

A GRAMMAR OF HIDATSA

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ACKNOWLEDGMENTS

The seed for this grammar was planted in the winter of 2006 after I had returned to Bloomington from an unsuccessful trip to many different reservations in the Plains to locate a language for my dissertation research. Just as I was giving up hope, Raymond J. DeMallie suggested to Douglas R. Parks that I work on Hidatsa. A few months later, I was able to accompany Doug on an unrelated trip to the Fort Berthold Indian Reservation, where he had worked for more than thirty-five years documenting the Arikara language. Since Doug has a larger-than-life reputation on Fort Berthold, I could not have found anyone more qualified to introduce me to the community. Besides Doug's reputation, the serendipitous similarity between our last names, and the fact that we are both at Indiana University has opened many doors for me on Fort Berthold and probably left behind a number of confused individuals.

The most important person to whom Doug introduced me was Rosaria Starr, one of the most fluent Hidatsa speakers on the reservation. Rosie had worked on language projects in the past both with Doug and a fellow Siouanist, A. Wesley Jones, and she graciously agreed to collaborate with me on the Hidatsa documentation project, one of the byproducts of which is the present grammar of Hidatsa.

On the same trip Doug introduced me to another very special person for Hidatsa studies, A. Wesley Jones, who gave generous support for my documentation project, including an unexpected jump start. Wes had worked on Hidatsa in the 1970s and 80s. Trusting Doug's recommendation, he not only agreed to grant me access to all of his field materials but also to deposit them in the archives of the American Indian Studies Research Institute at Indiana University. During my numerous trips through Bismarck to or from Fort Berthold, Wes and his wife Jenny have always been wonderful hosts and great company.

Thanks to the A. Wesley Jones collection I was able to connect in unexpected ways to several other linguists who have worked on Hidatsa in past. In 1988, Florence Voegelin entrusted Wes with the bulk of her own field materials as well as those of her late husband Carl Voegelin and his colleague Zellig Harris. Wes collated most of their lexical files with his own. I am gratified to know that this important and rich collection, which was originally compiled in Bloomington and then Bismarck, after a twenty-year sojourn in North Dakota has found its way back to Indiana. I am proud that my own field materials, both the field notes and sound recordings, have become a part of this historical collection, which has continually grown in size and quality after it was first begun at Indiana University more than sixty years ago.

I could not have completed this dissertation without the advice from my committee, chaired by Douglas Parks and Robert Botne, and including Ray DeMallie, Paul Kroeber, and Stuart Davis, whose comments on the draft versions of individual chapters contributed generously to the development of my ideas. As a non-native speaker of English, I often found it more difficult to deal with my English prose than with the Hidatsa data, which I stand by without reservation as it was recorded verbatim from the best speakers of the language.

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typology and his familiarity with the Crow language, led me time and again to alternative paths of analysis. Paul's ability to detect inconsistencies and contradictions, even if they were hundreds of pages apart, never ceased to amaze me.

Thanks to my minor advisor, Ray DeMallie, I was always mindful of the fact that language is a social institution first and a formal system second; I hope that this insight from anthropology is reflected in the final version of this grammar, exemplified particularly in the section on kinship, where I discuss some parallels between social and grammatical structures.

A special note of appreciation goes to Stuart Davis, who was not only my pre-dissertation advisor in the linguistics department but also played a decisive role in bringing me to IU. Stuart was often the first person to comment on my preliminary ideas, even before they became chapters, by giving me valuable feedback on my annual presentations at the Linguistic Society of America meetings.

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INDREK PARK

A GRAMMAR OF HIDATSA

This dissertation is a comprehensive description of the grammar of Hidatsa, a Siouan language spoken by approximately 100 people on the Fort Berthold Indian Reservation in North Dakota.

The grammar begins with a description of the historical and linguistic background of Hidatsa and an overview of previous scholarship. It then proceeds to a description of Hidatsa phonology, derivational and inflectional morphology, lexical categories, and concludes with a chapter on clausal phenomena.

The phonemic inventory comprises ten consonants, five vowels, and two diphthongs. Vowel length is contrastive. There is no lexical stress; instead, Hidatsa has developed a pitch-accent system that involves contrast between high and low pitch, contrast between level and falling pitch contours on long vowels and diphthongs, underlying accent on most morphemes, and variation on the surface level of accent placement caused by various derivational and inflectional patterns.

The canonical sentence structure is agent-object-verb, also characterized by postpositions, head marking, and internally-headed relative clauses.

Hidatsa employs two systems of morpho-syntactic alignment that distinguish between the arguments of transitive and intransitive verbs. The two core arguments of transitive verbs, agent and object, and the single core argument of intransitive verbs, subject, are marked by (1) pronominal prefixes on verbs (split-intransitive alignment) and (2) suffixes on noun phrases (ergative alignment). Overtly expressed clausal arguments are also disambiguated by their relative ranking on the animacy and agentivity scales.

Hidatsa morphology is agglutinative and involves considerable prefixation and suffixation. Participant information and modal categories are encoded on the verb by affixation. Hidatsa has developed a typologically unusual evidential system and an elaborate system of obligatory speech-act suffixes. Both deverbal nominalization and compounding are highly productive. There is also limited noun incorporation. Other Siouan characteristics include classification by posture verbs, perspective by motion verbs, and alienable and inalienable possession.

The grammar is written within the framework of Basic Linguistic Theory. Data used were obtained through elicitation from Hidatsa speakers and analysis of spontaneous speech. This study disproves several widely held notions about Hidatsa, clarifies various outstanding issues, and identifies various hitherto unknown features in the language.

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LIST OF ABBREVIATIONS

1	<i>1 person</i>
2	<i>2 person</i>
3	<i>3 person</i>
A	<i>active</i>
ABIL	<i>abilitative</i>
ADV	<i>adverbial</i>
ADV.TEMP	<i>temporal adverbial</i>
APPROX	<i>approximative</i>
ASSERT	<i>assertive</i>
B	<i>stative</i>
BEN	<i>benefactive</i>
C	<i>middle</i>
CAUS.DIR	<i>direct causative</i>
CAUS.INDIR	<i>indirect causative</i>
COL	<i>collective</i>
COM	<i>comitative</i>
COMPR	<i>compromisive</i>
CONC	<i>concessive</i>
CONC.COND	<i>concessive conditional</i>
COND	<i>conditional</i>
CONF	<i>confrontive</i>
CONT	<i>contemporaneous / continuative</i>
CRD	<i>coordinative</i>
DECL	<i>declarative</i>
DEF	<i>definite</i>
DES	<i>desiderative</i>
DIM	<i>diminutive</i>
DIST	<i>distributive</i>
EMPH	<i>emphatic statement</i>
ERG	<i>ergative</i>
EVID	<i>evidential</i>
EXCL	<i>exclamative</i>
FOC	<i>focus</i>
FT.INTER	<i>future interrogative</i>
FT.PL	<i>plural future</i>
FT.SG	<i>singular future</i>
GI	<i>GI-morpheme</i>
GOAL	<i>goal</i>
HAB.PL	<i>habitual plural</i>
HAB.SG	<i>habitual</i>
IMM	<i>imminentive</i>
IMP.PL	<i>plural imperative</i>
IMP.SG	<i>singular imperative</i>

INDEF	<i>indefinite</i>
INST	<i>instrumental</i>
INTENS	<i>intensive</i>
INTER	<i>question</i>
INTER.PRES	<i>presumptive interrogative</i>
INTERJ	<i>interjection</i>
IRR	<i>irrealis</i>
LIM	<i>limitive</i>
LOC	<i>locative, location</i>
MIT	<i>mitigative</i>
MOM	<i>momentaneous</i>
NEG	<i>negative</i>
OBJ.PL	<i>plural object</i>
OBS	<i>observative</i>
OPIN	<i>opinionative evidentiality</i>
PATH	<i>path</i>
PAST	<i>past</i>
PL	<i>plural</i>
PORT	<i>portative</i>
POS	<i>possessive</i>
POSSIB	<i>possibilitive</i>
PREC	<i>precative</i>
PRES	<i>presumptive</i>
PRO	<i>pronoun</i>
PROG	<i>progressive</i>
QUANT	<i>quantifier</i>
REAS	<i>reason</i>
RECIP	<i>reciprocal</i>
REDUP	<i>reduplication</i>
REFL	<i>reflexive</i>
REL	<i>relative</i>
REP	<i>reportative</i>
RES	<i>resultative</i>
SG	<i>singular</i>
SIM	<i>simulative</i>
SIMULT	<i>simultaneous; reason</i>
SOURCE	<i>source</i>
SPEC	<i>speculative</i>
STAT	<i>stativizer</i>
TEMP	<i>temporal</i>
USI	<i>usitative</i>
VER	<i>veritive</i>
VOC	<i>vocative</i>

1 Introduction

Hidatsa is a Siouan language spoken today by about 100 people of varying fluency living on the Fort Berthold Indian Reservation in west-central North Dakota. There is, in addition, an indeterminate number of passive speakers who understand Hidatsa but are unable to speak it.

1.1 Genetic affiliation

Hidatsa belongs to the Missouri River branch of the Siouan language family, which has the following internal structure (adapted from Voegelin 1941):

- WESTERN SIOUAN
 - MISSOURI RIVER SIOUAN
 - Crow
 - Hidatsa
 - MANDAN
 - Mandan
 - MISSISSIPPI VALLEY SIOUAN
 - DAKOTAN
 - Sioux (Lakota, Dakota, Yankton-Yanktonai)
 - Assiniboine
 - Stoney
 - WINNEBAGO-CHIWERE
 - Winnebago
 - Chiwere (Iowa, Oto, Missouri)
 - DHEGIHA
 - Omaha-Ponca
 - Kansa-Osage
 - Quapaw
 - SOUTHEASTERN SIOUAN
 - Tutelo
 - Biloxi
 - Ofo
- EASTERN SIOUAN
 - Woccon
 - Catawba

Some details of the internal structure of the Siouan family are not completely understood yet, but there is a general consensus that Hidatsa and Crow are very closely related. As for the time depth of their separation, it is not entirely correct to speak about the split between the two *languages* as the modern Hidatsa language and tribe were formed on the basis of three divergent dialects and tribal groups long after the separation from the other bands that were to become the Crow. According to oral traditions, groups continued to splinter and move between the two tribes even after the original separation.

Estimates varying between 300 and 800 years have been given for the time-depth of the split, mostly based on controversial methods of glottochronology (e.g., Matthews 1979). Although the Hidatsa and Crow recognize that they are closely related, the two languages are no longer mutually intelligible.

1.2 Historical background of the Hidatsa

The Hidatsa nation developed during the nineteenth and twentieth centuries from an amalgamation of three closely related tribal groups, all of whom had independently moved to the Missouri River valley in west-central North Dakota some time before the 1780s.¹ The three groups, **Awadixa**, **Awaxa'wi** and the **Hidatsa proper**, undoubtedly shared a common ancestor and a common proto-language in the not-so-distant past, since by the time of their reunification their respective dialects had not yet become mutually unintelligible. The three groups also shared common ancestry with the bands that migrated farther west to become the Crow nation in present-day Montana.

¹ The description of the historical background is based on Alfred W. Bowers, *Hidatsa Social and Ceremonial Organization* (Washington, 1965) xii, 528 p. and Gilbert Wilson's unpublished field reports.

The earliest group to arrive on the Missouri River were the **Awadixa** [awadixáá], who claim to have always lived there: according to tribal tradition, they descended from the sky and first settled near the modern town of Washburn. The Awadixa once formed a single group with the ancestors of the Mountain Crow, before the latter separated from them and moved to Montana. The prolonged presence of the Awadixa on the Missouri and their separation from the other two groups is confirmed by their more advanced agriculture and a cycle of myths and ceremonies that bear more resemblance to their neighbors, the Mandan, than either the Awaxa'wi or the Hidatsa proper.

Both the **Awaxa'wi** and the **Hidatsa proper** trace their origin to an area near Devils Lake where they ascended to the earth's surface by climbing a vine that had penetrated their home beneath the ground. The two groups parted ways, with the Hidatsa proper moving northwestward and the Awaxa'wi to the southwest. The **Awaxa'wi** [awaxá'wi] were next to arrive on the Missouri, where they found the Awadixa living above them. The Awaxa'wi continued to move around until the smallpox epidemic of 1781 so reduced their numbers that they decided to settle in close proximity to the Awadixa.

The last group to arrive on the Missouri were the **Hidatsa proper** [hiraacá]. According to the Mandan tradition, the Hidatsa proper came from the east and crossed the Missouri to settle near the Mandans on the Heart River; thereafter they became known in the Mandan language as 'the ones who forded the water'. The Mandan expression was translated into Hidatsa as **Mirí-daarí** 'water-ford', and then borrowed into English as **Minnetaree**, one of the alternate names for the Hidatsa. About this time a quarrel broke out among the Hidatsa proper, and a disgruntled splinter group moved farther to the west to become the River Crow in present Montana.

The three Hidatsa groups were generally on good terms with each other, but occasional quarrels did break out, the most severe of which resulted in three-year warfare between the Awaxa'wi and the Hidatsa proper.

During the smallpox epidemics of the early 1780s, both the Mandan and the Hidatsa experienced severe population loss. No more than 2,000 Hidatsas, or less than one half of the pre-epidemic population, survived the calamity. To make matters worse, a tribe of relatively recent newcomers, the Sioux, who were both numerous and aggressive, started to apply unbearable pressure on the sedentary village tribes. In order to increase their ability to withstand the common enemy, the separate Hidatsa and Mandan villages consolidated their strength by settling together. The Five Villages (**Awadigihxú**), as they came to be called, comprised three Hidatsa and two Mandan villages near the mouth of the Knife River at present-day Stanton, North Dakota.

The close proximity of the three Hidatsa and two Mandan villages offered relative stability and new venues for communication. Each group tried to maintain its independence as much as possible, but soon a considerable cultural and linguistic assimilation process was underway. Already in the early 1830s Prince Maximilian zu Wied-Neuwied (2008-12) remarked that most Mandan were also fluent in Hidatsa (the opposite was not true), and by the 20th century the two tribes were virtually indistinguishable culturally. As for the three Hidatsa groups, each one still spoke its distinct dialect. According to Buffalobird Woman, who was born in the Awadixa village, “the dialects of the three tribes differed somewhat and there is a story that quarrels sometimes arose through misunderstanding of one another’s language” (Wilson 1913:194). The Hidatsa proper, who were the most numerous, dominated the other two Hidatsa groups in most aspects of daily life.

The 1830s and 1840s turned out to be extremely challenging for the inhabitants of the Five Villages. In 1834, the Sioux succeeded in completely destroying the Awaxa'wi and Awadixa villages, which were never rebuilt. The survivors moved in with the Mandan, and the Awadixa eventually built a village close to Big Hidatsa (of the Hidatsa proper). In 1837 there came another devastating smallpox epidemic. The Mandan were particularly hard hit, losing more than 90 percent of their population. The Awadixa and Awaxa'wi were almost equally hard hit, but the more numerous Hidatsa proper, who happened to be on a seasonal migration and dispersed into smaller bands, did not fare as badly. However, the combined pre-epidemic population of the three Hidatsa groups, estimated at 2,100, was reduced by about two thirds. Between 1837 and 1845 the survivors of the Awaxa'wi and Awadixa villages lived both with the Mandan and the Arikara. Eventually the Awaxa'wi and the Awadixa, along with the Nuitadi Mandan, decided to move north and build a single fortified village at the Like-a-Fishhook bend of the Missouri River in present North Dakota. The new settlement, established in 1845, came to be known as Like-a-Fishhook Village. Soon afterward the Fort Berthold trading post was built near the village.

The Hidatsa proper, who had also been invited into the new village, at first declined the offer. After accepting an invitation from their distant relatives, the River Crow, they decided to give up agriculture and permanently resettle in Montana. On the way upriver to the west, they were overtaken by winter and stayed in Like-a-Fishhook. When spring came, the Hidatsa proper decided to remain there.

Even as the inhabitants of Like-a-Fishhook continued to be attacked by the Sioux and ravaged by European diseases, their population soon more than doubled, when first the Ruptare

Mandan moved in, and then, in 1862, the Arikara joined them as well. The Arikara, Mandan, and Hidatsa then came to be known as the Three Affiliated Tribes.

Each of the three tribes maintained a separate section in Like-a-Fishhook and performed its own ceremonies. Although the name of the most numerous Hidatsa subgroup came to be used for all three groups, even in the 1860s the Awadixa and Awaxa'wi tried to maintain separate camps during the summer hunt. By the early twentieth century, however, the distinctions among the three groups and their dialects had become blurred at best, and by the second half of the twentieth century had virtually disappeared.

Apart from the clan system, the only real subdivision of the Hidatsa today has relatively recent history. Around 1871, conflicts in the Hidatsa community caused a group of families, led by Crow-Flies-High, to move away from the reservation. The band's main village was situated at the confluence of the Missouri and Yellowstone Rivers near Fort Buford in present-day Montana. It was known as Badlands Village, Xosgadi [xóšgadi], which is a combination of the Sioux word *hóški* 'badlands' and Hidatsa *adi* 'village'. The members of the Crow-Flies-High band, known as the **Xosga** [xóšga], remained independent until 1894, when the U.S. Army brought them back to the reservation, where the Three Affiliated Tribes had already undergone considerable cultural change. During the 20th century the term Xosga has been used as a derogatory reference to a person who is deemed backward or less 'civilized', and the Xosga have maintained a reputation for being culturally conservative. The Xosga themselves, however, have always been fiercely proud of being descendants of the last "free" Indians in the United States. In the twenty first century they also tend to be among the best speakers of the Hidatsa language.

1.3 Present situation

After reaching a historical low point in the 1870s and 1880s the Hidatsa population started slowly to increase. In 1910 it reached 547 out of a total enrolled population of about 1,200 on the Fort Berthold Reservation. In 1950, when the Hidatsa were counted separately for the last time, they numbered 933 residing on the reservation.

By 2010, the number of enrolled members of the Three Affiliated Tribes exceeded 12,000, more than half of whom resided on the reservation. Although the exact number of Hidatsas today is impossible to ascertain, it probably exceeds one half of the total reservation population. Because of the large number of intertribal marriages, a growing number of tribal members identify themselves as Mandan-Hidatsa, Hidatsa-Arikara, or with all three tribes. Nevertheless, the western segment of the reservation is still predominantly Hidatsa. Even though no statistics are available, according to my experience the Hidatsa are the dominant group on the reservation in both population and influence on decision making, followed closely by the Arikara, and then by the Mandan who have become almost completely assimilated into the Hidatsa.

Whereas the population has clearly rebounded, the trend has been the reverse for the number of tribal language speakers. A hundred years ago virtually every Hidatsa was a speaker of the language, and most tribal members were also able to speak Mandan and English with varying degrees of fluency. Gilbert Wilson made the following observation about the language situation in 1908:

The Hidatsa and Mandan have been so closely associated for two or three generations that tribal barriers are nearly broken down, except perhaps in the matter of language. A child is reckoned as of his mother's tribe, and speaks his mother's

language; and even husband and wife, if not of the same tribe, address each the other in his own language. Most of the Hidatsa on the reservation understand Mandan, and every Mandan understands Hidatsa. In council or preaching service, an orator of either tribe speaks his mother's tongue, and no interpreter is necessary. If Arikara are present, an interpreter must be called. (Wilson 1908:101)

As of 2010, the situation is much starker. Only one fluent speaker of Mandan remains, and a handful of imperfect Arikara speakers. Hidatsa has fared better, but only in comparison to the other two languages. According to my informal survey of Hidatsa language usage, about 100 people still remain who are able to carry on a conversation in the language. Less than half of them are considered really good speakers who are fully fluent in most genres of the language. The majority of speakers are elderly. The youngest speakers, with a few rare exceptions, are in their mid to late fifties.

The Hidatsa community has initiated several projects to reverse the trend. Hidatsa is now taught in the New Town and Mandaree schools, as well as at Fort Berthold Community College. The language programs have been effective in reinforcing tribal identity and instilling pride in the culture but no speakers have come out of these programs, which suffer from the same set of problems that plague language revitalization efforts across the country.

1.4 Previous scholarship

The earliest historical records of the Hidatsa language include several 19th and early 20th century wordlists of varying length. The most extensive early vocabularies are those recorded by **Thomas Say** (in E. James 1822), **Prince Maximilian of Wied-Neuwied** (M. Wied, Prinz zu.

1839-41), **Ferdinand Vandever Hayden** (1862) and **Edward S. Curtis** (1907-30, Vol.4). **Lewis Henry Morgan** (1871) contains kinship terms.

The first grammar sketch, which includes an extensive vocabulary, was compiled by **Washington Matthews**, who served between 1865 and 1872 as a post surgeon in the United States Army in what is now North Dakota. During his six years in Dakota Territory Matthews became relatively fluent in Hidatsa. According to James Mooney (1905), Matthews lost all his manuscript notes and his library when his quarters at Fort Buford burned in 1871. Nevertheless, he was able to reconstruct from memory his *Grammar and Dictionary of the Language of the Hidatsa*, published in 1873. A revised version, entitled *Ethnography and Philology of the Hidatsa Indians*, was published in 1877.

In his eleven page grammatical sketch Matthews succeeds in highlighting many of the essential features of Hidatsa. The grammar is accompanied by a wordlist of almost 3000 entries, including grammatical particles. Even though Matthews's transcriptions are often excessively phonemicized and therefore unreliable, his wordlist contains a number of interesting lexemes and word forms that have disappeared from contemporary active usage as a consequence of culture change.

In 1876, a twenty-nine-year old Congregational missionary, **Charles Lemon Hall**, arrived at Fort Berthold where he remained until his death in 1940. In order to be more successful in his activities, Hall resolved to learn all three native languages that were spoken on the reservation. Without doubt he had most success with Hidatsa. Hall's published materials include a thirty-five-page pamphlet containing hymns and Bible passages (Hall 1906b), as well as a six-page mythological narrative (Hall 1906a) with an interlinear translation. Hall's most significant unpublished materials include a manuscript Hidatsa phrasebook (Hall 1882) and an

annotated copy of Matthews's (1873) dictionary (Hall 1876-90), both preserved at the State Historical Society of North Dakota.

Between 1905 and 1918, **Gilbert Livingston Wilson** spent ten seasons on Fort Berthold documenting Hidatsa culture. Included in the huge number of ethnographic data that he amassed are valuable lexical terms for material culture and for local fauna and flora. Much of this material remains unpublished.

Alfred Bowers's fieldwork in the 1930s and 1960s resulted in a large collection of Hidatsa texts, many of them sound recorded, all of which remain unanalyzed and unpublished.

In 1911, **Robert H. Lowie** collected four traditional Hidatsa texts while on a collecting expedition for the American Museum of Natural History. Those texts were elicited, transcribed, and translated by **Zellig Harris** and **Carl F. Voegelin** in 1938 and published together with one additional text that they themselves collected 1939. The published texts, comprising altogether about 300 sentences, were translated, extensively annotated, and supplemented with paradigmatic examples and morphological analyses of complex expressions. Although Harris and Voegelin did not prepare a grammatical sketch of Hidatsa, the generalizations, sample paradigms, and morphological analyses that they provide in extensive footnotes constitute the first modern, albeit random and unorganized, description of many aspects of Hidatsa grammar.

As a byproduct, Harris and Voegelin's fieldwork resulted in an alphabetically organized lexical slip file containing about 800 inflected themes and several thousand word forms that to this date remains unpublished.

In the 1950s, Voegelin passed the slip file on to **Florence Robinett**, who was then writing a master's thesis on Hidatsa morphophonology at Indiana University. In 1954, Voegelin and Robinett co-published a paper on motherese in Hidatsa (Voegelin and Robinett 1954).

Robinett's doctoral dissertation was published in 1955 in the *International Journal of American Linguistics* in three parts: (1) morphophonemics; (2) affixes; (3) stems and themes. In addition to her use of Harris and Voegelin's field notes, Robinett obtained additional data from two Hidatsa consultants with whom she worked briefly in 1954 at Indiana University, and in the field on the Fort Berthold Reservation.

For several decades, Robinett's work remained a singular achievement in Hidatsa linguistics. She describes the language within the framework of American structuralism, specifically the item-and-arrangement model and templatic morphology. Each affix is assigned a position number in the template. Each position or "slot" consists of mutually exclusive affixes that have to occur in a fixed order relative to all other affixal "slots". Robinett uses metaterms to describe all the affixes according to their function, but gives very few actual examples of affixal combinations (she does it in a more abstract manner, e.g., affixes *x*, *y*, and *z* may co-occur in such-and-such (e.g., active) stems. Nevertheless, it is possible to use her work for textual analysis, even if the process is quite laborious.

Robinett's reliance on data recorded by others and her limited field work made it difficult to avoid mistakes altogether. Another, more serious, source of mistranscriptions was her reliance on poor-quality sound recordings that she worked with after rapid-speed elicitation sessions with her informants, a technique deemed progressive at the time.

By and large, Robinett's notation of pitch (which she analyzed as stress) is wholly unreliable, and she provides incomplete or incorrect analyses of various verbal and adverbial affixes. More serious are her analyses of some constructions – e.g., the ergative suffix *-ri*, which she took for a demonstrative objectifier – that have been perpetuated in the subsequent literature, whether describing Hidatsa, or used for comparison and proof in the secondary literature. This is

exemplified by the conclusions in Zwicky's oft-quoted (1985b) paper on clitics and particles that is based on data from four languages, one of which is Hidatsa. Zwicky's erroneous Hidatsa data came from Matthews (1965), whose analysis to a large extent was derived from, but not credited to, Robinett.

G.H. Matthews's *Hidatsa Syntax* (1965), written within the framework of early transformational grammar, contains too many mistakes and erroneous analyses to enumerate here. Furthermore, his analysis is so abstract that it is opaque. Matthews does not credit his sources, but it is obvious that much of his data, as well as several incorrect conclusions, are actually derived from Harris and Voegelin's and Robinett's work. Nevertheless, some of his claims about Hidatsa have become accepted in the linguistic literature after Zwicky (1985b), who based his broad theoretical claims partly on Matthews's description.

After a long hiatus, in the 1970s, **A. Wesley Jones** engaged in direct work with Hidatsa speakers under the auspices of the North Dakota Indian Languages Program (Mary College, Bismarck, North Dakota). Jones's work was greatly facilitated by his living close to the Fort Berthold Reservation. The published materials resulting from his data collection include five traditional narratives (Jones 1978; and in Parks 1978), a Hidatsa wordlist, and four papers (1979a, 1983, 1984b, 1992) that describe various morphological peculiarities of Hidatsa. Most of Jones's data collection topics focused on lexical material. He greatly augmented the size and quality of the lexicon/vocabulary of recorded Hidatsa after "inheriting" Harris and Voegelin's 1938 slip files from Florence Robinett-Voegelin. By that time the files had been enlarged by slips of her own re-elicitations. Jones collated the older lexical slips with his own and resystematized them by dependent roots. Moreover, in the 1980s, Jones wrote some twenty papers, ranging in size from two to thirty pages, that describe various aspects of Hidatsa morphophonology and most of

which remain unpublished. Copies of Jones's manuscripts, together with the Harris-Voegelin-Robinett slip file, are preserved at the American Indian Studies Research Institute, Indiana University.

The most notable outcome of Jones's lexicographic work was his Hidatsa word list, (1979b), which remains a popular memory aid on the reservation. This glossary contains 1700 of the most common Hidatsa words, presented in English-to-Hidatsa and Hidatsa-to-English sections. However, the work does not provide any grammatical information, paradigmatic examples, or usage notes.

Jones (1979a) is a unique paper that describes what he calls "morphological constellations." By that he means the ability of various Hidatsa morphemes to appear as a lexical stem, a prefix, or a suffix in various functions, thus presenting an array of bewildering homophony.

The only major shortcoming of Jones's transcriptions is the unreliability of his pitch marking. According to Jones (personal communication), he tried to describe Hidatsa in terms of stress-accent, only realizing after his field work that in reality it is a pitch-accent language. It also turns out that his main informant, though fluent, was reputed to speak a highly idiosyncratic idiolect, not representative of "standard" Hidatsa. A minor issue, also evident in Harris and Voegelin (1939), is the uncertainty about what constitutes a "word" in Hidatsa. Compounding of content words and combining lexical stems with grammatical and discourse particles seems arbitrary in all of the published narratives.

Jones's material serves as an invaluable source of Hidatsa vocabulary because he worked with the last generation of "old-timers," i.e., fluent speakers who knew old vocabulary. Even if his recordings need to be re-elicited for pitch (and for weeding out the idiosyncrasies of his main

consultant), they are invaluable as prompts for older, less-used vocabulary that has receded into passive memory in the present day.

Norman Bowers's *Hidatsa Suprasegmentals* (1996), originally his doctoral dissertation, is the most recent publication on Hidatsa. It is an eclectic work that combines almost every conceivable phonetic feature into a unified description of Hidatsa phonology. Bowers describes Hidatsa in terms of \pm pitch, \pm accent, \pm stress, updrift-downdrift, and fortis-lenis. The last he considers a phonemic difference, the other four phonetic.

Bowers makes an excessive claim (1996: 9) that without spectrograms it would have been impossible to recognize the patterns of Hidatsa suprasegmentals or to demonstrate that they are predictable. In total, his monograph comprises spectrograms of 32 isolated nominals and inflected verbs accompanied by transcriptions, and virtually no other original data. In addition, Bowers provides hundreds of abstract schemas for his analysis in the form c+v (for consonants and vowels), which are supplemented by a bewildering array of diacritics without ever providing any glosses or even transcriptions for most of the examples he claims to analyze, thus rendering them impossible to verify. In fact, Bowers brings so much abstract detail into his analysis that it has little meaning for understanding Hidatsa.

In comparison, Bowers's master's thesis, "A Generative Phonology and Dictionary of the Hidatsa Indian Language" (1981), comprising close to two thousand alphabetically organized lexemes, is a valuable resource that contains numerous lesser-used vocabulary items, probably derived from Alfred Bowers's unpublished textual material.

Finally, **John Boyle** has been working with Hidatsa textual material since the late 1990s, supplementing his studies with occasional field work. In 2006, Boyle, in collaboration with language consultant Alex Gwin, compiled a bidirectional Hidatsa-English-Hidatsa wordlist

(unpublished), based on the Voegelin-Harris-Robinett-Jones lexical slip files. Boyle's work on Hidatsa culminated in his Ph.D. dissertation, "Hidatsa Morpho-syntax and Clause Structure", written "in a generative framework generally following the Minimalist Program of Chomsky" (2007: 20).

Since Boyle's work is primarily based on previously compiled lexical corpora and published texts, it suffers from the same issues that characterize those sources, notably the wholly unreliable accent marking and paradigmatic gaps in the data sets. The main value of his work resides in pulling together, systematizing, and making available the descriptions of various grammatical phenomena characteristic of Hidatsa that have previously appeared in the published and unpublished descriptions of Voegelin, Harris, Robinett, and Jones.

1.5 Sources of data

Since the reliable corpus of Hidatsa language materials is not large, the description in this grammar is primarily based on my own fieldwork data.

Between 2006 and 2010, I spent a total of about two years on the Fort Berthold Reservation documenting the language. I used primarily two methods for documentation – elicitation and group sessions. During five-hour daily elicitation sessions I worked primarily with my two principal collaborators, Rosaria Starr and Arvella White, both of whom are members of the conservative Xosga band and excellent speakers. Working with two people simultaneously gave the speakers an opportunity to consult with each other and, when needed, to correct one other. Occasionally, other speakers who were experts on specialized terminologies, joined us for more topic-oriented elicitation sessions. The first and longest stage of elicitation sessions consisted of re-eliciting Jones's and Voegelin's slip files to establish correct pronunciation,

expand paradigms, and eliminate questionable forms.² Paradigms and other data sets were systematically expanded by applying possible derivational and inflectional processes to them. The second stage of lexical elicitation consisted of the same process applied to other extant vocabularies (Bowers 1981, Hall 1876-90 and 1882, Maximilian 2008-12, lexical data in Wilson's field notes from 1905 to 1918, and other, minor vocabulary lists).

The group sessions consisted of four- to five-hour topic-oriented meetings of three to five speakers. In a typical session, the participants used the Hidatsa language to discuss a pre-determined set of topics on Hidatsa culture and history. All group sessions were tape recorded. Since the transcription of such sound recordings is an extremely time-consuming process, I was able to transcribe and utilize only a fraction of them for this dissertation. However, even by passively participating in the group sessions I was able to greatly enhance my understanding of spoken Hidatsa and some of its structural and stylistic peculiarities.

My field work materials are organized into three interconnected modules. The first is the data gathered from lexical elicitation sessions and is structured into an alphabetically organized lexical database that at present contains approximately 10,000 main and sub-entries. As a rule, all derived stems along with their inflected paradigmatic forms and examples of usage are listed under their respective bases in the database. Each derived form exists also as a separate minor entry in the database, with a cross reference to the main (sub)entry for a detailed description. Examples of usage, such as sentences and phrases, are listed separately under each lexeme used in the example, except the most common words, such as demonstratives and auxiliaries.

² Many of the dubious forms consisted of literal translations that Hidatsa speakers had given to English prompts, such as *mirawahú buusihge*, lit. *cat in the woods*, for 'wildcat'; *mirawahú cééša*, lit. *wolf in the woods*, for 'timber wolf' (as wolves are sometimes called in North Dakota); *ábaci adá*, lit. *throat + open sore*, for 'to have a sore throat', etc.

The second module is a corpus of texts, some of which are accompanied by a complete interlinear analysis, while others have only a literal translation.

The final module consists of a collection of approximately 200 morphologically organized files, each one containing a complete set of tokens for a particular morpheme or a family of morphemes, or a large representative set of tokens for morphemes that are particularly numerous and transparent.

The present dissertation is a cumulative work that has been developed over several years. Already during the early stages of writing this grammar I realized that a good description of any language cannot be compiled as a sequential series of stand-alone chapters. Instead, “as each new description is completed, it is likely to lead to the refinement or revision of some aspect or aspects” of the theory since “there is constant feed-back between theory and description” (Dixon 2010, I:2). In this sense the present grammar is an emergent phenomenon that strives for ever-finer degrees of distinction and refinement.

1.6 Analytical framework

This dissertation is written within the framework of Basic Linguistic Theory, most thoroughly expounded in Dixon (2010), which differs from explanatory theories mainly by “its attempt to describe each language in its own terms, rather than trying to forge the language into a model based on European languages” (Dryer 2006: 211). The supremacy of BLT over formal theories becomes immediately apparent if one takes a short survey of descriptive grammars published over the past forty five years in North America. Whereas only a few grammars written within the generative framework that came into vogue after the Chomskian revolution have stood the test of time, grammatical descriptions that have drawn on the cumulative insight offered by earlier

descriptive grammars, as well as linguistic typology, have never lost their value and have, in fact, served as the foundation without which the more fashionable formal or explanatory theories could not exist.

As Dryer (2006: 212) correctly points out, “the idea that description can be atheoretical is simply confused.” An atheoretical description is a practical impossibility since one cannot describe anything without making some theoretical assumptions. Exotic and novel notions, such as pitch-accent, ergativity, and evidentiality, as well as more mundane commonly held assumptions, such as the basic distinction between nouns and verbs, at some point all trace their discovery to observational linguistic descriptions. Even if many descriptive linguists do not subscribe to any explicit theories, the set of cumulatively growing assumptions and notions they all share clearly indicates that they work within the same theoretical framework.

2 Phonology

Hidatsa, like many other Northern Plains languages, has a relatively small phonemic inventory. It has ten consonants, five vowels, and two diphthongs. Vowel length is contrastive. There is no lexical stress; instead, Hidatsa has developed a pitch-accent system that involves contrast between high and low pitch, contrast between level and falling pitch contours on long vowels and diphthongs, underlying accent on most morphemes, and at the word level shift of pitch accent related to derivational and inflectional forms of the word.

2.1 Phonemic inventory

2.1.1 Consonants

The consonant inventory of Hidatsa is presented in TABLE 2.1.

TABLE 2.1. CONSONANT INVENTORY

	LABIAL	ALVEOLAR	VELAR	GLOTTAL
STOPS	p	t	k	ʔ
FRICATIVES		ʃ	x	h
AFFRICATES		ts		
SONORANTS	w	r		

The orthographic representations of consonantal phonemes in the writing system differ slightly from IPA symbols. An explanation of the orthography is presented in 2.6. All Hidatsa examples will henceforward be presented in the practical orthography. The consonant phonemes and their orthographic equivalents are listed in TABLE 2.2.

TABLE 2.2. ORTHOGRAPHIC EQUIVALENTS OF CONSONANTAL PHONEMES

PHONEME	WRITTEN AS
p	<i>b</i>
t	<i>d</i>
k	<i>g</i>
ʔ	ʔ
ʃ	<i>s</i>
x	<i>x</i>
h	<i>h</i>
ts	<i>c</i>
m/w	<i>m/w</i>
n/r	<i>n/r</i>

Consonants and their allophones are discussed in the following subsections.

2.1.1.1 Obstruents *b, d, g,* and *c*

Word-initial stops *b, d,* and *g,* and the affricate *c* are voiceless when the word is said in isolation or is preceded by a pause, as illustrated in (1). Usually they are voiced intervocalically, as in (2), and word initially in fast speech if the preceding word ends in a vowel. However, there is much variation in intervocalic voicing depending on the rate of speech and other factors, such as individual speech habits. Intervocalic obstruents are almost always voiced if they occur in the middle of the morpheme. The likelihood that the obstruents remain voiceless increases in morpheme-initial positions and when preceded by a prefix or a proclitic.

- | | | | |
|-----|--------------------------|-----------------------------------|---|
| (1) | beericgisdabeedhé | [peeritskiʃtabeet ^h é] | <i>sleet</i> (lit: <i>raven's eye secretion</i>) |
| | daadí | [taadíʃ] | <i>dad</i> |
| | gagúwi | [kagúwi] | <i>squash</i> |
| | cacúgi | [tsadzúgi] | <i>flea</i> |
| (2) | áàba | [áàba] | <i>his neck</i> |
| | áàda | [áàda] | <i>day, daylight</i> |
| | áàga | [áàga] | <i>the top part of sth</i> |
| | áàci | [áàdzi] | <i>her breast</i> |

In the three possessive prefixes indicating alienable possession (see 8.1.1), the pronunciation of morpheme-internal /d/ is long. It is not clear what causes this idiosyncrasy. For most speakers, the long stop in the possessive prefixes is voiced or semivoiced, as in (3).

- | | | | |
|-----|--------------|---------|-------------|
| (3) | ida- | [idda] | <i>his</i> |
| | mada- | [madda] | <i>my</i> |
| | nída- | [nídda] | <i>your</i> |

2.1.1.2 Glottal stop [?]

Word-initial prevocalic glottal stops are predictable in Hidatsa and therefore are not represented in the orthography. In compounds, as well as in complex forms consisting of a stem and affixes, an epenthetic glottal stop is always inserted between two vowels at a morpheme boundary to insure syllable integrity unless one of the vowels is deleted. Example (4) illustrates the epenthetic glottal stop in compounds, and (5) on stem and affix boundary:

- | | | | |
|-----|----|--|-------------------|
| (4) | a. | iidubáà'ihdia
iidubáà <i>wildcat</i> + ihdià <i>big</i> | <i>cougar</i> |
| | b. | míà'aagabe
míà <i>woman</i> + áàgabee <i>date sb</i> | <i>girlfriend</i> |
| | c. | macee'áàgabe
macée <i>man</i> + áàgabee <i>date sb</i> | <i>boyfriend</i> |
| | d. | noogdee'ihsi
noogdéé <i>corpse</i> + ihsi <i>container</i> | <i>coffin</i> |
| | e. | maa'arusua'ihsi
maa'arusúá <i>spit</i> + ihsi <i>container</i> | <i>spittoon</i> |
| (5) | a. | maa'aru'ihgiragabadí
maa-aru-ihgi-nagabadí
INDEF-REL-REFL-begin | <i>genealogy</i> |
| | b. | maa'aru'a'xúhe
maa-aru-a'xúà-hee
INDEF-REL-hide-3CAUS.DIR | <i>secret</i> |

- c. *maaʔiiʔfʔaʔxu* *cover (of sth)*
 maa-ii-í-aʔxúà
 INDEF-INST-LOC-hide
- d. *Madawaaʔiháàʔiiruʔsgii.* *They used to be our enemies.*
 mada-maa-iháà-îruʔ-sgíí
 IPOS-INDEF-different -HAB.PL -MIT

The phonemic status of the glottal stop in lexical items is confirmed by the existence of minimal pairs, some of which are given in (6)–(10).

- (6) a. *mirá* *wood*
 b. *miráʔ* *fire³*
- (7) a. *abáàri* *to grow*
 b. *abáàriʔ* *porcupine*
- (8) a. *gú* *that one*
 b. *gúʔ!* *give it to him!*
- (9) a. *guréèc* *he chased it*
 b. *guréʔc* *he kept it*
- (10) a. *gíʔaʔc* *they packed it on their backs*
 b. *gíàʔc* *they are scared*

2.1.1.3 Sonorants *w* and *r*

The sonorants *w* and *r* are pronounced as nasals *m* and *n*, respectively, after a pause in word initial position. They are always pronounced and written as *w* and *r*, respectively, if they are intervocalic and morpheme internal. The lexemes in (11) and (12) illustrate monomorphemic words that have *m/w* and *n/r* alternants in word-initial and word-internal positions, respectively.

- (11) a. *máà* *snow*
 b. *awá* *land*

³ Modified word forms result in occasional homophones, as exemplified by *miráʔs*, which can mean either ‘the fire’ /*miráʔ* fire + *-s* DEF/ or ‘pieces of wood’ /*mirá* wood + *-aʔ* PL + *-s* DEF/.

- (12) a. **náà!** *go!*
 b. **ará** *his hair*

In conversational speech, **w** and **r** are pronounced as [w] and [r] at a morpheme boundary if preceded by a vowel. This alternation always happens word internally in the case of compounds and other derivations. However, in careful and/or hypercorrect speech, **w** and **r** are sometimes pronounced as [m] and [n], respectively, at boundaries of lexical roots, as in (13) and (14), and some prefixes, as in (15)-(17). Suffixes and enclitics, on the other hand, are immune to the allophonic change and **w** and **r** are written as such even in careful or hypercorrect speech.

- (13) **cagáàgawia** Hypercorrect form: [tsagáàgamia]
 cagáàga-mía
 bird-woman
Sacagawea, or Bird Woman
- (14) **idawirúxibhi** Hypercorrect form: [idamirúxip^{hi}i]
 /ida-mirúxibhi
 3 POS-ice.cream
ice cream
- (15) **Miiwaa'isíàc.** Hypercorrect form: [miimaa'ijíàts]
 mii-maa-isíà-c
 1B-INDEF-bad-DECL
I am stingy.
- (16) **Niiwahúùc.** Hypercorrect form: [niimahúùts]
 nii-ma-ihúù-c
 2B-1POS-mother-DECL
You are my mother.
- (17) **Maaríragua??** Hypercorrect form: [maaníragua?]
 maa-n'-iragúà-?
 3OBJ.PL-2POS-friend-INTER
Are they your friends?

In fast, connected speech, the allophonic variants [w] and [r] prevail even in word-initial position, as illustrated in (18).

- (18) Adáàsihdaa [r]áree [r]áwaheeʔ?
 adáàsi-hdaa ná-néè ná-maʔíihee-ʔ
 outside-DIR 2A-go 2A-want-INTER
Do you want to go out?

The database upon which this grammar is based has numerous examples of prefix and root-initial /w/ that were pronounced word internally as [m] (not [w]) by speakers. In contrast, relatively few tokens of /r/ pronounced as [n] in identical contexts were recorded in natural speech, even though speakers accepted such examples when prompted.

In connected speech, it is common in a sentence for all examples of word-initial /m/ and /n/ to surface in their non-nasal allophonic form if the preceding word is vowel-final. This holds especially true in rapid speech. However, according to the orthographic convention adopted in this grammar, all word-initial /m/s and /n/s, regardless of their surface phonetic form, are written as nasals.

The alternations between [m] and [n], and [w] and [r], have been a source of much confusion in the ethnographic and linguistic literature. According to Matthews (1877: 91), members of “a labial series consisting of *m*, *b*, and *w*, and a dental, or linguo-dental, series consisting of *d*, *l*, *n*, and *r* [...] are subject to interchanges so arbitrary and frequent that no definite rules can be given for them”. Carl Voegelin in the 1930s and Florence Robinett in the 1950s occasionally transcribed the word initial *m/w* in their field notes as a bilabial fricative [β] that seems to correspond to Matthews’s orthographic *b* since both occur mainly before the vowel *i*. However, *b* is certainly not an allophone or a free variant of *m/w* as is demonstrated by numerous minimally different words.⁴

⁴ While some Hidatsa speakers apparently had [β] as an allophone of *m/w* in some circumstances, it was documented from none of the Hidatsa consultants who collaborated with me on the present description.

- (19) a. **míà** *woman*
 b. **bíà** *to emit flatulence*
- (20) a. **birúá** *to bubble*
 b. **mirúá** *to boil*
- (21) a. **búà** *to be boiled; be swollen*
 b. **múà** *to howl*
- (22) a. **báá** *to holler*
 b. **máà** *snow*

As for the second series, what Matthews and a number of early travelers perceived as [l] and [d] is, in fact, an alveolar flap [ɾ], a free variant of an intervocalic *r*. Even the common American ethnonym for the Hidatsa (spelled with a *d* in contemporary English and sometimes with an *l* in historical sources) is a result of this confusion. The self designation of the Hidatsa is [hiraadzá]). A number of minimal pairs in (23)–(25) helps to disambiguate this distinction.

- (23) a. **midéè** *cow*
 b. **miréè** *door*
- (24) a. **Miihiidác.** *I am fast.*
 b. **Miihiirác.** *I am slow.*
- (25) a. **idúù** *woman's sister-in-law*
 b. **iruù** *woman's older sister*

2.1.1.4 Fricatives *s*, *x*, and *h*

The alveopalatal fricative *s*, velar fricative *x*, and glottal fricative *h* are always voiceless and have no noticeable allophones.

2.1.2 Vowels

There are five oral vowels and two diphthongs. Unlike most other Siouan languages, there are no nasal vowels in Hidatsa. Vocalic length of high and low vowels is phonemic. The vowel inventory is given in TABLE 2.3.

TABLE 2.3. VOWEL INVENTORY

	FRONT [-round]	BACK [+round]
HIGH	i, ii	u, uu
MID	ee	oo
LOW	a, aa	
DIPHTHONG	ia	ua

A large number of minimal pairs, some of which are presented in (26), attest to the phonemic status of length.

(26)	SHORT		LONG	
	ihdí	<i>butte, hill</i>	iihdíí	<i>bangs; scalp lock</i>
	Níguuc.	<i>He gave it to you.</i>	Níguuc.	<i>She's your grandmother.</i>
	Maradác.	<i>It is my heart.</i>	Maaraadác.	<i>It is a heart.</i>

The difference in vowel length may yield up to four minimally different forms for disyllabic words, as in (27), and theoretically even more for polysyllabic words.

(27)	SHORT-SHORT	SHORT-LONG	LONG-SHORT	LONG-LONG
	idá- <i>his, her</i>	idáá <i>his arrow</i>	iidá <i>his face</i>	–
	masí <i>blanket, robe</i>	masî <i>non-Indian</i>	–	maasíí <i>story</i>

A number of lexical items exhibit free variation between a long vowel and a short vowel plus glottal stop sequence, as illustrated in (28). However, a few other lexemes with a similar internal structure permit only the short vowel plus the glottal stop sequence, as shown in (29). The glottal stop in the second column appears to be associated with accent on the immediately preceding mora in surface representations.

- | | | | |
|------|----------------|---------------|---|
| (28) | cîri | cíʔri | <i>to be yellow</i> |
| | sîri | síʔri | <i>to be brown</i> |
| | xîri | xíʔri | <i>to be faded</i> |
| | buusí | búʔsi | <i>to be dappled</i> |
| | buuxí | búʔxi | <i>to be speckled</i> |
| | xaawí | xáʔwi | <i>to be sticking out</i> |
| | néèxi | néʔxi | <i>to be light-complexioned⁵</i> |
| (29) | *doohi | dóʔhi | <i>to be blue</i> |
| | *meechi | méʔchi | <i>knife</i> |
| | *irée | iréʔ | <i>to speak sth</i> |

Various grammatical morphemes that have different allomorphs after short and long vowels prove that the short vowel plus glottal stop sequences are indeed based on an underlying long vowel. For example, the compromisive suffix (see 6.6.5) appears as **-aci** after short stem-vowels and as **-raci** after long. Only the latter allomorph is grammatical when combined with **iréʔ** *to speak something*, as illustrated in (30).

- | | | | | |
|------|--|--------------------|------------------------------|--------------------|
| (30) | Náruhgcag | iirárec | níreʔraca (*níreʔaca) | naarahgu. |
| | ná-núhgici-g | ii-ná-néè-c | nʼ-iréʔ-raci-Ø | náà-nahgú-Ø |
| | 2A-miss-CRD | INST-2A-go-DECL | 2POS-speak-COMPR-CONT | 2A-be.sitting-CONT |
| | <i>You were speaking so much at the time that you just passed it (as an exit).</i> | | | |

Both **ee** and **oo** have short allophones before certain derivational suffixes and adpositional enclitics that begin with a consonant cluster. Shortening is optional in some such environments, as before the postpositional suffix **-hgaa** in (31), and obligatory in others, as before the causative suffix **-hgee** in (32).

- | | | | |
|------|------------------|---|------------------|
| (31) | dóhgaa | = | dóòhgaa |
| | dóò -hgaa | | dóò -hgaa |
| | where-LOC | | where-LOC |
| | <i>where</i> | | <i>where</i> |

⁵ The non-glottalized version **néèxi** occurs only in compounds, as in **cíðareexi** *Palomino* (literally ‘light-tailed horse’).

- (32) **néhgee** (***néèhgee**)
 néè-hgee
 go-3CAUS.INDIR
 to send sb/sth

Exceptionally, mid vowels **ee** and **oo** are short in a few synchronically monomorphemic nouns, such as **néhba** *navel* and **dóhsga** *woodpecker species*. The short **e** in **maabéhe** *today*, which is a combination of the noun **maabí** *day* and the demonstrative **-hee** *this*, appears to be a manifestation of tranlaryngeal harmony (i.e., harmony over a glottal stop or **h** in derived words).

The mid vowel **ee** is realized as a lax [æ] in word-final open syllables, as in (33)–(35). The lax allophone [æ] is also common for yet-to-be-identified reasons in some non-final environments, such as in the deictic **éèhgua** *that* in (36) and (37).

- (33) **Sé?** **eewáhgeeh**[æ].
 sé? ma-ééhgee-hee
 that 1A-know-EMPH
I know that.

- (34) **Macééh**[æ] **mú?axbic**.
 macéé-hee m-ú?axbi-c
 man-this 1A-shoot-DECL
I shot this man.

- (35) **Dh**[ææ], **he?sá** **war**[ææ].
 dhéè he?sá waree
 darn like.this EVID
Oh, is that how it is.

- (36) **Masúga** [ææ]**hgu** **hirúwa** **áàbacigua** **raagíc**.
 masúga éèhgua hirú-wa áàbaci-gua naagí-c
 dog that bone-INDEF throat-LOC sit-DECL
That dog has a bone in its throat.

- (37) **Íga** **macéé** **maaráhxabaa** [ææ]**hgu!**
 ígaa-Ø macéé maaráhxabaa éèhgua
 look-IMP.SG man crazy that
Look at that crazy man!

The glottal stop is the only consonant in the coda position that does not block the reduction of [e] to [æ]. Examples (38a)–(40a) demonstrate the change of vowel quality before the interrogative speech act marker -ʔ in the coda position, contrasted with no change before other consonants in (38b)–(40b).

- (38) a. **Madawaaʔaráxibhe** agudóòri **bh[ææ]-ʔ?** b. **Miirahéèri** mabh[éè]-c.
 mada-maaʔaráxibhee agudóò-ri bhéè-ʔ m-iraheeri maa-bhéè-c
 1POS-bread which-ERG consume-INTER 1-PRO.ERG 1A-consume-DECL
Which one (of you) ate up my bread? *I ate it up.*
- (39) a. **Harúg** dóòhs[ææ]-ʔ? b. **Dóòhs[ee]-doog?**
 harúg dóòshee-ʔ dóòhsee-dóòg
 then how-INTER how-SPEC
What's the matter, then? *What's wrong, I wonder?*
- (40) a. **Gú** dab[ææ]-ʔ? b. **Dab[éè]-hi-ʔ?**
 gúá dabéè-ʔ dabéè-hi-ʔ
 that who-INTER who-3FT.INTER-INTER
Who's that? *Who could it be?*

Unlike **e**, other vowels and diphthongs are not subject to significant phonetic change in the speech of most speakers. The only exception is the diphthong **ua**, which often has the phonetic quality of [uo] in casual speech.

2.2 Phonotactics

2.2.1 Syllable structure

The canonical form of the syllable in Hidatsa is CV(V). All lexical stems end in a vowel. Codas are restricted to the lexical glottal stop, a small number of utterance final consonantal speech act markers (see 6.1) and other clausal suffixes (see Chapter 17), codas formed by final vowel deletion in commands (see 6.1.3.1), and the definite article **-s**.

A word begins with either a single phonemic consonant or the phonetic glottal stop preceding vowel-initial syllables. There are no word-initial clusters except for a small number of lexemes that begin with a *Ch* cluster, as illustrated in (41). Other types of consonant clusters are licensed only morpheme internally and at morpheme boundary.

- (41)
- | | |
|----------------|--------------------------------|
| bhí | <i>to be blue</i> |
| bhéè | <i>to eat up sth</i> |
| bhú | <i>to doctor sb</i> |
|
 | |
| dhadáhi | <i>to be stiff</i> |
| dhéè! | <i>interjection of disgust</i> |
|
 | |
| gháà | <i>to laugh</i> |
| ghí | <i>to mean sth</i> |
| ghádaa | <i>to stoke up the fire</i> |

Monosyllabic lexemes that do not begin with a cluster are always heavy: they contain a long vowel or a diphthong, or a short vowel and the glottal stop, as in (42).

- (42)
- | | |
|-------------|-----------------|
| díà | <i>long</i> |
| méeé | <i>lice</i> |
| éè | <i>yes</i> |
| éʔ | <i>his food</i> |

Word-final long vowels and diphthongs are usually shortened if the final syllable is open, as is the case with **máàhdií** *vehicle* in (43) and **gíʔria** *ride* in (44). Since content words consisting of a single light syllable are not grammatical in Hidatsa (unless the onset is a cluster), a phonetic [h] is added to the end of a monosyllable in order to keep it heavy, as the three examples in (45). However, there are monosyllabic words and grammatical morphemes, such as **míà** *woman*, **múá** *fish*, and **-hguá** *LOC*, as well as final diphthongs in polysyllabic words, such as **macúà** *sinew*, that are never shortened under any circumstances.

One should not ascribe too much importance to the regularities that seem to emerge from the matrix. Some clusters occur in only a few lexical constructions. One (hh) occurs in only one lexeme, albeit a very common one. There seem to be no phonological restrictions to explain why some of the clusters remain unattested.

TABLE 2.4. CONSONANT CLUSTERS

	b	d	g	c	s	x	h	w	r	ʔ
b	-	bd	bg	bc	bs	bx	bh	-	-	-
d	-	-	dg	dc	-	dx	dh	-	-	-
g	gb	gd	-	gc	gs	gx	gh	-	-	-
c	-	-	cg	-	-	cx	ch	-	cn	-
s	sb	sd	sg	-	-	-	-	-	-	-
x	xb	xd	-	-	-	-	-	-	-	-
h	hb	hd	hg	hc	hs	hx	hh	-	hn	-
w	-	-	-	-	-	-	-	-	-	-
r	-	-	-	-	-	-	-	-	-	-
ʔ	ʔb	ʔd	ʔg	ʔc	ʔs	ʔx	ʔh	ʔw	ʔr	-

bd	<i>íbdaree to pin sth on sth</i>	sd	<i>isdá his eye</i>
bg	<i>íbgidi to smear sth on sth</i>	sg	<i>ísgee to think of sth</i>
bc	<i>abcá to be sharp</i>	xb	<i>nuxbáàga people</i>
bs	<i>óbsagi to dip sth in sth</i>	xd	<i>ixdadagí hawk</i>
bx	<i>abxída mucus</i>	hb	<i>behbéé to be shaggy</i>
bh	<i>bhúria to get healed</i>	hd	<i>ahdú head</i>
dg	<i>nadgaabí Owl Dance</i>	hg	<i>áhgagoori thousand</i>
dc	<i>cîndcibisa mule deer</i>	hc	<i>híhci to be pink</i>
dx	<i>idxuhdí his glove</i>	hs	<i>híhsua mint</i>
dh	<i>madhéé already</i>	hx	<i>isbahxéé his elbow</i>
gb	<i>ágbaa to holler at sb</i>	hh	<i>háhheehisa to be quiet</i>
gd	<i>noogdéé corpse</i>	hn	<i>naraahnáaraa to be shivering</i>
gc	<i>óògcia night</i>	ʔb	<i>xíʔbi to be wrinkled</i>
gs	<i>maagiragsí baby</i>	ʔd	<i>áʔda to be dull gray</i>
gx	<i>mááhgoogxabi snowy owl</i>	ʔg	<i>seʔgúhaag from there</i>
gh	<i>migháá grass</i>	ʔc	<i>áʔciwi to track sb</i>
cg	<i>abiicgá moustache</i>	ʔs	<i>úʔsia to arrive</i>
cx	<i>icxúùgi feather</i>	ʔx	<i>búʔxi to be speckled</i>
ch	<i>ácha to be close</i>	ʔh	<i>dóʔhi to be blue</i>
cn	<i>gabíicnaagahgee to be tiny</i>	ʔm	<i>séʔwa that one</i>
sb	<i>irásba his shoulder</i>	ʔn	<i>seʔrí that one (ERG)</i>

Attested triconsonantal clusters are listed in TABLE 2.5, following which are examples of each cluster.

TABLE 2.5. TRICONSONANTAL CLUSTERS

GLOTTALIZED PREASPIRATED OBSTRUENTS	GLOTTALIZED ASPIRATED OBSTRUENTS	ALVEOPALATAL FRICATIVE AND ASPIRATED STOP	VELAR FRICATIVE AND ASPIRATED STOP	PALATAL AFFRICATE AND ASPIRATED STOP
ʔhb	ʔbh	sbh	xbh	cgh
ʔhd	ʔdh	sdh	x dh	-
ʔhg	ʔgh	sg h	-	-
ʔhc	ʔch	-	-	-

PREASPIRATED
VELAR FRICATIVE
AND STOP

hxb

hxd

-

-

ʔhb aʔhbáhi *to be larger*

ʔhd seʔhdáá *towards that place*

ʔhg éʔhgee *his snacks*

ʔhc macúàʔhca *sweetgrass*

ʔbh méʔbhi *mortar and pestle*

ʔdh iréʔdhaa *to be mute*

ʔgh siaʔgháà *until then*

ʔch méʔchi *knife*

sbh isbhirú *his forearm*

sdh arasdháà *to trample on sth*

sg h ísg hi *scales of sth*

xbh núxbhi *to pull sth down*

x dh naxdhí *to pound sth fine*

cgh nacghí *to quill sth*

hxb iihxbádi *to be sated*

hxd míàhxdee *to be jealous*

Certain surface forms, such as those in (41) and Table 2.5, cause aspirated stops to sound like they are single segments; however, other considerations suggest that it is better on the whole to treat them as sequences of an obstruent + *h*.

The arguments for that interpretation include:

- The fact that in many cases aspirated consonants at morpheme boundaries result from a morpheme-final stop (after the loss of a morpheme-final vowel) followed by an initial *h* of the following morpheme, as in (46) and (47).

(46) [áàp^hiru] *neck bone* /áàbi *neck* + hirú *bone*/ → áàbhiru

(47) [aʔk^húù] *to bring it along* /aʔg *have.and* + húù *come*/ → aʔghúù

- The A-set prefix **maa-** is shortened to **ma-** before all clusters, including *Ch* sequences (see 3.1.1). The shortening could not be explained if aspirated stops were phonemes.

- The allomorph **na-** of the instrumental prefix **naga-** is used before both unambiguous *CC* as well as *Ch* (see 4.3.1.6).

- The only short-voweled monosyllabic roots are ones that begin with *Ch*. If phonetically aspirated obstruents were single segments, it would be hard to explain why having an initial aspirated stop should affect the number of moras the root is allowed to have.

2.3 Pitch accent

Within the Siouan language family, Hidatsa and Crow stand apart because of their innovative pitch accent system. Other Plains languages that have developed pitch-accent include the Algonquian-speaking Arapaho and Blackfoot.

There is no stress in Hidatsa. All words have a single unstressed accented mora that can occur anywhere in the word. The accented mora and all moras to the left of it have high pitch (H), and all moras following the accented mora have low pitch (L). Since pitch accent is lexical in Hidatsa, it is also contrastive. Minimal pairs containing accented short vowels are contrasted in (48)–(52).

(48) HH mahgú *to dwell*
HL máhgu *cottonwood*

(49) HHH arawí *to notice sth*
HHL aráwi *to be bitter*

(50)	HHL HLL	aghíri ághiri	<i>be lucky</i> <i>be tame</i>
(51)	HHHH HHHL	arahgábi arahgábi	<i>to walk on paws or claws</i> <i>to scratch sth with paws or toenails</i>
(52)	HHHL HLLL	arahcáxic aráhcagic	<i>he broke it with his foot</i> <i>it was broken by the fire</i>

When accent occurs on the first mora of a long vowel or a diphthong, the long vowel or diphthong is realized with a falling pitch; when accent occurs on the second mora of a long vowel or diphthong, the whole vowel or diphthong is realized with level high pitch. Level high pitch on long vowels and diphthongs is indicated with acute accents (´) on both moras and the falling pitch with a sequence of acute and grave accents (´). A number of minimal pairs, contrasted in (53)–(57), attest to the phonemic status of pitch contour.

(53)	HH HL	íí îî	<i>fur, hair</i> <i>his mouth</i>
(54)	HH HL	cáác cáàc	<i>it is a butte</i> <i>it is uncooked</i>
(55)	HH HL	múác múàc	<i>it is a fish</i> <i>it is howling</i>
(56)	HH L HL L	núúba núùba	<i>marrow</i> <i>two</i>
(57)	H HH H HL	idúús idúùs	<i>her song</i> <i>her sister-in-law</i>

Since there is no stress in Hidatsa, some words, phrases, and sentences that contain only high-pitched constituents have no perceptible accent. When one hears no pitch fall in a sentence, one can assume that the last mora of each word in the sentence is accented; thus in (58) the entire

sentence is realized with high pitch and no syllable in the sequence is more prominent than others.

- (58) *Giraagudheerúg maciráá aruwaadiríác.*
hgiraagudhéé-rúg ma-iciráá aru-maa-diríá-c
morning-COND 1POS-barefoot IRR-1A-run-DECL
Tomorrow morning I will run barefoot.

Pitch-accent has been one of the least understood aspects of Hidatsa. It was first recognized by A. Wesley Jones in the 1980s (Jones, p.c.). Boyle (2007: 48) believes that “Hidatsa has a pitch accent system similar to that found in Crow” but does not elaborate. All other authors have described Hidatsa in terms of stress-accent.¹ Gordon (1972) is a good description of pitch accent in Crow.

As long as Hidatsa was still described in terms of stress-accent, words with accent on the last syllable proved to be particularly error-prone for analysis since no syllables in such words are perceptibly more salient in terms of pitch or stress. As a consequence, the transcriptions of most published and unpublished texts and lexical corpora in Hidatsa are unreliable due to the large number of incorrect accent markings.² Generally, the last element in a sequence of high-pitched syllables is not in any way phonetically more prominent than the preceding or following syllables. However, in uniformly high-pitched words, stress was often incorrectly perceived to be on syllables that are phonetically salient in other ways than accent. For example, the ethnonym *Hiraacá Hidatsa*, which has been variously transcribed as **Hiraaca* or **Hirààca*, offers insights

¹ Bowers (1996) uses the terms pitch and accent in other senses.

² Harris and Voegelin (1939) is a notable exception. Carl Voegelin correctly marked accent on last syllables in words containing only high-pitched moras. Voegelin’s unpublished field materials are equally reliable. In hindsight Voegelin’s intuitive ability to recognize pitch-accent is quite remarkable considering the fact that he never mentions the theoretical notion of pitch in his descriptions. The only feature associated with pitch-accent that Voegelin failed to detect is pitch contour and the interaction of it with vowel length.

into the reasoning behind incorrect transcription of accent: it has been marked on the first syllable, as the Hidatsa high front vowel *i* is perceptually more salient than the low vowel *a*, or on the long second vowel, as long vowels are again perceptually more salient than short vowels.

Another source of confusion has been high-pitch homophones. For example, the word *mirí* can mean either ‘water’ or ‘celestial luminary’. In many published sources, one of these meanings is transcribed as *mirí* and the other one as **míri*.

Hidatsa speakers are generally oblivious to the existence of pitch in their language. This, compounded by the problem of vowel length, has been one of the major reasons why community-based initiatives for developing an orthography have not been successful. Fluent speakers are aware that words distinguished only by pitch (and/or length) sound different but typically are unable to analytically articulate the difference. Massively incorrect accent marking in published word lists and traditional stories that are used in the community has further added to the conundrum.

The fact that Hidatsa is not a stress-accent language does not mean that certain elements in a pitch phrase cannot be stressed if needed. During the early stages of my field work this turned out to be a major source of incorrect accent marking in my own field notes, all corrected now, when the speakers working with me wanted to correct mistakes in my pronunciation by stressing an otherwise unaccented syllable.³

Incorrect accent placement and mistakes with pitch contour often change the meaning of words in subtle and not-so-subtle ways that are a source of amusement for fluent speakers and an

³ In polysyllabic “super compounds” consisting of multiple stems, the underlying accent in the individual component lexemes is sometimes realized as secondary stress.

obstacle learners have to surmount. (59) is an example of three different meanings that **Miixaagac** can have depending on where the accent is and whether the pitch contour is level or falling.

- | | | | |
|------|--|--|---|
| (59) | a. Mííxaagac.
mííxaaga-c
duck-DECL
<i>It's a duck.</i> | b. Mîíxaagac.
m-îî-xáàga-c
1POS-mouth-sore-DECL
<i>My mouth is scabby.</i> | c. Miixáàgac.
míí-xáàga-c
1B-sore-DECL
<i>I have sores.</i> |
|------|--|--|---|

2.3.1 Pitch spreading

With the possible exception of the anaphoric pronoun **sé'** *that*, all noun and verb stems are inherently accented. Affixes and clitics fall into two categories. Some, such as **nída-** 2POS, **ná-** 2B, **í-** LOC, **-î** HAB.SG, and **-gsá** USI, are accented. Many others, such as **nii-** 2B, **maa-** INDEF, **-wa** INDEF, **-he** DEM, and **-ga** PREC, are accentless.

High pitch is inserted at the left edge of a phonological word whence it spreads until it hits an accented mora (which also has high pitch). Low pitch is inserted after the accented mora and spreads until the end of the phonological word. Accentless affixes and clitics are pronounced with high pitch if they are left of the accented segment, and with low pitch if they are right of it. These two processes can be subsumed under the Hidatsa Pitch Spreading Rule, presented in (60).

- (60) PITCH SPREADING RULE:
 $H \rightarrow \acute{V} \rightarrow L$

An example of the pitch spreading rule is (61). The only accented morpheme in this word is the stative verb **cigúà** *to be sweet*, which has accent on the first mora in the last syllable. The lack of inherent accent on any of the grammatical morphemes preceding and following **cigúà** is reflected in the lack of diacritics in the interlinear analysis.

- (61) H HH HH H V̂L LL
 Giwiiwaacigúàhgeec.
 hgi-mii-maa-cigúà-hgee-c
 GI-1B- INDEF-sweet-3CAUS.INDIR-DECL
I became diabetic.

In lexical compounds, pitch remains low after the first low-pitched mora in any formant, as in (62).

- (62) mááhgu *night* + mirí *luminary* → mááhgwiri *moon*
 HH L HH → HH L LL

Demonstrative stems *hiri* *this*, *gua* *that*, *se*[?] *that*, and the adverbial *nuwa* *some* defy the Pitch Spreading Rule. For example, when the anaphoric pronominal demonstrative *se*[?] *that* is followed by accentless suffixes, the latter are pronounced with low pitch, as in (63a) and (64a). However, *se*[?] may also occur as an inherently high-pitched accentless morpheme, in which case no low pitch is inserted and the accentless suffixes that follow are pronounced with high pitch, as in (63b) and (64b). Both variants of *se*[?] are equally well attested in the corpus.

- (63) a. sé[?]hguá *there* = b. se[?]hgúá *there*
 (64) a. sé[?]hdaa *thither* = b. se[?]hdáá *thither*

Another example is the mesiodistal pronominal demonstrative *gúá* *that*, which only permits high pitch on the otherwise accentless locative suffixes, as illustrated in (65) and (66).

- (65) gugáá *there* (*gúgaa)
 (66) guhdáá *thither* (*gúhdaa)

The Deaccenting Final Moras Rule accounts for the deletion of the accent on the rightmost mora in a morpheme in complex stems and compounds if the following morpheme has

high pitch. The rule is recursive since there may more than two elements with accented final moras in a complex stem. The Deaccenting Final Moras Rule is presented schematically in (67).

(67) DEACCENTING FINAL MORAS

$$\acute{V}\# + H \rightarrow HH$$

Examples (68)–(70) illustrate the Deaccenting Final Moras Rule. In compounds where every component word, except the last one, has an accented last mora, only the last word retains its accent regardless of its location.

(68) *mirí* water + *máàhdii* vehicle → *miriwáàhdii* boat
 H V V L LL H H V L LL

(69) *abá* nose + *hobí* hole + *nuxbáàga* people → *Abahobiruxbáàga* Nez Perce
 H V H V H V L L H H H H H V L L

(70) *mirá* tree + *xubáá* sacred + *ihbú* tip → *miraxubaa'ihbú* cedar tips; peppercorns
 H V H HV H V H H H H H V

Grammatical morphemes (affixes and clitics) are either accented or accentless. When high pitch starts spreading from the left edge of the word, it rides over the accentless grammatical prefixes and proclitics until it reaches an accented mora, either in a lexical or a grammatical morpheme, after which the low pitch is inserted. The rightmost accented mora of a stem becomes deaccented when it is followed by an accented suffix or enclitic. Low pitch is inserted after the stem if the following affix is accentless. In short, accented grammatical morphemes behave essentially like lexical morphemes, being subject to the Pitch Spreading Rule and the Deaccenting Final Moras Rule.

TABLE 2.6 is a representative list of some common accented and accentless grammatical morphemes in Hidatsa.

TABLE 2.6. ACCENTLESS AND ACCENTED GRAMMATICAL MORPHEMES

ACCENTLESS		ACCENTLESS	
mada-	<i>1 person possessive</i>	-dhaa	<i>negative</i>
ida-	<i>3 person possessive</i>	-ara	<i>plural imperative</i>
maa-	<i>indefinite</i>	-wa	<i>indefinite</i>
ii-	<i>instrumental</i>	-aci	<i>compromisive</i>
aru-	<i>relativizer</i>	-sdaa'	<i>definitive</i>
ACCENTED		ACCENTED	
nída-	<i>2 person possessive</i>	-îi	<i>singular habitual</i>
ná-	<i>2 person active</i>	-gsá	<i>usitative</i>
áàb-	<i>comitative</i>	-sée	<i>distributive</i>
ági-	<i>locative</i>	-hcági	<i>limitive</i>
í-	<i>locative</i>	-rú	<i>locative / temporal</i>

The contrast between accented and unaccented suffixes is illustrated in (71). It is immediately apparent that the final mora in **macéé** *man* loses its accent in accordance with the Deaccenting Final Moras Rule when the following suffix is accented, as the ergative suffix **-rí** in (71b). The final mora in **macéé** retains its accent when the following suffix is unaccented, as the indefinite article **-wa** in (71a).

- (71) a. **Macééwa** **miigiwé'c.** b. **Maceerí-wa** **miigiwé'c.**
 macéé-wa **mii-hgiwé'c** **macéé-rí-wa** **mii-hgiwé'c**
 man-INDEF **1B-tell-DECL** **man-ERG-INDEF** **1B-tell-DECL**
 A man told it to me. *A man told it to me.*

Only a few Hidatsa prefixes are accented. For example, pronominal prefixes marking the second person, unlike the first and third person prefixes, are almost always accented (the only exception being unaccented B-set prefixes).⁴ Compare, for example, (72) with (73). In example (72), the first person alienable possessive prefix **mada-** and the A-set prefix **maa-** each are subject to left-to-right Pitch Spreading Rule and are pronounced with high pitch despite having

⁴ Four irregularly inflected active verbs also have unaccented second person prefixes. See TABLE 3.5.

no accent. In each of the three words in the sentence the accent follows elsewhere in the word after which the low pitch is inserted. In example (73), the second person pronominal marker that is prefixed to each word in the sentence is accented, causing the rest of word to become low-pitched.

- (72) **Madawaa[?]iigiré[?]hge** **mahguucí** **maawáàheec.**
mada- maa-ii-hgi-né[?]-hgee **maa-** hguucí **maa-** ma[?]ihee -c
1POS-INDEF-INST-GI-fly-CAUS **1**A-retrieve **1**A-want-DECL
I want my kite back.
- (73) **Nídwaa[?]iigire[?]hge** **náhguuci** **náwaahee[?]?**
nída- maa-ii-hgi-né[?]-hgee **ná-** hguucí **ná-** ma[?]ihee-[?]
2POS-INDEF-INST-GI-fly-CAUS **2**A-retrieve **2**A-want-INTER
Do you want your kite back?

Besides second person pronominal prefixes, locative prefixes comprise the only other group of prefixes that bear lexical accent.

2.3.1.1 Constructions with dominant accent

Exceptionally, one suffix, **-[?]hi** ‘momentaneous’, bears dominant accent that overrules the preceding pitch pattern neutralizing all accents before it.⁵ Note that the momentaneous suffix causes ablaut (see 2.4.1) in the preceding stem, after which the stem-final mora (that may have undergone ablaut) becomes accented, as in (74).

- (74) **núwiiric** → **nuwiiráhic**
núwiiri-c núwiiri-**hi**-c
twist-DECL twist-**MOM**-DECL
he twisted it *he turned it on*

⁵ Boyle suggests that the diachronic origin of the dominant pitch on **-[?]hi** may have something to do with the inherent emphasis laid on punctual activities (John Boyle, p.c., January 9, 2010).

In addition to the momentaneous suffix, vocative constructions are characterized by the use of dominant accent that is placed on the typically lengthened last syllable of the stem. The pitch on the lengthened final syllables has a falling contour. Vocative forms are commonly used with kinship terms (see 8.1.4) and personal names, including nicknames, as in (75).

- (75) **Maa'eehgeedháà!** **Húùga!**
 maa-ééhgee-dhaa-´´ húù-ga
 INDEF-know-NEG-VOC come-IMP
Stupid (derog. nickname)! Come here!

The dominant accent is placed on the usually lengthened plural morpheme -o when a group of people is addressed, as in (76).

- (76) **Maagarisda'ó(ò), níhgibo'se'riara!**
 maagarísda-o-´´ níhgi-bó'si-ria-ara
 child-PL-VOC 2REFL-bundle-REFL-IMP.PL
Children, bundle up!

The use of the plural vocative in a traditional story is illustrated in (77).

- (77) **Moohcaa'óò!** **Nááhuara!** **Ceesa'óò!** **Nááhuara!**
 móòhcaa-?o-´´ nááhu-ara céésa-?o-´´ nááhu-ara
 coyote-PL-VOC come.PL-IMP.PL wolf-PL-VOC come.PL-IMP.PL
- lixohga'óò!** **Nááhuara!** **héè wareec.**
 ííxohga-?o-´´ nááhu-ara héè waree-c
 fox-PL-VOC come.PL-IMP.PL say EVID-DECL

Coyotes, come! Wolves, come! Foxes, come! he said (they say).

Examples (74)–(77) provide sufficient evidence that the direction of high-pitch spreading is to the left from the accented mora. Unlike the regular type of left-to-right high-pitch spreading, whereby high pitch reaches only the first accented mora and drops right after that, the right-to-left spreading high pitch does not drop after reaching accented moras, but rides over them and

spreads until it reaches the left edge of the word. The Dominant Pitch Spreading Rule is presented in (78).

(78) DOMINANT PITCH SPREADING RULE

$$\mathbf{H} \leftarrow \check{\mathbf{V}} \rightarrow \mathbf{L}$$

Although the accent-bearing unit in Hidatsa is the mora, the momentaneous suffix *-hi* and the vocative *-^* are unusual in this respect since they contain an accentual specification but lack a segmental one. The only other example of “floating accent” in Hidatsa is the allomorph *n´-* of the second person pronominal prefix *ná-* that lacks a syllabic nucleus.

2.3.2 Floating pitch

A different kind of manifestation of the autonomy of the pitch-accent tier is illustrated in (79). In the compound *mááchiruwadu chokecherry*, the first component *máácuu* loses its final two moras, which happen to be the only low-pitch segments in the sequence. According to the Deaccenting Rule of Final Moras, one would now expect the accent in the compound to fall on the last accented mora in *madú*. Since this is not the case, the only explanation is that the low pitch was left “floating” after it became disassociated from the deleted segment.

(79) *máácuu berry* + *hirú bone* + *madú exist* → *mááchiruwadu chokecherry*

HH	LL	H H	H H	H H	HH	L L	L L	L L

A similar process occurs at morpheme boundary in (80), where the final accented vowel in *hirí this* is deleted before the low-pitched plural suffix *-ʔo*. However, both the accent and high pitch are preserved and transposed on *-ʔo*, whereas the low pitch on the plural morpheme is left floating. If one only considered the surface structure, one would expect the whole word to be

pronounced with the high pitch due to the Final Mora Deaccenting rule since the ergative morpheme *-rí* is accented. However, the unassociated and therefore “invisible” floating low tone after *hiróʔ* causes the pitch to drop, since the high pitch on *o* is not the final segment in the autonomous suprasegmental tier.

- (80) *hirí this -ʔo PL -rí ERG -c DECL* → *hiróʔric* *they are the ones who did it*
 | | | | | | | | | | | |
 H H L H HH L L

2.3.3 Phonological phrases

In phonological phrases, the accent of non-initial words is removed and the accentless words are realized with low pitch, even if the preceding word has accent on its final mora, as *iiwahgasaarí* in (81). This behavior is markedly different from what happens within a phonological word: in phonological words, if an element has an accent on its final mora, the next element *retains* its accent.

- (81) *Irúgsidi îwagicheedhahaaba iiwahgasaarí aabhiwaac.*
irugsidi îwagichee-dhaa-háà-aba ii-maa-hgi-asaarí áàbi-hiwaa-c
meat distribute-NEG-ADV-COL INST-1A-GI-steal with-1CAUS.DIR-DECL
Before they passed the meat around I snuck some off.

The mapping of syntactic phrasing, if any, to phonological phrasing remains unclear. The phenomenon of entire words losing their accent, however, is extremely common in Hidatsa and should at least be mentioned here, even if no analysis is available. In this grammar, the existence of this phenomenon is obscured by the fact that most transcriptions in examples reflect the hypercorrect speech-style in which all words retain their accent.

A few generalizations can nevertheless be made.

Accent loss occurs more frequently in auxiliary verb constructions, especially if the main verb terminates in a low-pitch mora, as in (82). Note that accentless words in connected speech are particularly prone to $m \rightarrow w$ and $n \rightarrow r$ lenition even in word-initial position.

- (82) **Mihcagí(i)hdaa awawáàga [w]aaragic.**
 m-íhcagídaa maa-awáàgi-Ø maa-naagí-c
 1-PRO 1A-sit.down-CONT 1A-sit-DECL
I'm sitting by myself.

Accent loss in non-initial words may help to disambiguate the meaning of an utterance. Compare, for example, the compound **miracúhga board**, subject to the Deaccenting Rule of Final Moras, in (83a), to the phrase **mirá cuhga wide tree**, to which the rule does not apply, in (84a). In hypercorrect, careful, or slow speech style the noun modifier **cúhgac it is wide** retains its original accent on the first syllable, as in (84b). Again, the orthography employed in this grammar does not reflect the change in pitch in phonological phrases because there is much variation due to changes in the rate of speech in everyday life.

- (83) a. **Miracúhgac.** b. ***Mirácuhgac.**
 mirá-cúhga-c
 tree-wide-DECL
It's a wooden board.
- (84) a. **Mirá cuhgac.** b. **Mirá cúhgac.**
 mirá cúhga-c mirá cúhga-c
 tree wide-DECL tree wide-DECL
It's a wide tree. It's a wide tree.

2.3.4 Pitch contour on monosyllabic roots

As a rule, the falling pitch contour on some monosyllabic roots becomes level when the root is a non-final element of a compound or is followed by an accented suffix, or is a non-final member of a phonological phrase. The final long syllable of a few polysyllabic roots, such as **xubáà to be**

holy and *cirfà* *to be cold*, undergoes the same prosodic change in all (e.g., *xubáà*) or some (e.g., *cirfà*) of the aforementioned contexts. The pattern is illustrated in examples (85)–(89).

- (85) *miraxubaa'ihbú*
 mirá-xubáà-ihbú
 tree-sacred-tip
cedar tips; peppercorns
- (86) *Maahiigsasgí* *hahsáá goowíheec.*
 maa-hî-gsá-sgí hahsáá goowí-hee-c
 INDEF-drink-USI-MIT but quit-3.CAUS.DIR-DECL
He used to be a heavy drinker but he quit.
- (87) *Mirabhéèrabi hiirúg* *Máàgadaa Aasis* *se'hdaa* *aruwaaréèc.*
 mirabhéèrabi hî-rúg máàgadaa áàsi-s sé'hdaa aru-maa-nèè-c
 noon get.here-COND plum creek-DEF that-GOAL IRR-1A-go-DECL
I'm going to Minot this afternoon.
- (88) *Idúùxi caràà íxdeehcagag* *gii'fíc.*
 idúùxi caràà íxdee-hcági-g gî-î-c
 shirt oil smell.of-LIM-CRD get.back-HAB-DECL
He always comes home clothes smelling of gas.
- (89) *Móòhcaawa múá* *naaghíc.*
 móòhcaa-wa múà-Ø naaghí-c
 coyote-INDEF howl-CONT sit.EVID-DECL
A coyote is howling.

There is also some interspeaker variation in respect to changing pitch-contour on polysyllabic stems. For instance, in one elicitation session example (90a) was deemed more correct by one native speaker whereas another one felt that (90b) sounded better.

- (90) a. *Ichéé* *gigéèc.* b. *Ichéè* *gigeec.*
 ichéè gigéè-c ichéè gigéè-c
 awake OPIN-DECL awake OPIN-DECL
I think he's awake. *I think he's awake.*

2.3.5 Pitch-accent schemas

Dependent verbal roots that are used to derive instrumental and locative verbs lack lexical accent. Instead, a schematic pitch pattern is associated with each derived instrumental and locative verb class, and word forms inflected for number belonging to each class. An incomplete example of a family of instrumental and locative verbs based on an abstract root **bági* *to scatter; bloom* is presented in example (91) with affixes underlined and accented segments in boldface:

(91)	<i>*-BÁGI</i>	<i>disperse small pieces, scatte; bloom</i>
	<u>núbági</u>	<i>scatter sth</i>
	<u>giruági</u>	<i>scatter sth, scatter sth again</i>
	<u>arabági</u>	<i>scatter sth with the foot</i>
	<u>arábági</u>	<i>splattering by heat; sudden breakout or spreading of a skin condition</i>
	<u>habági</u>	<i>cut little slits in sth, such as slits for shoestrings in mocassins</i>
	<u>nábági</u>	<i>splash or scatter sth by teeth (as when biting into an orange)</i>
	<u>nagabági</u>	<i>spread sth by splashing it on a surface; bloom, blossom</i>
	<u>írubági</u>	<i>sprinkle sth on sth</i>
	<u>íigabági</u>	<i>be splashed or splattered on</i>
	<u>ígabahgee</u>	<i>spray or sprinkle sth on sth</i>

The specifics of each derivational and inflectional pattern of instrumental and locative verbs are described in section 4.3.2.

2.4 Phonological and morphophonemic processes

2.4.1 Ablaut

Before certain morphemes, most stem-final vowels are subject to a number of alternations that can be subsumed under the term ablaut. The ablaut-triggering morphemes are listed in TABLE 2.7.

TABLE 2.7. ABLAUT-TRIGGERING SUFFIXES AND ENCLITICS

-∅	<i>SINGULAR IMPERATIVE</i>
-∅	<i>CONTINUATIVE</i>
-g	<i>COORDINATIVE (affects only verbs)</i>
-aba	<i>COLLECTIVE PLURAL</i>
-aci	<i>COMPROMISIVE</i>
-'hi	<i>MOMENTANEOUS</i>
-rée	<i>PROGRESSIVE</i>
-íí	<i>INTENSIVE</i>
-ara	<i>PLURAL IMPERATIVE</i>
-ʔa	<i>PLURAL</i>
-ʔo	<i>PLURAL</i>

The division of ablaut-triggering morphemes in TABLE 2.7 into three groups implies that they affect the vowel(s) in the preceding syllable in three distinct ways. There are several subgroups of vowels that are affected differently by the three groups of morphemes. The matrix in TABLE 2.8 presents all possible combinations of ablaut-triggering morphemes with preceding vowels. Cells containing ablauting stem vowels are filled in grey. Combinations with oo are omitted from the matrix since any such examples with *asgóò to be lame, to limp*—the only oo-final verb that I have been able to identify—are absent from my corpus.

TABLE 2.8. STEM ABLAUT

		GROUP I (SG. IMP.)	GROUP II	GROUP III (PLURAL)
P				
R	-a	–	–	–
E	-aa	-a	–	–
C				
E	-i	-a	-a	-a
D				
I	-e [?] /-ee	-a [?] / -aa	-a [?] / -aa	-aa
N				
G	-ee	-e	-ia	-ii
	-i [?]	-i [?]	-ia [?]	-ii
V	-ii	-i	-ia	-ii
O	-ia	-i	-ia	-ii
W	-ua	-u	-ua	-uu
E	-u [?]	-u [?]	-ua [?]	-uu
L	-uu	-u	-ua	-uu

Stem-final short and long **a** are not affected by ablaut, except that the second mora in **aa** is deleted in the singular imperative form.

Stem-final short **i** ablauts to **a**, as illustrated in (92)–(95).

- (92) **Maruwîrag marusgíc.**
 maa-núwiiri-g maa-núsgi-c
 1A-twist-CRD 1A-open-DECL
I unscrewed it.

- (93) **Maaghág iiwaadá maawagíc.**
 maa-ghí-g ii-maa-dí-Ø maa-magí-c
 1A-get.back-CRD INST-1A-die-CONT 1A-lie-DECL
I got home and dropped over dead (of exhaustion).

- (94) **Ará birábuuraacidoore.**
 ará birábuuri-aci-doore
 hair fine-COMPR-ASSERT
She has fine fly-away (thinning) hair.

- (95) **liʔawáàgag gáádhaara! Maaruwá hiráàra!**
 ii-awáàgi-g gáá-dhaa-ara maa-ruwa hirí-ara
 INST-sit-CRD sit.PL-NEG-IMP.PL INDEF-some do-IMP.PL
Don't just be sitting there! Do something!

In a small number of verbs that terminate with **ee / eʔ**, such as **géeèsee** *to watch sth*, **gáàgèʔ** *to roll*, and third person causative suffixes **-hee** and **-hgee**, the final **ee / eʔ** ablauts to **aa / aʔ** before all morphemes that are listed in TABLE 2.7. Examples are (96)–(100).

- (96) **Nídawaagarisdoʔ gigéèsaara! Maaʔawáàgihgaara!**
 nída maa-garísda-ʔo hgi-géeèsee-ara maa-awáàgi-hgee-ara
 2POS INDEF-small-PL GI-watch-IMP.PL 3OBJ.PL-sit-3CAUS.INDIR-IMP.PL
Watch / take care of them your children! Make them sit down!

- (97) **Cagáàga éèca giráʔg nááhaʔc.**
 cagáàga éèca hgiréʔ-g nááhi-ʔa-c
 bird all fly-CRD go.PL-PL-DECL
All the birds flew away.

- (98) **Harúg heʔsáh!**
 harúg heʔsée-Ø
 then do.this-IMP.SG
Do it then!

- (99) **Miiʔarááʔac**
 mii-areʔ-ʔa-c
 1B-ache-PL-DECL
We are hurting.

- (100) **Cagáàga éèca girááʔac.**
 cagáàga éèca hgiréʔ-ʔa-c
 bird all fly-PL-DECL
All birds fly.

Long vowels **ee, ii / iʔ**, and **uu / uʔ**, as well as the diphthongs **ia** and **ua** are affected in three ways by the ablaut-triggering morphemes in TABLE 2.7.

First, the phonetically zero singular imperative morpheme only causes the final vowel or diphthong to become short but triggers no ablaut, as in (101)–(103).

- (101) **Níhgibo^ʔse^ʔri!**
 níhgi-bó^ʔsi-**ria**-Ø
 2REFL-bundle-REFL-IMP.SG
Bundle up!
- (102) **Hiróó naharé!**
 hiróó naharéé-Ø
 here stand-IMP.SG
Stand here!
- (103) **Maa^ʔii^ʔíbdare** **hiróó íbdare!**
 maa-ii-í-bádaree hiróó í-bádaree-Ø
 INDEF-INST-LOC-stick here LOC-stick-IMP.SG
Stick the pin right here!

Second, **ee** → **aa**; **ee, ia, i^ʔ** → **ii**, and **u^ʔ** → **uu** before the plural morphemes **-^ʔa** and **-^ʔo**.

Examples illustrating each one of these alternations are in (104)–(108) with the alternating segment of the ablaut-causing morpheme in boldface.

- (104) **Dibiàhgua miiragdárii^ʔac.**
 dibià-hgua mii-nagdáree-**^ʔa**-c
 mud-LOC 1B-stuck-PL-DECL
We got mired in the mud.
- (105) **Darúhdisee diríi^ʔac.**
 darúhdi-sèè diríá-**^ʔa**-c
 flat.land-DIST run-PL-DECL
They ran along on the plains.
- (106) **Cîdadagi maaríi^ʔac.** / **nárii^ʔoo^ʔ?**
 cîda-adagí maa-ní^ʔ-**^ʔa**-c / ná-ní^ʔ-**^ʔo**-^ʔ
 tail-white 1A-shoot-PL-DECL / 2A-shoot-PL-INTER
We shot a deer. / Did you shoot a deer?
- (107) **Adáàsiruhaag magiwirúú^ʔac.**
 adáási-ruhaag magi-mirú^ʔ-**^ʔa**-c
 outside-LOC RECIP-fight-PL-DECL
They are fighting outside.
- (108) **Daagáà síi^ʔoo^ʔ?**
 daagáà séé-**^ʔo**-^ʔ
 say.what say-PL-INTER
What did they say?

In many speakers' speech the final **-iiʔa** and **-uuʔa** in examples are diphthongized and pronounced as **-iaʔ** and **-uaʔ**, respectively.

Finally, before all other morphemes in TABLE 2.7, the second mora in long vowels becomes **a**, in effect creating a diphthong. The affected segments are **ii / iʔ** and **uu / uʔ**, which become **ia / iaʔ** and **ua / uaʔ**, respectively. The long vowel **ee** is affected by a cyclical rule which first raises it to **ii** and then diphthongizes it to **ia**.

Examples are (109)–(111).

- (109) **Garíá** **háhguc** **adáàsigua.**
garèè-Ø háhgu-c adáàsi-hgua
vomit-CONT be.at-DECL outside-LOC
He's vomiting outside.

- (110) **Gíág** **gíáʔg** **nèèc.**
gíí-g gíʔ-g nèè-c
get.back-CRD backpack-CRD go-DECL
He came back and carried it away on his back.

- (111) **Náàg** **ééhgaag** **gúág** **miigiwáʔ!**
nèè-g ééhgee-g gúú-g mii-giwéʔ-Ø
go-CRD know-CRD come.back-CRD 1B-tell-IMP.SG
Go, find out what is going on, come back, and tell me!

The three ways ablaut-triggering morphemes affect verbs belonging to this third group are illustrated with **núdaree** *to grab and squeeze something soft* in (112). Recall that the singular imperative does not cause ablaut in this group.

- (112) a. **Dibí núdare!** b. **Dibí núdariiʔac.** c. **Dibí núdariag** **îbgidaara!**
dibíà núdaree-Ø dibíà núdaree-ʔa-c dibíà núdaree-g í-bágidi-ara
mud squeeze-IMP.SG mud squeeze-PL-DECL mud squeeze-CRD LOC-spread-IMP.PL
Grab some mud! Grab some mud! Grab the mud and spread it on the wall!

Although ablaut was recognized by Jones (1984) and Boyle (2007), the interplay between stem alternation and the morpheme causing it led them to mistakenly analyze the alternated stem vowel as part of the ablaut-triggering morpheme. Thus, in Boyle (2007:42) **-g** is analyzed as **-ag**, **-’hi**, as **-áhi**, **-ara** as **-aara**, and \emptyset as **-a**. He also posits the final short **i** deletion before the same suffixes. The correct shape of these morphemes can be ascertained when they combine with stems that do not ablaut. Compare, for example, **-g** in (113a) and (113b). The singular form **húù** *to come* terminates in a long **uu**, the second mora of which ablauts to **a**. It is unclear whether the second mora in the long vowel was deleted before the hypothetical suffix **-ag**. The shape of the coordinative suffix is clarified when it follows the plural form of the same verb. **Nááhu** *to come* terminates in a short **u**, which is not subject to ablaut; therefore, the coordinative suffix has to be **-g**.

(113)	a. SINGULAR		b. PLURAL	
	Húág	miigiwé’c.	Nááhug	miigiwá’c.
	húù-g	mii-giwé’-c	nááhu-g	mii-giwé’-’a-c
	come.SG-CRD	1B-tell-DECL	come.PL-CRD	1B-tell-PL-DECL
	<i>He came and told me.</i>		<i>They came and told me.</i>	

2.4.1.1 Ablaut with other lexical classes

Unlike verbs, all of which are subject to rules governing ablaut, ablaut in other lexical classes is lexically conditioned and the final vowel in many stems is not affected. The stems that do not undergo ablaut must be marked as such in the lexicon.

Some of the morphemes listed in TABLE 2.7, such as the compromisive **-aci**, never trigger ablaut, as exemplified with the **i**-final noun stem **adí** *lodge* in a predicative construction in (114).

The same is true of the coordinative suffix **-g** (see 17.3.1) which combines with nouns and evidential enclitics – it does not trigger ablaut, as can be seen in (115).

(114) **Adfàcic.**

adí-**aci-c**

house-COMRP-DECL

It's kind of a house.

(115) **Masúga's múà aaghic móòhca iigúà'a wareeg.**

masuga-[?]a-s múà-Ø áàghi-c móòhcaa iigigúà-[?]a waréè-**g**

dog-PL-DEF howl-CONT sound.EVID.PL-DECL coyote hear-PL EVID-CRD

The dogs are howling, they must have heard the coyote howling.

Of the morphemes that trigger ablaut, such as the plural **-[?]a**, most, but not all, non-verbs undergo vowel alternation; therefore ablaut with non-verbs must be lexically conditioned. In (116), the long **ee** in the reportative enclitic **rahee** ablauts into **aa**. However, this process cannot be generalized, as implied by (117), where the plural morpheme has no effect on the preceding **ee**. This is contrasted with the same sequence in (118), where the same plural morpheme causes **ii**-ablaut.

(116) **Cagí rahaa'a.**

cagí rahéè-[?]a-c

good REP-PL-DECL

They said it's good.

(117) **midéès** *the cow* > **midéè[?]as** / ***midí[?]as** / ***midáà[?]as** *the cattle*

(118) **macéès** *the man* > **macíí[?]as** / ***macéè[?]as** / ***macáà[?]as** *the men*

The number of non-ablauting nominal stems before the plural suffixes **-[?]a** and **-[?]o** is small; therefore, it is safe to assume that it is the exception rather than the rule that is specified in the lexicon.

2.4.2 Vowel deletion

In complex stems, both short and long morpheme-final vowels may be deleted at a morpheme boundary, unless the result is an impermissible cluster. Examples (119)–(121) illustrate short vowel deletion, and examples (122) and (123) long vowel deletion. Example (123) illustrates a cluster that was formed at the morpheme boundary after the final vowel in *máácuu* was deleted before a consonant-initial component.

- (119) *aasúùwaca*
aasí-úùwaca
horn-metal
metal spoon
- (120) *îdahihdia*
îdahu-ihdià
mouse-big
woodrat
- (121) *cagáàgaruwihga*
cagáàga-aru-mihga
bird-REL-female
hen
- (122) *xúhgidacagaaga*
xúhgee-ida-cagáàga
skunk-3POS-bird
bobolink
- (123) *mááchiruwadu*
máácuu-hirú-madú
berry-bone-exist
chokecherry

The deletion of morpheme-initial vowels in complex stems is not common, but possible.

An example is (124).

- (124) *aasibcá*
aasí-abcá
horn-sharp
young buffalo

2.4.3 Final vowel shortening

The second mora in word-final long vowels and unaccented diphthongs is deleted. Constructions in which the final long vowel is shortened in (125a)–(127a) are contrasted with similar constructions in (125b)–(127b), in which it has been retained in the non-final position.

- (125) a. **giraagudhé**
hgiraagudhéé
morning
morning
- b. **giraagudhéésiru**
hgiraagudhéé-si-rú
morning-PAST-TEMP
yesterday morning
- (126) a. **Hiríc** **máàhdi.**
hirí-c máàh**di**
this-DECL vehicle
This is a car.
- b. **Máàhdiic** **hirí.**
máàh**di**-c hirí
vehicle-DECL this
This is a car.
- (127) a. **Óògci** **ciríàc.**
óòg**ci** ciríà-c
night cold-DECL
It's a cold night.
- b. **Óògci** **ciríàc.**
óòg**ci**-hee ciríà-c
night-this cold-DECL
It's cold tonight.

The second mora in diphthongs is always retained, even in word-final position, if either one of the moras is accented. A sample of nouns and verbs with accented final diphthongs is presented in (128).

- (128) **míà** *woman*
cíá *to go out (as a cigarette)*
múà *to howl*
múá *fish*
isíà *to be bad*
siríá *to be hoarse*
cigúà *to be sweet*
dawúá *to ring*

An exception occurs when the second mora is deleted in the mesiodistal pronominal demonstrative stem **gúá** *that* (and a phonetic [h] is added to the end of the syllable to keep it

heavy) when it occurs in isolation, as in (45a) above. Another exception is the unaccented locative suffix **-hgua** that always retains its second mora.

2.4.4 Fortition

In certain environments the sonorants **w** and **r** and the alveopalatal fricative **s** undergo fortition, whereby the general place of articulation is retained, but with a much tighter closure.

Fortition affects both the sonorants and the fricative in clusters immediately followed by **h**, which occurs commonly in causativized stems before the direct causative suffix **-hee** (see 4.7.1). Only the sonorants are affected in word-final position, as in commands after the final vowel has been deleted (see 6.1.3.1). Examples of the fortition process are shown in (129)–(131).

(129)	w → b				
	hiráwi	<i>sleep</i>	→	hirábhee	<i>put sb to sleep</i>
			→	níhaab!	<i>Sleep!</i>
	náàwi	<i>come in a direction</i>	→	náàbhee	<i>start singing</i>
			→	Náàb!	<i>Come in!</i>
(130)	r → d				
	miréèri	<i>enter</i>	→	miréèdhee	<i>let sb in</i>
			→	Miréèd!	<i>Come in!</i>
	daarí	<i>cross sth</i>	→	daadhéé	<i>help sb cross sth</i>
			→	Dáád!	<i>Cross it!</i>
(131)	s → c				
	sibísa	<i>be black</i>	→	sibíchee	<i>blacken sth</i>
	haxísi	<i>be wet</i>	→	haxíchee	<i>make sth wet</i>

Whereas the sonorant fortition always follows the rule, in many stems where the fricative **-s** forms a cluster with **h**, the two consonants undergo local metathesis as an alternative to fortition. An example is (132).

(132)	suwááh saa (= suwáá chaa)	<i>slowly</i>
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2.5 Sound symbolism

Hidatsa consonant sounds are often iconic and form a series of sound-symbolic lexemes.⁶

Iconicity is most often expressed with affricates and fricatives, followed by stops, and almost never by sonorants. Sound symbolism, with a few exceptions, occurs mostly in verbs. TABLE 2.9 presents an overview of iconic values associated with individual fricatives and the affricates.

TABLE 2.9. ICONIC MEANINGS OF FRICATIVES AND AFFRICATES

PHONEME	ICONIC MEANINGS
c [ts]	thin, tiny, or fine objects; intense colors and high-pitched sounds
s [ʃ]	medium intensity sounds and colors; enlarged sizes; surfaces neither too fine nor too coarse
x [x]	rasp, rough, or coarse textures, objects, and sounds; large sizes; dull colors
h [h]	movement of air (?)

Stop sounds are less iconic than fricatives. Still, the Hidatsa lexicon contains a fair number of lexemes involving series of stops that are clearly iconic in meaning. The qualities associated with stop sounds are presented in TABLE 2.10.

TABLE 2.10. ICONIC MEANINGS OF STOPS

PHONEME	ICONIC MEANINGS
b	burbling and popping sounds
d	loud, rumbling, or slapping sounds; thick or stout objects
g	stiff or hard objects; lumpy or hard surfaces; tight spaces; pungent smells

In certain semantic classes of words there is a direct linkage between sound and meaning that is achieved by consonant substitution. Fricatives, affricates, and stops participate in sound-symbolic substitutions, with fricatives and affricates being most common. No sets of sound-

⁶ Sound-symbolic series in Hidatsa were first recognized by A. Wesley Jones, whose lexical slipfiles contain a number of minimally different pairs and triplets of stative verbs with iconic meanings.

symbolic substitutions take full advantage of all possibilities, most sets being either pairs or triplets. Most sound-symbolic sets encode variation in intensity and size (of color, texture, sound, etc.). Sound-symbolic words are lexicalized. Even if gaps occur in possible triplets, they may not be filled arbitrarily with “missing” word forms.

As a rule, smaller size and higher intensity or frequency are associated with [ts] and courser qualities with [x], with [ʃ] falling somewhere in between. The meaning of lexemes in some series is more abstract and the relationship between words less obvious.

TABLE 2.11 contains lexical pairs and triplets based on sound symbolic stative verbs.

TABLE 2.11 SOUND-SYMBOLIC SERIES INVOLVING FRICATIVES AND AFFRICATES

C-SERIES	S-SERIES	X-SERIES
cîri / cíʔri <i>be yellow</i>	sîri / síʔri <i>be brown</i>	xîri / xíʔri <i>be pale brownish yellow, faded</i>
còòda <i>be gray, discolored (white of the eye)</i>	sòòda <i>be gray (e.g., eye color)</i>	xòòda <i>be moldy</i>
búʔci <i>be multicolored stitches</i>	buusí / búʔsi <i>dappled</i>	buuxí / búʔxi <i>be speckled</i>
*círíá <i>rattle ??</i>	síríá <i>be hoarse, rustling</i>	xíríá <i>be sexually aroused, horny</i>
in: aruciriawadú <i>rattlesnake</i>		
cigúà <i>be sweet</i>	—	xigúà <i>be sour</i>
cáhci <i>uniformly dark eagle</i>	—	xáhxi <i>be spotted</i>
ciwí <i>be dangling (small things)</i>	—	xiwí <i>be dangling (big things)</i>
céècee <i>hang</i>	—	xéèxee <i>hang, dangle, sag</i>
caawí / cáʔwi <i>sth stringy sticking out</i>	—	xaawí / xáʔwi <i>sth thick sticking out</i>
—	siisí <i>hiss through the nostrils</i>	xiisí <i>snort through the nostrils</i>
—	sarée <i>be wet, damp</i>	xarée <i>rain</i>
—	sarúhxi <i>be loose-fitting (as clothing); roomy</i>	xarúhxi <i>be loose-fitting (clothing); roomy</i>
—	siibí <i>be rough terrain</i>	xíʔbi <i>be wrinkled</i>
—	sáhi <i>be stretched wide</i>	xáhi <i>be stretched high</i>
cóógi <i>be hard</i>	sóógi <i>be dull, blunt</i>	—
cíí <i>be powdery</i>	síí <i>be hazy, blurred</i>	—
híhxi <i>be pink</i>	hisí <i>be red</i>	—
cúhga <i>be flat, level</i>	súhga <i>be wide, broad</i>	—

Since the iconic values of sound-symbolic consonants are most often associated with qualities and states, such series typically occur with stative verbs. However, many instrumental roots that are primarily used to derive active transitive verbs⁷ can also form symbolic series. Sound symbolism in instrumental/locative stems pertains mostly to the intensity of the action, or the size or other measurable qualities of the object affected by the action. TABLE 2.12. contains a list of instrumental/locative roots that form sound-symbolic series associated with activities. Since future field work may prove some of these series to be incomplete, cells for hitherto unattested forms are left at present empty.

⁷ A small number of derived instrumental stems are active intransitive or stative verbs.

TABLE 2.12. SOUND-SYMBOLIC SERIES OF INSTRUMENTAL ROOTS

C-SERIES	S-SERIES	X-SERIES	H-SERIES	B-SERIES	D-SERIES	G-SERIES
-hgici	-hgisi	-hgixi				
-carua	-sarua	-xarua				
-cia	-sia	-xia				
-ciria		-xiria				
-caadi	-saadi	-xaadi				
-hcagi	-hsagi / -sagi	-hxagi				
	-sdhua/ -sdua	-xdua				
	-seesi	-xeesi				
-cisi	-sisi	-xisi				
-cudi	-sudi	-xudi				
-cugi		-xugi				
-cuudi	-suudi	-xuudi				
	-hsibi	-hxibi				
	-hsua	-hxua				
-caa	-saa	-xaa				
-cghi	-sghi / -sgi					
-cgia	-sgia / -sghia					
-wici		-wixi				
	-sdhi	-xdhi				
-caraa	-saraa					
-cahci	-sahsi	-xahxi				
-buci	-busi	-buxi				
-cgabi	-sgabi					
-cooci		-xooxi				
-cibi	-sibi					
-cihci	-sihsi					
		-xua	-hua			
			-huuri	-buuri		
	-dahsi	-dahxi			-dahdi	
-cuuxi				-buuxi		
-gici				-gibi	-gidi	
-hci				-hbi	-hdi	-hgi
				-rabi		-ragi
					-daree	-garee

Differences in meaning between sound-symbolic roots modified by identical instrumental or locative prefixes are illustrated in (133), with the root underlined and the sound-symbolic element in boldface.

- | | | | | |
|-------|------------------|------------------------------------|------------------|------------------------------------|
| (133) | báwici | <i>chop sth fine</i> | báwixi | <i>chop sth short</i> |
| | aradahsí | <i>fall on one's foot</i> | aradahxí | <i>prance</i> |
| | arágici | <i>be singed</i> | arágidi | <i>be a wildfire</i> |
| | òòrabi | <i>find sth by chance/accident</i> | òòragi | <i>follow a trail, retrace sth</i> |
| | nagahuurí | <i>fan sth</i> | nagabuurí | <i>be blowing around, as dust</i> |

Not all surface forms that appear to be members of sound-symbolic series are iconic. The words listed in (134) present an example of a false set of semantically unrelated words superficially resembling a sound-symbolic series.

- (134) **cugí** *to melt* **sugí** *to be limp* **xugí** *to be a small pit*

Sound-symbolic series may be based on a lexical verb whose meaning is non-iconic. In example (135), the basic root **múá** *to howl* serves as a base for a sound-symbolic series that expresses different intensities of ringing or rattling sounds. Example (136) illustrates different usages of some of these words.

- (135) **múá** *to howl*
cawúá *to tinkle (sound of thin metal, as wind chimes or jingle bells tinkle)*
sawúá *to jingle (as the tin cones on a jingle dress dancer)*
xawúá *to rattle (as rain, shower, or rushing water; pebbles in a can / gourd rattle)*
dawúá *to ring (as a bell or telephone)*
- (136) **Mahgúxi dawúác.** *My ears are ringing. (less fine sound than cawúá)*
Mahgúxi cawúác. *My ears are ringing. (finer sound than dawúá)*

Sound-symbolic series involving stops are possible, but not common. The series in (137) is based on the analogy with the verb 'to boil'. Example (138) illustrates some of these words in context.

- (137) **mirúá** *to boil*
birúá *to bubble, burble*
dirúá *to be viscous*

- (138) Harúg hiróʔ idawaaríhaaʔas iibirúág múúʔas mirúág...
 harúg hirí-óʔ ida-maa-níhee-ʔa-s ii-birúá-g múá-ʔa-s mirúá-g
 Then this-PL 3POS-INDEF-put-PL-DEF INST-burble-CRD fish-PL-DEF boil-CRD
*Then what they had put in the pot, it was just **burbling**, the fish were **boiling**...*

2.6 Orthography

The orthography employed in this dissertation is based on the phonemic writing systems employed by Voegelin, Robinett, and Jones. Published articles and field materials reveal that Voegelin, Robinett, and Jones all experimented with different orthographic representations of Hidatsa sounds at different stages of their careers. The only major difference between their respective writing systems is the representation of simple and aspirated stops and fricatives.

The motivating principle underlying the present orthography is representation of each phoneme with one grapheme (one phoneme - one grapheme principle). Orthographic conventions like those in English, in which aspirated stops are represented by a single symbol, have been avoided because they obscure the underlying structure of consonant clusters and complicate the analysis of word structure for learners.

Each of the allophonic sets of the obstruent sounds [p/b], [t/d], [k/g]), and [ts/dz] is represented with a single symbol without regard to voicing, which is always predictable. Conventional symbols used for voiced stops were chosen for pedagogical reasons, since most language learners whose first language is English tend to aspirate stops incorrectly when they are represented by voiceless stop symbols.

2.13 ORTHOGRAPHIC REPRESENTATION OF OBSTRUENTS

PHONEME	VOICELESS	VOICED	ORTHOGRAPHIC REPRESENTATION
/p/	[p]	[b]	b
/t/	[t]	[d]	d
/k/	[k]	[g]	g
/ ts /	[ts]	[dz]	c

Phonetically aspirated stops are actually phonemic clusters; therefore in the present orthography they are also written as such (TABLE 2.14).

TABLE 2.14. ORTHOGRAPHIC REPRESENTATION OF PHONETICALLY ASPIRATED OBSTRUENTS

PHONEMIC FORM	PHONETIC FORM	ORTHOGRPAHIC FORM
/ph/	[p ^h]	bh
/th/	[t ^h]	dh
/kh/	[k ^h]	gh
/tsh/	[ts ^h]	ch

Robinett (1955b), as well as Harris and Voegelin (1939), represented phonetically aspirated obstruents with two symbols. In the orthography of Jones and many self-published materials the aspirated series [p^h], [t^h], [k^h], and [ts^h] are written as *p*, *t*, *k*, and *ch*. This solution appears inconsistent as the series contains one digraph and three single graphemes. Moreover, the three single graphemes violate the one phoneme = one grapheme principle, since aspirated stops are always underlyingly clusters.

The allophones in the [m/w] and [n/r] sets are written as **m** and **n** word initially. In complex stems they are sometimes written as **m** and **n** also on a morpheme boundary to indicate hypercorrect speech. [m/w] and [n/r] are written and pronounced as **w** and **r**, respectively, when they are intervocalic and morpheme internal, and everywhere in enclitics. Although words are written with an initial **m** and **n** to reflect their status as independent lexical items, they are actually pronounced as [w] and [r] in connected speech.

The proper orthographic representation of [m/w] and [n/r] at morpheme boundaries, especially on word boundaries in compounds, remains a contentious issue, as some Hidatsa speakers advocate the hypercorrect and others the casual writing style. This dissertation follows the casual style reflecting the natural flow of speech. Occasional hypercorrect examples are not

excluded if they were elicited as such. The difference between the regular and hypercorrect orthography is illustrated with a compound noun in (139).

- (139) Normal orthography: *Cagáàgawia Bird Woman* < *cagáàga bird, míà woman*
Hypercorrect orthography: *Cagáàgamia Bird Woman*

The fricative /f/ is written with the symbol *s* in this orthography. No special symbols, such as s-wedge (š) , or diagraphs, such as *sh*, are needed since the alveolar fricative /s/ that it could be confused with is absent from the Hidatsa phonemic inventory. Moreover, *sh* could easily be confused with the preaspirated fricative *hs* [hʃ].

For ease of writing, the apostrophe is utilized for representing the glottal stop /ʔ/. Word initial glottal stops are not indicated in the orthography since they are predictable before vowel-initial words and they are never phonemic.

In line with the one phoneme-one grapheme principle, long vowels are represented by double vowels, in lieu of other formerly popular conventions, such as indicating vowel length with diacritics.

Stem-final long vowels and diphthongs are normally shortened in the spoken language if the stem is not followed by a suffix or an enclitic.⁸ In hypercorrect speech the final element may be preserved, especially in the case of diphthongs. The full form is also used as the citation form for lexemes in dictionaries. For the purposes of this grammar, word-final long vowels and diphthongs are spelled out if a lexeme is presented in isolation. If the underlying long vowel is indicated elsewhere, such as interlinearly, phonetic shortened forms are written.

⁸ There are exceptions to this rule. A few lexemes, such as *míà woman* and *múá fish*, are never shortened.

TABLE 2.15. CITATION FORMS OF STEMS ENDING IN LONG VOWELS AND DIPHTHONGS

STEM (CITATION FORM)	SPOKEN FORM IN ISOLATION	GLOSS
máàraa	máàra ⁹	<i>autumn</i>
máàhdii	máàhdi	<i>vehicle</i>
cúhgahgee	cúhgahge	<i>to flatten sth</i>
óògci	óògci	<i>evening after dusk</i>
gúá	gú	<i>that one</i>

The indication of pitch-accent with diacritics is a pedagogical convention used for language instruction and linguistic description. Fluent speakers are able to read and write Hidatsa without indicating it.

The Hidatsa alphabet is presented in (140).

(140) a, b, c, d, e, g, h, i, m, n, o, s, u, x, ?

⁹ This could also mean ‘my arm’. However, *máàra* *my arm* ends with a phonemic short vowel. The two words are disambiguated if the stem is modified by suffixation, as with the declarative speech act marker *-c*: *máàraac* *it is autumn* versus *máàrac* *it is my arm*.

3 Verb classification

Typologically, Hidatsa is an active-stative type language. In transitive clauses the transitive Agent (A) is marked with one set of pronominal prefixes and the transitive Object (O) with another. The single argument in intransitive clauses, the intransitive Subject (S), is marked for some verbs like (A) and for some verbs like (O). This type of morphosyntactic alignment is often referred to as the Split Intransitive, or simply as Split-S (Dixon 1979: 82).

Most Hidatsa verbs, which can be classified on the basis of pronominal marking, fall into three classes, conventionally labeled transitive verbs, intransitive verbs, and stative verbs. The split-S pronominal marking in Hidatsa is illustrated in TABLE 3.1.

TABLE 3.1. THE ACTIVE-STATIVE PRONOMINAL SYSTEM (SPLIT INTRANSITIVE)

Valence:	TRANSITIVE	INTRANSITIVE	
Morphological class:	ACTIVE VERBS		STATIVE VERBS
Verb class:	Transitive	Intransitive	Stative
Agent/Subject:	∅ / maa- / ná-	∅ / maa- / ná-	∅ / mii- / nii-
Object:	∅ / mii- / nii-		

Mithun's (1991) observation that the division of monovalent verbs into active and stative classes is motivated by volition or control is generally true in Hidatsa, but there are a few exceptions. For example, the verbs *déè* to die and *arîdi* to be hungry are both classified as active intransitive verbs, even though the subject presumably has no control over either of these states. Impersonal verbs are classified as statives, but they occur only in third person forms (with ∅ prefix).

A small number of Hidatsa verbs that occur in reflexive constructions or refer to bodily movement defy classification based on straightforward valency. The pronominal system of such

verbs resembles both active verbs (accented second person prefix) and stative verbs (prefix vowel *i*). Such verbs literally straddle the line between active and stative verbs on the one hand, and transitive and intransitive verbs on the other. Following the example of more familiar Indo-European languages, such as classical Greek and Sanskrit, this pattern is termed the ‘middle verb’.

Active, stative, and middle verbs can all be causativized. The causative marker is an inflected suffix that follows the stem (see 4.7). Pronominal prefixes are not used with causative verbs, except to indicate the transitive object.

Hidatsa marks three grammatical persons, 1st, 2nd, and 3rd, that occur in four inflectional patterns, which are the following:

A-set. Pronominal prefixes in the first set mark agents of transitive verbs and subjects of intransitive verbs. Transitive and intransitive verbs form the class of active verbs. A-set prefixes are subject to considerable allomorphy depending on the derivational class.

B-set. This set of pronominals marks the subjects of stative verbs. In transitive constructions, B-set pronominals also mark the direct objects of transitive verbs (see 5.1).

C-set. The third set of prefixes marks the subjects of middle verbs, as well as objects of postpositions. Verbs inflected with C-set prefixes describe actions that are performed by the subject for his or her own benefit or in which the subject affects itself.

The third person is unmarked in the inflection of active and stative verbs; it is the bare stem. It is, however, overtly marked in the middle and causative inflections. Pronominal prefixes are identical in the singular and plural, and they are attached directly to the stem. The pronominal suffixes of the causative inflection, discussed in section 4.7, are also identical in the singular and plural, but subject to ablaut when immediately followed by the plural marker *-aʔ*.

The A-set and C-set second person prefixes are always accented in Hidatsa. There are a few lexicalized exceptions to this rule that will be pointed out where applicable in the sections that follow.

The three classes of pronominal prefixes are given in TABLE 3.2.

TABLE 3.2. PRONOMINAL PREFIXES

PERSON	ACTIVE VERBS (A-SET)	STATIVE VERBS (B-SET)	MIDDLE VERBS (C-SET)
3	–	–	i-
1	maa- / ma- / m-	mii-	mi-
2	náà- / ná- / n'-	nii-	ní-

The difference in meaning between the A-, B-, and C-sets is illustrated in (1) by using the first person marker from each set with the verbal stem *gíruhsîà* *nauseate*. This example also helps to clarify the phonological status of the person-marking morphemes in the three pronominal classes. The underlying form of /*h*gíruhsîà/ begins with a consonant cluster. As a rule, the initial *h* in clusters is not realized at a word boundary or when preceded by proclitics. According to this criterion, person-marking morphemes in the A and C-sets are prefixes, whereas the B-set contains proclitics.

- (1) A-set. *ma_hgíruhsîàc*¹⁰ *I am disgusted (by him)*
 B-set. *miigíruhsîàc* *I am disgusting (to him)*
 C-set. *mi_hgíruhsîàc* *I am disgusted by myself*

¹⁰ For an utterance to be grammatically complete, it needs to be marked with one of the speech-act markers. Most Hidatsa examples in this and later chapters will be marked with the declarative marker *-c* (see 6.1.1.1) or the interrogative marker *-ʔ* (see 6.1.2.1).

3.1 Active verbs

Most active verbs describe actions that one has control over, but there is also a small number of active verbs that describe states or non-controlled activities, such as *dée* to die and *arîdi* to be hungry. Active verbs are inflected with the A-set pronominal prefixes. The A-set of inflection of non-derived active verbs is described in this chapter, starting with those that are regular in respect to prefixation, pitch-accent, and stem suppletion. The inflection of derived active stems, many of which exhibit pronominal allomorphy, will be described separately in Chapter 4, in conjunction with the description of derivational classes.

3.1.1 Inflection of consonant-initial active verbs

Most non-derived consonant-initial active stems follow the regular inflectional pattern for active verbs: 3P is unmarked, 1P prefix is *maa-*, and 2P prefix is *ná-*. A representative paradigm of a regularly inflected active verb is given in TABLE 3.3.

TABLE 3.3. INFLECTION OF CONSONANT-INITIAL ACTIVE VERBS

	daarí	<i>cross sth</i>
3SG	daaríc	<i>he crossed it</i>
1SG	maadaaríc	<i>I crossed it</i>
2SG	nádaaric	<i>you crossed it</i>
3PL	daaráʔc	<i>they crossed it</i>
1PL	maadaaráʔc	<i>we crossed it</i>
2PL	nádaaraʔc	<i>y'all crossed it</i>

A sample of inflected consonant-initial active stems is listed in (2).

(2)	3SG	1SG	2SG	GLOSS
	báác	maabáác	nábaac	<i>shout</i>
	húác	maahúác	náhuac	<i>cough</i>
	gíà	maagíàc	nágiac	<i>fear sth</i>
	níʔc	maaríʔc	náriʔc	<i>shoot at sth</i>

cáàgic	maacáàgic	nácaagic	<i>mourn</i>
nîiric	maarîiric	náriiric	<i>walk</i>
góòsic	maagóòsic	nágoosic	<i>whistle</i>
múùbic	maawúùbic	náwuubic	<i>smell it</i>
gaaríc	maagaaríc	nágaaric	<i>ask for sth</i>
niidíc	maariidíc	náriidic	<i>slice meat</i>
gúáxic	maagúáxic	náguaxic	<i>catch up with sb</i>
cixíc	maacixíc	nácixic	<i>jump</i>
mahúc	maawahúc	náwahuc	<i>bark</i>
xabíc	maaxabíc	náxabic	<i>lie down (action)</i>
magéʔc	maawagéʔc	náwageʔc	<i>beg sb</i>
diríac	maadiríac	nádiriac	<i>run</i>
magíàc	maawagíàc	náwagiàc	<i>battle</i>
géèseec	maagéèseec	nágeeseec	<i>watch sth</i>
magácgic	maawagácgic	náwagacgic	<i>wrestle</i>
miráàgic	maawiráàgic	náwiraagic	<i>groan</i>
garáàc	maagaráàc	nágaraac	<i>flee, run away</i>
guréèc	maaguréèc	nágureec	<i>chase sb</i>
maahsíàreec	maawaahsíàreec	náwaahsiareec	<i>dream</i>

The first person prefix is short before stems that begin with a consonant cluster:

- (3)
- | | |
|-----------------|----------------------|
| bhée | <i>to eat sth up</i> |
| bhéèc | <i>he ate it up</i> |
| mabhéeèc | <i>I ate it up</i> |
| nábheec | <i>you ate it up</i> |

More inflected active verbs with roots beginning with a consonant cluster are listed in (4).

- (4)
- | 3SG | 1SG | 2SG | GLOSS |
|----------|-------------------|-------------------|--------------------------|
| bhúc | mabhúc | nábhuc | <i>heal sb</i> |
| gháàc | magháàc | nághaac | <i>laugh</i> |
| ghádaac | maghádaac | nághadaac | <i>stoke up the fire</i> |
| ghíc | maghíc | nághic | <i>mean sth</i> |
| gháhcaac | magháhcaac | nághahcaac | <i>smile</i> |

The only permissible word-initial consonant cluster in Hidatsa consists of a stop and **h**.

Comparative and historical research may prove that word initial consonant clusters resulted from the diachronic loss of the short vowel in the first root syllable preceding an **h**-initial second

syllable. Synchronically, if the second root syllable begins with an **h** or a single consonant other than **h**, the first syllable vowel may still be elided in overtly inflected forms (or if preceded by any other prefixes), provided that the resulting cluster is permissible in Hidatsa. The resulting consonant cluster causes the first person prefix to become short in some inflected stems, as in (5), but not in others, as in (6).¹¹

(5) 3SG **gácaac** 1SG **magcáàc** 2SG **nágcaac** *blow sth*¹²

(6) 3SG **gahéèc** 1SG **maaghéèc** 2SG **nààgheec** *give sth to a group*¹³

3.1.2 Inflection of vowel-initial active verbs

In the inflection of vowel-initial active verbs the A-set pronominal prefix is truncated to the initial nasal consonant. The second person prefix remains accented, however, and the accent is shifted to the stem-initial vowel, if elsewhere in the uninflected stem. Inflection of vowel-initial non-derived stems is illustrated with three paradigms in TABLE 3.4.¹⁴

¹¹ In instrumental verbs, the vowel in the instrumental prefix **ba-** is subject to the same process if any other prefix precedes the stem (see 4.3.1.3). The second vowel in the instrumental prefix **naga-** is almost always elided if the result is a permissible consonant cluster at a root boundary (see 4.3.1.6).

Normally, vowels are elided only in compounding or at a prefix and root juncture. Root-internal elision occurs almost exclusively in **ga-**initial roots. The “prefixoidal” properties of the root-initial **ga-** suggest that diachronically it may have been a full prefix.

¹² Note the inexplicable shift of accent to the last syllable in the first person form. This pattern is identical to the inflection of instrumental stems derived with **ba-** (see 4.3.1.3)

¹³ The long-voweled second person prefix suggests that **gahéè** *give sth to a group* may follow the inflectional pattern of **naga-**initial instrumental verbs (see TABLE 4.6.).

¹⁴ According to an alternative analysis, **arîdi** *to be hungry* and **iixbádi** *to be sated* are inflected following the inalienable possessive paradigm. Other verbs that are unambiguously inflected like inalienably possessed nouns include **iré?** *to speak something*, **irîahi** *to breathe*, and **irîâci** *to think something* (see 3.3.1).

TABLE 3.4. INFLECTION OF VOWEL-INITIAL ACTIVE VERBS

	arîdi	<i>be hungry</i>	ú'sia	<i>arrive</i>	iihxbádi	<i>be sated</i>
3SG	arîdic	<i>he is hungry</i>	ú'siac	<i>he arrived</i>	iihxbádic	<i>he is sated</i>
1SG	marîdic	<i>I am hungry</i>	mú'siac	<i>I arrived</i>	miihxbádic	<i>I am sated</i>
2SG	náriidic	<i>you are hungry</i>	nú'siac	<i>you arrived</i>	nîihxbadic	<i>you are sated</i>
3PL	arîda'c	<i>they are hungry</i>	ú'sia'c	<i>they arrived</i>	iihxbáda'c	<i>they're sated</i>
1PL	marîda'c	<i>we are hungry</i>	mú'sia'c	<i>we arrived</i>	miihxbáda'c	<i>we are sated</i>
2PL	náriida'c	<i>you are hungry</i>	nú'sia'c	<i>you arrived</i>	nîihxbada'c	<i>you are sated</i>

A small number of vowel-initial underived active verbs are inflected identically to consonant-initial verbs, whereby the untruncated pronominals belonging to the A-set are prefixed directly to the stem. However, the first person prefix shortens so as not to violate the constraint against three-mora syllables, as in (7).

- (7) 3SG **arawíc** 1SG **maarawíc** 2SG **náàrawi'?** *notice sth, know sb, recognize*
 3SG **araaxisác** 1SG **maaraaxisác** 2SG **náàraaxisac** *be ignorant*

3.1.3 Irregular inflection of active verbs

A number of active stems have irregular inflections and/or undergo stem suppletion.

Pronominal markers in the verbs in TABLE 3.5. are identical to the prefixes that are used in stems derived with the locative **á(à)g-** (see 4.4.3) but, unlike in regularly inflected active verbs, the second person pronominal prefix **na-** is not accented (except in **eeráhgeec** *you know it*).

Person marking in **ééhgee** *to know sth* is an example of irregular infixation. In addition, the first and second person forms of *to come out* and *to steal sth* undergo stem suppletion.

TABLE 3.5. VERBS WITH IRREGULAR SECOND PERSON PREFIXES AND INFIXES

3SG	1SG	2SG	GLOSS
adaaríc	awadaráàric	aradaráàric	<i>come out, appear</i>
asaaríc	awasaráàric	arasaráàri'?	<i>steal sth</i>
awáàgic	awawáàgic	arawáàgic	<i>sit down</i>
adhîc	awadhîc	aradhîc	<i>camp</i>
ééhgeec	eewáhgeec	eeráhgeec	<i>know sth</i>

The first two verbs in TABLE 3.6. ('to fry sth' and 'to bathe') are compounds of [mirí](#) *water* with bound verbal roots. The third person forms of [mirídi](#) and [mirihbí](#) are examples of noun incorporation by compounding and the first and second person forms of noun stripping (see 7.3). All three inflected forms of [mirirîri](#) are examples of noun stripping.

TABLE 3.6. PERSON MARKING IN NOUN STRIPPING

3SG	1SG	2SG	GLOSS
mirídic	miríwadic	miríradic	<i>fry sth</i>
mirihbíc	miriwahbíc	miriráhbic	<i>bathe</i>
mirirîric	miriwaarîric	miriráriic	<i>swim</i>

First and second person inflected forms in TABLE 3.7. undergo stem suppletion.

TABLE 3.7. VERBS WITH SUPPLETIVE STEMS

3SG	1SG	2SG	GLOSS
hîc	máác	náác	<i>drink sth</i>
héèc	máác	náác	<i>say sth</i>
(sééc	seewáàc	seeráàc)	<i>say sth</i> ¹⁵
hiríc	mahéèc	náheec	<i>make / do sth</i>
ma'îiheec	maawáàheec	náwaaheec	<i>want sth</i>
miréèric	miríwaaríc	miríraaríc	<i>enter</i> ¹⁶
déèc	maadíc	nádíc	<i>die, be dead</i>
îsic	masíc	násíc	<i>throw sth away</i>

¹⁵ Although [séé](#) *to say sth* is actually not suppletive, it was included with the suppletive verbs because of its similarity to [héè](#) *to say sth*. It is an ablauting verb; third person plural of [séé](#) is [sí'ac](#) *they said it*.

¹⁶ To the consternation of conservative Hidatsa speakers, many contemporary speakers, undoubtedly motivated by analogy, have replaced the irregular first and second person forms of [miréèri](#) *to enter* with “regularly” inflected forms [maawiréèric](#) *I entered* and [náwireeric](#) *you entered*.

More irregularly inflected verbs without any particular order are presented in TABLE 3.8.

The stem initial /n-/ in *nuudí* *to eat sth* becomes /w-/ following the first person prefix for no apparent reason. The citation form and the third person forms of *to beat sb in the game* occur only with the prefix *hgi-* even though the first and second person forms may occur without it. The vowel in the second person prefix of *to stand* and *to sneeze* is long. The first person prefix is short in *to dig sth* and *to pack sth on the back*.

TABLE 3.8. VARIOUS IRREGULAR VERBS

3SG	1SG	2SG	GLOSS
<i>nuudíc</i>	<i>maawuudíc</i>	<i>náruudic</i>	<i>eat sth</i>
<i>gixdéèc</i>	<i>maxdéèc</i>	<i>náxdeec</i>	<i>beat sb in a game</i>
	<i>mahgixdéèc</i>	<i>náhgxideec</i>	
<i>nahíc</i>	<i>maarahíc</i>	<i>náàrahic</i>	<i>stand</i>
<i>xiisíc</i>	<i>maahxiisíc</i>	<i>náàhxiisic</i>	<i>sneeze</i> ¹⁷
<i>géʔc</i>	<i>magéʔc</i>	<i>nágeʔc</i>	<i>dig sth</i>
<i>gíʔc</i>	<i>magíʔc</i>	<i>nágiʔc</i>	<i>pack sth on the back</i> ¹⁸

The Hidatsa motion verbs, presented in TABLE 3.9., have suppletive plural stems that are subject to ablaut. In addition, the first person plural forms are either suppletive, or exceptionally have a special first person plural prefix *maa-*. The long stem vowel either shortens after the second person prefix (except in *náreec* *you went*), or, according to an alternative analysis, the second person prefix has an irregular shape *nára-*. The same process affects the second person prefix also in a few other verbs that are regular in other respects, as in (8) below.

¹⁷ The active stem (h)xiisí *sneeze* should not be confused with the stative stem xiisí *be tired*. Compare: *maahxiisíc* *I sneezed*, *miixiisíc* *I am tired*.

¹⁸ Compare this form with the regular inflection of *níʔ* *shoot at sth*: 1SG *maariʔc*, 2SG *náriʔc*.

TABLE 3.9. MOTION VERBS

	néè (SG) nááhi (PL) <i>go</i>	náàgua (SG) nááгаа (PL) <i>go home</i>	húù (SG) nááhu (PL) <i>come</i>	gúú (SG) náághu (PL) <i>come back</i>	hîi <i>get here</i>	gíí (SG) náághi (PL) <i>get back here</i>
3 SG	néèc	náàguac	húùc	gúúc	hîic	gííc
1 SG	maaréèc	maagúác	maahúc	maaghúc	—	maaghíc
2 SG	náreec	náraguaʔʔ	nárahúʔʔ	náraghuc	—	náraghic
3 PL	nááhaʔc	nááгааʔac	nááhuaʔc	náághuaʔc	—	náághaʔc
1 PL	mááhaʔc	mááгааʔac	mááhuaʔc	máághuaʔc	—	máághaʔc
2 PL	nárahaʔc	náragaaʔac	nárahuaʔc	*ʔnáraghuaʔc	—	náraghaʔc
IMP. SG.	náà! néèga!	náàgu! náàguaga!	húh! húùga!	gúú! <i>not said</i>	—	—
NEG.IMP.	néèdha!	náàguadha!	húùdha!	gúúdha!	—	—
IMP. PL.	nááhaara! nááhaʔga!	nááгааara! nááгааʔga!	nááhuara! nááhuaʔga!	náághuara! <i>not said</i>	—	—
NEG.IMP.	nááhidhaara!	náágaadhaara!	nááhudhaara!	náághudhaara!	—	—
SUGGEST.	mááhoʔ!	máágooʔ!	—	máághuwihooʔ!	—	—
NEG.SUG.	mááhidhooʔ!	máágaadhooʔ!	—	ʔʔ	—	—

(8) 3SG nááwic 1SG maaráwic 2SG náráwic *come in one's direction*

3.2 Stative verbs

As the name implies, stative verbs describe states. The B-set pronominal markers that inflect stative verbs are proclitics: they never participate in morphophonological processes across the word boundary. For example, word-initial *h* in underlying clusters is not realized after B-set pronominals if the stem begins with a phonetically preaspirated consonant (see example (1) above). B-set pronominals are separated from vowel-initial stems with an epenthetic glottal stop. Examples of inflected stative paradigms are given in TABLE 3.10.

TABLE 3.10. INFLECTION OF STATIVE VERB

	hiirá	<i>to be slow</i>	isìà	<i>to be bad</i>
3SG	hiirác	<i>he is slow</i>	isìàc	<i>he is bad</i>
1SG	miihiirác	<i>I am slow</i>	mii'isìàc	<i>I am bad</i>
2SG	niihiirác	<i>you are slow</i>	nii'isìàc	<i>you are bad</i>
3PL	hiirá'c	<i>they are slow</i>	isìà'ac	<i>they are bad</i>
1PL	miihiirá'c	<i>we are slow</i>	mii'isìà'c	<i>we are bad</i>
2PL	niihiirá'c	<i>you are slow</i>	nii'isìà'c	<i>you are bad</i>

Predicate nominals, indefinite quantifiers, and cardinal numbers are inflected as stative verbs with the B-set proclitics. Unlike predicate nominals, indefinite quantifiers and cardinal numbers are usually not inflected for number. A sample paradigm of an inflected predicate nominal is given in TABLE 3.11.

TABLE 3.11. INFLECTION OF A PREDICATE NOMINAL

	macéé	<i>man</i>
3SG	macééc	<i>he is a man</i>
1SG	miiwacééc	<i>I am a man</i>
2SG	niiwacééc	<i>you are a man</i>
3PL	mací'ac	<i>they are men</i>
1PL	miiwací'ac	<i>we are men</i>
2PL	niiwací'ac	<i>you are men</i>

3.3 Middle verbs

In addition to active and stative verbs, Hidatsa has a third class of verbs, inflected by prefixation, which, following the example of more familiar Indo-European languages, are called middle verbs. Middle verbs in Hidatsa literally straddle the middle line between active and stative verbs because the subject often cannot be categorized as either Agent or Subject but may have elements of both. Middle verbs are sometimes referred to as autocausative reflexives in the literature. Autocausative reflexives are differentiated from true reflexive verbs, the referent represented by the subject “combines the activity of Actor and undergoes a change of state like

Patient”. The Actor “ends up in a new location or position [or state] thus acquiring the feature of Patient”. (Geniušienė 1987: 87, 105)

Relatively few verbs in Hidatsa are underived middles. Several are verbs of motion, based on derived instrumental stems, indicating that the position of one’s body changes from one position to another. (Various inflectional patterns of middle instrumental verbs are discussed in section 4.3.3.) TABLE 3.12 presents a comparison between the active and middle inflectional paradigms of the instrumental base /nuuhi/. There the second person marked on the imperative forms in the middle inflection does not justify the treatment of the paradigm as reflexive. The true reflexive imperative of /nuuhi/ would be a nonce form *níhgi ruuha!* *lift yourself up!*

An overt second person prefix in the imperative forms of middle verbs provides an argument against a possible hypothesis that there is a middle derivational prefix *i* and that verbs with this prefix are inflected with A-set prefixes like vowel-initial active stems (see 3.1.2). Imperative forms of active verbs, unlike the imperative middle verbs, are never marked with pronominal prefixes. For example, the singular imperative form of the active verb *ú’sia* *to arrive* is *ú’si!*, as in *Gáádhaag u’si!* *Be sure to get here!*

TABLE 3.12. COMPARISON OF ACTIVE AND MIDDLE PARADIGMS

	ACTIVE INFLECTION	GLOSS	MIDDLE INFLECTION	GLOSS
	núùhi	<i>to lift sth</i>	i-ruuhí	<i>to stand up</i>
3SG	núùhic	<i>he lifted it</i>	i-ruuhíc	<i>he stood up</i>
1SG	maruuhíc	<i>I lifted it</i>	mi-ruuhíc	<i>I stood up</i>
2SG	náruuhic	<i>you lifted it</i>	ní-ruuhic	<i>you stood up</i>
3PL	núùhá’c	<i>they lifted it</i>	i-ruuhá’c	<i>they stood up</i>
1PL	maruuhá’c	<i>we lifted it</i>	mi-ruuhá’c	<i>we stood up</i>
2PL	náruuha’c	<i>y’all lifted it</i>	ní-ruuha’c	<i>you stood up</i>
IMP.SG	núùha!	<i>lift it!</i>	ní-ruuha!	<i>stand up!</i>
IMP.PL	núùhaara!	<i>you all lift it!</i>	ní-ruuhaara!	<i>you all stand up!</i>

Only a small number of middle verbs are not based on derived instrumental stems. The citation form of underived middles is identical to the third person form. Most underived middle verbs express change from one abstract or mental state to another. A list of the most common underived middle verbs is presented in TABLE 3.13.

TABLE 3.13. COMMON NONDERIVED MIDDLE VERBS

3SG	1SG	2SG	GLOSS
iháàric	miháàric	níhaaric	<i>be finished</i>
ihabíc	mihabíc	níhabic	<i>be happy</i>
hiráwic	miháàwic	níhaawic	<i>sleep</i> ¹⁹
ichéèc	michéèc	nícheec	<i>wake up</i>
iicháàc	miicháàc	nīchaac	<i>pout</i>

A small number of middle verbs, such as *iigigúà* to hear sth and *iighací* to understand sth, are transitive. Examples of transitive clauses combining B-set prefixes for the object and C-set affixes for the agent are given in (9)–(13).

- (9) **Miirñigiguara!**
 mii-ní-iigigúà-ara
 1B-2C-hear-IMP.PL
Listen to me!
- (10) **Niiwiigigúàc.**
 nii-mi-iigigúà-c
 2B-1C-hear-DECL
I hear you.
- (11) **Maawiigigúàc.**
 maa-mi-iigigúà-c
 3OBJ.PL-1C-listen-DECL
I hear them.
- (12) **Mii?iigigúàdhaa?iic.**
 mii-iigigúà-dhaa-î-c
 1B-listen-NEG-HAB.SG-DECL
He never listens to me.

¹⁹ The derivation of this irregularly inflected verb is possibly related to the stative verb (\emptyset -, mii-, nii-) *haawí* to be worn out. The lengthening of the vowel in the second syllable is irregular.

- (13) **Miirîghaci'?**
 mii-ní-iihaci'-?
 1B-2C-understand-INTER
Do you understand me?

Occasionally a locative verb (with *í-*), a stativized verb (with *i-*), and a middle verb (with *i-*) can be derived from a single instrumental base. The third person and citation forms of middle and stativized verbs can be differentiated only by the pitch pattern of the whole verb since the two unaccented prefixes are otherwise indistinguishable. The third person and citation forms with the locative prefix *í-* can also be problematic in a writing system that does not mark accent on words.²⁰ Again, first and second person forms are not ambiguous since stativized instrumental verbs are inflected with B-set and locative verbs with A-set prefixes. An example of middle and locative stems derived from *báhdāa* *to tip sth over* is presented in (14).

(14)	MIDDLE <i>i-</i>		LOCATIVE <i>í-</i>	
	3SG ibahdáàc	<i>he rolled over (as in bed)</i>	íbahdaac	<i>he rolled sth in sth (as in flour)</i>
	1SG mibahdáàc	<i>I turned over</i>	awábahdaac	<i>I rolled it in sth (e.g. sugar)</i>
	2SG níbahdaac	<i>you turned over</i>	arábahdaac	<i>you rolled it in sth</i>
	IMP. níbahda!	<i>turn over!</i>	íbahda!	<i>roll it in (flour)!</i>
	*íbahda!		*arábahda!	

Cross-linguistically, the middle voice typically constitutes a semantically coherent domain that involves situation types “such as reflexive, reciprocal, motion, and body directed actions” (van Gijn 2010: 276) . In Hidatsa, the middle marker is most often used in reflexive

²⁰ Hidatsa contains numerous “families” of morphemes that look deceptively similar or even identical with each other. Often length and accent are sufficient for discrimination, but the identity of individual morphemes sometimes becomes concealed by morphophonological change, as with instrumental prefixes. In such cases one has to rely on pitch-accent schemas that are associated with specific derivational classes for identification. The “family” of morphemes resembling the middle *i-* include also the stativizing *i-*, 3P inalienable possession marker *i-*, locative *í-*, instrumental *ii-*, modal *ii-*, locative *î-*, and middle *ii-* that is partially suppletive with the instrumental prefix *naga-*.

constructions in combination with the GI- morpheme (see 4.8.). Whereas the productivity of reflexive constructions is restricted only by semantic constraints, the non-reflexive, or underived, middle stems form a closed class of verbs.

In addition to reflexive verbs, Hidatsa also uses the middle to mark objects of postposition.

The Hidatsa middle seems to have counterparts in other Siouan languages. However, it has never been recognized in any of them and the middle is usually described in terms of morphologically peculiar intransitive inflection. For example, the received view of the Lakota *ištíŋme* *to sleep* (1P *mištíŋme*, 2P *ništíŋme*) is either that of an intransitive active verb, or a stative verb. The parallel with Hidatsa is striking, since neither language typically marks the third person, and the shape of pronominal prefixes differs markedly from the regular active and stative prefixes (3P \emptyset , 1P *wa-*, 2P *ya-* for active, and 3P \emptyset , 1P *ma-*, 2P *ni-* for stative verbs in Lakota). Like in Hidatsa, the Lakota prefixal series of *i-/mi-/ni-* is also used with postpositions and reflexives.

3.3.1 Possessive inflection of middle verbs

The pronominal system of a small number of stems (TABLE 3.14.) that are clearly verbs follows the inflectional pattern of inalienable nominal possession (see 8.1.2). All inalienably possessed nouns and verbs that adhere to this pattern begin either with *i* or *n*. First person possessive prefix *ma-* and second person prefix *ná-* are added directly to *n*-initial stems or replace the stem-initial short *i*.

TABLE 3.14. INALIENABLE INFLECTION OF VERBS

3SG	1SG	2SG	GLOSS
iréʔc	maréʔc	níreʔc	<i>Speak sth</i>
iríàcic	maríàcic	níriacic	<i>think</i>
iríàhic	maríàhic	níriahic	<i>breathe</i>
iríguac	maríguac	níriguac	<i>be jealous (of women)</i> ²¹
iróʔgigsic	maróʔgigsic	níroʔgigsic	<i>sigh, take a deep breath</i>
iróʔhaawic	maróʔhaawic	níroʔhaawic	<i>be worn out, exhausted</i>
iróʔhgeec	maróʔhgeec	níroʔhgeec	<i>strain, exert oneself</i>
náàhsic	maraahsíc	níraahsic	<i>spread one's legs</i>

It is probably not a coincidence that all inalienably inflected verbs, just like inalienably possessed nouns, refer to activities that are intimately related to bodily functions or mental states. It may be ultimately decided that possessively inflected verbs need to be recognized as a separate verb class, but in this grammar they are tentatively grouped with middle verbs. In addition to obvious semantic similarities, the imperative forms of middle verbs and inalienably inflected verbs are both formed of the verb stem inflected for second person, as illustrated in (15).

- (15) a. **Níreʔdha!**
n´-iréʔ-dhaa-Ø
2POS-speak-NEG-IMP.SG
Don't talk!
- b. **Súwahaá níraʔ!**
súwaa-haa n´-iréʔ-Ø
slow-ADV 2POS-speak-IMP.SG
Speak slowly!
- c. **Níroʔhga!**
n´-iróʔhgee-Ø
2POS-strain-IMP.SG
Exert yourself!

²¹ *Irígua* may turn out to be an inalienably possessed noun. I have elicited it as a predicative, but all the examples of usage I have are existential constructions, such as *irígua maduc* *she is jealous* (lit. *her jealousy exists*, or, *she has jealousy*).

4 Verb derivation and inflection

In this chapter I examine the derivational morphology and inflectional subclasses of verbs.

Hidatsa derivational morphology includes prefixes, suffixes, and reduplication.

While the basic classification of Hidatsa verbs and the inflection of active, stative, middle verbs was described in Chapter 3, the inflection of most verbs derived by prefixation as well as causative suffixation is subject to various peculiarities and will be described separately in this chapter.

4.1 Verb Stem

There are two types of verbal roots in Hidatsa – free and bound. Each underived verb-stem is identical to one free root. Derived stems are formed from roots or from other stems by means of affixation or compounding. Various complex stems derived from the stative root *cagí* *to be good* are illustrated in (1).

(1)	cagí	<i>to be good</i>	
	cagíhee	<i>to do sth well</i>	< cagí <i>good</i> , -hee 3CAUS.DIR
	maacagí	<i>to be generous</i>	< maa- INDEF, cagí <i>good</i>
	maacagíria	<i>to be condescending</i>	< maa- INDEF, cagí <i>good</i> , -ria REFL
	cagháhi	<i>to feel better</i>	< cagí <i>good</i> , -hi MOM
	gicagí	<i>to become better</i>	< hgi- GI, cagí <i>good</i>
	gicagíchee	<i>to hype sth up</i>	< hgi- GI, cagí <i>good</i> , -? ? , -hee 3CAUS.DIR
	gicagíhgee	<i>to get better</i>	< hgi- GI, cagí <i>good</i> , -hgee 3CAUS.INDIR
	cagíhdi	<i>to be pretty</i>	< cagí <i>good</i> , -hdi DES
	cagídhee	<i>to decorated sth</i>	< cagí <i>good</i> , -hdi DES, -hee 3CAUS.DIR
	ihgicagí	<i>to be becoming to sb</i>	< í- LOC, hgi- GI, cagí <i>good</i>
	ihgicagíria	<i>to brag</i>	< i- 3C, hgi- GI, cagí <i>good</i> , -ria REFL
	idacaghéé	<i>to enjoy sth</i>	< ida- 3POS, cagí <i>good</i> , -hee 3CAUS.DIR
	idawaacagí	<i>to be generous</i>	< ida- 3POS, maa- INDEF, cagí <i>good</i>

Most bound roots occur with instrumental or locative prefixes and will be described in section 4.3.

The stem and the citation form of the verb are identical to the third person form. There are no infinitives in Hidatsa.

4.2 Grammatical number

Hidatsa marks three grammatical persons, 1st, 2nd, and 3rd, that follow four sets of inflectional patterns. The sets, described in Chapter 3, are reproduced in TABLE 4.1.

TABLE 4.1. PRONOMINAL PREFIXES

PERSON	ACTIVE VERBS (A-SET)	STATIVE VERBS (B-SET)	MIDDLE VERBS (C-SET)
3	–	–	i-
1	maa- / ma- / m-	mii-	mi-
2	náà- / ná- / n'-	nii-	ní-

The prefixal inflection mostly marks person (except for plural forms of motion verbs and third person plural object prefix, described in 5.2); number is marked by a plural suffix. Hidatsa verbs and pronouns, as well as predicatively used or possessed nouns, are inflected in the singular and plural. Singular is the unmarked form. Unlike many other Siouan languages, Hidatsa does not distinguish between inclusive and exclusive forms, and there is no dual.

4.2.1 -²a and -²o 'plural'

The principles of plural formation with -²a and -²o are largely identical for nouns and verbs and the discussion in this section applies equally to both. (The plural pronominal morpheme -ro², which is inserted between the basic pronominal root ñi- and the rest of the stem, is described separately in 11.2.)

The plural suffix -²a only occurs with the stem if it is directly followed by any suffixes or enclitics except the interrogative speech-act marker -² (see 6.1.2.1) and the vocative construction

(see 14.4). Most types of stem-final syllables are subject to morphophonological change before the plural suffix (for details on ablaut see section 2.4.1). The following rules apply in plural formation:

- The vowel in the plural morpheme is deleted if the stem ends with a short **a** or **i**. The final vowel in a few lexically determined noun stems, such as **ahí** *turnip*, is not deleted and the plural suffix is added directly to the unmodified stem, as in **ahíʔo** *turnips*. The short **u** is not deleted, but in some speakers' speech the plural form is reduced to a diphthong and a glottal stop sequence.
- The plural morpheme is added directly to the long vowels **aa**, **ii**, and **uu**, and the short vowels **iʔ** and **uʔ**, both of which are lengthened.²²
- Stem-final **ee** and **eʔ** ablaut to **aa**. A few **e**-final noun stems, such as **midéè** *cow*, are not subject to ablaut and the plural morpheme is added to the unmodified stem, as in **midéèʔas** *the cows*.
- In many lexically determined cases the final **ee** is raised to **ii**.
- The plural form of the diphthongs **ia** and **ua** consists of the lengthened first segment of the diphthong plus the plural morpheme.
- In some speakers' speech, plural forms **uʔa/uuʔa** and **iʔa/iiʔa** are reduced to **uaʔ** and **iaʔ**, respectively.

TABLE 4.2. contains the list of all stem-final vowels (except **oo**), followed by the declarative speech-act marker **-c**, in their singular and plural forms.

²² There are a few words in Hidatsa that end with a long **oo**, such as **asgóò** *to be lame, to limp* and **macidóò** *awl*; however, my field materials contain no examples of plural forms, therefore **oo**-final stems were not included in the table. Presumably the plural morphemes are added directly to the stem following an epenthetic glottal stop.

TABLE 4.2. PLURAL FORMATION

STEM-FINAL SINGULAR	STEM-FINAL PLURAL	SINGULAR EXAMPLE	GLOSS	PLURAL EXAMPLE	GLOSS
-ac	-aʔc	abcác	<i>it is sharp</i>	abcáʔc	<i>they are sharp</i>
-ic	-aʔc	hisíc	<i>it is red</i>	hisáʔc	<i>they are red</i>
-uc	-uʔac / -uaʔc	ahúc	<i>there are many</i>	ahúʔac ahúàʔc	<i>there are many</i>
-aac	-aaʔac	garáàc	<i>he ran away</i>	garáàʔac	<i>they ran away</i>
-iʔc	-iiʔac / -iaʔc	níʔc	<i>he shot it</i>	nííʔac	<i>they shot it</i>
-iic	-iiʔac	hîc	<i>he drank it</i>	hííʔac	<i>they drank it</i>
-uʔc	-uuʔac / -uaʔc	gúʔc	<i>he gave it to him</i>	gúúʔac gúàʔc	<i>they gave it to him</i>
-uuc	-uuʔac	idúúc	<i>it is a song</i>	idúúʔac	<i>they are songs</i>
-eʔc	-aaʔac	guréʔc	<i>it keeps it</i>	gurááʔac	<i>they keep it</i>
-eec	-aaʔac	géèsec	<i>he is watching it</i>	géèsaʔac	<i>they are watching it</i>
-eec	-iiʔac / -iaʔc	garéèc	<i>he vomited</i>	garííʔac garíàʔc	<i>they vomited</i>
-iac	-iiʔac / -iaʔc	diríac	<i>he ran</i>	dirííʔac	<i>they ran</i>
-uac	-uuʔac / -uaʔc	iigigúac	<i>he heard it</i>	iigigúúʔac iigigúàʔc	<i>they heard it</i>

Plural stems not followed by any suffixes or enclitics, with the exception of the interrogative speech-act marker -ʔ, are followed by the plural suffix -ʔo instead. Vowels and diphthongs preceding the plural suffix -ʔo are subject to identical sound changes to the vowels and diphthongs preceding the plural suffix -ʔa. The two plurals are compared in (2).

(2)	-ʔo + Ø / INTERR		-ʔa + SUFFIX (ANY)	
	aahdúúʔo	<i>their heads</i>	maaʔaahdúúʔas	<i>the heads</i> < -s DEF
	aguwaahiróʔ	<i>workers</i>	aguwaahiráʔs	<i>the workers</i> < -s DEF
	míàhgaaʔoʔ	<i>are they baby girls?</i>	míàhgaaʔac.	<i>they are baby girls.</i> < -c DECL
	Sííʔo ééhgaaʔac.	<i>Those ones know it.</i>	Sííʔari ééhgaaʔac.	<i>Those ones know it.</i> < -ri ERG

4.2.2 Collective plural

Often the verb is not inflected for the plural number if plurality is inherently implied by the verb and/or reference is made to real-life entities that normally occur in groups, as in (3)–(5).

(3) **Maagarísda ahúc hiróóhaa.**
 maagarísda ahú-c hiróó-haa
 child many-DECL here-PATH
There are a lot of children around here.

(4) **Maa?icidí ahúc.**
 maa-icidí ahú-c
 INDEF-track many-DECL
There are a lot of footprints.

(5) **Hiró? madahbádhaac.**
 hirí?o mada-huubá-dhaa-c
 this-PL 1POS-shoe-NEG-DECL
These are not my shoes.

Plural inflection is used if the speaker wants to emphasize that the group consists of individuals. Examples (6a) and (7a), in which predicates expressing quantities are used without the plural suffix, have a collective sense; when the same predicates are used with the plural suffix, the sense is distributive, as in (6b) and (7b).

(6) a. **Agucîisi doobác.**
 agu-cîisi doobá-c
 REL-scout four-DECL
There's (a group of) four scouts.

b. **Agucîisi iidoobá?c.**
 agu-cîisi ii-doobá-?a-c
 REL-scout INST-four-PL-DECL
There are four scouts.

(7) a. **Sigáàga ahúc.**
 sigáàga ahú-c
 young.man many-DECL
There is a lot of young men.

b. **Sigáàga ii?ahú?ac.**
 sigáàga ii-ahú-?a-c
 young.man INST-many-PL-DECL
There are many young men.

The choice between the singular and plural may sometimes be interpreted as the difference between mass nouns, as in (8a), and count nouns, as in (8b).

(8) a. **Gíi iixagháhic.**
 gíi ii-xagháhi-c
 oh INST-sufficient-DECL
Oh, there was a lot (of food).

b. **Gíi iixagháha?c.**
 gíi ii-xagháhi-?a-c
 oh INST-sufficient-PL-DECL
Oh, there were quite a few (people).

4.2.2.1 Collective plural *-aba*

The collective plural suffix *-aba* is not used on the predicates of main clauses which are pluralized with *-ʔa* and *-ʔo*. The distribution of the collective suffix is restricted to cosubordinate clauses marked with *-g* (see 17.3), certain adverbial clauses (e.g., temporal clauses) and a few adverbs. The collective suffix (1) disambiguates the grammatical number of the subject in the non-matrix clause by marking it overtly as ‘plural’, and (2) views the individuals in question as a group.

Examples (9a-b) demonstrate that independent clauses are unambiguous as to the grammatical number of the subject. The default reading of the grammatical number in the non-matrix clause in (9c) is singular, but the plural reading is also possible if context permits it. In such cases the collective suffix *-aba* is used to eliminate ambiguity, especially if the number of the subject needs clarification but is not apparent from the context. Example (9d) has an unequivocally plural reading due to the presence of the collective marker.

- (9)
- | | | |
|----|--------------|---|
| a. | Múʔsiac. | <i>I arrived.</i> |
| b. | Múʔsiaʔc. | <i>We arrived.</i> |
| c. | Múʔsiag... | <i>I arrived and... (or: We arrived and...)</i> |
| d. | Múʔsiabag... | <i>We arrived and...</i> |

The collective form is used to disambiguate the number only if there are no other morphological means available, as in (10b). The use of *-aba* is not grammatical if the predicate is pluralized by other means, as by the third person plural object prefix *maa-* in (11b).

- (10)
- | | | | | | | | |
|----|---------------------------------|-----|------------|----|-------------------------------------|-----|------------|
| a. | Niiʔigúbag | néè | maʔiiheec. | b. | Niiʔigúbaabag | néè | maʔiiheec. |
| | nii-igúba-g | néè | maʔiihee-c | | nii-igúba- aba -g | néè | maʔiihee-c |
| | 2B-with-CRD | go | want-DECL | | 2B-with-COL-CRD | go | want-DECL |
| | <i>He wants to go with you.</i> | | | | <i>He wants to go with you all.</i> | | |

- (11) a. **Maa'igúbag** néè ma'iiheec. b. ***Maa'igúbaabag** néè ma'iiheec.
maa-igúba-g néè ma'iihee-c ***maa-igúba-aba-g**
3OBJ.PL-with-CRD go want-DECL ***3OBJ.PL-with-COL-CRD**
He wants to go with them. *He wants to go with them.*

The collective suffix also triggers stem ablaut. In (12b), stem-final vowel *i* in the verb **guxdí** to help somebody ablauts to *-a* before *-aba*.

- (12) a. **Miiguxdá** néèc. b. **Miiguxdáàbag** nááha'c.
mii-guxdí-g néè-c **mii-guxdí-aba-g** nááhi-'a-c
1B-help-CRD go-DECL **1B-help-COL-CRD** go.PL-PL-DECL
He helped me and left. *They helped me and left.*

The collective suffix is often used in various adverbial clauses. (13) is an example of a temporal clause, and (14) is an example of a locative clause.

- (13) **Maahudhaháàba** néèc.
maa-huu-dhaa-haa-aba néè-c
1A-come-NEG-ADV-COL go-DECL
He left before we came.
- (14) **Nísooghaa(ba)** maaréèc. -- **Éè, cagíc.** **Náà!**
ní-isòogi-haa-(aba) maa-néè-c -- **èè cagí-c** néè-Ø
2POS-front-PATH-(COL) **1A-go-DECL** -- **yes good-DECL** **go-IMP**
I'll pass in front of you (all). -- *Yes, OK. Go!* (formulaic expressions used when passing somebody in public)

It seems clear that for the most part the collective suffix is a participant number marker rather than an agreement marker. Unlike plural suffixes in canonical clauses, which are obligatory with active verbs and in many other constructions, the collective *-aba* is often optional, as demonstrated in several of the preceding examples. In example (15) below, *-aba* is redundant for any other reason except augmenting the statement with a strong collective sense; it is suffixed to the adverb **èèca** *all* that implies unequivocal plurality, which is furthermore accentuated by the active verb, obligatorily inflected for the plural.

- (15) **li[?]éècaaba** **húá[?]ac.**
 ii-éèca-**aba** húá-[?]a-c
 INST-all-COL cough-PL-DECL
They all cough.

The collective suffix is also used to differentiate between collective and individuated meanings. The difference between the two examples in (16) is that in the sentence without **-aba**, dancers are viewed individually, whereas in the second example they are considered a group dancing out to the powwow grounds.

- (16) a. **Adaarág** **maarihsá[?]c.** b. **Adaaráàbag** **maarihsá[?]c.**
 adaarí-g maarihsí-[?]a-c adaarí-**aba**-g maarihsí-[?]a-c
 exit-CRD dance-PL-DECL exit-CRD dance-PL-DECL
They came out dancing. *They came out dancing (as a group).*

4.2.3 Passive plural

Although Hidatsa has no passive morphology, the foregrounding of the semantic patient or recipient can be achieved by other means. One such strategy is inflecting a transitive verb for the third person plural without specifying the actual identity of the agent (who may be one individual or a group of people). Sentences thus created are translated into English by using the passive voice. Examples are in (17)–(21).

- (17) **Áàbasee** **ígooga[?]c.**
 áàba-séè ígoogi-[?]a-c
 neck-DIST hang-PL-DECL
He was hanged by his neck.
- (18) **John díhaa[?]a** **wareec.**
 John díhee-[?]a waree-c
 John kill-PL EVID-DECL
John was killed.
- (19) **Maaruwarí** **éerihdihaa[?]ac.**
 maaruwá-rí eerí-ihdiá-hee-[?]a-c
 someone-ERG belly-big-3CAUS.DIR-PL-DECL
Someone got her pregnant.

- (20) **Hiraagáca isdá sahaa naagic. Agihdíawa cixíhaaʔa wareec.**
 hiraagáca isdá sahí-haa naagí-c agihdíawa cixí-hee-ʔa waree-c
 still eye wide-ADV sit-DECL very jump-3CAUS.DIR-PL EVID-DECL
He must have been really frightened. He was sitting there eyes wide open (from fright).
- (21) **Girusúùgihge maaréèc irídihaaʔwa.**
 hgi-núsuugi-hgee maa-néè-c irídee-hee-ʔa-wa
 GI-wash-3CAUS.INDIR 1A-go-DECL frightened-3CAUS.DIR-PL-SIMULT
I'm taking her to get cleansed (lit. washed off) because she was spooked (by spirits).

4.3 Instrumental verbs

Like other Siouan languages, Hidatsa has a set of instrumental prefixes that broadly mark the means by which an action is accomplished. There are eight instrumental prefixes in Hidatsa. Some of them are extremely common in derivation, one (**úáʔ-/uʔá-**) is rare, while others fall in between. Only a small number of instrumental roots can occur with most of the instrumental prefixes. Combinatory productivity is often restricted by the mutual semantic incompatibility of the basic meaning of the root and that of the instrumental prefix. Moreover, the instrumental prefixes are not freely productive. The prefixes are listed in TABLE 4.3.

TABLE 4.3. INSTRUMENTAL PREFIXES

INSTRUMENTAL PREFIX	GLOSS
ará-	<i>by heat or cold</i>
ara-	<i>by foot</i>
bá-	<i>by outward pressure</i>
ha-	<i>by blade (cutting)</i>
ná-	<i>by mouth or teeth</i>
naga-	<i>by sudden motion</i>
nú-	<i>by hand</i>
úáʔ- / uʔá-	<i>by sweeping motion</i>

Even though I have not been able to identify any roots that combine with all eight instrumental prefixes, it does not mean that none exist. As of now, several instrumental sets in

my corpus come close, with only one or two missing stems. (22) and (23) present two lists of almost complete sets of instrumental verbs.

- | | | |
|------|--|---|
| (22) | <p>*-bági</p> <p>arábági</p> <p>arabági</p> <p>*bábági</p> <p>habági</p> <p>nábági</p> <p>nagabági</p> <p>núbági</p> <p>*úá'bagi</p> | <p><i>to disperse small pieces, scatter; to spread outwards</i></p> <p><i>to splatter from heat (frying); to break out or spread (skin infection)</i></p> <p><i>to scatter sth with the feet</i></p> <p>–</p> <p><i>to cut little slits in sth</i></p> <p><i>to splash or scatter sth by teeth (as when biting into an orange and the juice splashes out)</i></p> <p><i>to bloom, blossom; to splash and spread mud on sth (as when mudding a house)</i></p> <p><i>to scatter sth (as beans or beads), spread sth (as ashes)</i></p> <p>–</p> |
| (23) | <p>*-sági</p> <p>arásági</p> <p>arasági</p> <p>básági</p> <p>hasági</p> <p>násági</p> <p>nagsági</p> <p>núsági</p> <p>*úá'sági</p> | <p><i>to spread apart</i></p> <p><i>to split from intense cold</i></p> <p><i>to break or split sth with feet</i></p> <p><i>to split sth by pressure; to care</i></p> <p><i>to split sth into big chunks by repeated cutting</i></p> <p><i>to split sth by teeth (as a peanut)</i></p> <p><i>to split sth (as cordwood) along the grain; to get hit, bump sth</i></p> <p><i>to break sth apart, spread apart (as citruses, a chicken, a rabbit)</i></p> <p>–</p> |

The overwhelming majority of stems derived with instrumental prefixes are active verbs. However, most verbs derived with **-ara** by *heat or cold* are stative. Stative verbs derived with other instrumental prefixes are not common, but possible.

Only a small number of independent roots, such as **cía** *to go out (as a light or cigarette)*, **cugí** *to melt*, and **hxúà** *to fall*²³ are combinable with instrumental prefixes. Most sets of instrumental (and locative) verbs are derived by prefixation from a large class of bound roots with a rather general meaning, illustrated in (24). The instrumental prefix, when added to the lexical root, narrows its meaning by indicating the means or instrument by which the activity

²³ The inflection of this verb is irregular: 3SG **xúàc** *he falls*, 1SG **miihxúàc** *I fall*, 2SG **nîhXuac** *you fall*.

unravels or is performed. The specific meaning, however, is often not the sum of the prefix and the root and is by no means always predictable.

(24)	-caa	<i>to reduce to pieces</i>
	-caraa	<i>to undo, unravel</i>
	-carua	<i>to slide across a surface</i>
	-cgiidi	<i>to clip off</i>
	-cgubi	<i>to bend, flex</i>
	-daa	<i>to crack</i>
	-dahsi	<i>to tap</i>
	-daree	<i>to insert</i>
	-dohdi	<i>to shake</i>
	-garaa	<i>to tear</i>
	-goobi	<i>to make a hole</i>
	-haci	<i>to puncture</i>
	-hcagi	<i>to sever</i>
	-hxua	<i>to fall</i>
	-sagi	<i>to spread apart</i>
	-seesi	<i>to pry</i>
	-sghu	<i>to dislodge</i>
	-wiiri	<i>to twist, turn</i>
	-xabi	<i>to peel</i>
	-xbhi	<i>to knock down</i>

4.3.1 The semantics of instrumental verbs

The specific meaning of individual instrumental stems cannot always be inferred solely from the combined meaning of the prefix and the root, but the prefix, at the very least, usually indicates the general means by which an action is accomplished (if volitional) or what causes something to happen (if non-volitional). The semantic contribution of individual instrumental prefixes to the meaning of derived stems is outlined in the subsections below. Most of the examples in the lists of instrumental stems were chosen because they have either not appeared in the descriptions before or have been represented incorrectly, especially in regards to their pitch-accent placement.

4.3.1.1 *ará-* ‘by extreme temperature’

Ará- is the only instrumental prefix that mainly derives stative verbs. It usually implies that a change of state was brought about by intense heat or, less often, by intense cold. This prefix looks identical to another instrumental prefix *ara-* *by foot* except that it always has the second syllable accented. A sample of stems derived with *ará-* is presented in (25).

(25)	<i>arábaabi</i>	<i>be chapped</i>
	<i>arábcia</i>	<i>be sunburnt, darken in the sun</i>
	<i>arábuusi</i>	<i>have burn marks</i>
	<i>arácgubi</i>	<i>be warped from the weather</i>
	<i>arádaa</i>	<i>snap in the fire, backfire</i>
	<i>arádaree</i>	<i>be scorched</i>
	<i>arágidi</i>	<i>be a prairie fire</i>
	<i>aráhcagi</i>	<i>become severed by extreme cold or heat</i>
	<i>aráhcixi</i>	<i>shriveled up from heat</i>
	<i>aráhcugi</i>	<i>become hard by overcooking</i>
	<i>aráhdugi</i>	<i>be shriveled, curled up (as wet leather after heating)</i>
	<i>aráhsirua</i>	<i>get scalded</i>
	<i>arásagi</i>	<i>split from intense cold</i>
	<i>arásaraa</i>	<i>meat to fall off the bone</i>
	<i>arásbia</i>	<i>be charred</i>
	<i>aráxaa</i>	<i>burn</i>
	<i>aráxiria</i>	<i>sizzle</i>

Instrumental verbs derived with *ará-* appear in (26) and (27).

- (26) *Irúgsidi aráxiria maaghic.*
irúgsidi aráxiria maaghí-c
meat sizzle lie.EVID-DEF
The meat is frying.
- (27) *Agihdiàwa mii'arábcia.*
agihdiàwa mii-arábica-c
very 1B-sunburn-DECL
I got a bad sunburn.

4.3.1.2 *ara-* ‘by foot’

Ara- with *the foot* derives mostly transitive verbs that refer to activities carried out by using one’s feet, toenails, or claws. The inflection of this instrumental follows a single pattern and there are no morphologically conditioned exceptions. A typical paradigm is presented in TABLE 4.4.

TABLE 4.4. INFLECTION OF INSTRUMENTAL VERBS WITH *ara-*

		ara-cuudí	<i>slip</i>
ara-	3P	aracuudíc	<i>he slipped</i>
ma²-	1P	ma²cuudíc	<i>I slipped</i>
ná²-	2P	ná²cuudic	<i>you slipped</i>

A representative selection of active, mostly transitive, stems with *ara-* is listed in (28).

- (28)
- | | |
|------------------|---|
| arabági | <i>scatter sth with the foot</i> |
| aragídi | <i>squish sth by stepping in it</i> |
| arahdábi | <i>stumble over sth, trample on sth</i> |
| arahdahdí | <i>step hard on sth (as a rock or pebble)</i> |
| arahdíhsi | <i>touch sth with the foot</i> |
| arahsúá | <i>bend sth by stepping on it</i> |
| arasági | <i>split sth with the foot</i> |
| arasdháà | <i>trample sth</i> |
| arasià | <i>climb by bracing with the foot</i> |
| araxáà | <i>climb using the claws</i> |
| araxahxí | <i>be hesitant</i> |
| araxárua | <i>push sth with the foot</i> |
| araxisi | <i>dig sth with the spade</i> |

The instrumental prefix *ara-* occurs in some speakers’ speech as *a²-*, as in *a²béé* instead of *arabéé* to *kick something*. This reduction, which is diachronically recent and deemed by more conservative speakers as an indicator of inferior knowledge of Hidatsa, is caused by analogy whereby the instrumental prefix is likened to the morphologically unusual first person prefix *ma²-* and second person prefix *ná²-*. The only other context where either of these prefixes is used is before confrontative verbs derived with *a²-* (see 4.5.4).

4.3.1.3 *bá-* ‘by outward pressure’

The instrumental prefix *bá-* derives transitive stems and it has two basic meanings: (1) pressure applied on something with the hands or an instrument, or (2) pressure applied by the body or by gravitational force. The prefix *bá-* is always accented when not preceded by first or second person prefixes, or the *gi-* morpheme. *Bá-* typically loses its vowel in the first and second person forms when followed by a root that begins with a single stop, fricative, or affricate. The vowel is typically retained when the root begins with a consonant cluster. Both inflectional patterns are presented in TABLE 4.5.

TABLE 4.5. INFLECTION OF INSTRUMENTAL VERBS WITH *bá-*

		CONSONANT CLUSTER-INITIAL ROOT		SINGLE CONSONANT-INITIAL ROOT	
		<i>bá-sgua</i>	<i>pry sth open by pushing</i>	<i>bá-sagi</i>	<i>care about sth</i>
<i>bá-</i>	3P	<i>básguac</i>	<i>he pried it open</i>	<i>básagic</i>	<i>he cares about it</i>
<i>maba-</i>	1P	<i>mabasgúac</i>	<i>I pried it open</i>	<i>mabságic</i>	<i>I care about it</i>
<i>nába-</i>	2P	<i>nábasguac</i>	<i>you pried it open</i>	<i>nábsagic</i>	<i>you care about it</i>

There are, however, a few derived stems where the reduction of the instrumental prefix in stems that contain a root beginning with a single consonant does not occur. For example, in (29) the vowel in the first person *maba-* and second person *nába-* is not deleted.

- (29) a. *abá-dóhdi* *shake sth* *mabadóhdic* *I shook it* *nábadohdic* *you shook it*
 b. *bá-gisi* *wipe sth* *mabagísic* *I wiped it* *nábagísic* *you wiped it*

In a small number of stems that contain a root beginning with an *h*-initial consonant cluster, the first element in the root-initial consonant cluster and the final vowel in the inflected instrumental prefix are both deleted, as in (30).

- (30) *bá-hdihsi* *poke sb* *mabdíhsic* *I nudged him* *nábdihsic* *you nudged him*
bá-hsia *brace oneself* *mabsiàc* *I braced myself* *nábsiac* *you braced yourself*

A representative selection of active stems with **bá-** is listed in (31).

- (31)
- | | |
|-----------------|---|
| báàhi | <i>sing sth</i> |
| báàhxu | <i>spill sth</i> |
| bácaadi | <i>poke at sth, stab at sth, needle sth</i> |
| bácadaa | <i>squash sth, mash sth</i> |
| bácarua | <i>push sth on a surface</i> |
| bádahxi | <i>pick at sth, poke, tamp</i> |
| bádhagi | <i>knead sth</i> |
| bádohdi | <i>shake sth</i> |
| bágaraa | <i>tear sth with an instrument</i> |
| bágaree | <i>stick sth into sth soft</i> |
| báhaci | <i>punch a hole in sth, puncture sth</i> |
| báhcagi | <i>cut sth</i> |
| báhci | <i>erect sth</i> |
| báhdihsi | <i>poke sth/sb, nudge sth/sb</i> |
| báhgixi | <i>avoid sth, dodge sth</i> |
| báhxua | <i>push sth over, knock sth over</i> |
| báwuuci | <i>roll sth up (as bedding, a tent)</i> |
| báxaa | <i>smooth sth by pressing, iron clothes; shove sth out of the way</i> |

A small number of instrumental stems with **bá-** are statives. For example, the verb **bácgîidi** refers to an imprint left on the skin by something too tight, such as an elastic band or clothes that are too tight, as in (32a). The active inflection in (32b) is not grammatical.

- (32)
- | | | | | |
|----|--|-------------------|----|----------------------|
| a. | Mîisa | bácgîidic. | b. | *Mabacgîidic. |
| | m-îisa | bácgîidi-c | | |
| | 1POS-ankle | tight-DECL | | |
| | <i>I have an imprint left around my ankle.</i> | | | |

4.3.1.4 **ha-** 'by blade'

Ha- *by blade* derives mostly active transitive stems that describe cutting or splitting actions carried out with a blade. A representative selection of instrumental verbs derived with **ha-** is presented in (33).

- (33) **habádi** *saw sth, file sth*

habági	<i>cut slits in sth</i>
habéè	<i>hack sth up</i>
habúxi	<i>slit sth, notch sth, lance sth</i>
hacáà	<i>cut a narrow strip, cut along a pattern, cut with scissors</i>
hacáraa	<i>cut sth along the seam</i>
hacúùdi	<i>slit sth, cut sth</i>
hadádahxi	<i>whittle sth</i>
hagáci	<i>cut sth open, butcher sth</i>
hagágasghi	<i>cut sth into strips or strings</i>
hasági	<i>split sth with a blade</i>
hasià	<i>cut the meat off the bone</i>
hasíhsi	<i>cut by putting the point of the knife in, cut by incision</i>
haxéèsi	<i>slit sth with a blade</i>
haxúdi	<i>cut sth open</i>

(34) and (35) are examples of instrumental verb forms with **ha-** in context.

- (34) **Adixáàbi habià neechaaʼa wareec maaruwarí.**
 adí-xáàbi habéè-Ø neesáá-héé-ʼa waree-c maaruwá-rí
 house-thin hack-CONT not.exist-3CAUS.DIR-PL EVID-DECL someone-ERG
Someone has hacked up the tent.

- (35) **liwagsiàghaag maahacáàc.**
 ii-magsiàghee-g maa-hacáà-c
 INST-measure-CRD 1A-cut.in.strips-DECL
I measured it and cut it with scissors.

One verb, **hasísi** *to have a burning or stinging sensation, be searing pain*,²⁴ is a stative that is mostly used in reference to affected body parts, as in (36).

- (36) **Masdá hasísic.**
 m-isdá hasísi-c
 1POS-eye sting-DECL
My eyes are burning (from tiredness).

²⁴ This verb should not to be confused with **hasíhsi** *to cut sth by incisions* that is inflected according to the active pattern with A-set prefixes: 1SG **maahasíhic**, 2SG **náhasihic**.

4.3.1.5 *ná-* ‘by mouth or teeth’

The instrumental prefix *ná-* indicates that the activity is carried out with the mouth or teeth.

Examples are in (37).

(37)	<i>nábee</i>	<i>tear sth to pieces with the mouth or teeth</i>
	<i>nábuuxi</i>	<i>crunch on sth (as when eating)</i>
	<i>nábuxi</i>	<i>cut through sth with teeth, leave teeth marks on sth</i>
	<i>nácaa</i>	<i>chew sth into bits</i>
	<i>nácarua</i>	<i>drag sth with the teeth</i>
	<i>nácgaadi</i>	<i>pick sth delicately up with the teeth</i>
	<i>nádhabi</i>	<i>hold onto sth with teeth</i>
	<i>náhsua</i>	<i>bend sth with the teeth</i>
	<i>náhuuri</i>	<i>breathe sth in, inhale</i>
	<i>náhxagi</i>	<i>get a whiff of a smell</i>
	<i>náhxaraa</i>	<i>shell sth by mouth, eat corn off the cob</i>
	<i>násdhua</i>	<i>chew sth, masticate</i>
	<i>násia</i>	<i>jerk meat off sth</i>
	<i>náwiiri</i>	<i>turn sth with the teeth</i>
	<i>náxaa</i>	<i>bite sth such as corn on the cob, eat bark on trees</i>
	<i>náxeesi</i>	<i>slit sth with teeth, tear with teeth</i>
	<i>náxubi</i>	<i>drink sth up</i>
	<i>náxugi</i>	<i>suck sth up, drink audibly</i>

Examples of *ná-*instrumental verbs in context are seen in (38) to (41).

(38)	<i>Maa’agucîri</i>	<i>miihsáhdaa</i>	<i>maraxábic.</i>
	<i>maa-agu-ciîri</i>	<i>m-iihsá-hdaa</i>	<i>ma-náxabi-c</i>
	INDEF-REL-yellow	1POS-tooth-INST	1A-peel.with.teeth-DECL
	<i>I peeled an orange with my teeth.</i>		

(39)	<i>Miramagibihe</i>	<i>nácoob!</i>
	<i>mirá-magi-bihee</i>	<i>nácoobi-Ø</i>
	wood-RECIP-set	kiss-IMP.SG
	<i>Kiss the crucifix!</i>	

(40)	<i>Nuwa ráhbag</i>	<i>wúg!</i>
	<i>nuwá náhbi-g</i>	<i>m-gú[?]-Ø</i>
	some bite-CRD	1B-give-IMP.SG
	<i>Bite it off for me!</i>	

- (41) **Nuuwiráhuurihga** **nídoobi!**
 nuwá-mii-náhuuri-hgee-Ø nída-óòbi
 some-1B-inhale-3CAUS.INDIR-IMP.SG 2POS-tobacco
Give me a puff of your smoke!

4.3.1.6 *naga-* ‘by sudden motion; by inner force’

The instrumental prefix *naga-* is semantically rather complex, but two of its meanings can be summarized as follows: (1) the action takes place by a sudden motion, such as by striking, or (2) an action results from an inner force, such as by natural phenomena. Most verbs belonging to the first type are inflected as active transitives, whereas verbs belonging to the second type are inflected as statives.

There are three phonologically conditioned distinct allomorphs of *naga-*: *naga-*, *nag-*, and *na-*.

The form *naga-* is prefixed to roots that begin with a vowel, an unclustered stop, or the sonorant *w* (there are no relevant examples of *r*-initial roots in my corpus). A representative sample of derived stems is listed in (42).

- | | | |
|------|-------------------|--|
| (42) | nagaahí | <i>pull sth</i> |
| | nagaahisí | <i>hold sth in the arms, carry sth in the arms</i> |
| | nagabáá | <i>stew sth</i> |
| | nagadáà | <i>break or crack sth fragile</i> |
| | nagadahsí | <i>pat or slap sth together</i> |
| | nagadahxí | <i>knock on sth, tap, hit</i> |
| | nagadohdí | <i>shake or brush sth off</i> |
| | nagagáaraa | <i>tear sth by one’s weight</i> |
| | nagagíbi | <i>scrape sth off, as dry mud or cheese</i> |
| | nagagíci | <i>pass by or miss one’s goal</i> |
| | nagagídi | <i>scrape one’s skin; scrape sth off</i> |
| | nagagúbi | <i>make a depression on sth</i> |
| | nagawíci | <i>cut brush or weeds; make fringes</i> |

The allomorph *na-* is prefixed to roots that begin with clustered consonants, as in (43).

(43)	nacgaadí	vi. <i>squirt</i>
	nacghí	<i>quill sth</i>
	nacgíbi	<i>peel or slice sth</i>
	nacgiidí	<i>clip sth off</i>
	nacgubí	<i>bend sth under weight</i>
	nadhagí	<i>hurt sb</i>
	nadhí	<i>beat sb/sth</i>
	naghúà	<i>flesh sth</i>
	nahbí	<i>chip sth off</i>
	nahgicí	<i>miss one's aim; pass by sth</i>
	nahxúá	<i>knock sth over, fell</i>
	nasbí	<i>finish sth</i>
	nasdhí	<i>pound sth</i>
	nasghí	<i>weave or lace sth</i>
	nasghú	vi. <i>get knocked out of place</i>
	naxbhí	<i>knock sth down</i>
	naxdhí	<i>pound sth</i>

EXCEPTIONS:

nagabcí	<i>chop sth into fine pieces</i>
nagabhí	<i>pick sth up; select sth; elect sb</i>

The allomorph **nag-** precedes roots that begin with fricatives and the affricate. Examples are listed in (44).

(44)	nagcáá	<i>shatter sth</i>
	nagcádaa	<i>smash sth</i>
	nagcáraa	<i>come apart (as a necklace), crack (as glass)</i>
	nagcí	<i>bake sth</i>
	nagcíría	<i>become a crack</i>
	nagcuuxí	<i>shatter sth into shards</i>
	naghací	<i>pass right through sth</i>
	naghúci	<i>swing sth/sb</i>
	naghuuwí	<i>go after sth, try to obtain sth</i>
	nagsagí	<i>split sth</i>
	nagseesí	<i>pry sth open</i>
	nagsià	<i>ensnare sth</i>
	nagsibí	<i>pass sth</i>
	nagsúá	<i>dent sth</i>
	nagsudí	<i>slip sth</i>
	nagsugí	<i>slosh sth</i>
	nagsuugí	<i>clear land of sth (such as trees)</i>

EXCEPTIONS:

nagahuurí *fan sth*
nagcági *split sth, chop, cut down* < ***-hcagi** *sever, break off*

The unclustered root-initial fricative **x** is usually combined with **h** and is preceded by the allomorph **na-**. However, in some stems **h** is not added to the root and the instrumental prefix appears as **naga-**. Both types of stems are illustrated in (45).

- (45) STEMS WITH **na-**:
nahxúdi *bust sth open* < ***-xudi** *open*
STEMS WITH **naga-**:
nagaxúhxi *break sth* < ***-xuhxi** *break*

A smaller number of instrumental verbs with **naga-** are inflected with B-set prefixes.

Most of these verbs are statives. A few, however, are transitives in which the pronominal prefix represents a transitive object rather than an intransitive subject. Such verbs refer to activities and states that are brought about by some inner force, such as an illness or a natural phenomenon, or by an unsteady posture. Common examples are listed in (46).

- (46) **nagabadí** *contract sth (as an illness)*
nagabuurí *be blowing or flying around (as dust)*
nagawiirí *be staggering, swaying*
nagcárua *slide, skate*
nagcíá *be heavy*
nagcuudí *slip*
nagcuudí *slide off*
nagdahdí / -dohdí *be rocking, wobbly*
nagháhbi *blow away*
nagsaawí *be daybreak*
nagsí *choke*
nagabagí *bloom, blossom*
nagabíxi *flutter, flap; float; soar*

4.3.1.7 *nú-* ‘by hand’

Verbs derived with the instrumental prefix *nú-* usually indicate an activity done with the hands.

Most verbs with *nú-* are active transitives, but there are also a few active intransitives and statives. A representative sample of derived stems is given in (47).

(47)	<i>núbaari</i>	<i>spread sth out, lay out</i>
	<i>núbagi</i>	<i>scatter sth</i>
	<i>núbiac</i>	<i>tear sth to shreds</i>
	<i>núbubi</i>	<i>stretch sth</i>
	<i>núbuuxi</i>	<i>crunch sth in the hand</i>
	<i>núcadaa</i>	<i>squash sth</i>
	<i>núcarua</i>	<i>drag sth on the surface</i>
	<i>núcgaaði</i>	<i>pick sth up by barely touching it</i>
	<i>núcgiiði</i>	<i>be too tight; pick sth up between sth</i>
	<i>núcgisi</i>	<i>wring sth out</i>
	<i>núcuuxi</i>	<i>crush sth in the hand</i>
	<i>núdahxi</i>	<i>fiddle with sth</i>
	<i>núdhagi</i>	<i>squeeze sth</i>
	<i>núdhi</i>	<i>tie sth</i>
	<i>núgaaxi</i>	<i>measure sth, mark off</i>
	<i>núgaree</i>	<i>knead sth</i>
	<i>núgiria</i>	<i>steer sth</i>
	<i>núhci</i>	<i>take sth, purchase</i>
	<i>núhdihsi</i>	<i>touch sth</i>
	<i>núhgixi</i>	<i>snatch sth away</i>
	<i>núhsibi</i>	<i>untie sth</i>
	<i>núhsua</i>	<i>bend sth</i>
	<i>núhxahbi</i>	<i>snatch sth away</i>
	<i>núhxaraa</i>	<i>shell sth</i>
	<i>núhxisi</i>	<i>plow sth</i>
	<i>núhxua</i>	<i>pull sth down, knock down</i>
	<i>núseesi</i>	<i>pry sth</i>
	<i>núsgghi</i>	<i>pull sth out</i>
	<i>núsihsi</i>	<i>turn sth over (as boiling meat)</i>

In a small number of stems derived with *nú-* *by hand*, illustrated in (48), the semantic contribution of the instrumental prefix is less obvious.

(48)	núceebi	<i>go through the woods or brush</i>
	núcihci	<i>trot</i>
	núhcixi	<i>vs. faint; have muscle spasms; go into a seizure</i>
	núhsia	<i>vt. / vs. twitch, palsy; be nauseated, revolted</i>
	núhxia	<i>wink, blink</i>
	núsbia	<i>start a rumour about sb</i>
	núhuuri	<i>rush sb</i>

The instrumental prefix **nú-** has a free variant **núù-** that is used only with the third person and with uninflected stems. The productivity of **núù-** varies: it never occurs with some stems, both allomorphs seem to be equally common with other stems, and with a small number stems **núù-** appears to be the preferred third person form. Examples are shown in (49).

(49)	núbee ~ núùbee	<i>tear sth into shreds</i>
	núsuugi ~ núùsuugi	<i>wash sth</i>
	núcaa ~ núùcaa	<i>unhem sth</i>
	núdaa ~ núùdaa	<i>break sth fragile, pop</i>
	núgiria ~ núùgiria	<i>steer sth</i>
	núsagi ~ núùsaagi	<i>break sth apart (as a citrus or a rabbit)</i>
	núsia ~ núùsia	<i>take sth apart</i>
	núùwiiri	<i>unscrew sth</i>
	núùxaa	<i>spread sth out</i>
	núùbaa	<i>lay sth out</i>
	núùsaa	<i>put sth down, leave behind</i>

4.3.1.8 **úá[?]-/u[?]á[?]-/ú[?]a-** ‘by sweeping motion’

The final instrumental prefix, **úá[?]-/u[?]á[?]-/ú[?]a-** *by sweeping motion*, has so far never been recognized in the descriptions of the Hidatsa instrumental system, even though cognates exist in other Siouan languages, including Crow **oó/óo/uú** *by projectile* (Graczyk 2007: 92, 98). There is no doubt, however, that this prefix is also an instrumental in Hidatsa since it is used almost exclusively with bound instrumental roots. It is also derivationally the least productive among Hidatsa instrumental prefixes. Instrumental stems derived with **úá[?]-/u[?]á[?]-/ú[?]a-** usually have

something to do either with the movement of water or with fast moving projectiles, as when shooting something. The three variants of the prefix reflect differences between idiolects and modern dialects. Instrumental stems derived with *úá’-/u’á’-/ú’a-* are often causativized, as in some of the examples in (50).

- (50) *úá’bixi* *be flooded all over*
úá’gidhee *wash sth clean; rinse/wash sth out*
úá’sghuhee *rinse sth*
ú’axbhi / u’áxbhi *shoot sth*

4.3.2 Inflectional patterns of instrumental verbs

TABLE 4.6 lists all the pronominal prefixes for instrumental verbs. Third person forms are identical with the citation form. Allomorphs are listed under the primary form. Less common variants are given in the brackets. Dialectal variants are separated by the slash symbol. Plurals are formed by suffixation as described in section 4.2.

TABLE 4.6. INFLECTION OF INSTRUMENTAL VERBS

INSTRUMENTAL PREFIX	GLOSS	3 PERSON	1 PERSON	2 PERSON
<i>ará-</i>	<i>by heat or cold</i>	<i>ará-</i>	-	-
<i>ara-</i>	<i>by foot</i>	<i>ara-</i>	<i>ma’-</i>	<i>ná’-</i>
<i>bá-</i>	<i>by outward pressure</i>	<i>bá-</i>	<i>maba-</i> <i>mab-</i>	<i>nába-</i> <i>náb-</i>
<i>ha-</i>	<i>by blade (cutting)</i>	<i>ha-</i>	<i>maaha-</i>	<i>náha-(náàha-)</i>
<i>ná-</i>	<i>by mouth or teeth</i>	<i>ná-</i>	<i>mara-</i>	<i>nára-</i>
<i>naga-</i>	<i>by sudden motion</i>	<i>naga-</i> <i>nag-</i> <i>na-</i>	<i>maaga-</i> <i>maag-</i> <i>maa-</i>	<i>náàga-</i> <i>náàg-</i> <i>náà-</i>
<i>nú-</i>	<i>by hand</i>	<i>nú- (núù-)</i>	<i>maru-</i>	<i>náru-</i>
<i>úá’- / u’á’- / ú’a-</i>	<i>by sweeping motion</i>	<i>úá’-/u’á’-/ú’a-</i>	<i>múá’- / mu’á’-/mú’a-</i>	<i>nú’a-/núà’-</i>

With minor variations, the inflected forms of instrumental verbs consistently follow schematized pitch-accent patterns. The second person prefix is in every way identical to the first

person prefix, except that it is always accented and begins with a different consonant. (The only exception to this rule is instrumental verbs that are inflected statively since the B-set second person prefix is not accented.) Since second person forms are always predictable, they are omitted from the paradigms below. Four instrumental prefixes, *ará-*, *bá-*, *ná-*, and *nú-*, are always accented in the citation form, which serves also as the morphologically unmarked third person form, so they will not be included in the paradigms below. However, neither they nor the personal prefix are accented in the first person form. The last instrumental prefix, *úá[?]-/u[?]á-/ú[?]a-* *by sweeping motion*, is inflected identically to vowel-initial active verbs (see 3.1.2) and will not be included in the examples below. Diphthongs behave in every respect like long vowels and are therefore not treated separately.

The accent is always on the base syllable if the instrumentalized base is monosyllabic and the final stem syllable is short. Stems with CV, CCV, and CCV structure fall into this class. Examples are in TABLE 4.7.

TABLE 4.7. PITCH-ACCENT ON MONOSYLLABIC ROOTS, SHORT FINAL VOWEL

3SG	1SG	GLOSS	BASE
CV			
<i>nagcíc</i>	<i>maagcíc</i>	<i>to bake sth</i>	*-ci
<i>nagsíc</i>	<i>miiragsíc</i>	<i>to choke (stative inflection)</i>	*-si
CCV			
<i>núdhic</i>	<i>marudhíc</i>	<i>to tie sth</i>	*-dhi
<i>náhbic</i>	<i>marahbíc</i>	<i>to bite off sth</i>	*-hbi
<i>báhbic</i>	<i>mabahbíc</i>	<i>to chip off sth</i>	*-hbi
<i>nagabcíc</i>	<i>maagabcíc</i>	<i>to chop sth</i>	*-bci
<i>aradhíc</i>	<i>ma[?]dhíc</i>	<i>to step on sth</i>	*-dhi
CCCV			
<i>haxbhíc</i>	<i>maahaxbhíc</i>	<i>to sneeze</i>	*-xbhi
<i>araxbhíc</i>	<i>ma[?]xbhíc</i>	<i>to kick off sth</i>	*-xbhi
<i>nacghíc</i>	<i>maacghíc</i>	<i>to quill sth</i>	*-cgbi

Instrumental stems derived from monosyllabic roots ending with a long vowel or a diphthong always have the accent on the final syllable, and, in the majority of cases, the pitch contour is falling. Roots with CVV, CCVV, and CCVV structure fall into this class. Examples are in TABLE 4.8.

TABLE 4.8. PITCH-ACCENT ON MONOSYLLABIC ROOTS, LONG FINAL VOWEL

3SG	1SG	GLOSS	BASE
CVV			
nú(ù)beec	marubéèc	<i>to shred shred</i>	*-bee
náxaac	maraxáàc	<i>to gnaw on sth</i>	*-xaa
báxuac	mabxúàc	<i>to tan sth</i>	*-xua
nagsíàc	maagsíàc	<i>to ensnare sth</i>	*-ghia
hacáàc	maahacáàc	<i>to cut sth into narrow strips</i>	*-caa
aradáàc	ma'dáàc	<i>to break sth with the feet</i>	*-daa
CCVV			
núsbíac	marusbíàc	<i>to slander sb</i>	*-sbia
náhsuac	marahsúàc	<i>to bend sth with teeth</i>	*-hsua
báhxuac	mabahxúàc	<i>to push sth over</i>	*-hxua
naghúàc	maaghúàc	<i>to flesh sth</i>	*-ghua
arahxúàc	ma'hxúàc	<i>to kick sth over</i>	*-hxua
CCCVV			
núsdbaac	marusdháàc	<i>to crumble sth</i>	*-sdhaa
násdhuac	marasdhúàc	<i>to masticate sth</i>	*-sdhua
básdbaac	mabasdháàc	<i>to crumble sth</i>	*-sdhaa
arasdháàc	ma'sdháàc	<i>to trample on sth</i>	*-sdhaa

Pitch contour can also be level on the final long vowel. Level high pitch is lexicalized and not predictable. The level pitch contour is much less common than the falling one. Instrumentalized base forms with ((C)C)CVV structure and level pitch contour are illustrated in TABLE 4.9.

TABLE 4.9. PITCH-ACCENT ON MONOSYLLABIC ROOTS, LONG FINAL VOWEL

3SG	1SG	GLOSS	BASE
CVV			
nagabáác	maagabáác	<i>to stew sth</i>	*-baa
nagabééc	maagabééc	<i>to strike sth</i>	*-bee
arabééc	ma'bééc	<i>to kick sth</i>	*-bee

aracáác CCVV	ma'cáác	<i>to shatter sth</i>	*-caa
nagsúác	maagsúác	<i>to dent sth</i>	*-hsua
nahxúác	maahxúác	<i>to fell sth</i>	*-hxua
nahxáác	maahxáác	<i>to sweep sth</i>	*-hxaa
arahsúác	ma'hsúác	<i>to bend sth with the foot</i>	*-hsua

The majority of bound roots from which instrumental verbs are derived are disyllabic.

The accent in the derived stem is usually on the first syllable of the root. However, stems derived with two instrumental prefixes, *naga-* and *ara-*, display a tendency to have the accent on the second syllable of the root. Only a minority of *naga-* and *ara-* stems have the second root syllable accented if the root structure is CVCV or CCVCCV; most CCVCV roots have the accent on the second syllable in stems derived with *naga-*; the second root syllable is accented in the majority of both *naga-* and *ara-* stems if the root structure is CVCCV; and the second root syllable in *naga-* and *ara-* stems is almost always accented in roots with CVVCV and CCVVCV structure. This tendency is illustrated in TABLE 4.10.

TABLE 4.10. ACCENT PLACEMENT IN STEMS DERIVED FROM DISYLLABIC ROOTS WITH *naga-* AND *ara-*

SYLLABLE STRUCTURE OF THE ROOT	INSTRUMENTAL PREFIX	PROPORTION OF STEMS WITH ACCENT ON SECOND ROOT SYLLABLE
CVCV	<i>naga-</i> , <i>ara-</i>	some
CCVCCV	<i>naga-</i> , <i>ara-</i>	some
CCVCV	<i>naga-</i>	most
CVCCV	<i>naga-</i> , <i>ara-</i>	most
CVVCV	<i>naga-</i> , <i>ara-</i>	almost all
CCVVCV	<i>naga-</i> , <i>ara-</i>	almost all

Instrumental stems with accent on the first root syllable are illustrated in TABLE 4.11.

TABLE 4.11. INSTRUMENTAL STEMS WITH ACCENT ON THE FIRST ROOT SYLLABLE

3SG	1SG	GLOSS	BASE
CVCV			
núbagic	marubáagic	<i>to scatter sth</i>	*-bagic
nácibic	maracíbic	<i>to lick sth</i>	*-cibi
báxisic	mabxísic	<i>to shovel sth</i>	*-xisi
nagawícic	maagawícic	<i>to chop sth fine</i>	*-wici
nagsagí	maagsagíc	<i>to split sth</i>	*-sagi
habádic	maahabádic	<i>to saw sth</i>	*-badi
aracídic	ma'cídic	<i>to undo with the foot</i>	*-cidi
CCVCCV			
núhxahbic	maruhxáhbic	<i>to snatch sth</i>	*-hxahbi
nahxúhxic	maahxúhxic	<i>to scrape sth</i>	*-hxuhxi
náhdahdic	marahdáhdic	<i>to bite down on sth</i>	*-dahdi
arahdíhsic	ma'hdíhsic	<i>to touch sth</i>	*-hdihsi
CCVCV			
núcgabic	marucgábic	<i>to pinch sth</i>	*-cgabi
náhduxic	marahdúxic	<i>to bite a chunk off sth</i>	*-hduxi
báhsagic	mabahsáagic	<i>to mash sth</i>	*-hsagi
nahxúdic	maahxúdic	<i>to bust sth open</i>	*-hxudi
aracgísic	ma'cgísic	<i>to squish sth</i>	*-cgisi
CVCCV			
núxuhxic	maruxúhxic	<i>to break sth</i>	*-xuhxi
nádohdic	maradóhdic	<i>to shake sth</i>	*-dohdi
bádahxic	mabadáhxic	<i>to pick at sth</i>	*-dahxi
hasíhsic	maahasíhsic	<i>to cut sth with the point</i>	*-sihxi
nagaxúhxic	maagaxúhxic	<i>to break sth</i>	*-xuhxi
araxáhbic	ma'xáhbic	<i>to kick sth</i>	*-xahbi
CVVCCV			
núcuuxic	marucúùxic	<i>to grind/crush sth</i>	*-cuuxi
nácoobic	maracóòbic	<i>to kiss sb</i>	*-coobi
naghîdic	maaghîdic	<i>to squeeze sth in</i>	*-hiidi
hacúùdic	maahacúùdic	<i>to cut, slit sth</i>	*-cuudi
arawîric	ma'wîric	<i>to twist sth</i>	*-wiiri
báxeesic	mabxéèsic	<i>to pierce sth</i>	*-xeesi
CCVVCCV			
núcgîidic	marucgîidic	<i>to tighten sth</i>	-giidi

Instrumental stems with accent on the second root syllable are illustrated in TABLE 4.12.

TABLE 4.12. INSTRUMENTAL STEMS WITH ACCENT ON THE SECOND ROOT SYLLABLE

3SG	1SG	GLOSS	BASE
CVCV			
nagsudíc	maagsudíc	<i>to slip off sth</i>	*-sudi
arasudíc	maʔsudíc	<i>to lose footing</i>	*-cibi
araxisíc	maʔxisíc	<i>to dig sth</i>	*-xisi
CCVCCV			
arahdahíc	maʔhdahíc	<i>to step hard on sth</i>	*-hdahdi
CCVCV			
nacgubíc	maacgubíc	<i>to bend sth</i>	*-cgubi
nagsugíc	maagsugíc	<i>to slosh sth</i>	*-hsugi
arahgicíc	maʔhgicíc	<i>to mis-step</i>	*-hgici
arahsugíc	maʔhsugíc	<i>to step in water/mud</i>	*-hsugi
CVCCV			
nagadahsíc	maagadahsíc	<i>to tap sth</i>	*-dahsi
nagadohdíc	maagadohdíc	<i>to shake sth</i>	*-dohdi
aradahxíc	maʔdahxíc	<i>to prance</i>	*-dahxi
araxahxíc	maʔxahxíc	<i>to hesitate</i>	*-xahxi
CVVCV			
naghaadíc	maaghaadíc	<i>to sting, nail sth</i>	*-haadi
naghuuwíc	maaghuuwíc	<i>to attempt sth</i>	*-huuwi
araseesíc	maʔseesíc	<i>to pry open sth</i>	*-seesi
araxooxíc	maʔxooxíc	<i>to smooth sth</i>	*-xooxi
CCVVCV			
nacgiidíc	maacgiidíc	<i>to clip sth</i>	*-cgiidi
nagdiiwíc	–	<i>to ricochet</i>	*-hdiiwi
aracgaadíc	maʔcgaadíc	<i>to walk quietly</i>	*-cgaadi
arahdiiwíc	maʔhdiiwíc	<i>to flip sth by stepping on</i>	*-hdiiwi

Besides verbs derived with *naga-* and *ara-*, a few other instrumental stems have accent on the second syllable of the disyllabic bound root, as in TABLE 4.13.

TABLE 4.13. INSTRUMENTAL STEMS WITH ACCENT ON THE SECOND ROOT SYLLABLE

3SG	1SG	GLOSS	BASE
CVCCV			
nádahxic	maradahxíc	<i>to gnaw on sth</i>	*-dahxi
CVVCV			
núcuudic	marucuudíc	<i>to slip sth from hand</i>	*-cuudi
náseesic	maraseesíc	<i>to pry sth open</i>	*-seesi
bácaadic	mabcaadíc	<i>to poke sth</i>	*-caadi
CCVVCV			
nácgaadic	maracgaadíc	<i>to pick up sth</i>	*-cgaadi

Several instrumental stems exhibit variation in accent placement. Some speakers express preference for one of the variants, but many others accept both as equally valid. Variation in accent placement is illustrated in (51).

- (51) *nahxísic* = *nahxisíc* *she hoed it* *maahxísic* = *maahxisíc* *I hoed it*
arahdábic = *arahdabíc* *he trampled on it* *ma'dhábic* = *ma'hdabíc* *I trampled on it*

Accent in instrumental stems derived from disyllabic roots with a long final vowel is always on the first root syllable. There are no exceptions. Examples are in TABLE 4.14.

TABLE 4.14. PITCH ACCENT ON DISYLLABIC ROOTS WITH LONG FINAL VOWEL

3SG	1SG	GLOSS	BASE
CVCVV			
<i>núxaruac</i>	<i>maruxáruac</i>	<i>to move sth</i>	*-xarua
<i>nágareec</i>	<i>maragáreec</i>	<i>to bite sth</i>	*-garee
<i>bácadaac</i>	<i>mabcádaac</i>	<i>to squash sth</i>	*-cadaa
<i>nagcíriac</i>	<i>maagcíriac</i>	<i>to crack sth</i>	*-ciria
<i>hádareec</i>	<i>maahadáreec</i>	<i>to notch sth</i>	*-daree
<i>aracáruac</i>	<i>ma'cáruac</i>	<i>to push sth</i>	*-carua
CCVCVV			
<i>núhxaraac</i>	<i>maruhxáraac</i>	<i>to shell sth</i>	*-hxaraa
<i>nahxáraac</i>	<i>maahxáraac</i>	<i>to thresh, shell sth by striking</i>	*-hxaraa
<i>náhxaraac</i>	<i>marahxáraac</i>	<i>to shell sth with teeth</i>	*-hxaraa

A few bound roots that serve as base forms for deriving instrumental stems are vowel-initial. Six such verbs that have been identified to date are given in TABLE 4.15. Again, accent falls on the final syllable.

TABLE 4.15. PITCH-ACCENT ON VOWEL-INITIAL ROOTS

3SG	1SG	GLOSS	BASE
VCV			
<i>núùhic</i>	<i>maruuhíc</i>	<i>to lift sth</i>	*-uhi
<i>báàhic</i>	<i>mabaahíc</i>	<i>to sing sth</i>	*-ahi
<i>nagaahíc</i>	<i>maagaahíc</i>	<i>to pull sth</i>	*-ahi

VCCV			
báàhxuc	mabaahxúc	<i>to spill sth</i>	*-ahxu
araahxúc	ma'aahxúc	<i>to spill sth by kicking</i>	*-ahxu
VCVCV			
nagaahisíc	maagaahisíc	<i>to carry sth</i>	*-ahisi

Most instrumental verbs are active and transitive, but a fair number of stems derived with **naga-** have only intransitive third person forms. Two other common instrumental stems that only occur in the third person are **hasísi** *to be stinging pain*, **badhí** *to fall off (a chair, bed, horse)*.

4.3.3 Middle inflection of instrumental verbs

Most stems that are inflected with C-set pronominal prefixes are derived instrumental verbs.

TABLE 4.16. presents a comparison between the active and middle inflectional paradigms of the instrumental base /**nuuhi**/.

TABLE 4.16 COMPARISON OF ACTIVE AND MIDDLE PARADIGMS

	ACTIVE INFLECTION	GLOSS	MIDDLE INFLECTION	GLOSS
	núùhi	<i>to lift sth</i>	i-ruuhí	<i>to stand up (lit. to lift oneself)</i>
3SG	núùhic	<i>he lifted it</i>	i-ruuhíc	<i>he stood up</i>
1SG	maruuhíc	<i>I lifted it</i>	mi-ruuhíc	<i>I stood up</i>
2SG	náruuhic	<i>you lifted it</i>	ní-ruuhic	<i>you stood up</i>
3PL	núùhaʔc	<i>they lifted it</i>	i-ruuháʔc	<i>they stood up</i>
1PL	maruuháʔc	<i>we lifted it</i>	mi-ruuháʔc	<i>we stood up</i>
2PL	náruuhaʔc	<i>y'all lifted it</i>	ní-ruuhaʔc	<i>y'all stood up</i>
IMP.SG	núùha!	<i>lift it!</i>	ní-ruuha!	<i>stand up!</i>
IMP.PL	núùhaara!	<i>y'all lift it!</i>	ní-ruuhaara!	<i>y'all stand up!</i>

In most derived stems, the accent on middle stems shifts to the first mora of the next syllable to the right in comparison to the equivalent active verb, unless it was on the final syllable in the first place. The pitch contour is falling if the nucleus of the accented syllable is

4.4 Locative verbs

There are three basic locative prefixes: *í-/î-* ‘onto’, *ó-/òò-* ‘into, overlapping’, and *ág-/áàg-/ága-* ‘on, over’. The fourth locative prefix, *ági-* ‘squeezed into’, is rare. Locative prefixes are always accented and inflected with metathesized pronominal prefixes. Most of the locative stems are derived from active verbs, but there are some that are derived from stative verbs. Some locative verbs are derived by prefixing the locative markers directly to a bound root. The first locative prefix, *í-*, is usually attached to instrumental stems (i.e., the locative prefix is immediately followed by an instrumental prefix). The second prefix, *ó-*, occurs with both instrumental and other kinds of stems, whereas the third prefix, *á-*, seldom co-occurs with instrumental stems. The only two stems formed with the fourth locative prefix *ági-* that have been identified so far are both instrumentals.

The four locative prefixes are described in more detail in the subsections that follow.

4.4.1 *í-* ‘locative’

The first locative prefix *í-/î-* has the basic meaning of an action that is directed onto the surface of something. Most locative verbs with *í* are derived by prefixing it to an instrumental stem preceding the instrumental prefix. Only the prefix *naga-* (and its allomorphs) is replaced by the locative *í-/î-*. The derivation of locative stems with the prefix *í-* is illustrated in TABLE 4.18.

TABLE 4.18. DERIVATION OF LOCATIVE VERBS FROM INSTRUMENTAL STEMS WITH *í-*

INSTRUMENTAL BASE	GLOSS	LOCATIVE <i>í</i> -STEM	GLOSS
<i>bá-</i> <i>by outward pressure</i>			
<i>bácaa</i>	<i>string sth, bead</i>	<i>íbcaa</i>	<i>string sth, bead</i>
<i>bácaadi</i>	<i>poke / stab at sth</i>	<i>íbcaadi</i>	<i>thread sth, bead</i>
<i>bácadaa</i>	<i>squash sth</i>	<i>íbcadaa</i>	<i>smear sth on sth</i>

bácgabi	<i>thrust / poke sth</i>	íbacgabi	<i>treat sb meanly</i>
bácgisi	<i>press fluid out of sth</i>	íbasgisi	<i>soak up liquid with sth</i>
bácgubi	<i>fold sth</i>	íbacgubi	<i>fold sth with sth else</i>
bádaree	<i>stick sth into sth</i>	íbdaree	<i>pin on sth</i>
bágidi	<i>rub sth, scrape</i>	íbgidi	<i>spread sth on sth</i>
báhdaa	<i>tip sth over</i>	íbahdaa	<i>turn/roll sth in sth (e.g. flour)</i>
báxuhxi	<i>break sth</i>	íbxuhxi	<i>break sth off</i>
ná- <i>by mouth or teeth</i>			
násaadi	<i>call sb by name</i>	írasaadi	<i>pledge sth, promise sth</i>
naga- <i>by sudden motion</i>			
nacgaadi	<i>squirt from</i>	ícgaadi	<i>squirt sth from</i>
nahgubi	<i>be dented, emaciated</i>	îhgubi	<i>tuck sth under sth</i>
nagcúdi	<i>whip sth</i>	îgcudi	<i>slam into sth; be flapping</i>
naghíà	<i>drive sth/sb</i>	îghia	<i>a whip</i>
naghuuwi	<i>try for sth</i>	îghuuwi	<i>strike at sb</i>
nú- <i>by hand</i>			
núbagi	<i>scatter sth</i>	írubagi	<i>sprinkle sth on sth</i>

There are many cases in which the nonlocativized instrumental stem is not found synchronically in the language or the locative prefix is attached directly to the root. A selection of such stems is given in (53).

- (53)
- | | |
|----------|---------------------------------------|
| íbadagha | <i>against, close to</i> |
| íbabeeri | <i>smear sth around in sth</i> |
| íbadhugi | <i>be mean to sb on the sly</i> |
| íbxuudic | <i>be stuffed</i> |
| írudhugi | <i>be mad at sb and act brusquely</i> |
| ígcaa | <i>doctor sb by blowing at</i> |
| ígaaxi | <i>be leaning on/against sth</i> |
| íga | <i>look at sth</i> |

The *í*-locative may also participate in noun derivation, as illustrated in (54).

- (54)
- | | |
|------------|-----------------|
| ma'îghua | <i>flesher</i> |
| ma'îcgiidi | <i>scissors</i> |
| íbcí | <i>post</i> |

Examples of inflected locative paradigms with the prefix *í-/î-* are given in TABLE 4.19.

TABLE 4.19. INFLECTION OF *i*-VERBS

íbcadaa <i>to smear sth on sth</i>			
3SG	íbcadaac	3PL	íbcadaa'ac
1SG	awábcadaac	1PL	awábcadaa'ac
2SG	arábcadaac	2PL	arábcadaa'ac
îgcudi <i>to slam/crash into sth</i>			
3SG	îgcudic	3PL	îgcuda'c
1SG	awáàgcudic	1PL	awáàgcuda'c
2SG	aráàgcudic	2PL	aráàgcuda'c

4.4.2 *ó*-, *óò*-, *óòg*- 'locative'

The locative *ó*-/*óò*-/*óòg*- can be prefixed to instrumental stems and directly to the root. It signifies that the action is directed into some mass or an object. Again, the instrumental prefix *naga*- and its allomorphs are replaced by the locative prefix. Examples are in TABLE 4.20.

TABLE 4.20. DERIVATION OF LOCATIVE VERBS FROM INSTRUMENTAL STEMS WITH *ó*-

INSTRUMENTAL BASE	GLOSS	LOCATIVE <i>ó</i> -STEM	GLOSS
bá - <i>by outward pressure</i>			
bácaadi	<i>poke/stab at sth</i>	óbcaadi	<i>“ring” sth (as a finger), thread sth, stick in</i>
bácgisi	<i>press fluid out of sth</i>	óbacgisi	<i>dunk sth in liquid</i>
–	–	óbahdi	<i>plug sth, insert in sth</i>
báhsagi	<i>mash sth</i>	óbsagi	<i>dip sth into liquid</i>
básahsi	<i>poke at sth</i>	óbsahsi	<i>stick sth through sth</i>
báxisi	<i>shovel / plow sth</i>	óbxisi	<i>scoop / shovel sth</i>
–	–	óbxia	<i>stuff sth into sth; get backed up</i>
naga - <i>by sudden motion</i>			
nacgabí	<i>nibble on sth</i>	óòcgabi	<i>be at the very edge of sth</i>
nagcía	<i>be heavy</i>	óògcia	<i>be evening after dark</i>

In addition to the inessive meaning, the prefix *ó* sometimes has an allative meaning, signifying that the action is directed *onto* something. Often the meaning is not immediately

obvious, especially if the locative prefix is attached directly to the bound root. Examples (55)–(57) list more stems with *ó-/óò-*, some of which are locativized instrumental stems, and others combinations of the locative prefix and the root.

- (55) *ó̀bxagi* *a sliver to go into the flesh*
ó̀bxiche *stub sth*
ó̀cahdi *bury sth*
ó̀cawua *ooze*
ó̀dhaa *wear sth*
ó̀gi *insert sth into sth*
ó̀xbihgee *add sth on (as liquid, money, material); to dilute*
- (56) *ó̀cihgee* *rest*
ó̀hgabhee *patch sth*
ó̀rabi *find sth by chance/accident*
ó̀ragi *follow a trail; to sing along*
ó̀ree *pass sth (néè to go)*
ó̀see *pour sth into sth; to plant sth*
- (57) *ó̀gdaawi* *burn a hole into sth; to get splattered*
ó̀gsachee *doubt sb*
ó̀gxee *be dripping on sth (compare: xéèxee dangle)*
ó̀gxeehe *splash liquid on sth; to baptize*

Examples of inflected locative paradigms with the prefix *ó-/óò-* are given in TABLE 4.21.

TABLE 4.21. INFLECTION OF *ó-*VERBS

<i>ó̀cáhdi to bury sth in the ground</i>			
3SG	<i>ó̀cahdic</i>	3PL	<i>ó̀cahda'c</i>
1SG	<i>awócahdic</i>	1PL	<i>awócahda'c</i>
2SG	<i>arócahdic</i>	2PL	<i>arócahda'c</i>
<i>ó̀see to pour sth into sth; to plant</i>			
3SG	<i>ó̀seec</i>	3PL	<i>ó̀saa'ac</i>
1SG	<i>awóseec</i>	1PL	<i>awósaac'ac</i>
2SG	<i>aróseec</i>	2PL	<i>arósaac'ac</i>

4.4.3 *áàg-*, *ág-*, *ága-* ‘locative’

Locative prefix *ág-/áàg-/ága-* is semantically the most bleached. Some of the stems derived with this prefix add the sense to the verb that the action takes place over something or is directed at something. The basic meaning of this prefix is also the same in other Siouan languages. Probably it is not a coincidence that the independent postposition *áàgaa* *to be the top* has the same shape as one of the allomorphs of this locative prefix. Curiously, this prefix is almost never used on instrumental stems.

The prefix has several allomorphs. Before bases with an initial consonant cluster (bound roots only), the stop *g*, or a sonorant consonant, the prefix has the shape *ága-*, as in TABLE 4.22.

TABLE 4.22. DERIVATION OF LOCATIVE STEMS WITH *ága-*

BASE	GLOSS	LOCATIVE STEM	GLOSS
*-xbi	<i>(instrumental stem)</i>	<i>ágaxbi</i>	<i>step over sth</i>
*-bcia	<i>(instrumental stem)</i>	<i>ágabcia</i>	<i>be envious/jealous of sb</i>
*-gahsi	?	<i>ágagahsi</i>	<i>write / mark sth</i>
<i>gíí</i>	<i>come back</i>	<i>ágagii</i>	<i>be able to sth, be able</i>
<i>gaarí</i>	<i>ask for sth, borrow sth</i>	<i>ágagaari</i>	<i>ask sth of sb</i>
<i>híhgee</i>	<i>make sb come (?)</i>	<i>ágahihgee</i>	<i>procrastinate</i> ^a
<i>náàhsi</i>	<i>spread one’s legs</i>	<i>ágaraahsi</i>	<i>straddle sth</i>
<i>náhcaa</i>	<i>be careful</i>	<i>ágarahcaa</i>	<i>take good care of one’s things</i>
<i>nihsí</i>	<i>dance sth</i>	<i>ágarihsi</i>	<i>dance at / toward sb</i>
<i>míàhxdee</i>	<i>be jealous of sb</i>	<i>ágawiahxdee</i>	<i>be jealous over sb</i>

^a It is unclear why *ága-* is prefixed to this *h*-initial stem.

Before vowels and all other consonants, either *ág-* or *áàg-* is prefixed, as in TABLE 4.23.

TABLE 4.23. DERIVATION OF LOCATIVE STEMS WITH *á(à)g-*

BASE	GLOSS	LOCATIVE <i>í</i> -STEM	GLOSS
<i>abéé</i>	<i>loop sth around sth, string</i>	<i>áàgabée</i>	<i>court sb, date, woe</i>
<i>úùci</i>	<i>be dry</i>	<i>águuci</i>	<i>become dry on sth (as mud)</i>
<i>îwíá</i>	<i>cry</i>	<i>ágíiwíá</i>	<i>cry for sb</i>
<i>cîsi</i>	<i>scout</i>	<i>áàgciisi</i>	<i>peek in/on/at sth</i>
<i>súá</i>	<i>spit</i>	<i>áàgsúa</i>	<i>spit on/at sth</i>
*-sia	<i>(instrumental stem)</i>	<i>ágsia</i>	<i>catch sth, hold sth</i>

dée	die	ágdee	grab / grip / hold sth
cixí	jump	ágcixi	jump over sth; jump sb
haaga	be the last one	ághaaga	be late; be way in the back
hirí	do sth	ághiri	be lucky
habáà	be cold (of people)	ághabaa	be cold
habáà	be cold (of people)	áàghabahee	freeze sth
?	?	áàghaahi	take sth away
hiirahbí	difficult	áàghiiirahbi	be hard up for things

Some derived stems manifest irregular locative allomorphy. The prefix appears as **áà-** before a consonant cluster in example (58) and before a **g**-initial stem in (59).

- (58) **áàhgua** *cremate sb; sit on a branch* < **-hgua** *at*
- (59) **áàguxdi** *wait for sb, expect sth* < **guxdí** *help/support sb*

The verb **ágagahsi** *to write sth* also has an irregular free variant, given in (60).

- (60) **áàgahsi** *write / mark sth* < ***gahsi** *mark sth (?)*

Finally, in the two stems in (61) the locative prefix appears as **á-**.

- (61) **áchaa** *claim sth as one's own* < ?
- ágoosi** *whistle on sth* < **gòòsi** *whistle*

Examples of inflected locative paradigms with the prefix **ág-/áàg-/ága-** are given in

TABLE 4.24.

TABLE 4.24. INFLECTION OF **á**-VERBS

ágcixi <i>to jump over sth</i>		áàgsua <i>to spit on/at sth</i>	
3SG	ágcixic	3SG	áàgsuac
1SG	awágcixic	1SG	awáàgsuac
2SG	arágcixic	2SG	aráàgsuac
ágabcia <i>to be jealous/envious of sb</i>		ágaraahsi <i>to straddle sth</i>	
3SG	ágabciaic	3SG	ágaraahsic
1SG	awágabciac	1SG	awágaraahsic
2SG	arágabciac	2SG	arágaraahsic

Among other Siouan languages, Quintero (2004: 232-33) identifies a construction in Osage that she calls ‘benefactive locative’ and illustrates it with examples using two stems **áwaachi** *to dance for sb* and **áyaake** *to cry fo sb*. Both lexemes, with identical meaning, also exist in Hidatsa and both are derived with the **á**-series locative. The benefactive meaning appears to be restricted to these two verbs in Hidatsa. Examples are (62) and (63).

(62) **Mii?ágarihsic.**
 mii-**ága**-nihsí-c
 1B-LOC-dance-DECL
He danced toward me. or He danced for me.

(63) **Ihúùs** **ágiwiac.**
 ihúù-s **ág**-iíwí-a-c
 mother-DEF LOC-cry-DECL
[The child] is crying for the mother (to get sth).

4.4.4 **ági-** ‘locative’

The relatively uncommon locative prefix **ági-** suggests that something is squeezed into something else. TABLE 4.25 presents the derivation of verbs with **ági-**.

TABLE 4.25. DERIVATION OF LOCATIVE STEMS WITH **ági-**

BASE	GLOSS	DERIVED STEM	GLOSS
núhdabi	<i>be tight fitting</i>	ágiruhdabi	<i>be squeezed between sth</i>
núdaa	<i>crack sth fragile</i>	ágirudaa	<i>be tight fit for sb</i>

A sample paradigm with the locative prefix **ági-** is given in TABLE 4.26.

TABLE 4.26. INFLECTION OF **ági-**VERBS

ágiruhdabi <i>to be squeezed between sth</i>			
3SG	ágiruhdabic	3PL	ágiruhdaba?c
1SG	awágiruhdabic	1PL	awágiruhdaba?c
2SG	arágiruhdabic	2PL	arágiruhdaba?c

Examples of locative verbs formed with the prefix *ági-* are shown in (64)–(66).

- (64) *Maa'áàgasiwa marohcíhdaa ágiruhdabhiwaac.*
 maa-áàgasi-wa ma-nóhci-hdaa ági-núhdabi-hiwaa-c
 INDEF-write-INDEF 1POS-armpit-INST LOC-tight-1CAUS.DIR-DECL
I squeezed a book in my armpit.
- (65) *Mii'ágirudaac.*
 mii-ági-núdaa-c
 1B-LOC-crack-DECL
It's too tight for me.
- (66) *Ágirudaa gadaaríc.*
 ági-núdaa-Ø hgi-adaarí-c
 LOC-crack-CONT GI-exit-DECL
He barely squeezed through.

4.5 Other derivational prefixes

4.5.1 *maa-* 'indefinite'

The indefinite, or abstract, object prefix *maa-* detransitivizes transitive verbs by reducing their valence from two to one. *Maa-* is used for both animate and inanimate objects and may be glossed as 'stuff', 'things', or 'people'. The identity of the object is understood from the context or cultural setting. TABLE 4.27 contrasts a number of transitive verbs with their detransitivized counterparts.

TABLE 4.27. DERIVATION OF ABSTRACT VERBS

TRANSITIVE BASE	GLOSS	INTRANSITIVE ABSTRACT STEM	GLOSS
<i>báxua</i>	<i>tan sth</i>	<i>maabáxua</i>	<i>tan (hides)</i>
<i>bhú</i>	<i>heal sb</i>	<i>maabhú</i>	<i>heal</i>
<i>nacghí</i>	<i>quill sth</i>	<i>maaracghí</i>	<i>quill, do quill work</i>
<i>náxdua</i>	<i>chew sth</i>	<i>maaráxdua</i>	<i>chew</i>
<i>neehá</i>	<i>not be sth</i>	<i>maareehá</i>	<i>be nothing</i>
<i>níhee</i>	<i>put sth (in the pot)</i>	<i>maaríhee</i>	<i>cook</i>
<i>nuudí</i>	<i>eat sth</i>	<i>maaruudí</i>	<i>eat</i>

The meaning of many stems derived with **maa-** has become lexicalized, as illustrated in

TABLE 4.28.

TABLE 4.28. DERIVATION OF ABSTRACT VERBS WITH LEXICALIZED MEANING

TRANSITIVE BASE	GLOSS	LEXICALIZED INTRANSITIVE STEM	GLOSS
ééhgeedhaa	<i>not know sth</i>	maa'ééhgeedhaa	<i>be stupid</i>
hagáci	<i>cut sth open</i>	maahagáci	<i>butcher</i>
hirí	<i>do sth, make sth</i>	maahirí	<i>work</i>
nahxúá	<i>knock sth over, fell</i>	maarahxúá	<i>fell big game</i>
níʔ	<i>shoot at sth</i>	maariʔ	<i>hunt</i>

Intransitive verbs derived with **maa-** are often used together with the usitative suffix **-gsá** and the habitual suffix **-ñi** to derive verbs that describe habits or personality traits. Examples are (67)–(70).

- (67) **Maawahgaraaxisagsác.**
maa-maa-garaaxisá-gsá-c
 INDEF-1A-forget-**USI-DECL**
I'm forgetful.
- (68) **Maahiigsa'íísd.**
maa-híi-gsá-ñi-sd
 INDEF-drink-**USI-HAB.SG-DEF**
He used to drink a lot (i.e., he used to be an alcoholic).
- (69) **Maahiigsáwa** **arucúáda gireesác.**
maa-híi-gsá-wa **aru-cúáda hgi-neesá-c**
 INDEF-drink-**USI-SIMULT** REL-brain GI-not.exist-**DECL**
She's got no brain left because of her drinking.
- (70) **Madawasúgas** **maaráhcigsac.**
mada-masúga-s **maa-náhci-gsá-c**
 1POS-dog-**DEF** INDEF-bite-**USI-DECL**
My dog bites.

The indefinite object prefix **maa-** should not be confused with the homophonous third person plural object prefix **maa-**. Although the two prefixes do not occupy the same slot in the

affix matrix, they are mutually exclusive in intransitive clauses. The intransitive verb *maa'irídihee* *to be haunted* subcategorizes for the intransitive subject in (71). If the house in this example were an agent in a transitive clause it would have to be marked as such with the ergative suffix *-rí*.

The same verb, *irídihee*, is transitive when it occurs without the indefinite prefix and means *to frighten somebody, spook somebody*. ‘Your family’ in example (72) functions as a transitive object of the verb ‘to spook somebody’. The prefix *maa-* marks third person plural object in this example.

(71) *Adíhe maa'irídiheegsa wareec.*
 adí-hee **maa**-irídihee-gsá waree-c
 lodge-this INDEF-frighten-USI EVID-DECL
This house is haunted.

(72) *Náàdigudaa maa'irídiheedha!*
 n'-aadigudáa **maa**-irídihee-dhaa-Ø
 2POS-family **3OBJ.PL**-frighten-NEG-IMP
*Don't frighten your family!*²⁵

The only way to have both the indefinite *maa-* and the plural object marker *maa-* co-occur in a single inflected stem is to increase the valency of the verb by causativization, as in (73).

(73) *Maawaa'ééhgeheec.*
maa-maa-ééhgee-hee-c
 3OBJ.PL-INDEF- know-**3CAUS.DIR**-DECL
He let them know.

²⁵ This is a formulaic expression used by the senior pallbearer by which the deceased person is asked to go happily and not look back. A person who dies may be reluctant to leave his or her close ones and may come back to “spook” the living.

Finally, in clauses without an overt subject or object the role of the prefix *maa-* is ambiguous. According to the specific pragmatic context it may be interpreted either as the indefinite marker, if one is speaking about things in general, or as the plural object marker, if specific multiple objects are referred to. More often than not, however, the reading is indefinite.

- (74) **Maabáhgidha!**
maa-bághi-dhaa-Ø
 INDEF/3OBJ.PL-hold.in.mouth-NEG-IMP.SG
*Don't put **anything** / **them** in your mouth!*
- (75) **Maagiragabháàra!** **Adiwahú** **gicawúhcihgaara!**
maa-gi-nagabhí-ara **adi-awahú** **hgi-cawúhci-hgee-ara**
 INDEF/3OBJ.PL-GI-pick.up-IMP.PL house-inside GI-straight-3CAUS.INDIR-IMP.PL
Pick the clutter / them up! Straighten up the rooms!

4.5.2 *i-* 'stativizer'

The prefix *i* derives stative verbs from transitive instrumental stems. The derived verb refers either to the state that results from an activity or to an agentless activity. Many of the derived verbs inflect only for third person. The stativizing prefix has an allomorph *î(g(a))-* that occurs on verbs beginning with *na(g(a))-*. The stativizing prefix becomes accented before *bá-* initial verbs if the vowel in the instrumental prefix is elided.

TABLE 4.29. DERIVATION OF STATIVIZED INSTRUMENTAL VERBS

INSTRUMENTAL STEM	GLOSS	STATIVIZED STEM	GLOSS
<i>nagabagí</i>	<i>splash sth on sth</i>	<i>îngabagi</i>	<i>be splashed / splattered on</i>
<i>nagcádaa</i>	<i>swiftly smash sth</i>	<i>î(î)gcadaa</i>	<i>get splattered</i>
<i>nagcíá</i>	<i>be heavy</i>	<i>îngcia</i>	<i>be weighted down</i>
<i>nagcúdi</i>	<i>whip sth</i>	<i>îngcudi</i>	<i>be flapping</i>
<i>nagsugí</i>	<i>slosh sth</i>	<i>îngsugi</i>	<i>slosh, splash</i>
<i>nagsià</i>	<i>ensnare / trap sth</i>	<i>îngsia</i>	<i>become entrapped, mired</i>
<i>nahxáá</i>	<i>sweep sth</i>	<i>îhxaa</i>	<i>be drifting in the current</i>
<i>núbubi</i>	<i>stretch sth</i>	<i>irúbubi</i>	<i>be elastic / stretchable; stretch</i>

núbuuxi	<i>crunch sth</i>	irúbuuxi	<i>be crunched into fragments</i>
núcaraa	<i>unravel sth</i>	irúcaraa	<i>be ripped, unraveled; rip, unravel</i>
núcgubi	<i>fold or bend sth</i>	irúcgubi	<i>be bent, weighted down</i>
núcuudi	<i>lose grip of sth</i>	irúcuudi	<i>be cracked, crack</i>
núcuuxi	<i>crush sth brittle</i>	irúcuuxi	<i>be cracked, crack (of sth brittle)</i>
núdaa	<i>break sth open</i>	irúdaa	<i>be cracked, crack</i>
núgaraa	<i>tear sth</i>	irúgaraa	<i>be torn; tear</i>
núhcagi	<i>snap sth in two</i>	irúhcagi	<i>be snapped in two; snap in two</i>
núhsibi	<i>untie sth</i>	irúhsibi	<i>become untied</i>
núsagi	<i>split sth, break apart</i>	irúsagi	<i>come apart, split</i>
núsghi	<i>pull sth out</i>	irúsghi	<i>escape, get away</i>
núsuugi	<i>wash sth</i>	irúsuugi	<i>be washed off, fade away</i>
núwiiri	<i>twist sth, wind</i>	irúwiiri	<i>be/become twisted</i>
núxabi	<i>peel sth</i>	irúxabi	<i>be peeling off</i>
núxudi	<i>open sth up</i>	irúxudi	<i>burst open, pop</i>
núxuhxi	<i>break sth</i>	irúxuhxi	<i>be broken; break</i>
núxeesi	<i>slit sth</i>	irúxeesi	<i>rip, become slit</i>
básagi	<i>care, mind</i>	íbsagi	<i>pass by, go out of sight</i>

Stativized instrumental verbs are inflected with B-set prefixes, as in (76).

- (76) Maabéhe **mii**?irúxuhxic.
 maabéhee **mii**-i-núxuhxi-c
 today **1B**-STAT-broken-DECL
I'm broke today. (English calque)

One stem, **irúsghi** *to escape, get away*, can be inflected either as a stativized verb or as a middle verb, as in (77).

- (77) Dóòsag **mii**?irúsghic / **mirúsghic**.
 dóòsag **mii**-irúsghi-c / **mi**-núsgghi-c
 somehow **1B**-STAT-escape-DECL / **1C**-escape-DECL
I barely got away.

4.5.3 a- 'stativizer'

The prefix **a-** derives stative verbs from instrumental-locative roots. This prefix, unlike the locative prefix **á-**, described in 4.4.3, is not accented. There are only a few examples of such

verbs in my corpus. In the hope of identifying more verbs that follow this pattern of derivation, I will tentatively label the prefix as a ‘stativizer’, akin to the stativizing *i-* in the previous section.

The derivation of stative verbs with *a-* is presented in TABLE 4.30.

TABLE 4.30. DERIVATION OF STATIVE VERBS WITH PREFIX *a-*

INSTRUMENTAL ROOT	GLOSS	STATIVE STEM	GLOSS
*-baari	<i>spread out; grow</i>	abáàri	<i>grow (of plants)</i>
*-xbi	<i>be more, surpass</i>	axbí	<i>be left over</i>

4.5.4 *a*²- ‘confrontive’

The confrontive *a*²- adds an argument to the verb and conveys the sense that the activity is directed against someone, usually with the intention of confronting that person. The inflection of the confrontive prefix is given in TABLE 4.31.

TABLE 4.31 CONFRONTIVE PREFIXES

PERSON	CONFRONTIVE PREFIX
3P	<i>a</i> ² -
1P	<i>ma</i> ² -
2P	<i>na</i> ² -

Examples of confrontive stems are given in TABLE 4.32.

TABLE 4.32 DERIVATION OF CONFRONTIVE VERBS

BASE	GLOSS	CONFRONTIVE STEM	GLOSS
<i>néè</i>	<i>go</i>	<i>a</i> ² <i>réeè</i>	<i>go to confront sb</i>
<i>húù</i>	<i>come</i>	<i>a</i> ² <i>húù</i>	<i>come to confront sb, fight sb</i>
<i>giwíá</i>	<i>turn back</i>	<i>a</i> ² <i>giwíá</i>	<i>turn back in anger to confront sb</i>
<i>miréèri</i>	<i>enter</i>	<i>a</i> ² <i>wiréèri</i>	<i>go in to get after sb</i>
<i>iruuhi</i>	<i>stand up</i>	<i>a</i> ² <i>iruuhi</i>	<i>jump up ready to fight sb</i>
-	-	<i>a</i> ² <i>cúáhgee</i>	<i>play against sb; take on a project</i>
-	-	<i>a</i> ² <i>íguubxi</i>	<i>answer sb; talk back to, argue with sb</i>

Examples of sentences with confrontive constructions are given in (78)–(80).

- (78) **Mii^ʔa^ʔrááhua^ʔc.**
 mii-**a^ʔ**-nááhu-^ʔa-c
 1B- **CONF**-come.PL-PL-DECL
They came to confront me.
- (79) **Miirá^ʔdiria** **náwaahee^ʔ?**
 mii-**ná^ʔ**-diríá ná- ma^ʔíihee^ʔ
 1B- **2CONF**-run 2A-want-INTER
Do you want to race me?
- (80) **Ma^ʔwaadiriác.**
ma^ʔ-maa-diríá-c
1CONF -3OBJ.PL-run-DECL
I ran a race with them.

In some stems the confrontive prefix appears to have shed the implied meaning of confrontation and behaves more like a locative prefix. When used locatively, the confrontive prefix is accented not only for second person, but for first and third as well. An example of a confrontive stem with a locative meaning is **á^ʔciwi** which has two lexicalized meanings: (1) ‘to track something, follow somebody’, as in (81), and (2) ‘to cry for somebody (as mother)’. The base for the derived stem, **ciwí**, means ‘to dangle’.

- (81) **Maa^ʔicidí** **ígaag** **á^ʔciwag** **néèc.**
 maa-icidí ígaa-g **á^ʔciwi**-g néè-c
 INDEF-tracks see-CRD follow-CRD go-DECL
He saw tracks and followed them.

In a number of confrontive stems the original meaning of **a^ʔ**- has been almost completely replaced by the locative function. The semantic shift has clearly something to do with the directionality of action. One bound root, ***aadí** *to throw something at somebody*, actually occurs with both locative and confrontive prefixes with no difference in meaning.

TABLE 4.33 LOCATIVE AND CONFRONTIVE COMBINATIONS OF **aadi*

PERSON	LOCATIVE STEM	CONFRONTIVE STEM	GLOSS
3SG	íʔaadic	aʔaadíc	<i>he threw it at him</i>
1SG	awáʔaadic	maʔaadíc	<i>I threw it at him</i>
2SG	aráʔaadic	náʔaadic	<i>you threw it at him</i>

4.5.5 *aʔg-* ‘portative’

The portative *aʔg-* is a pseudo-prefix that adds an argument to the verb (almost always a motion verb). It means that the person carrying out an activity does it while in possession of an object or an animal, or accompanying a person. The portative is inflected for person of the subject and usually prefixed to the inflected base, resulting in a doubly inflected stem. The reason for this is that the portative has developed historically from the lexical verb *éʔ-* *to have sth*, linked to the following verb with the ablaut-triggering coordinating suffix *-g* (see 17.3). The lexical verb *éʔ* and portative pseudo-prefix, inflected for grammatical person and supplemented with literal glosses, are given in TABLE 4.34.²⁶

TABLE 4.34 DERIVATION AND LITERAL MEANING OF PORTATIVE PSEUDO-PREFIX

PERSON	<i>éʔ</i>	<i>have sth</i>	<i>éʔ + -g</i>	<i>have sth and...</i>
3	éʔc	<i>he has it</i>	aʔg	<i>he has it and...</i>
1	méʔc	<i>I have it</i>	maʔg	<i>I have it and...</i>
2	néʔc	<i>you have it</i>	náʔg	<i>you have it and...</i>

A paradigm of the motion verb *néè* *to go* is compared to the portative paradigm of the same verb in TABLE 4.35. Note that the portative stem is inflected for person twice.

²⁶ The portative prefix *aa* in Crow has become fully grammaticalized and is not inflected for person. As in Hidatsa, the Crow portative is prefixed to the inflected stem —i.e., it precedes the pronominal prefixes (Graczyk 2007:103). According to Graczyk, the fact that *aa* is prefixed to the inflected stem suggests that it is an incorporated postposition (2007:103). However, since Crow also has the verb *eé* ‘to have, own’ that ablauts to *aa* (see Graczyk 2007:388) it is likely that the Crow portative prefix *aa* and the Hidatsa portative prefix *aʔg-* have the same origin.

TABLE 4.35. INFLECTION OF THE PORTATIVE STEM *a'gréè* 'TO TAKE SOMETHING ALONG'

PERSON	BASE <i>nèè to go</i>		PORTATIVE STEM <i>a'gréè to take sth along</i>	
3SG	<i>nèèc</i>	<i>he went</i>	<i>a'gréèc</i>	<i>he took it there</i>
1SG	<i>maaréèc</i>	<i>I went</i>	<i>ma'gwaaréèc</i>	<i>I took it there</i>
2SG	<i>náreec</i>	<i>you went</i>	<i>ná'gnareec</i>	<i>you took it there</i>
3PL	<i>nááha'c</i>	<i>they went</i>	<i>a'grááha'c</i>	<i>they took it there</i>
1PL	<i>mááha'c</i>	<i>we went</i>	<i>ma'gwááha'c</i>	<i>we took it there</i>
2PL	<i>náraha'c</i>	<i>you went</i>	<i>ná'graraha'c</i>	<i>you took it there</i>
IMP.SG	<i>náà!</i>	<i>go!</i>	<i>a'gráà!</i>	<i>take it there!</i>
IMP.PL	<i>nááhaara!</i>	<i>go!</i>	<i>a'grááhaara!</i>	<i>take it there!</i>
NEG.IMP.SG	<i>nèèdha!</i>	<i>don't go!</i>	<i>a'gréèdha!</i>	<i>don't take it there!</i>
NEG.IMP.PL	<i>nááhidhaara!</i>	<i>don't go!</i>	<i>a'grááhidhaara!</i>	<i>don't take it there!</i>

The derivation of portative stems is illustrated in TABLE 4.36. The base for a derived portative stem is frequently a movement verb since “carrying” objects normally implies a change in location.

TABLE 4.36. DERIVATION OF PORTATIVE VERBS

BASE	GLOSS	PORTATIVE STEM	GLOSS
<i>nèè</i>	<i>go</i>	<i>a'gréè</i>	<i>take sth</i>
<i>hîi</i>	<i>get here</i>	<i>a'ghîi</i>	<i>bring sth</i>
<i>ú'sia</i>	<i>arrive</i>	<i>a'gú'sia</i>	<i>bring sth</i>
<i>húù</i>	<i>come</i>	<i>a'ghúù</i>	<i>bring sth here</i>
<i>xabí</i>	<i>lie</i>	<i>a'gxabí</i>	<i>sleep with sb</i>
<i>diríá</i>	<i>run</i>	<i>a'gdiríá</i>	<i>rush/run sb (as to the hospital)</i>
<i>núceebi</i>	<i>go through the woods</i>	<i>a'grúceebi</i>	<i>go with sb through the woods</i>
<i>así</i>	<i>roam</i>	<i>a'gasí</i>	<i>take sb around</i>
<i>nîiri</i>	<i>walk</i>	<i>a'grîiri</i>	<i>haul sth, carry sb, walk with sb</i>

The ambiguous state of the portative, hovering between a prefix and a lexical verb, is indicated by the fact that with certain verbs it is possible to leave the base verb uninflected, in which case the portative is the only indicator of grammatical person. An example of a singly inflected portative stem is shown in (82).

- (82) **Maa'agubóhorowihge** go²sdá **ma'ghúùc**.
 maa-agu-bóhorowi-hgee go²sdá **m-a'g-húù-c**
 INDEF-REL-spherical-DIM few **1-PORT-come-DECL**
I brought a few apples.

When the portative prefix precedes a stem that begins with the velar stop **g**, the latter becomes **h** in casual speech according to a minor phonological rule in (83).

- (83) **a'g** → **a'h**/_#**g**

An example of this sound change in context is in (84).

- (84) **Magi'a'gharáà'a** wareec.
 magi-a'g-garáà-'a waree-c
 RECIP-PORT-run.away EVID-DECL
They eloped.

Examples of various portative constructions are shown in (85)–(89).

- (85) **Mii'iraagháág** mii'a'grîra'c **Mé'chirooghiri**.
 mii-iraaghée-g mii-a'g-nîiri mé'chirooga-rí
 1B-adopt-CRD 1B-PORT-walk Knife.Clan-ERG
The Knife Clan adopted me and walked with me around the arbor.
- (86) **Magi'a'gxabá'c**.
 magi-a'g-xabí-c
 RECIP-PORT-lie-DECL
They slept with each other.²⁷
- (87) **Nídawaagarísdo'** **a'grááhudhaara!**
 nída-maa-garísda-'o a'g-nááhu-dhaa-ara
 2POS-INDEF-small-PL PORT-come.PL-NEG-IMP.PL
Don't bring your children!
- (88) **Icúàsghiri** mii'a'gxúàc.
 icúàsga-rí mii-a'g-hxúà-c
 horse-ERG 1B-PORT-fall-DECL
The horse fell with me.

²⁷ The stem **xabí** to lie, lie down implies going to or being in bed. Another verb, **maagí** to lie, is semantically unrestricted and only indicates the position.

- (89) **Madawáàhdi núcaruhgaag a'grááha'c.**
 mada-máàhdii núcarua-hgee-g a'g-nááhi-'a-c
 1POS-vehicle drag-3CAUS.INDIR-CRD PORT-go.PL-PL-DECL
They towed my car. / My car was towed.

4.5.6 áàb- 'comitative'

The comitative **áàb-** is a derivational prefix that has been grammaticalized from an independent postposition **áàbi** *with* (see 16.2.1). Its combinatory power in derivation is relatively low. An example of a comitative verb **áàbasi** *to follow sb, tag along*, 1SG **awáàbasic**, 2SG **aráàbasic**, (not to be confused with **áàbi así** *to travel with sb*) is presented in (90).

- (90) **Mii'áàbasa'c.**
 mii-áàb-así-'a-c
 1B-COM-travel-PL-DECL
They followed me.

4.5.7 ii- 'instrumental'

The instrumental applicative prefix **ii-** is much less common with verbs than as a means of deriving nouns from verbs (see 7.2.4.4). Most verbs with the instrumental prefix **ii-** are causatives, e.g., **iiríhee** *to use sth* (from **níhee** *to put sth*) and **iiwadúhee** *to give birth to sb* (from **madú** *to exist*). Derivation from uncausativized verbs is also possible, as confirmed by the derivation of **iidíà** *to depend on sb* from **díà** *to be a long time, be late*. Further data are needed to clarify the details of prefixal inflection for noncausativized stems with **ii-**, therefore a representative paradigm presented in TABLE 4.37. should be considered tentative for the time being.

TABLE 4.37. INFLECTION OF INSTRUMENTAL VERBS

3SG	1SG	2SG	GLOSS
iidíàc	iiwiidíàc	iiriidíàc	<i>depend on sb</i>
iiríheec	iiríwaac	iiríraac	<i>use sth</i>

Additional examples with the verb **ii'iré'** *to speak about sb/sth*, derived from the possessively inflected verb **iré'** *to speak*, are (91a) and (91b). Note that an additional argument is encoded in the derived stem in both examples: the first person object **mii-** in (91a) and the indefinite object prefix **maa-** in (91b). (92) is an example with **iiwadúhee** *to gith birth to sb*.

- (91) a. **Mii'ii'iré'** **wareec.** b. **Maa'ii'iré'gsac.**
 mii-ii-n'-iré' **waree-c** **maa-ii-iré'-gsá-c**
 1B-INST-2POS-speak EVID-DECL INDEF-INST-speak-USI-DECL
 I hear you gossiped about me. *He is a gossip.*
- (92) **Míahgeewa** **iiwadúhee** **wareec.**
 míà-hgee-wa **ii-madú-hee** **waree-c**
 woman-DIM-INDEF INST-exist-3CAUS.DIR EVID-DECL
 She gave birth to a little girl.

It should be noted that the instrumental prefix **ii-** is often used adverbially, in which case it is usually glossed 'just' or 'only', as in **ii'gimaagíxaacic** *he is just whining* (see 15.2.9).

4.6 Reflexive verbs

There are two productive processes in Hidatsa that derive reflexive verbs. The first process involves prefixation: the derivational prefix **hgi-** (see 4.8) is combined with C-set pronominal prefixes. The second process involves suffixing the reflexive morpheme **-ria** to the verb stem and inflecting the verb with B-set prefixes.²⁸ Finally, stems derived by suffixation can be inflected with pronominal prefixes derived by the first process.

²⁸ Since I finished the first draft of this chapter, Paul Kroeber has raised several important arguments against my analysis of **-ria** as a reflexive morpheme. His tentative suggestions to describe it as an inchoative or inceptive morpheme, however, have so far proved equally unsatisfactory. Until a deeper semantic analysis of **-ria** becomes available, I have chosen to keep the description of it in the present chapter with a tacit understanding that the

The agent (less often the subject) and the object of a reflexive verb are coreferential, i.e., a single pronominal prefix coindexes both the agent and the object of the clause to a single person. Because of that, command forms of reflexive verbs are always inflected for second person.

4.6.1 Reflexive derivation by prefixation

Reflexives prototypically denote an agent that is simultaneously a patient of the verb. In other words, the subject acts upon itself. The reflexive prefix **ihgi-** is formed by combining the inflectional middle prefix **i-** with the derivational prefix **hgi-** (see 4.8). The prefix **hgi-** in this construction usually functions as a SUUS marker. In other words, reflexive stems are formed by prefixing **hgi-** to the base (see 4.8) and then inflecting them with C-set prefixes. For practical purposes the reflexive **ihgi-** will be henceforward treated as a single morpheme, rather than a sequence of two prefixes.

Reflexive verbs are derived by prefixing **ihgi-** to transitive verbs. The reflexive prefixes are given in TABLE 4.38.

TABLE 4.38. REFLEXIVE PREFIXES

3	ihgi-	<i>himself, herself, itself, themselves</i>
1	mihgi-	<i>myself, ourselves</i>
2	nihgi-	<i>yourself, yourselves</i>

A comparison of active and reflexive paradigms is presented in TABLE 4.39.

morpheme is labeled for convenience rather than by convention for the time being. It should be noted that Robinett (1955), Jones (m.s.), and Boyle (2007) have also described **-ria** as a reflexive.

TABLE 4.40. DERIVATION OF REFLEXIVE VERBS BY PREFIXATION

BASE	GLOSS	REFLEXIVE STEM	GLOSS
araaxisá	<i>be ignorant of sth</i>	ihgaraaxisá	<i>be unconscious</i>
arabée	<i>kick sth</i>	ihgarabée	<i>kick oneself</i>
îibi	<i>copulate with sb</i>	ihgibi	<i>fuck oneself</i> (Eng. calque)
iráhbi	<i>prick sb/sth</i>	ihgiráhbi	<i>prick oneself</i>
úùchee	<i>dry sth/sb</i>	ihgi [?] úùchee	<i>dry oneself</i>
hacúùdi	<i>cut sth, slit</i>	ighacúùdi	<i>cut oneself</i>
gigé [?]	<i>scratch sth</i>	ihgigé [?]	<i>scratch oneself</i>
gigsí	<i>fix sth</i>	ihgigsí	<i>get dressed</i>
nagaahí	<i>pull sth</i>	ihgiragaahí	<i>pull back, retreat</i>
nagadíà	<i>be stretched, extended</i>	ihgiragadíà	<i>stretch oneself</i>
naghuurí	<i>fan sb/sth</i>	ihgiraghuurí	<i>fan oneself</i>
núhgaa	<i>be a handful</i>	ihgiruhgàà	<i>cringe</i>
núsia	<i>take sth apart</i>	ihgirusià	<i>undress</i>
bácgubi	<i>fold sth</i>	ihgibacgubi	<i>coil up (as a snake)</i>
bádohdi	<i>shake sth</i>	ihgibádohdi	<i>shake oneself, ruffle one's feathers</i>

Reflexivized causative stems, illustrated in (94) and (95), are unique in Hidatsa because they are subject to double inflection: both the reflexive prefix and the causative suffix are inflected for person.

- (94) **Mihgigi[?]hgiwaa-c.**
 mihgi-gi[?]-hgiwaa-c
 1REFL-carry.on.back-1CAUS.INDIR-DECL
I'm trying not to be forward.
- (95) **Mihgiragcíáwaa-c.**
 mihgi-nagcíá-waa-c
 1REFL-heavy-1CAUS.DIR-DECL
I weighed myself.

Common nonderived middle verbs cannot be reflexivized. Combining the pronominal C-set prefix with the prefix **hgi-** in such verbs derives a new stem that has a vertitive meaning

(implying return to the original position). For example, middle verb *hiráwi* *to sleep* combined with *hgi-* yields a vertitive stem *ihgiháàwi* *to go back to sleep*. An example is (96).

- (96) *Mihgiháàwag* *miiragsibíriac*.
 mi-hgi-háàwi-g mii-nagsibí-ria-c
 1C-GI-sleep-CRD 1B-pass-REFL-DECL
I went back to sleep and I was late.

4.6.2 Reflexive derivation by suffixation

Reflexive derivation by suffixation creates automative verbs. Automative reflexives indicate a passive process where the subject has the role of an inactive patient. Automative reflexives are derived from active, stative, and causative verbs with the reflexive suffix *-ria*, and they are inflected with B-set prefixes.²⁹

The causer of change in the subject expressed with automative reflexives is not a living being. The change is caused by some external factor or happens spontaneously.

The derivation of some common automative reflexives from stative bases is illustrated in (97). Examples of usage are in (98)–(101).

- (97) *adarúúria* *get hurt* ← *adarúú* *be injured*
arácguria *get soaked* ← *arácgu* *be soaked*
gicó'hiria *lose weight* ← *gicó'hi* *become slender*, *có'hi* *be slender*

²⁹ John Boyle illustrates his description of stems derived with *-ria* with only one example which is unexpectedly inflected with an A-set prefix (Boyle 2007:162).

Mé'ecci'hda mabáhcagiriac.
 wé'ecci-hta wa-báhcaki-ria-c
 knife-INST 1A-cut-REFL-DECL
 I cut myself with a knife. (Boyle 2007:162)

According to my informants, the A-set prefix *ma-* should be replaced with the B-set prefix *mii-*, as in the example below.

Mé'chi-hdaa mii-báhcagi-ria-c. *I got cut with a knife.*

gi'iháària	<i>change</i>	←	gi'iháà <i>become different, iháà be different</i>
gixó'hiria	<i>cower</i>	←	gixó'hi(hgee) <i>frown</i>
habáària	<i>have chills</i>	←	habáà <i>feel cold</i>
haxísiria	<i>get wet</i>	←	haxísi <i>be wet</i>
mirihcágiria	<i>get wet</i>	←	mirihcági <i>be wet</i>
óòdiria	<i>get scalded</i>	←	óòdi <i>be ripe, cooked, done</i>
xagáària	<i>be moving</i>	←	xagáà <i>move</i>

(98) **Miigicó'hiriac.**

mii-hgi-có'hi-ria-c
 1B-GI-slender-REFL-DECL
I lost weight.

(99) **Miibhúria maahúc.**

mii-bhú-ria maa-húù-c
 1B-heal-REFL 1A-come-DECL
I came to get doctored.

(100) **Dóòhseewa niiwirihcágiria'?**

dóòhsee.wa nii-mirihcági-ria-'
 why 2B-wet-REFL-INTER
How come you got all drenched?

(101) **Idáá, nuwa riixagáàriara! li'awáàgag gáádhaara!**
 idáá nuwa nii-xagáà-ria-ara ii-awáàgi-g gáá-dhaa-ara
 INTERJ some 2B-move-REFL-IMP.PL INST-sit.down-CRD 3sit.PL-NEG-IMP.PL

Maaruwa hiráàra!
 maaruwa hirí-ara
 something do-IMP.PL

Oh my, (get up and) move some! Don't just be sitting there! Do something!

If the automative reflexive is modified with **hgi-** (see 4.8), the reflexive suffix is often optional, as in (102).

(102) **Miigixawáà(ria)rug arucagíwa.**
 mii-hgi-xawáà-(ria)-rúg aru-cagí-wa
 1B-GI-bloating.to.go.down-(REFL)-COND IRR-good-EXCL
It would be good if I lost weight.

Since an automative verb is a type of reflexive, its subject is coreferential with the patient, as in (103a). An outside argument is ungrammatical in (103b) because it cannot be coindexed with the subject. The outside argument is grammatical in (103c) because the reflexive suffix *-ria* has been removed and the stem is inflected with A-set prefixes according to the active transitive paradigm.

- (103) a. *Mii'áhgageexiriac.*
 mii-hgi-ààg-eexí-ria-c
 1B-GI-LOC-urinate-REFL-DECL
I peed on myself. or I wet my pants.
- b. **Madhaací áhgageexiriac.*
 ma-idhaací hgi-ààg-eexí-ria-c
 1POS-pants GI-LOC-urinate-REFL-DECL
I wet my pants.
- c. *Madhaací awáhgageexic.*
 ma-idhaací hgi-ma-ààg-eexí-c
 1POS-pants GI-1A-LOC-urinate-DECL
I wet my pants.

The reflexive suffix *-ria* alone or in combination with indirect causative suffixes is often used to signal that an activity is carried out in pretense, as illustrated in examples (104)–(109).

- (104) *Hiráwiria(raca)g maagíc.*
 hiráwi-**ria**-(raci)-g maagi-c
 sleep-REFL-(COMPR)-CRD lie-DECL
*He's (lying there) pretending to be asleep.*³⁰
- (105) *Maa'ééhgeeriahge dóòhseewa ééhgeedhaa' oorààsaadi maagiragsí?*
 maa-ééghee-**ria**-hgee dóòhseewa ééhgee-dhaa-? aru-náàsaadi maagiragsí
 INDEF-know-REFL-3CAUS.INDIR how know-NEG-INTER REL-call baby
If he pretends to be knowledgeable, how come he didn't know how to say "baby" in Hidatsa?

The reflexive suffix followed by indirect causative suffixes is also used with predicate nouns to indicate that someone is pretending to be something or somebody else.

³⁰ The compromisive suffix *-raci* adds more disdain to the statement.

(106) **Maagarísdariahgeec.**
maa-garísda-ria-hgee-c
INDEF-small-REFL-3CAUS.INDIR-DECL
He is acting like a baby.

(107) **Miiraxbichíriahgiwaaac.**
mii-naxbichí-ria-hgiwaa-c
1B-bear-REFL-1.CAUS.INDIR-DECL
I pretend to be a bear.

One could argue that the examples in (106) and (107) have both a subject and an object. As for transitive verbs that are first reflexivized with **-ria** and then causativized there is no question that they can have an outside argument. For example, the stem in (108), based on the transitive verb **úà'hdi** *to laugh at somebody*, is inflected with an A-set pronominal prefix as well as an indirect causative suffix. The direct object, as the gloss implies, lies outside the verb complex. The outside argument (**mii-** *me*) is explicit in (109).

(108) **Awá'hdiriahgiwaaac.**
ma-úà'hdi-ria-hgiwaa-c
1A-laugh.at-REFL-1CAUS.INDIR-DECL
I pretended to laugh at him.

(109) **Isáh miigirásiriahgeeraci'iic.**
isá mii-girási-**ria**-hgee-raci-ii-c
again 1B-love-REFL-CAUS.INDIR-COMPR-HAB-DECL
(Then) she always acts as if she loves me again (as after I receive my paycheck).

There are data in Harris and Voegelin's lexical files about the use of a rare reflexive causative morpheme **-ihgee** in Hidatsa. My own consultants were uncertain that constructions with the reflexive causative morpheme are grammatical and suggested that one use the contemporary sequence of the reflexive suffix **-ria** and the indirect causative suffix. The historical reflexive causative morpheme does, however, survive in Hidatsa society and dance names, such as **Míiraa'ihgee** *Goose Society*, **Maa'iháàwia'ihgee** *Enemy Woman Society*, and

gîrabi'ihgee [pretending to be] buffalo dance. (110) and (111) are examples of this morpheme, inflected for person and number, as they appear in Harris and Voegelin's lexical files.

- (110) ?*Miiwîà'ihgiwaaac.*
 mii-mîà-ihgiwaa-c
 1B-woman-1CAUS.REFL-DECL
I pretend to be a woman.
- (111) ?*Gúó' masúga'ihgaa'ac.*
 gúá'o masúga-ihgee-?a-c
 that-PL dog-CAUS.REFL-PL-DECL
They pretend to be dogs.

4.6.3 Complex reflexive verbs

Many Hidatsa verbs combine a reflexive prefix and suffix in the same stem. Such doubly reflexivized stems combine the intentionality inherent in the prefixal pattern and the passive or automative meaning of undergoing an experience conveyed by the reflexive suffix. Compare a passive construction in (112a) and a reflexive construction encoding intentionality in (112b) to a construction encoding an unintentional activity directed to oneself in (112c).

- (112) a. *Báhcagiriac.* b. *Ihgibáhcagic.* c. *Ihgibáhcagiriac.*
 báhcagi-ria-c ihgi-báhcagi-c ihgi-báhcagi-ria-c
 cut-REFL-DECL REFL-cut-DECL REFL-cut-REFL-DECL
He got cut. *He cut himself (intentionally).* *He cut himself (unintentionally).*

The difference between verbs derived only with *ihgi-* and verbs combining both *ihgi-* and *-ria* is not always as straightforward as in (112). In many cases the suffix *-ria*, instead of indicating unintentionality, modifies the thematic role of the grammatical object by distinguishing the Theme (no *-ria*) from the Experiencer (with *-ria*). The use of complex reflexives denoting the Experiencer is illustrated in (113) and (114).

- (113) **Guhgác, John. Níhguxdiri!** -- **Hóò, aruwíhguxdíriac.**
 guhgá-c John n' -**ihgi**-guxdí-**ria**-Ø -- hóò aru-m-**ihgi**-guxdí-**ria**-c
 ready-DECL John 2-REFL-help-REFL-IMP.SG -- yes IRR-1-REFL-help-REFL-DECL
It (the food) is ready, John. Help yourself! -- *Ok, I'll help myself.*
- (114) **Mihgiwigááriac. Niiwaawagé?c.**
 m-**ihgi**-migáá-**ria**-c nii-maa-magé?-c
 1-REFL-low-REFL-DECL 2B-1A-beg-DECL
I humbly ask of you (said in prayer).

For language learners, mastering the distinction between simple and complex reflexives is difficult to achieve since the translation of both constructions is usually identical in English and sometimes both forms are equally valid in Hidatsa. For example, both **ihgigsí** and **ihgigsíria** can be translated as ‘to get ready, get dressed’ (from **gigsí** to fix sth), and for the most part they are freely interchangeable. Another pair of such verbs is **ihgigéèsee** and **ihgigéèseeria**, both of which mean ‘to watch out for oneself, be careful’ (from **gèèsee** / (h)**gigéèsee** to watch sth). There is a subtle difference in meaning, however, between **ihgigé?** to scratch oneself and **ihgigé?ria** to scratch an itch by rubbing against an object (from **gé?** / (h)**gigé?** to scratch sth).

Finally, many verbs are lexicalized in only one form or have distinct meanings for each form and have to be learned as such. Examples of verbs with distinct lexicalized meanings appear in (115).

- (115) (h)**garabhéé** remind sb of sth → **ihgarabhééria** come to one's senses
iriigsi scold sb → **ihgiriigsiéria** confess (lit. scold oneself)

4.7 Causative verbs

There are two types of causatives in Hidatsa: the ‘direct causative’, derived with **-hee**, and the ‘indirect causative’, derived with **-hgee**. Both morphemes are suffixed to the verb stem they causativize and both are inflected for person.

Despite claims to the contrary (e.g., Boyle 2007: 169), causativized verbs do not always subcategorize for an additional argument in Hidatsa. The semantics of causative verbs will be discussed in 4.7.2 below.

4.7.1 Derivation and inflection of causative verbs

Direct causative suffixes follow two paradigmatic patterns. Third person suffixes are the same in both patterns, but the first and second person suffixes have two allomorphs that are conditioned by their occurrence with vowel-final or consonant-final stems.

Indirect causative suffixes are invariant as the preceding stem always ends with a vowel. However, a small number of indirect causatives, most of which are derived from stems that occur only as direct causatives, have irregular inflection that is indicated in the parentheses.

The inflection of direct and indirect causative suffixes is given in TABLE 4.41.

TABLE 4.41. DIRECT AND INDIRECT CAUSATIVE SUFFIXES

	<i>V</i> + CAUS.DIR	<i>C</i> + CAUS.DIR	CAUS.INDIR
3SG	-hee	-hee	-hgee (-hehgee)
1SG	-waa	-hiwaa	-hgiwaa (-hehgiwaa)
2SG	-raa	-hiraa	-hgiraa (-hehgiraa)

Causative suffixes, like pronominal prefixes, have distinct forms for the three grammatical persons that Hidatsa distinguishes. There are no separate suffixes for the plural. Vowel change in causative stems inflected for the plural and imperative is caused by the ablaut-triggering plural morphemes -ʔa and -ʔo, and the imperative morphemes -∅ and -ara.

Sample paradigms for direct causative inflection of vowel-final and consonant-final stems are given in TABLE 4.42. The particulars of direct causative stem derivation will be

described in the section that immediately follows the description of indirect causative verb derivation.

TABLE 4.42. INFLECTION OF DIRECT CAUSATIVE VERBS

<i>nagciá</i> be heavy → <i>nagciáhee</i> weigh sth					
3SG	<i>nagciáheec</i>	<i>he weighed it</i>	3PL	<i>nagciáhaa'ac</i>	<i>they weighed it</i>
1SG	<i>nagciáwaaac</i>	<i>I weighed it</i>	1PL	<i>nagciáwaa'ac</i>	<i>we weighed it</i>
2SG	<i>nagciáraac</i>	<i>you weighed it</i>	2PL	<i>nagciáraa'ac</i>	<i>you weighed it</i>
IMP.SG	<i>nagciáha!</i>	<i>weigh it!</i>	IMP.PL	<i>nagciáhaara!</i>	<i>weigh it!</i>
<i>óòdi</i> be ripe, done, cooked → <i>óòdhee</i> cook sth, brand, dye					
3PL	<i>óòdheec</i>	<i>he cooked it</i>	3PL	<i>óòdhaa'ac</i>	<i>they cooked it</i>
1PL	<i>óòdhiwaaac</i>	<i>I cooked it</i>	1PL	<i>óòdhiwaa'ac</i>	<i>we cooked it</i>
2PL	<i>óòdhiraac</i>	<i>you cooked it</i>	2PL	<i>óòdhiraa'ac</i>	<i>you cooked it</i>
IMP.SG	<i>óòdha!</i>	<i>cook it!</i>	IMP.PL	<i>óòdhaara!</i>	<i>cook it!</i>

Indirect causative suffixes (TABLE 4.43) are also added directly to the stem. Aside from a few irregular verbs, long vowels and diphthongs are reduced to their first mora before indirect causative suffixes unless their second mora is accented. Stem-final short vowels are never deleted before the indirect causative suffixes since this would result in an ungrammatical consonant cluster. Consequently there is no allomorphy because the indirect causative suffixes are always added to vowel-final stems.

TABLE 4.43. REGULAR INFLECTION OF INDIRECT CAUSATIVE VERBS

<i>giguucgí</i> learn sth → <i>giguucgíhgee</i> teach sth					
short vowel					
3SG	<i>giguucgíhgeec</i>	<i>he teaches him</i>	3PL	<i>giguucgíhgaac'ac</i>	<i>they teach him</i>
1SG	<i>giguucgíhgiwaaac</i>	<i>I teach him</i>	1PL	<i>giguucgíhgiwaa'ac</i>	<i>we teach him</i>
2SG	<i>giguucgíhgiraac</i>	<i>you teach him</i>	2PL	<i>giguucgíhgiraa'ac</i>	<i>you teach him</i>
IMP.SG	<i>giguucgíhga!</i>	<i>teach him!</i>	IMP.PL	<i>giguucgíhgaara!</i>	<i>teach him!</i>

húù come → **húhgee** make sb come, send sb here

long vowel, unaccented second mora

3SG	húhgeec	<i>he sent him here</i>	3PL	húhгаа'ac	<i>they sent him here</i>
1SG	húhgiwaac	<i>I sent him here</i>	1PL	húhgiwaa'ac	<i>we sent him here</i>
2SG	húhgiraac	<i>you sent him here</i>	2PL	húhgiraa'ac	<i>you sent him here</i>
IMP.SG	húhga!	<i>send him here!</i>	IMP.PL	húhgaara!	<i>send him here!</i>

diríá run → **diríáhgee** make a horse run, start an engine

long vowel, accented second mora

3SG	diríáhgeec	<i>he made it run</i>	3PL	diríáhгаа'ac	<i>they made it run</i>
1SG	diríáhgiwaac	<i>I made it run</i>	1PL	diríáhgiwaa'ac	<i>we made it run</i>
2SG	diríáhgiraac	<i>you made it run</i>	2PL	diríáhgiraa'ac	<i>you made it run</i>
IMP.SG	diríáhga!	<i>make it run!</i>	IMP.PL	diríáhgaara!	<i>make it run!</i>

A small number of indirect causatives are derived irregularly so that the indirect causative suffixes are recursively added to the truncated direct causative suffix **-hee**. In most cases the base for such indirect causatives is a lexicalized direct causative where the noncausativized form does not exist as an independent stem in the language. A sample paradigm is presented in TABLE 4.44.³¹

TABLE 4.44. IRREGULAR INFLECTION OF INDIRECT CAUSATIVE VERBS

iiríhee use sth → iiríhehgee let sb use sth, lend					
3SG	iiríhehgeec	<i>he lent it to him</i>	3PL	iiríhehгаа'ac	<i>they lent it to him</i>
1SG	iiríhehgiwaac	<i>I lent it to him</i>	1PL	iiríhehgiwaa'ac	<i>we lent it to him</i>
2SG	iiríhehgiraac	<i>you lent it to him</i>	2PL	iiríhehgiraa'ac	<i>you lent it to him</i>
IMP.SG	mii'iiríhehga!	<i>let me use it!</i>	IMP.PL	mii'iiríhehgaara!	<i>let me use it!</i>

³¹ The pattern is considered irregular insofar as the direct and indirect causative suffixes are normally in complementary distribution. However, some causatively inflected verbs, such as **níhee** to put something somewhere (1SG **níwaac**, 2SG **níraac**), are synchronically no longer analyzable and the deletion or substitution of the formally direct causative suffixes would result in ungrammatical forms.

In the derivation of direct causatives the causativized stem is subject to a number of sound changes. Although there are many exceptions, several more-or-less rule-based derivational patterns emerge from the data. The most common patterns are listed below.

The second mora in unaccented stem-final long vowels and diphthongs is deleted in both direct and indirect causative derivation, as illustrated in (116).

(116)	BASE		DIRECT CAUSATIVE		INDIRECT CAUSATIVE
	xagáà	<i>move</i>	xagáhee	<i>move sth</i>	xagáhgee <i>make sth move</i>
	nagadáraa	<i>shake</i>	nagadárahee	<i>shake sth</i>	nagadárahgee <i>gallop</i>
	maghîi	<i>be assembled</i>	maghîhee	<i>assemble sth</i>	maghîhgee <i>assemble sth</i>
	húù	<i>come</i>	húhee	<i>fall (as rain)</i>	húhgee <i>send sb here</i>
	iihdóò	<i>be shy</i>	iihdóhee	<i>embarrass sb</i>	??
	xúà	<i>fall</i>	xúhee	<i>trip sb</i>	xúhgee <i>trip sb</i>
	ihdíà	<i>be big</i>	ihdíhee	<i>raise a child</i>	ihdíhgee <i>enlarge sth</i>
	bhéeè	<i>eat sth up</i>	bhéehee	<i>let sb eat sth up</i>	bhéhgee <i>have sb eat sth up</i>
	nagadíà	<i>be stretched out</i>	nagadíhee	<i>stretch sth out</i>	nagadíhgee <i>become stretched</i>
	arádaree	<i>be scorched</i>	arádarehee	<i>scorch sth</i>	arádarehgee <i>have sb scorch sth</i>
EXCEPTION:					
	garéeè	<i>vomit</i>	garéeèhee	<i>make sb vomit</i>	garéhgee <i>make sb vomit</i>

In some stems the remaining first mora of the reduced long *ee* resurfaces as an *i* or *a*.

Question marks in (117) indicate unattested forms.

(117)	BASE		DIRECT CAUSATIVE		INDIRECT CAUSATIVE
	déeè	<i>die</i>	díhee/dáhee	<i>kill sb</i>	díhehgee/dáhehgee <i>have sb kill sb</i>
	ichéeè	<i>wake up</i>	ichíhee	<i>wake sb up</i>	?
	abéeè	<i>wrap sth around sth</i>	abíhee	<i>hang sth over sth</i>	?

The second mora in long vowels and diphthongs is not deleted before causative suffixes when it is accented, as in (118). Question marks in the list indicate unattested forms.

(118) BASE		DIRECT CAUSATIVE		INDIRECT CAUSATIVE	
nahxáá	<i>sweep sth, brush off</i>	nahxááhee	<i>scrape sth</i>	?	
saréé	<i>be damp, muggy</i>	sarééhee	<i>mix sth gooey</i>	sarééhgee	<i>concoct sth</i>
xéé	<i>drip</i>	xééhee	<i>drip sth</i>	?	
adarúú	<i>be injured</i>	adarúúhee	<i>hurt sb</i>	?	
íá	<i>be obscure</i>	íáhee	<i>sneak up</i>	gi'íáhgee	<i>become dark</i>
diríá	<i>run</i>	diríáhee	<i>make sb run</i>	diríáhgee	<i>make sth run</i>
giwíá	<i>turn back</i>	?		giwíáhgee	<i>turn sb back</i>
mirúá	<i>boil</i>	mirúáhee	<i>boil sth</i>	?	
sawúá	<i>jingle</i>	?		sawúáhgee	<i>make sth jingle</i>
birúá	<i>bubble; ache</i>	?		birúáhgee	<i>cause sb jump by pain</i>

In the derivation of direct causatives, stem-final unaccented short vowels **i** and **a** are deleted after single stops **b**, **d**, and **g**, affricate **c**, and fricatives **s** and **x**, resulting in a phonetically aspirated consonant.³² In clusters with fricatives, the order of **h** and the fricative is switched according to the aspirated fricative metathesis rule. Examples are in (119).

(119) **VCV** → **VC** / ___-**hee**

icgóòdi	<i>be tender</i>	→	icgóòdhee	<i>roast sth</i>
arîidi	<i>be hungry</i>	→	arîidhee	<i>make sb hungry</i>
gáádi	<i>be true</i>	→	gáádhee	<i>tell the truth</i>
agháàga	<i>be late</i>	→	agháàghee	<i>delay sb</i>
arágici	<i>be singed</i>	→	arágichee	<i>singe sth</i>
irúbuci	<i>be ripped</i>	→	irúbuchee	<i>cause a tear in sth</i>
úùci	<i>be dry</i>	→	úùchee	<i>dry sth</i>
hisí	<i>be red</i>	→	híhsee	<i>dye sth red</i>
dîisi	<i>be distant</i>	→	dîihsee	<i>take long strides</i>
gagíxi	<i>be circular</i>	→	gagíhxee	<i>make sth circular</i>
úá'bixi	<i>be flooded</i>	→	úá'bihxee	<i>overflow</i>

³² Final short **u** is not deleted, e.g., **báàhxu** *spill sth* → **báàhxuhee** *spill sth (accidentally)*, **arácgu** *be wet* → **arácguhee** *soak sth*.

Sonorants *m/w* and *n/r*, and in many cases the alveopalatal fricative *s*, undergo fortition (see 2.4.4) before the direct causative suffix forms after the short vowel has been deleted, as exemplified in (120)–(122).

(120) **w** → **b** / ___-hee

<i>bóhorowi</i>	<i>be round, spherical</i>	→	<i>bóhorobhee</i>	<i>make sth round, spherical</i>
<i>barúwi</i>	<i>be short</i>	→	<i>barúbhee</i>	<i>make sth short</i>
<i>hiráwi</i>	<i>sleep</i>	→	<i>hirábhee</i>	<i>put sb to sleep</i>
<i>haawí</i>	<i>be worn out</i>	→	<i>haabhéé</i>	<i>annihilate sb, destroy sth</i>
<i>náàwi</i>	<i>come in a direction</i>	→	<i>náàbhee</i>	<i>start singing</i>

(121) **r** → **d** / ___-hee

<i>miréeri</i>	<i>enter</i>	→	<i>mirédhee</i>	<i>let sb in</i>
<i>cîri</i>	<i>be yellow</i>	→	<i>cîdhee</i>	<i>dye sth yellow</i>
<i>daarí</i>	<i>cross sth</i>	→	<i>daadhéé</i>	<i>help sb cross sth</i>
<i>adaarí</i>	<i>appear</i>	→	<i>adaadhéé</i>	<i>chase sb out</i>

(122) **s** → **c** / ___-hee

<i>sibísa</i>	<i>be black</i>	→	<i>sibíchee</i>	<i>blacken sth</i> ³³
<i>haxísi</i>	<i>be wet</i>	→	<i>haxíchee</i>	<i>make sth wet</i>
<i>hasísi</i>	<i>be stinging pain</i>	→	<i>hasíchee</i>	<i>make sth angry</i>

The stem-final short vowel is typically not deleted if it is accented, as in (123).

(123) <i>gubí</i>	<i>smell</i>	→	<i>gubíhee</i>	<i>season sth</i>
<i>hobí</i>	<i>be a hole</i>	→	<i>hobíhee</i>	<i>make a hole in sth</i>
<i>cagí</i>	<i>be good</i>	→	<i>cagíhee</i>	<i>do sth well</i>
<i>goowí</i>	<i>be finished</i>	→	<i>goowíhee</i>	<i>quit sth</i>
<i>xiwí</i>	<i>be hanging</i>	→	<i>xiwíhee</i>	<i>dangle sth</i>
<i>maahirí</i>	<i>work</i>	→	<i>maahiríhee</i>	<i>make sb work</i>
<i>gisí</i>	<i>be healed</i>	→	<i>gisíhee</i>	<i>heal sb</i>
<i>daxbí</i>	<i>be noise</i>	→	<i>daxbíhee</i>	<i>make noise</i>
<i>haxbhí</i>	<i>sneeze</i>	→	<i>haxbhíhee</i>	<i>make sb sneeze</i>

³³ The direct causative of *sibísa* *to be black* is also attested as *sibíhsee* in the reflexive stem *ihgisibíhsee* *to blacken oneself*.

The stem-final accented short vowel is deleted in some derived verbs in which case the accent is left “floating”. The disassociated accent is transferred to the causative suffix that now has the high pitch originally associated with the deleted vowel. Examples are in (124).

(124)	cagí	<i>be good</i>	→	idacaghéé	<i>enjoy sth</i>
	daxbí	<i>be a sound</i>	→	maadaxbhéé	<i>argue, quarrel</i>
	naxdagí	<i>be comfortable</i>	→	naxdaghéé	<i>make sb comfortable</i>
	nagahuurí	<i>fan sth</i>	→	nagahuudhéé	<i>be a blizzard</i>
	nagsudí	<i>glance sth off</i>	→	nagsudhéé	<i>let sth drop</i>

Phonetically aspirated and pre-aspirated stops and affricates (i.e., clusters with **h**) lose their aspiration before the deleted unaccented final short vowel, as in (125) and (126).

(125)	ChV#	→	C# / __-hee		
	sagásghi	<i>be crooked</i>	→	sagásghee	<i>make sth crooked</i>
	hagágasghi	<i>slice meat</i>	→	hagágasghee	<i>slice meat</i>
(126)	hCV#	→	C# / __-hee		
	hisiséhbi	<i>be dark red</i>	→	hisisébhee	<i>dye sth dark red</i>
	nahhbí	<i>board sth</i>	→	nahbhéé	<i>elect sb, give sb a ride</i>
	nagháhbi	<i>blow away</i>	→	naghábhee	<i>blow away, smudge</i>
	guhhgá	<i>be ready, done</i>	→	guhbhéè	<i>quit sth right now</i>
	cúhga	<i>be flat</i>	→	cúbghee	<i>flatten sth</i>
	sáhgi	<i>be open</i>	→	sábghee	<i>opne sth</i>
	cawúhci	<i>be straight</i>	→	cawúbchee	<i>straighten sth</i>

Phonetically preaspirated fricatives (i.e., clusters with **h**) resurface with preaspiration through a cyclical rule by which first the stem-final short vowel is deleted, then aspiration, after which the initial **h** in the causative morpheme is metathesized as a result of the fricative meathesis rule (see 2.2.2 and 2.4.4) and resurfaces as preaspiration. Examples and exceptions to the rule are in (127).

(127)	nagaxúhxi	<i>break, break sth</i>	→	nagaxúhxee	<i>break sth</i>
	irúxuhhxi	<i>break, be broken</i>	→	irúxuhhxee	<i>break sth</i>

EXCEPTION (no short unaccented short vowel deletion):

nasaráhsi	<i>be smooth</i>	→	nasaráhsihee	<i>make sth smooth</i>
siríhsi	<i>be in a hurry</i>	→	siríhsihee	<i>rush sb</i>

A few causativized stems have an uncertain derivation. For example, the regular direct causative of **cagí** *to be good* is **cagíhee** *to do sth well*. However, there is also a form **gicagíchee** *to hype sth up* that seems to be derived from a derogative interjection **cagís!** *good for him!* and that ends with a definite suffix **-s**. Another such example is **isíchee** *to criticize sb* that is clearly derived from **isíà** *to be bad*. The regularly derived causative form of **isíà** is **isíhee** *to do sth badly, make a mistake*.

A number of lexicalized causative verbs have no uncausativized counterparts in Hidatsa. Some of the most common ones are listed in (128).

(128)	níhee	<i>place sth somewhere</i>	→	níhehgee	<i>have sb put sth</i>
	iiríhee	<i>use sth, wear sth</i>	→	iiríhehgee	<i>let sb use sth, lend</i>
	hacîdhee	<i>roast sth</i>			
	gúáhee	<i>put sth somewhere, apply sth</i>			
	iigúáhee	<i>use sth, put on a clothing item</i>	→	iigúáhehgee	<i>make sb use sth</i>
	hagáàdhee	<i>wait</i>	→	hagáàdhehgee	<i>make sb wait</i>
	maʔîlhee	<i>want sth</i>			
	gaxbádahee	<i>belch</i>	→	gaxbádahehgee	<i>burp sb</i>

Finally, inflected forms of the lexical verb **héè** *to say sth* in (129) are identical with the direct causative suffixes. Whether and how this paradigm is related to the causative remains to be ascertained.

(129)	3SG héèc	<i>he said it</i>
	1SG máác	<i>I said it</i>
	2SG náàc	<i>you said it</i>

4.7.2 Semantics of causative verbs

The semantics of causative verbs in Hidatsa is less straightforward than the impression left in previous descriptions. The received view of causative semantics can be summarized roughly as follows: the direct causative shows that the causer is directly responsible for bringing about the effect of the action, whereas the indirect causative indicates that the causer is less directly involved and “lets”, “permits”, or “has” the causee bring about the effect. During the process of successive levels of causativization the verb subcategorizes for additional arguments as its transitivity increases from one to two to three. An example with a stative verb *goowí* *to be finished* and the two types of causative stems derived from it is presented in (130).

(130) a. STATIVE VERB - INTRANSITIVE

Madóòbi goowíc.
mada-óòbi goowí-c
1POS-tobacco finish-DECL
I'm out of cigarettes. (lit. My tobacco is finished.)

b. DIRECT CAUSATIVE VERB - TRANSITIVE

Óòbi goowíwaac.
óòbi goowí-waa-c
tobacco finish-1CAUS.DIR-DECL
I quit smoking. (lit. I finished tobacco.)

c. INDIRECT CAUSATIVE VERB - DITRANSITIVE

Óòbi niigoowíhehgiwaac.
óòbi nii-goowí-hee-hgiwaa-c
tobacco 2B-finish-3CAUS.DIR-1CAUS.INDIR-DECL
I told you to quit smoking. (lit. I caused you to finish tobacco.)

The semantics of causative constructions in Hidatsa is actually more complex and the subcategorization frames less straightforward than appears from the sentences in (130). The rest of this section describes the most common semantic patterns as they occur in Hidatsa.

4.7.2.1 Causativization of stative verbs

The first pattern of causative formation involves stative bases that describe states. The direct causative, inflected with causative suffixes, is transitive and adds an argument to the verb, as in (131).

- (131) **Mirèè arugicóóghiwaac.**
mirèè aru-hgi-cóógi-hiwaa-c
door IRR-GI-hard-1CAUS.DIR-DECL
I'll lock the door.

Indirect causative stems that are derived from stative verbs and inflected with B-set suffixes are typologically unusual as they do not add any further arguments. Although the B-set pronominal prefix is inflected for person, the indirect causative suffix occurs always in the default third person form. Examples are (132) and (133). The instrumental prefix that precedes the stem in (133) is used here as an adverbial modifier (see 15.2.9) that is not part of the stem.

- (132) **Miigi[?]adagíhgeec.**
mii-hgi-adagí-hgee-c
1B-GI-white-3CAUS.INDIR-DECL
I turned pale.

- (133) **liriigixáàbihgeec.**
ii-**nii**-hgi-xáàbi-hgee-c
INST-**2B**-GI-thin-3CAUS.INDIR-DECL
You have just become thin!

Indirect causatives derived from stative bases occur almost always with the GI-prefix that precedes the stem and indicates a change of state. Empty fields in TABLE 4.45. indicate unattested forms.

TABLE 4.45. CAUSATIVES OF STATIVE VERBS THAT DESCRIBE STATES

STATIVE BASE	GLOSS	TRANSITIVE DIRECT CAUSATIVE	GLOSS	STATIVE INDIRECT CAUSATIVE	GLOSS
hisí	<i>be red</i>	híhsee	<i>make sth red</i>	gihisíhgee	<i>blush</i>
ciʔri (cîri)	<i>be yellow</i>	ciʔdhee (cîdhee)	<i>make sth yellow</i>	giciʔrihgee (gicîrihgee)	<i>rust</i>
siʔri	<i>be brown</i>	siʔdhee	<i>make sth brown</i>		
xîri	<i>be pale</i>			gixîrihgee	<i>become faded</i>
buhxí	<i>be foam</i>			gibuhxíhgee	<i>foam up</i>
cóòda/cóʔda	<i>be gray</i>			gicóòdahgee	<i>fade gray</i>
cóógi	<i>be hard</i>	gicóóghee	<i>lock sth</i>	gicóógihgee	<i>become hard</i>
adagí	<i>be white</i>			giʔadagíhgee	<i>become pale</i>
dachí	<i>be thick</i>	dachíhe	<i>thicken sth</i>	gidachíhgee	<i>become thick</i>
xáàbi	<i>be thin</i>	xáàbhee	<i>make sth thin</i>	gixáàbihgee	<i>become thin</i>
háhheehisa	<i>be quiet</i>			giháhhee- hisahgee	<i>become quiet</i>
barúwi	<i>be short</i>	barúbhee	<i>shorten sth</i>		
bóhorowi	<i>be round, spherical</i>	bóhorobhee	<i>make sth round</i>	gibóhorowi- hgee	<i>become round</i>
séhbi	<i>be dark</i>			giséhbihgee	<i>become dark, soiled</i>

Example (134) illustrates the difference between the stative verb *hisí* *to be red* and both types of causative verbs derived from it.

- (134) a. *Miidá hisíc.*
 m-iidá hisí-c
 1POS-face red-DECL
My face is red.
- b. *Miidá híhsiwaaç.*
 m-iidá hisí-waa-c
 1POS-face red 1CAUS.DIR-DECL
I painted my face red. (lit. I made my face red.)
- c. *Miidá gihisíhgeec* / **gihisíhgiwaaç.*
 m-iidá hgi-hisí-hgee-c / *hgi-hisí-hgiwaa-c
 1POS-face GI-red-3CAUS.INDIR-DECL / *GI-red-1CAUS.INDIR-DECL
I blushed. (lit. My face became red.)

The third person indirect causative suffix *-hgee* should not be confused with the homophonous diminutive suffix *-hgee*. In example (135b), the suffix *-hgee* that follows the verb

dichí to be stout is clearly a diminutive, as further indicated by the missing prefix *hgi-* that normally precedes indirect causative forms with a mutative meaning derived from stative verbs.

- (135) a. *Dichíc.* *He is stout.*
 b. *Dichíhgeec.* *He is chubby.*

Not all indirect causatives denoting states and qualities that are derived from stative verbs are intransitive. Transitive stems based on stative bases and indirect causative morphology are possible but less common than the intransitive inchoative stems that are presented in TABLE 4.45. The former are sometimes differentiated from the latter by the absence of the prefix *hgi-*, as in example (136b).

- (136) a. *Nírasi xubáàc.* *Your name is holy.* < *xubáà* be holy
 b. *Nírasi xubáhgiwaa’ac.* *We hallow your name.* < *xubáhgee* bless sth, hallow

Stative verbs denoting states and qualities that derive indirect causative forms which are transitive, such as *xubáà* to be holy → *xubáhgee* to bless sth, typically lack direct causatives (**xubáhee*). In the case of missing direct causatives, the transitive function of the latter is fulfilled by the indirect causative (which in the case of many other stative bases indicates the involuntary change of state and is inflected with B-set prefixes). If the indirect causative is used transitively, it is inflected by pronominal suffixation according to the indirect causative pattern presented in TABLE 4.41. Since transitivized indirect causatives cannot indicate involuntary change of state, the same effect is achieved by prefixing the mutative prefix *hgi-* to the stative stem without causativizing the base.

For example, the stative verb *iháà* to be different lacks the direct causative form **iháhee* to make something different, change something. Instead, the indirect causative *gi’iháhgee*,

customarily translated as ‘to change something’, is used in the same sense, even though the literal sense of the indirect causative is ‘to cause something to become different’. The mutative form is achieved by simply prefixing **hgi-** to the base. The three forms are illustrated in (137).

- (137) a. **Hirí iháàc.** *This one is different.* < **iháà** be different
 b. **Maabí gi[?]iháàc.** *The weather is changing.* < **gi[?]iháà** change
 c. **Idúúxi gi[?]iháhgeec.** *He changed his clothes.* < **gi[?]iháhgee** change sth
Madúúxi gi[?]iháhgiwaac. *I changed my clothes.*

Stative verbs denoting activities and accomplishments typically derive both direct and indirect causatives, as in TABLE 4.46.

TABLE 4.46. CAUSATIVES OF STATIVE VERBS THAT DESCRIBE ACTIVITIES AND ACCOMPLISHMENTS

STATIVE BASE	GLOSS	TRANSITIVE DIRECT CAUSATIVE	GLOSS	DITRANSITIVE INDIRECT CAUSATIVE	GLOSS
cugí	<i>melt</i>	cugíhee	<i>melt on sb</i>	cugíhgee	<i>melt sth, defrost</i>
goowí	<i>finish</i>	goowíhee	<i>quit sth</i>	goowíhehgee	<i>make sb quit sth</i>
gachí	<i>cool off</i>	gachíhee	<i>extinguish sth</i>	gachíhgee	<i>cool sth down</i>
xagáà	<i>move</i>	xagáhee	<i>move sth</i>	xagáhgee	<i>make sth move</i>
aráxaa	<i>burn</i>	aráxahee	<i>burn sth</i>	aráxahehgee	<i>have sb burn sth</i>
siríhsi	<i>hurry</i>	siríhsihee	<i>hurry sb</i>	siríhsihgee	<i>have sb hurry sb</i>

4.7.2.2 Causativization of intransitive active verbs

Both the direct and indirect causatives of most intransitive active verbs only subcategorize for one additional argument, and both derived stems have largely the same meaning. In other words, indirect causatives derived from intransitive active verbs are not ditransitive, as one would expect. Whereas some active intransitive verbs have both direct and indirect causative

counterparts, others derive only direct causatives.³⁴ The derivations of causative forms from intransitive active verbs are illustrated in TABLE 4.47.

TABLE 4.47. DERIVATIONS OF CAUSATIVES FROM INTRANSITIVE ACTIVE VERBS

STATIVE BASE	GLOSS	TRANSITIVE DIRECT CAUSATIVE	GLOSS	TRANSITIVE INDIRECT CAUSATIVE	GLOSS
<i>diría</i>	<i>run</i>	<i>diríahée</i>	<i>make sth/sb run</i>	<i>diríahgee</i>	<i>make sb/sth run</i>
<i>maahirí</i>	<i>work</i>	<i>maahiríhee</i>	<i>make sb work</i>	<i>maahiríhgee</i>	<i>make sb work</i>
<i>awáàgi</i>	<i>sit down</i>	<i>awáàghee</i>	<i>make sb sit down</i>	<i>awáàghgee</i>	<i>make sb sit down</i>
<i>garéè</i>	<i>vomit</i>	<i>garéèhee</i>	<i>make sb vomit</i>	<i>garéhgee</i>	<i>make sb vomit</i>
<i>hîi</i>	<i>get to</i>	<i>híhee</i>	<i>help sb to</i>		
<i>gháà</i>	<i>laugh</i>	<i>gháhee</i>	<i>make sb laugh</i>		
<i>húá</i>	<i>cough</i>	<i>húáhee</i>	<i>make sb cough</i>		

The exact semantic difference between the direct and indirect causatives derived from active intransitive stems remains to be determined. The preliminary analysis indicates that at least in some cases the difference lies in deliberation. In both (138) and (139), the indirect causative form *miidiríahgeec* *he/it made me run* would be inappropriate since it would imply that either my cat or grandchild deliberately ordered or forced me to run.

(138) *Madabuusíhgees miidiríahgeec.*
 mada-buusíhgee-s mii-diría-hee-c
 1POS-cat-DEF 1B-run-3CAUS.DIR-DECL
My cat put me on a run (i.e., it wouldn't let me catch it).

(139) *Madawaabísa miidiríahgeec.*
 mada-maabísa-s mii-diría-hee-c
 1POS-grandchild-DEF 1B-run-3CAUS.DIR-DECL
My grandchild made me run (as when he was about to be run over by a car).

³⁴ All patterns described in this chapter contain a few, but nonetheless important, exceptions. For example, the active intransitive verb *húù* *to come* has direct causative form *húhee* *to come down, fall (as rain or snow)*, which is intransitive, and an indirect causative form *húhgee* *to send sb here*, which is transitive.

4.7.2.3 Causativization of transitive active verbs

The relationship between active transitive verbs and indirect causatives derived from them is usually straightforward. The indirect causative indicates that the causer lets, asks, commands, or makes the causee perform an action or has an action be done on an object. An active construction and indirect causative construction is contrasted in (140).

- (140) a. **Mará mahgiracgiidíc.**
m-ará ma-hgi-nacgiidí-c
1POS-hair 1A-GI-clip-DECL
I gave myself a haircut. (lit. I cut my hair.)
- b. **Mará giracgiidíhgiwaa-c.**
m-ará hgi-nacgiidí-hgiwaa-c
1POS-hair GI-clip-1CAUS.INDIR-DECL
I got a haircut. (lit. I had sb cut my hair.)

4.7.2.4 Causative constructions with dative meaning

The semantics of many direct causatives that are derived from active transitive verbs and stative verbs that describe activities is quite unusual in Hidatsa. In addition to adding an argument to the verb, direct causatives indicate that the activity was unintentional and directed to oneself. The interpretation of such constructions is, depending on the context, either reflexive, dative, suus, or simply unintentional, and the causative stem is inflected according to the grammatical person affected. Examples of direct causatives derived from active verbs are presented in (141)–(142).

- (141) **Mabhúhgaxaabi naghábhiwaa-c.**
m-abhúhga-xáabi naghábhi-waa-c
1POS-hat-thin blow.away-1CAUS.DIR-DECL
My scarf was blown away.

- (142) **Nídhaaci nagagáraaʔ?**
n'-idháaci nagagáraa-raa-ʔ
2POS-pants rip-2CAUS.DIR-INTER
Did you rip your pants?

- (143) **Mirisibísa ruwa báàhxuwaac.**
mirí-sibísa nuwá báàhxu-waa-c
water-black some spill-1CAUS.DIR-DECL
I (accidentally) spilled some coffee.

- (144) **Abá nahxudhééc.**
 abá nahxúdi-**hee-c**
 nose bust-**3CAUS.DIR-DECL**
He busted his nose.
- (145) **Madawáàhdi asaadhíwáác.**
 mada-máàhdii asaarí-**hiwaa-c**
 1POS-vehicle steal-**1CAUS.DIR-DECL**
I got my car stolen.

Probably the most interesting aspect of the examples above is that the subject, as coded by the personal inflection of the causative suffix, is not necessarily a causer of the event at all, even an unintentional causer. Beyond that, one can note that the formal object (scarf, pants, coffee, etc., in the examples) may be possessed by the subject, but need not be (143), though the event affects the subject in some way or another.

The contrast between noncausativized and causativized stative verbs with the dative meaning is illustrated in (146)–(148).

- (146) a. **Madawirúxibhi aréèwa cugíc.**
 mada-mirúxibhi aréè-wa cugí-c
 1POS-ice.cream hot-SIMULT melt-DECL
My ice cream is melted because it's hot.
- b. **Madawirúxibhi aréèwa cugíwaaac.**
 mada-mirúxibhi aréè-wa cugí-**waa-c**
 1POS-ice.cream hot-SIMULT melt-**1CAUS.DIR-DECL**
My ice cream melted (on me) because it's hot.
- (147) a. **Nídawiruxibhi cugág xééc.**
 nída-mirúxibhi cugí-g xéé-c
 2POS-ice.cream melt-CRD drip-DECL
Your ice cream is melted and is dripping.
- b. **Nídawiruxibhi cugág xééraac.**
 nída-mirúxibhi cugí-g xéé-**raa-c**
 2POS-ice.cream melt-CRD drip-**2CAUS.DIR-DECL**
Your ice cream is melted and you are (unintentionally) dripping it.

- (148) a. [?]*Mîisa mahgiruxúhxic.
 m-îisa ma-hgi-núxuhxi-c
 1POS-ankle 1A-GI-break-DECL
I (deliberately) broke my ankle.
- b. Mîisa irúxuhxiwaa-c.
 m-îisa i-núxuhxi-waa-c
 1POS-ankle STAT-break-1CAUS.DIR-DECL
I (accidentally) broke my ankle.

4.7.2.5 Causativization of other types of predicates

Causativization subcategorizes for an additional argument in the case of reflexive verbs as well, as in (149b). Contrast this to the non-causativized form in (149a), where the outside predicate is ungrammatical.

- (149) a. (*Aahdú) nagsagíriac.
 aahdúù nagsagí-ria-c
 3POS.head strike-REFL-DECL
He bumped his head. (implied)
- b. Aahdú nagsaghéériac.
 aahdúù nagsagí-hee-ria-c
 3POS.head strike-3CAUS.DIR-REFL-DECL
He bumped his head.

Instead of inflecting reflexive verbs with B-set prefixes, as in (150a), causative person marking is used in some cases together with reflexive prefixation, as in (150b), with no apparent difference in meaning.

- (150) a. Miiragcíáriac.
 mii-nagcíá-ria-c
 1B-heavy-REFL-DECL
I weighed myself.
- b. Mihgiragcíáwaa-c.
 mihgi-nagcíá-waa-c
 1REFL-heavy-1CAUS.DIR-DECL
I weighed myself.

It is also possible to causativize nouns in Hidatsa, as illustrated in (151)–(154).

- (151) Iiriigihirúhgeec.
 ii-nii-gi-hirú-hgee-c
 INST-2B-bone-3CAUS.INDIR-DECL
You are just skin and bone.

- (152) **Giwasîhgaag** **hahgúc.**
 hgi-masîi-**hgee-g** hahgú-c
 GI-white.person-**3CAUS.INDIR-CRD** be.around-DECL
He's turned white (as an Indian who behaves like Whites).
- (153) **Isdahacúùda's** **sí'ari** **náàhgehaa'a** **wareec.**
 isdá-hacúùdi-³a-s se²-³a-rí náàhgee-**hee-³a** waree-c
 eye-slit-PL that-PL-ERG captive-**3.CAUS.DIR-PL** EVID-DECL
He was held captive by the Japanese.
- (154) **Hirí'ihgi beerí** **agubáhdaag** **giruxbáàgahgee** **gigeec** **aré'heegsa'ii.**
 hiri-ihgii beerí agu-báhdaa-g hgi-nuxbáàga-**hgee** gigeec aré'hee-gsa-ii
 this-PRO excrement REL-tip.over-CRD GI-human-**3CAUS.INDIR** OPIN-DECL anger-**USI-INTEN**
This one must have been a “turd turner” (in his previous life) and then he became human; he gets mad a lot.

Both alienably and inalienably possessed nouns can be causativized. The possessed noun is inflected doubly with the possessive prefix and the causative suffix, as in (155)–(157).

- (155) **Madawagiruxbáàghiwaa'ac.**
mada-magi-nuxbáàga-hiwaa-³a-c
1POS-RECIP-people-1CAUS.DIR-PL-DECL
We took each other as relatives.
- (156) **Maraaghiwáác.**
ma-iraagá-hiwáác
1POS-child-1CAUS.DIR-DECL
I adopted him.
- (157) **Maadúàghaacirus** **níراسي** **hirag**
 maa-dúàgha-háà-aci-rús ní-náàsi hiri-g
 INDEF-when-ADV-COMPR-CONC 2POS-name-make-CRD
- ooraaǵí** **oorii'iraagháá'ac.**
 aru-naagí aru-nii-**iraagá-héé-³a-c**
 REL-clan REL-2B-**3POS.child-CAUS-PL-DECL**

Later on they will name you and the clan will adopt you.

The causativization of numerals is illustrated in (158). The causativized form of ‘one’ has a lexicalized meaning of ‘having a meeting’.

- (158) *Maagiruwáchi***h***gaa*^ʔ*awa* *néèc*.
 maa-**hgi**-nuwáca-**hihgee**-^ʔa-wa *néè-c*
 INDEF-GI-one-3CAUS.DIR-PL-SIMULT go-DECL
He went because they had a meeting.

4.8 GI-morpheme

The prefix **hgi-**, which is one of the most productive derivational morphemes, can be added to most predicatives. It has several different yet semantically related meanings. Since differences between those meanings are not always obvious and cannot be subsumed under a single common denominator, they will be collectively referred to as the GI-morpheme. Four of the most common meanings of GI are translative (also called mutative), iterative, repetitive, and vertitive. GI is also used in the derivation of reflexive and reciprocal verbs (see sections 4.6.1 and 4.9, respectively).

The description of GI in this section will commence with an overview of derivational and inflectional patterns and then proceed to the semantics of them.

4.8.1 Inflectional and derivational patterns

4.8.1.1 Reduction of *hgi-* to *gi-*

The **h** of **hgi-** is dropped when it occurs (1) in word-initial position, (2) after weak prefixes (B-set pronominal prefixes, *maa-* INDEF, *ii-* INST, etc.), (3) when **-hgi** is used as a suffix, and (4) when **hgi-** is prefixed to **h**-initial active stems that always result in a word-initial consonant cluster **gh-**. It is not deleted after A-set pronominal prefixes or locative prefixes.

Examples of **hgi-** in word-initial position are in (159), preceded by weak prefixes in (160), and preceded by strong prefixes in (161). Long vowels in strong prefixes become short before

hgi-, as illustrated in (161). The reduction of hgi- to g- before h-initial active stems is illustrated in (163) below.

- (159) **giwéʔc** *he told it to him*
- (160) **maagiwéʔc** *he told him (something)* < **maa-** INDEF_
maagiwéʔc *he told it to them* < **maa-** 3OBJ.PL_
miigiwéʔc *he told it to me* < **mii-** 1B_
niigiwéʔc *he told it to you* < **nii-** 2B_
arugiwéʔc *he will tell it to him* < **aru-** IRR
- (161) a. **mahgiwéʔc** *I told it to him* < **maa-** 1A
b. **nahgiwéʔc** *you told it to him* < **ná-** 2A

4.8.1.2 Stem-initial allomorphy

Gi is realized as (h)gi- in front of all consonant-initial stems, as in (162), with the exception of h-initial active stems where the vowel in (h)gi- is deleted, resulting in a derived stem that begins with the consonant cluster gh-, as in (163). In front of h-initial stative and impersonal, mostly weather-related, stems, (h)gi- does not undergo this contraction, as illustrated in (164).

- (162) (h)gi + C → (h)giC

bácgubi	<i>fold sth</i>	gibacgúbi	<i>fold sth</i>
cagí	<i>be good</i>	gicagí	<i>get better</i>
dichí	<i>be stout</i>	gidichí	<i>gain weight</i>
garée	<i>vomit</i>	gigarée	<i>regurgitate</i>
géeèsee	<i>watch sth</i>	gigéeèsee	<i>watch over sth</i>
maxúà	<i>spill sth</i>	giwaxúà	<i>drain down</i>
nagaahí	<i>pull sth</i>	giragaahí	<i>pull sth towards oneself</i>
nagciá	<i>be heavy</i>	giragciá	<i>become heavy</i>
súá	<i>spit</i>	gisúá	<i>spit it (back) out</i>
xahsá	<i>be weak</i>	gixahsá	<i>become weak</i>

- (163) (h)gi + h → gh (ACTIVE STEMS)

haachée	<i>knock sth off</i>	ghaachée	<i>unload sth (as groceries or sand)</i>
hacúùdi	<i>slit sth</i>	ghacúùdi	<i>make slits in sth</i>
hadádahxi	<i>whittle sth</i>	ghadádahxi	<i>whittle sth, cut meat from a bone</i>

hagásghee	hook sth up	ghagásghee	hook them up
hasági	split sth, saw	ghasági	split sth, saw
hasià	cut meat off the bone	ghasià	cut meat off the bone

(164) (h)gi + h → (h)gih (STATIVE STEMS)

habáà	feel cold	gihabáà	get cold
hácgi	be long	gihácgi	get longer
haxísi	be wet	gihaxísi	get wet
hicòògi	be cool, chilly	gihicòògi	get chilly, get cool
hisí	be red	gihisíhgee	blush
hóbheehisa	be dark	gihóbheehisa	become dark

GI is separated from vowel-initial stative stems with an epenthetic glottal stop, as in (165).

A few active stems, such as *ééhgee* to know sth, also follow this pattern.

(165) adagí	be white	giʔadagí	become white, pale
isíà	be bad	giʔisíà	become bad, spoil
iríbi	be fat	giʔiríbi	become fat
óòri	be done, complete	giʔóòri	become complete
úùci	be dry	giʔúùci	dry up
ééhgee	know sth	giʔééhgee	understand sth at last

GI has the shape (h)g- in front of vowel-initial active and most transitivized stems, as in

(166). There are exceptions to this rule. For example, the GI-form of *aréʔhee* to be angry is *giʔaréʔhee* to get angry. Also, in slow and deliberate speech style (h)gi- occasionally does not fuse with the stem, resulting in a non-reduced prefix that is separated from the stem with an epenthetic glottal stop, as in *gabcáhgee* → *giʔabcáhgee* to sharpen sth.

(166) abcá	be sharp	gabcáhgee	sharpen sth
arahdiiwí	step on sth and flip it	garahdiiwí	twist one's ankle
adeʔhee	show sth to sb	gadéʔhee	reveal sth, cause sth to appear
awáxaadi	be light	gawáxaadhee	illuminate sth, turn on the light
iríbi	be fat	giríbhee	fatten sth
–	–	guxdí	wait for sb
–	–	guucí	take sth back, retrieve

Although the data on deriving GI-forms from locative stems is insufficient for a comprehensive description, it allows some preliminary generalizations.

First, the reduced form of (h)gi- is infixated after the first mora into the locative prefix ág-/áàg-, yielding a complex form áhgag-.

Second, the full form (h)gi- is preserved between the two locative prefixes ó-/óò- and í- and a consonant-initial stem, yielding LOC-GI sequences óhgi- and íhgi-, respectively.

There are no examples of (h)gi- combined with either ága- or óòg-.

Examples in TABLE 4.48 include one puzzling form, áhghighaagi to take sth back, which is derived from the locative verb áàghaahi to take sth away, which, according to the analysis in section 4.4.3, is derived by prefixing the locative áàg- to a dependent root *-haahi. The unreduced GI-form of this verb suggests that the complex form may be derived with a locative prefix áà-, followed by (h)gi- and the dependent root *-ghaahi. The only problem with this analysis is that a locative prefix áà- is not otherwise attested (there are two other locative verbs, áchaa to claim sth as one's own and ágoosi to whistle on sth, which are derived with an analogous short locative prefix á-).

TABLE 4.48. DERIVATION OF GI-FORMS FROM LOCATIVE STEMS

LOCATIVE BASE	GLOSS	GI-STEM	GLOSS
áàgabee	date sb	áhgagabee	date sb again after a breaking up
áàgsua	spit on sth	áhgagsua	spit on oneself
ágdee	grab sth	áhgagdee	catch sth
ágsiac	grab, catch, seize sth	áhgagsia	catch sth again
ágagahsi	write sth	áhgagahsi	rewrite sth
áàghaahi	take sth away	áhghighaahi	take sth back
ígoogi	hang sth	íhghigoogi	hang sth back
írigi	shoot sth, throw at sth	íhghirigi	shoot sth, throw at sth
ócahdi	bury sth	óhghicahdi	(re)bury sth
ócawua	ooze, leak	óhghicawua	leak
ógi	stick sth in the ground	óhghigi	transplant sth
óòragi	follow sth (as trail, tracks)	óhghiragi	retrace a trail or tracks

A number of verbs have irregular GI-forms, as illustrated in TABLE 4.49. The prefix appears as **giru-** and **gira-** before several stems beginning with a consonant, and **gur-** before stems beginning with a vowel. Some stems, such as **daarí** *to cross/ford sth (such as a river)*, **mirèèri** *enter*, **ódhaa** *put sth on*, and **òòrabi** *to find sth*, have suppletive GI-forms. The combination of the locative **òò-** and **(h)gi-** is **óhga-** in **òòsee** *to pour sth*, Glottal stops in **gúʔ** *to give sth to sb*, **gíʔ** *to pack sth on the back*, and **gíʔria** *to ride*, are deleted in the GI-form. The glottal stop is not deleted, however, in the GI-forms of **éʔ** *to own sth* and **iʔee** *to wear sth*. GI appears as **gig-** before **hî** *to drink*. The initial **h** in the movement verbs **hî** and **húù** is replaced by **g** and the falling pitch on the stem syllable becomes level.

TABLE 4.49. IRREGULAR GI-VERBS

BASE	GLOSS	GI-FORM	GLOSS
gíʔ	<i>pack sth on the back</i>	girugí	<i>pack sth on the back</i> ³⁵
gíʔria	<i>ride horseback</i>	girugíria	<i>get back on a horse</i>
gácia	<i>be bloated</i>	giragácia	<i>be bloated</i>
ghádaa	<i>stoke sth (as fire)</i>	giraghádaa	<i>stoke sth (as fire)</i>
éʔ	<i>own sth</i>	guréʔ	<i>keep sth</i>
iʔee / iʔèè	<i>wear sth (like a shawl)</i>	guriʔèè	<i>wear sth (like a shawl)</i>
daarí	<i>cross over sth</i>	gadagîiri	<i>cross back over sth</i>
mirèèri	<i>enter</i>	giwirígiiri	<i>re-enter</i>
ódhaa	<i>wear sth, put sth on</i>	óghadaa	<i>put sth on, get dressed</i>
òòrabi	<i>find sth (by accident)</i>	óhgibaabi	<i>find sth lost, find again</i>
òòsee	<i>pour sth, plant sth</i>	óhgasee	<i>load sth (gun, pipe, gas); pour sth back in</i>
gúʔ	<i>give sth to sb</i>	gigú	<i>return sth to sb</i>
hî	<i>drink sth</i>	gighî	<i>drink sth</i>
hî	<i>get here</i>	gíí	<i>get back here</i>
húù	<i>come</i>	gúú	<i>come back</i>

³⁵ Reflexive verbs that are derived with **(h)gi-** and inflected with C-set pronominal prefixes are not subject to irregularities in the stem. For example, the glottal stop in **gíʔ** is preserved in the causativized reflexive stem **ihgigiʔhgee** *to hold back, be passive, deferential*.

Active GI-verbs are inflected with A-set prefixes. Examples of inflected paradigms are given in TABLE 4.50. In both paradigms, the long vowel in the first person pronominal prefix *maa-* is shortened according to the pronominal vowel shortening rule before consonant clusters. The rule prohibiting clusters with double aspiration prevents *h* in *hgi-* from surfacing after pronominal prefixes when *hgi-* is prefixed to *h*-initial active stems.

TABLE 4.50. INFLECTION OF GI-VERBS

gigéèsee <i>watch over sth / sb</i>			
3SG	gigéèseec	3PL	gigéèsaa'ac
1SG	mahgigéèseec	1PL	mahgigéèsaa'ac
2SG	náhgigeeseec	2PL	náhgigeesaa'ac
ghadádahxi <i>whittle sth</i>			
3SG	ghadádahxic	3PL	ghadádahxa'c
1SG	maghadádahxic	1PL	maghadádahxa'c
2SG	nághadadahxic	2PL	nághadadahxa'c

The inflection of locative GI-verbs is analogous to the inflection of simple locative verbs, described in 4.4, and accomplished by metathesizing the first and second person pronominal prefixes. Sample paradigms with *á-*, *í-*, and *ó-*locatives are in TABLE 4.51.

TABLE 4.51. INFLECTION OF LOCATIVE GI-VERBS

	áhgagahsi <i>rewrite sth</i>	íhgirigi <i>shoot at sth</i>	óhgi <i>transplant sth</i>
3SG	áhgagahsic	íhgiricic	óhgigic
1SG	awáhgagahsic	awáhgirigic	awóhgigic
2SG	aráhgagahsic	aráhgirigic	aróhgigic

One locative verb, *íгаа* to look at sth in (167), and all forms derived from it have irregular GI-forms whereby *hgi-* not only precedes the locative prefix *í-*, but is not separated from the stem with an epenthetic glottal stop. In addition, first and second person pronominal prefixes, unlike the regular locative pattern, are not metathesized, as in (168).

- (167) *í*gaa *look at sth* → *gí*gaa (**í*hgíaa) *look again on sth*
- (168) *awá*gaa *I looked at it* → *má*hgíagac (**awá*hgíaa) *I took another look*

The combination of the accented locative prefix *í-* with *hgi-* should not be confused with the reflexive *ihgi-* (see 4.6.1) which is formed with the unaccented C-set pronominal prefix *i-*. In (169) and (170), accent in the sequence *ihgi-* on *í-* is an obvious clue that the stems in question are locative and not reflexive.

- (169) *Nii'í*hgicagic.
 nii-*í*-*hgi*-cagí-c
 2B-LOC-GI-good-DECL
It looks good on you.
- (170) *Mii'í*hgíbsaghaabag *néèc.* *Cí*dadagi *í*righiwaac.
 mii-*í*-*hgi*-básagi-hee-aba-g *néè*-c *cí*ida-adagí *í*righi.hiwaa-c
 1B-LOC-GI-care-3CAUS.DIR-COL-CRD go-DECL tail-white bump.into-1CAUS.DIR-DECL
I hit (ran over) a white-tailed deer. It took our place (i.e., or else sb else in the family would have died).

4.8.2 Semantics of GI

4.8.2.1 Translative

The translative (sometimes called mutative) meaning indicates a change from one state into another. GI has a translative meaning when prefixed to stative or stativized stems, middle stems, and predicative nouns. Examples are in (171)–(174).

- (171) *Nuwá* gísadáàgic *maabéhe.*
 nuwá *hgi*-sadáàgi-c *maabé*hee
 some GI-lukewarm-DECL today
It's warmed up a little today.
- (172) *Miigicawéè*hisaacic.
 mii-*hgi*-cawéè-hisa-aci-c
 1B-GI-warm-SIM-COMPR-DECL
I'm getting kind of hot.

(173) **Maaʹarubhí** **giʹirúsuuga** **nec.**
 maa-arubhí **hgi-i-núsuugi-Ø** **nèè-c**
 INDEF-REL-pump **GI-STAT-wash-CONT** **go-DECL**
The tattoo is fading away.

(174) **Maagarísdawias** **giwíàc.**
 maa-garísda-míà-s **hgi-míà-c**
 INDEF-small-woman-DEF **GI-woman-DECL**
The girl became a woman.

In combination with the negative suffix **-dhaa**, GI indicates that the circumstances referred to by the active verb are no longer valid. Stems with and without GI are contrasted in (175) and (176).

(175) a. **Áàchiidhaac.**
 áàcii-híi-**dhaa-c**
 breast-drink-NEG-DECL
He is not suckling.

b. **Giʹáàchiidhaac.**
hgi-áàcii-híi-dhaa-c
GI-breast-drink-NEG-DECL
He is not breast-fed any longer.

(176) a. **Maahirídhaac.**
 maa-hirí-**dhaa-c**
 INDEF-do-NEG-DECL
He/it is not working.

b. **Girasáàci, giwaahirídhaac.**
 girasáàci, **hgi-maa-hirí-dhaa-c**
 pitiful **GI-INDEF-make-NEG-DECL**
Poor thing, he is unemployed.

Causative verbs, which are inflected with B-set prefixes and have a translative meaning, are derived by prefixing **hgi-** to a stative stem and then causativizing it with the indirect causative suffix **-hgee**. This process was described in detail in section 4.7.2 and examples are in TABLE 4.45.

4.8.2.2 Iterative

The iterative meaning expresses a quick succession of punctual acts or a single continuous act that is perceived as a single internally multiplex durational event. Most stems with iterative meaning are derived from active, usually transitive, verbs. Examples of iterative verbs and their derivation are in (177).

(177)	básgu	<i>dislodge sth</i>	→	gibasgú	<i>shed hair, molt</i>
	maxúa	<i>spill sth</i>	→	giwaxúà	<i>drain down</i>
	báxaa	<i>smooth sth by pressing; iron</i>	→	gibxáà	<i>iron sth</i>
	gèèsee	<i>watch sth</i>	→	gigèèsee	<i>watch over sth</i>
	nuwí	<i>walk</i>	→	giwuwí	<i>count sth</i>
	ócawua	<i>ooze, drain, leak</i>	→	ohgicawua	<i>leak</i>
	nahxáaraa	<i>chip sth</i>	→	girahxáaraa	<i>thresh sth, shell</i>

Examples of iterative constructions in context are in (178)–(181).

- (178) **Madarúhxa awóhgaseec.**
 mada-mirúhxa maa-**hgi**-óòsee-c
 1POS-gun 1A-GI-pour.in-DECL
I loaded my gun.
- (179) **Magisáàgi garáxeexaara!**
 magi-sáàgi **hgi**-aráxeexee-ara
 RECIP-hand GI-grope-IMP.PL
Shake hands with each other!
- (180) **Nísagi girigáàra!**
 ní-sáàgi **hgi**-nigí-ara
 2POS-hand GI-hit-IMP.PL
Give him a round of applause!
- (181) **Madhéé madawaawahgibó’sic.**
 madhéé mada-maa-maa-**hgi**-bó’si-c
 already 1POS-INDEF-1A-GI-pack-DECL
I already packed my stuff.

Many instrumental verbs, especially the ones derived with **nú-** *by hand* and **naga-/nag-/na-** *by rapid force*, denote actions that are inherently iterative, such as raking something, or distributed, such as shattering something or spreading it out. Such verbs normally occur with **hgi-**. A selection of inherently iterative verbs is given in (182), and an example sentence in (183).

- | | | | | | |
|-------|-----------------|-----------------------|---|-------------------|--|
| (182) | núbubhee | <i>stretch sth</i> | → | girubúbhee | <i>stretch/tighten sth (as a bow string)</i> |
| | núcaraa | <i>take sth apart</i> | → | girucáaraa | <i>take sth apart (as stitches)</i> |
| | núcarua | <i>drag sth</i> | → | girucárua | <i>drag sth</i> |
| | núsuugi | <i>wash sth</i> | → | girusúugi | <i>wash sth</i> |

núùbaa	spread sth out →	girubáà	spread sth out
nuxaadi	rake sth, claw →	giruxáàdi	rake sth, harrow
nagcáá	shatter sth →	giragcáá	shatter sth
nahxáá	sweep sth →	girahxáá	sweep sth up
nagahuurí	fan sth →	giragahuurí	fan sth

- (183) Masíà'he girubáàra! Neesarúg aruxóòdag gi'iríchiic.
masí-²a-hee hgi-núbaari-Ø neesá-rúg aru-xóòda-g hgi-iríchiic-c
blanket.INDEF-PL-this GI-lay.out-IMP.SG not.exist-COND IRR-mold-CRD GI-stink-DECL
Lay out these blankets (from the tent)! Otherwise they will get moldy and stink.

4.8.2.3 Repetitive

Some active stems derived with GI indicate that the activity is repeated or replicated and is usually translated as doing something ‘again’. Examples of stems with a repetitive meaning and their derivation are in (184).

(184) áàgabee	date sb	→	áhagabee	date sb again after breaking up
ágagahsi	write sth	→	áhagahsi	rewrite sth
ágaxbi	step over sth	→	áhagaxbi	step again over sth
ágsia	catch sth	→	áhagsia	catch sth again
óòrabi	find sth by accident	→	óhgibaabi	find sth lost, find again
óòragi	follow a trail/tracks	→	óhgiragi	retrace a trail
ógi	stick sth in the ground	→	óhgigi	transplant sth
diríá	run	→	gidiríá	start again (as an engine)
gúáxi	catch up with sb	→	gigúáxi	catch up with sb again
nahí	stand	→	girahí	get up (again, from bed)

In many cases it is difficult to differentiate between the iterative and repetitive meanings because the derived stem may encode both, as in (185).

- (185) Hiraagacahgáá mahgibahcágic.
hiraagacahgáá maa-hgi-báhcagi-c
all.over 1A-GI-cut-DECL
I recut it all over again.

4.8.2.4 Vertitive

Vertitive stems are used to indicate motion back to the original location. The derivation of vertitive stems is not productive and the meaning of existing stems has become lexicalized. The vertitive meaning is also encoded in many iterative and repetitive stems, and vice versa. For example, the GI-form of *cibí* *to be submerged, drown* – *gicibí* – has a repetitive meaning ‘to dive back in the water’, but it can also mean ‘to jump repeatedly out of the water (as fish)’. Examples of various verbs with their vertitive equivalents are presented in (186), and an example of a sentence with a vertitive stem is (187).

(186)	<i>hî</i>	<i>get here/there</i>	→	<i>gíí</i>	<i>get back here/there</i>
	<i>húù</i>	<i>come</i>	→	<i>gúú</i>	<i>come back, return</i>
	<i>daarí</i>	<i>cross over sth</i>	→	<i>gadagîri</i>	<i>cross back over sth</i>
	<i>gúʔ</i>	<i>give sth to sb</i>	→	<i>gigú</i>	<i>give sth back to sb</i>
	<i>cibí</i>	<i>drown, become submerged</i>	→	<i>gicibí</i>	<i>dive back in the water</i>
	<i>ígoogi</i>	<i>hang sth</i>	→	<i>íhgigoogi</i>	<i>hang sth back</i>
	<i>áàghaahi</i>	<i>take sth away from sb</i>	→	<i>áhghaagi</i>	<i>take sb back from sb</i>
	<i>óòsee</i>	<i>pour sth into sth</i>	→	<i>óhgasee</i>	<i>pour sth back in; load sth</i>
	<i>abáàri</i>	<i>grow (as a plant)</i>	→	<i>óhgibaari</i>	<i>grow back</i>
	<i>garèè</i>	<i>vomit</i>	→	<i>gigarèè</i>	<i>regurgitate, throw it back up</i>
	<i>súá</i>	<i>spit</i>	→	<i>gisúá</i>	<i>spit it (back) out</i>
	<i>naghîidi</i>	<i>get into sth small (as a car)</i>	→	<i>giraghîidi</i>	<i>get back into the car</i>
	<i>núsgi</i>	<i>pull sth out, extract</i>	→	<i>girusgí</i>	<i>remove sth (clothes), unplug</i>
	<i>núxabi</i>	<i>peel sth</i>	→	<i>giruxábi</i>	<i>uncover sth, pull sth back</i>
	–	–	→	<i>guucí</i>	<i>take sth back, retrieve</i>

- (187) *Maagarísdaʔs* *máàhdi* *maagiraghîidhiwaac.*
maa-garísda-ʔa-s *máàhdii* *maa-hgi-naghîidi-hiwaa-c*
 INDEF-small-PL-DEF vehicle 3OBJ.PL-GI-squeeze.into-1CAUS.DIR-DECL
*I put the children **back** in the car.*

The basic and vertitive meanings of *núù* *to obtain something* are contrasted in (188). The subject in (188b) has returned to pick up his “old woman” after having left the location at an

There are only two stems and their respective vertitive variants that participate in the system. Both stems are in many respects irregular. First, the verb *hî* to get here/there occurs only in the third person singular. A different verb, *ú'sia* to arrive, is used for all other person and number combinations. Second, one would expect the vertitive forms of *húù* to come and *hî* to get here/there to be *ghúù* and *ghî*, respectively, but the actual citation, or third person, forms are *gúù* to come back and *gíí* to get back here/there. The stem-initial *h* is preserved, however, in the first and second person forms.

The Hidatsa movement verbs that have vertitive equivalents and their inflectional paradigms are presented in TABLE 4.52.

TABLE 4.52. MOVEMENT VERBS

	<i>húù</i> <i>come</i>	<i>gúú</i> <i>come back</i>	<i>hî</i> <i>arrive</i>	<i>gíí</i> <i>get back</i>
3 SG	<i>húùc</i>	<i>gúúc</i>	<i>hîc</i>	<i>gííc</i>
1 SG	<i>maahúc</i>	<i>maaghúc</i>	—	<i>maaghíc</i>
2 SG	<i>nárahuc</i>	<i>náraghuc</i>	—	<i>náraghic</i>
3 PL	<i>nááhua'c</i>	<i>náághua'c</i>	—	<i>náágha'c</i>
1 PL	<i>mááhua'c</i>	<i>máághua'c</i>	—	<i>máágha'c</i>
2 PL	<i>nárahua'c</i>	* <i>náraghua'c</i>	—	<i>náragha'c</i>
IMP. SG.	<i>húh!</i> <i>húùga!</i>	<i>gúú!</i> <i>not said</i>	—	—
NEG.IMP.	<i>húùdha!</i>	<i>gúúdha!</i>	—	—
IMP. PL.	<i>nááhuara!</i> <i>nááhua'ga!</i>	<i>náághuara!</i> <i>not said</i>	—	—
NEG.IMP.	<i>nááhudhaara!</i>	<i>náághudhaara!</i>	—	—

The deictic center of *hî* and *gíí* is context dependent. In most cases it is understood to be egocentric and anchored in the speaker's location in time or space, as in (190) and (191). It is possible, but less common, to transfer the deictic center to some other location or time that is removed from the speaker, as in (192) where the speaker herself is not in Bismarck.

- (190) **Oorigí** **idaahcuheerúg** **aruwaaghíc.**
 aru-nigí idaahcuhéè-rúg **aru-maa-gíí-c**
 REL-hit half-COND **IRR-1A-get.back-DECL**
I'll be back (here) in half an hour.
- (191) **Hiróó** **hiidhaháà** **maagaráà'o'!**
 hiróó **hî-dhaa-háà** maa-garáà-'o-'
 here **get.here-NEG-ADV** 1A-run.away-PL-INTER
Let's run away before he gets here!
- (192) **Mark** **híá** **rèèhicgi** **Mirahaciwààgus** **se'hgua.**
 Mark **hî-Ø** **rèè-hi-cgíí** **mirahací-máàgu-s** **se'hgua**
 Mark **get.here-CONT** RES-3SG.FT-PRES willow-high that-LOC
Mark should be in Bismarck by now.

Both **hî** and **gíí** can be used transitively, as in (193) and (194), usually in situations when an event or situation has “come” to a person who is indicated by a B-set object prefix.

- (193) **Maahiirahbí** **miihîc.**
 maa-hiirahbí **mii-hî-c**
 INDEF-difficult **1B-get.here-DECL**
I'm having a hard time.
- (194) **Mirisibísa** **aruhirí** **niigííc.**
 mirí-sibísa aru-hirí **nii-gíí-c**
 water-black REL-make **2B-get.back-DECL**
It's your turn to make coffee.

4.8.2.5 Suus

Robinett (1955a: 164) suggested that GI is also used to denote action on one's own possessions (suus). It is indeed possible to elicit pairs of statements where the action performed on oneself is preferably formed with GI, as in (195b) and (196b), whereas an identical action performed on somebody else's possession is preferably formed without GI, as in (195a) and (196a).

- (195) a. **Áàra** **maruhdíhsic.** b. **Máàra** **mahgiruhdíhsic.**
 áàra maa-núhdihsi-c m-áàra maa-**hgi**-núhdihsi-c
 3POS.arm 1A-touch-DECL 1POS-arm 1A-**GI**-touch-DECL
I touched his arm. I touched my arm.

- (196) a. **Áàra** **núhdihsic.** b. **Áàra** **gíruhdíhsic.**
 áàra núhdihsi-c m-áàra **hgi**-núhdihsi-c
 3POS.arm touch-DECL 1POS-arm **GI**-touch-DECL
He touched her arm. *He touched his (own) arm.*

On the other hand, examples involving action on one's own possession where the verb occurs without GI are not uncommon. There is, for instance, no obvious reason why the verb **nagagídi** to *scrape something* occurs without GI in (197a), but with it in (197b), although the action in both sentences is clearly directed on one's own body part. Possible explanations include a contrast between a punctual event in (197a) versus an iterative event in (197b). Perhaps **hgi-ragagídi** has developed an idiomatic meaning in reference to shaving.

- (197) a. **Maxúàhxa** **maagagídic.** b. **Miidá** **mahgiragagídic.**
 ma-ixúàhxa maa-nagagídi-c m-iidá maa-**hgi**-nagagídi-c
 1POS-knee 1A-scrape-DECL 1POS-face 1A-**GI**-scrape-DECL
I scraped my knee. *I shaved my face.*

The suus aspect of GI-stems is also apparent in the datasets in (198) and (199). The simple locative forms of **eexí** to *urinate* and **eerí** to *defecate*, when they occur without GI, as in (198b) and (199b), indicate that the action was directed on something or someone else, whereas the action is clearly directed on one's own possessions, or oneself in reflexive stems, when **hgi-** is present, as in (198c-d) and (199c-d).

- (198) a. **eexí** b. **áàgixi** c. **áhgageexi** d. **áhgageexiria**
 eexí áàg-eexí áàg-**hgi**-eexí áàg-**hgi**-eexí-ria
 urinate LOC-urinate LOC-**GI**-urinate LOC-**GI**-urinate-REFL
urinate *urinate on sth* *urinate on one's own* *urinate on oneself*
- (199) a. **eerí** b. **áàgaree** c. **áhgageeri** d. **áhgageeriria**
 eerí áàg-*aree áàg-**hgi**-eerí áàg-**hgi**-eerí-ria
 defecate LOC-?defecate LOC-**GI**-defecate LOC-**GI**-defecate-REFL
defecate *defecate on sth* *defecate on one's own* *defecate on oneself*

The semantic contribution of GI to *suus* is indirectly corroborated by the prefixal derivation with *hgi-* of reflexive verbs (see 4.6) that also involve actions directed on oneself (though not on one's possessions).

Although the existence of *suus* in Hidatsa is probably indisputable, a more detailed description of it requires further documentation.

4.8.3 GI-verbs with lexicalized meaning

The meaning of many *hgi-*initial verbs has become lexicalized and is no longer predictable. However, the semantic contribution of GI to the idiomatic meaning of such verbs is typically still transparent and always involves iterative, repeated, or vertitive activities. A representative list of verbs with their respective GI-forms (some of which are causativized) that have an idiosyncratic meaning is presented in TABLE 4.53.

TABLE 4.53. LEXICALIZED GI-VERBS

BASE	GLOSS	GI-FORM	GLOSS
<i>araaxisá</i>	<i>be ignorant, unknowing</i>	<i>garaaxisá</i>	<i>forget sth</i>
<i>arabhéé</i>	<i>bring sth to one's attention</i>	<i>garabhéé</i>	<i>remind sb</i>
<i>arawí</i>	<i>notice sth, recognize</i>	<i>garawí</i>	<i>remember sth, recall</i>
<i>aráxahee</i>	<i>burn sth</i>	<i>garáxahee</i>	<i>light sth, start a fire</i>
<i>géʔ</i>	<i>dig sth</i>	<i>gigéʔ</i>	<i>scratch sth</i>
<i>gúʔ</i>	<i>give sth to sb</i>	<i>gigú</i>	<i>return sth to sb</i>
<i>iháà</i>	<i>be different</i>	<i>giʔiháà (giʔiháhgee)</i>	<i>change (become different)</i>
<i>nagsí</i>	<i>choke</i>	<i>giragsí</i>	<i>bundle sth up</i>
<i>neesá</i>	<i>exist not</i>	<i>gireesáhgee</i>	<i>vanish; pass away</i>

4.8.4 Fossilized gi-verbs

A number of stems, presented in (200), do not occur without *hgi-* synchronically. The semantic contribution of GI is usually related to the repetitive or iterative nature of the activity, but in some cases it seems to contribute little or nothing to the meaning of the verb.

(200) garíxabi	<i>to adhere to sth, stick to sth</i>
gigáàgi	<i>to sew sth</i>
gigúà	<i>to trap sth</i>
gibsúgi	<i>to belch</i>
giguucgí	<i>to study sth, practice, learn</i>
giruwí	<i>to count sth (from nuwí to walk ?)</i>
gigawará	<i>to haul sth</i>
gisí	<i>to be healed</i>
giradá	<i>to like sth/sb</i>
girási	<i>to love sb</i>
gigéè	<i>to resemble sb</i>
gigsí	<i>to fix sth</i>
gigísgia	<i>to test sth, try; think about sth</i>
giwáhxu	<i>to ask sth (as a question)</i>
giwaréè	<i>to be surprised</i>
ihgiwaree	<i>to brag about oneself</i>
giwé[?]	<i>to tell sth</i>
giwíá	<i>to turn back</i>
guxdí	<i>to help sb³⁷</i>

4.8.5 Complex GI-stems

Florence Robinett (1955a: 164) pointed out that **hgi-** may occur in different slots in the stem. It may precede the pronominal prefix, follow it, or occur in both positions simultaneously. It can occur more than once in a single stem only if the two prefixes are separated from each other by one or more other prefixes or an incorporated noun, therefore third person forms with two contiguous **hgi-**s are not possible.

³⁷ An **h** after 1st and 2nd person pronominal prefixes indicates that the verb **guxdí** *to help sb* begins with an underlying **hgi-**: **mahguxdí** *I helped him*, **náhguxdic** *you helped him*. The **h** does not appear before other **g-**initial stems, such as **guréè** *to chase sb*, and the 1st person prefix vowel remains long: **maaguréèc** *I chased him*. **hgi-** can be prefixed to **guréè** *to go and chase after sb* in which case the vowel in the 1st person prefix is short: **mahgiguréèc** *I went chasing after him* (as when missing someone in the office; the non-GI-form ***maaguréèc** would be ungrammatical in this context).

The prefix always occurs doubly if **hgi-** is prefixed to a lexicalized GI-verb (see 4.8.3), as **garaaxisá** *to forget something* in (201), or where the prefixless bare stem is synchronically no longer found (see 4.8.4), as **giguucgí** *to learn something* in (201).

(201) **ligimaawahgaraaxisagsác** **miigixi'éeèwa.**
 ii-**hgi**-maa-maa-**hgi**-araaxisá-gsá-c mii-hgi-xi'éeè-wa
 INST-GI-INDEF-1A-GI-ignorant-USI-DECL 1B-GI-old-SIMULT
I'm getting forgetful because I'm getting old.

(202) **Giwahgiguucgíc.**
hgi-maa-**hgi**-guucgí-c
 GI-1A-GI-practice-DECL
I am starting to learn. / I am learning again.

The meaning of stative verbs does not vary regardless of the position of GI in the stem. Robinett illustrated this variation with the three versions of an expression “I am getting old” (1955a: 164), reproduced here in (203).

(203) a. **Miigixi'éeèc.** b. **Giwiixi'éeèc.** c. **Giwiigixi'éeèc.**
 mii-**hgi**-xi'éeè-c **hgi**-mii-xi'éeè-c **hgi**-mii-**hgi**-xi'éeè-c
 1B-GI-old-DECL GI-1B- old-DECL GI-1B-GI-old-DECL
I am getting old. *I am getting old.* *I am getting old.*

Boyle (2007: 134), after eliciting the same set of variants, reached a conclusion that there are two GI-prefixes in Hidatsa. According to his analysis, the phonological shape of the first prefix that precedes the pronominals, is /ki-/ and it marks inceptive or completive actions.³⁸ The phonological shape of the second prefix, which follows the pronominals, is /hki-/, and it signals

³⁸ GI in word-initial position and when preceded by weak prefixes, as is the case with Boyle's inceptive/completive /ki-/, provides no means to ascertain the underlying structure of the prefix, since the initial **h** is never realized in these positions. There are several other prefixes in Hidatsa that have different functions in different positions in the stem (e.g., **maa-**, **hgua-** etc.), but whose phonological shape remains unchanged. This grammar assumes that the underlying form of GI, too, is always the same regardless of its position in a stem.

vertitive, repetitive, translative, or suus actions (Boyle 2007: 135). In the light of this analysis, he translates (203a) as ‘I am getting old’, (203b) as ‘I am beginning to be old’, and (203c) as ‘I am beginning to get old’ (Boyle 2007: 136).

During my own fieldwork I was unable to replicate Boyle’s results. Instead, all speakers consulted for the sentences in (203) reconfirmed Robinett’s single gloss for all three variants.

Other examples of stative stems displaying prefix variation but no difference in meaning are presented in (204)–(206). Note that the pronominal prefix may be replaced by an incorporated noun, as in (206a).

- (204) **Miigiwaacigúàhgeec.** = **Giwiwaacigúàhgeec.**
 mii-**hgi**-maa-cigúà-hgee-c **hgi**-mii-maa-cigúà-hgee-c
 1B-GI-INDEF-sweet-CAUS.INDIR-DECL GI-1B-INDEF-sweet-CAUS.INDIR-DECL
I became diabetic.
- (205) **Nuuwiigixawáàracic.** = **Giruumiigixawáàracic.**
 nuwa-mii-**hgi**-xawáà-raci-c **hgi**-nuwa-mii-**hgi**-xawáà-raci-c
 some-1B-GI-swelling.go.down-COMPR-DECL GI-some-1B-GI-swelling.go.down-COMPR-DECL
I kind of lost some of my bloatedness. (i.e., I lost some weight.)
- (206) a. **Gihucí maduc.** = b. **Hucí giwaduc.**
hgi-hucí madú-c hucí **hgi**-madú-c
 GI-wind exist-DECL wind GI-exist-DECL
The wind has picked up. / It’s starting to get windy.

The placement and possible duplication of **hgi-** is not optional in the derivation of GI-forms of active and middle verbs. GI is always inserted between the A-set pronominal prefix and the active stem, unless the latter is a lexicalized or fossilized GI-stem in which case the second GI with the iterative, repetitive, vertitive, or suus meaning precedes the pronominal, as in (201) and (202) above.

Most middle verbs combine with **hgi-** less frequently than stative or active verbs. The stem has a translative (or inceptive, according to Boyle’s terminology) meaning when **hgi-**

precedes the pronominal prefix, as in (207b). It has a vertitive meaning when **hgi-** follows the pronominal prefix, as in (208b). I should be noted that (208b) is a vertitive verb that does not have a reflexive meaning, although the combination of the pronominal prefix **mi-** and **(h)gi-** appears identical to the first person reflexive prefix **mihgi-**: reflexive verbs, as mentioned before, are derived exclusively from active transitive stems.

- (207) a. **Miháàwihdic.**
 mi-hiráwi-hdi-c
 1C-sleep-DES-DECL
I am sleepy.
- b. **Giwháàwihdic.**
hgi-mi-hiráwi-hdi-c
GI-1C-sleep-DES-DECL
I am getting sleepy.
- (208) a. **Miháàwic.**
 mi-hiráwi-c
 1C-sleep-DECL
I slept.
- b. **Mihgiháàwic.**
 mi-**hgi**-hiráwi-c
 1C-**GI**-sleep-DECL
I went back to sleep.

The derivation of reflexive verbs by combining GI with C-set prefixes is considered an unrelated derivational process that is described separately in section 4.6.1).

4.9 Reciprocity

The concept of reciprocity is expressed with the quasi-pronominal prefix **magi-** *each other*. The reciprocal **magi-** precedes all other prefixes in the verb, including pronominal prefixes, as in (209), with the exception of B-set pronominals, as in (210), and the third person plural object prefix **maa-**, as in (229). Reciprocal verbs are usually inflected for the plural. In serial verb constructions it is the last element in the chain that is marked for the plural, as in (211) and (212).

- (209) **Áàdarug** **magi[?]awáhghohbiwiho[?]?**
 áàda-rúg **magi**-maa-ihgohbi-wihi-[?]o-[?]
 daylight-COND **RECIP**-1A-meet-1FT.INTER-PL-INTER
Shall we meet tomorrow?

- (210) **Miiwagiruxbáàga²c.** **Eeráhgee²?**
 mii-**magi**-nuxbáàga-²a-c ná-ééhgee-²
 1B-RECIP-people-PL-DECL 2A-know-INTER
We are related. Did you know that?
- (211) **Magi²aráxeexag** **áàrahguo²?**
magi-aráxeexi-g ná-áhgu-²o-²
 RECIP-grope-CRD 2A-be.PL-PL-INTER
Did you make out?
- (212) **Magi²arabía** **neecháá²ac.**
magi-arabée-Ø neesá-háá-²a-c
 RECIP-kick-CONT not.exist-3CAUS.DIR-PL-DECL
They are kicking the hell out of each other.

The reciprocal prefix freely combines with all types of predicatives, but the prototypical reciprocal construction is closely related to the concept of transitivity. Intransitive verbs are typically transitivized, either by causativization or prefixation (as with the portative **a²g-** or the confrontive **a²-**), before the reciprocal prefix is added to the verb. The expression “it takes two to tango” nicely characterizes the semantics of reciprocity: many such verbs, as illustrated in (213), involve activities by two (or more) participants directed at each other, often involving love life or conflict.

- | | | | |
|-------|--|--------------------------------------|--|
| (213) | magi²áàgabia²c | <i>they are dating</i> | < áàgabée court sb |
| | magiháheedhaa²ac | <i>they got divorced</i> | < háheedhaa leave sth behind |
| | magirúúsaa²ac | <i>they separated</i> | < núúsaa abandon sth |
| | magiguucá²c | <i>they reunited (after divorce)</i> | < guucí take sth back |
| | magiráágha²c | <i>they got back together</i> | < naaghí get.back.PL |
| | magi²ágawidaba²c | <i>they are flirting (on a sly)</i> | < ága- LOC, midabá tell lies |
| | magi²a²gxabá²c | <i>they slept with each other</i> | < a²g- PORT, xabí lie down |
| | magi²icgídhaa²ac | <i>they are incompatible</i> | < icgí fit, -dhaa NEG |
| | magi²a²hgaráà²ac | <i>they eloped</i> | < a²g- PORT, garáà run away |
| | magi²aráxeexa²c | <i>they are making out</i> | < aráxeexi grope sth |
| | magi²ihgohba²c | <i>they are having a tryst</i> | < ihgohbi meet sb |
| | magiwúùba²c | <i>they smelled each other</i> | < múùbi smell sth |
| | magi²arabí²ac | <i>they are kicking each other</i> | < arabée kick sth |
| | magiwirúú²ac | <i>they fought each other</i> | < mirú² fight sb |

magihaabháà'ac	<i>they destroyed e.o.</i>	< haawí worn out, -héé CAUS
magiwagácga'c	<i>they wrestled</i>	< magácgi wrestle
magi'a'diríá'c	<i>they raced each other</i>	< a' - CONF, diríá run
magi'a'cúáhga'a'ac	<i>they are competing</i>	< a' - CONF, cúáhgee start out on a task
magi'arahxúáhga'a'ac	<i>they (cars) collided</i>	< arahxúà knock sth over, -hgee CAUS

Many reciprocal verbs have lexicalized meanings. A sample of such verbs referring to kinship, marriage, and procreation is presented in (214)–(216).

- (214) **Magiwadaruxbáàga'c** **áchaagaadi.**³⁹
magi-mada-nuxbáàga-²a-c **áchaa-gáádi**
RECIP-1POS-people-PL-DECL close-VER
My relatives are really close to me.
- (215) **Magi'úùdiruraa'oo'?** -- **Éè, magi'úùdiruwaa'ac.**
magi-úùdi-rú-raa-²o' -- **éè magi-úùdi-rú-waa-²a-c**
RECIP-beside-LOC-2CAUS.DIR-PL-INTER -- yes RECIP-beside-LOC-1CAUS.DIR-PL-DECL
Are you (two) married? -- *Yes, we are married.*
- (216) **Magiríguboo'?** -- **Éè, magiwagúba'c.**
magi-ní-igúba-²o' -- **éè magi-ma-igúba-²a-c**
RECIP-2POS-together-PL-INTER -- yes RECIP-1POS-together-PL-DECL
Are you (two) married? -- *Yes, we are married. (lit. together with each other)*

Other lexicalized reciprocal verbs, not related to kinship, are illustrated in (217). In many lexicalized combinations the prefix and the stem have become fused. Reciprocal verbs are also used in noun derivation, as illustrated in (218).

- (217) **magibíhee** *crisscross* < **abéé** laid across, **-hee** CAUS
icí magsé'hdaa *be pigeon-toed* < **icí** foot, **sé'** that, **-hdaa** LOC
ixúàhxa magírudhihisa *be knock-kneed* < **ixúàhxa** knee, **í** LOC, **núdhi** tie, **-hisa** SIM
máàhdi iiwagóbxia *be a traffic jam* < **máàhdii** vehicle, **ii-** INST, **óbxia** blocked

³⁹ There are several idiomatic ways to express the concept of kinship without making the specific relationship explicit. In this example, **magi-ida-nuxbáàga** literally means ‘to possess each other as people’. Another idiomatic way to express kinship ties between individuals is **magi-ida-dáàba** ‘to possess each other as something’, as in **Magi'idadáàba'c**. *They are related to each other.*

- (218) **doobácawaghihgee** 4-mix cornball⁴⁰ < **doobá** four, **-ca** all, **-hgee** CAUS.INDIR
uuwagiwagóghdi patchwork quilt < **uuwagí** quilt, **óghdi** add on⁴¹
úùwacawagiigsia metal chain < **úùwaca** metal, **îgsia** be entrapped

The reciprocal may occur in many different grammatical roles. Although the syntactic properties of the reciprocal prefix fall outside the scope of the present description, some basic observations will be briefly described.

The stem has to be inflected for the plural when the agents and objects of the reciprocal stem are co-indexical. The reciprocal stems need to be inflected in the plural also when the reciprocal prefix occurs in the direct object role and plural agents are referred to. In the imperative forms in (219), the plural imperative speech-act marker **-ara** is used in affirmative commands and **-ara** plus the negative suffix **-dhaa** in negative commands since the command is given to more than one person. The verb stem is not in the plural in (220) because the reciprocal prefix is not coindexed with the agent; rather, it represents relations between elements of the set represented by the object.

- (219) **Magiguxdáàra!** *Help each other!* < **guxdí** help
Magibágiriadhaara! *Don't push each other!* < **bágiria** push
Magirúhdihsidhaara! *Don't touch each other!* < **núhdihsi** touch

- (220) **Maa'awahéèdhe** **magi'íbacgub!**
maa-awa-héèra-hee **magi-íbacgubi-Ø**
INDEF-ground-middle-CAUS.DIR **RECIP-fold.together-IMP.SG**
Roll up the donations together!

The reciprocal prefix may also precede an incorporated noun, as in (221) and (222).

- (221) **Magi'áàra óbsahsag** **nááha'c.**
magi-áàra óbsahsi-g **nááhi-'a-c**
RECIP-arm stick.through-CRD **go.PL-PL-DECL**
They are walking arm-in-arm.

⁴⁰ Four-mix cornballs is a traditional dish made of corn, red beans, sunflower seeds, and squash.

⁴¹ **Magi'óghdi** means 'to splice something'.

- (222) **Magi'**abísa cahdihaa'ac.
magi-abísa cahdí-hee-ʔa-c
RECIP-liver grease-3CAUS.DIR-PL-DECL
They flatter each other (lit. *they grease each other's liver*).

Examples (223)–(226) illustrate the use of the reciprocal prefix in adverbialized predicates where the elements are not in an A-O relation, but in S-and-locational relation.

- (223) **Isdá magi'**áchaa iiragsibic.
 isdá **magi-**ácha-haa ii-nagsibí-c
 eye **RECIP-close-ADV** INST-pass-DECL
His eyes are too close.

- (224) **Magidí**hisa áàwahgua'c.
magi-díisi-haa maa-áhgu-ʔa-c
RECIP-far-ADV 1A-be.PL-PL-DECL
We live far apart.

- (225) **Magi'**àgahaa níha!
magi-àgaa-haa níhee-Ø
RECIP-top-ADV put-IMP.SG
Stack them up!

- (226) **Magi'**ágaxbhaa níha!
magi-ágaxbi-haa níhee-Ø
RECIP-step.over-ADV put-IMP.SG
Put them on top of another (as every other thread when weaving)!

The second syllable in the reciprocal prefix **magi-** appears to have the semantic properties of the **gi-**morpheme (see 4.8). Complex stems that comprise both **magi-** and **hgi-** are rare, but are nevertheless possible, as illustrated in (227). Fossilized verbs where **hgi-** has merged with the rest of the stem (see 4.8.4) constitute the only common exception to this generalization. An example of such a verb in combination with the reciprocal prefix is presented in (228). Finally, although **hgi-** and **magi-** do not occupy the same slot, as confirmed by (227), their similar semantic

properties make one of them redundant, as illustrated by a verb that describes hooking up a team of oxen, first with **hgi-** in (229a), and then with the reciprocal **magi-** in (229b).

(227) **Maagarísdaʔs** **miriʔiigáàgeʔhehdaa** **magirucáruag** **áhguaʔc.**
 maa-garísda-ʔa-s mirá-ii-gáàgeʔ-hee-hdaa **magi-hgi-núcarua-g** áhgu-ʔa-c
 INDEF-small-PL-DEF wood-INST-roll-CAUS-INST **RECIP-GI-drag-CRD** be.PL-PL-DECL
The children are pulling each other on a wagon.

(228) **Magirásaʔc.**
magi-hgirási-ʔa-c
RECIP-GI.love-PL-DECL
They love each other.

(229) a. **Maaghagásghiwaac.**
 maa-**hgi**-hagásg-hiwaa-c
 3OBJ.PL-**GI**-hook.together-1 CAUS.DIR-DECL
I hooked them up (a team).

b. **Maawagihagásghiwaac.**
 maa-**magi**-hagásg-hee-hiwaa-c
 3P.OBJ-**RECIP**-hook.together-CAUS.DIR-1 CAUS.DIR-DECL
I hooked them up (a team).

4.10 Reduplication

Reduplicated verbs are not particularly common in Hidatsa. It is a semiproductive process and the meaning of many reduplicated forms has become lexicalized. Both active and stative verbs can be reduplicated. A small number of reduplicated verbs lack simplex, unreduplicated forms. A reduplicated verb stem has usually an iterative, distributive, or more intensive meaning than the simplex stem.

The process of reduplication is complex and the rules are not always predictable. As my database does not contain enough examples for an exhaustive analysis, the following is restricted to a brief overview that identifies only the most common patterns of reduplication.

The most pervasive property of Hidatsa reduplication is that it applies only to the root and a few suffixes. Instrumental and other derivational prefixes (underlined in the following examples) preceding the root are never reduplicated.

As a rule, disyllabic roots undergo partial reduplication. Only a few disyllabic roots are subject to full reduplication, whereby the whole word is repeated, as in (230).

(230) *naráá* *tremble* → *naraahnáraa* *shiver*

In case of initial reduplication of disyllabic roots the reduplicant copies the first root syllable, as in TABLE 4.54. The unaffected instrumental prefix is underlined.

TABLE 4.54. INITIAL REDUPLICATION OF DISYLLABIC ROOTS

BASE	GLOSS	DERIVED STEM	GLOSS	ROOT
—	—	<u>hadá</u> -dahxi	<i>whittle wood</i>	*-dahxi
—	—	<u>hagá</u> -gashgi	<i>cut sth into strips</i>	*-gashgi
<i>náhcagi</i>	<i>bite sth off</i>	<u>náhca</u> -hcagi	<i>biting and yanking</i>	*-hcagi
<i>nacgubí</i>	<i>bend under weight</i>	<u>nacgú</u> -cgubi	<i>spring up and down</i>	*-cgubi
<i>núdhabi</i>	<i>tighten sth</i>	<u>núdha</u> -hdabi ^a	<i>squeeze sth</i>	*-dhabi

^a A minor phonological rule triggers metathesis in the reduplicated cluster.

Hidatsa also has final reduplication, which follows more patterns than initial reduplication. The overwhelming majority of examples in my corpus involves the reduplication of the final long vowel or diphthong which is always shortened in the base if the reduplicant begins with a consonant cluster, as in in TABLE 4.55. Vowel length is preserved in the reduplicated segment.

TABLE 4.55. LONG VOWEL AND DIPHTHONG REDUCTION IN FINAL REDUPLICATION

BASE	GLOSS	DERIVED STEM	GLOSS	ROOT
<i>náh</i> gaa	<i>take a big bite</i>	<i>náh</i> ga-hgaa	<i>gobble</i>	*-hgaa
<i>iré</i> ^ʔ dhaa	<i>mute (lit. speak-not)</i>	<i>iré</i> ^ʔ dha-hdaa ^a	<i>stutter</i>	*-dhaa ⁴²
<i>garí</i> hga	<i>lightning</i>	<i>garí</i> hga-hgaa	<i>lightning all over</i>	<i>garí</i> hga
<i>gariic</i> gáá	<i>shiny</i>	<i>gariic</i> gá-cgaa	<i>sparkle, glisten</i>	<i>gariic</i> gáá
<i>nú</i> hsia	<i>twitch</i>	<i>nú</i> hsi-hsia	<i>twitch</i>	*-hsia
<i>nú</i> hxia	<i>wink</i>	<i>nú</i> hxi-hxia	<i>blinking</i>	*-hxia
<i>ih</i> búà	<i>toss sth</i>	<i>ih</i> bu-hbúà	<i>be bouncing</i>	*-hbua
<i>nagaw</i> úà	<i>sway</i>	<i>nagaw</i> ó ^ʔ -wua ^{aa}	<i>wobbly</i>	*-múà
<i>î</i> giracgúà	<i>savor sth</i>	<i>î</i> giracgú-cgua	<i>have an aftertaste</i>	*-cgua

^a A minor phonological rule triggers metathesis in the reduplicated cluster.

^{aa} A minor phonological rule causes *mua* → *wo*^ʔ change.

There are a few examples of initial reduplication in the corpus that involve a long vowel. Again, the long vowel is shortened in the base but preserved in the reduplicant, as in TABLE 4.56.

TABLE 4.56. LONG VOWEL REDUCTION IN INITIAL REDUPLICATION

BASE	GLOSS	DERIVED STEM	GLOSS	ROOT
–	–	<i>buu</i> -bu-dí	<i>bubble</i>	* <i>buudí</i>
<i>có</i> òbi	<i>chirp</i>	<i>abawaacó</i> ò-co-bi	<i>cricket (lit. chirping nose)</i>	<i>có</i> òbi
<i>daa</i> héé	<i>separately</i>	<i>daa</i> -da-hí	<i>separately</i>	<i>daa</i> hee

In many cases an epenthetic *h* is inserted before the reduplicant (with final reduplication), or the root (with initial reduplication). The process occurs almost exclusively before obstruents. Long vowels are not shortened if the following consonant cluster results from epenthesis. Examples in TABLE 4.57. illustrate epenthesis both with initial and final reduplication.

⁴² The negative suffix *-dhaa* is one of the few non-lexical morphemes that can be reduplicated.

TABLE 4.57. EPENTHETIC *h* IN REDUPLICATION

BASE	GLOSS	DERIVED STEM	GLOSS	ROOT
habáà	<i>feel cold</i>	habáà-hbaa	<i>have chills</i>	habáà
cáà	<i>raw, uncooked</i>	cáà-hcaa	<i>rare</i>	cáà
cixí	<i>jump</i>	ci-hcixí	<i>hop</i>	cixí
dichí	<i>stout</i>	di-hdichí	<i>pound, pounding sound</i>	dichí
–	–	da-hdahxí	<i>clicking</i>	*-dahxi
–	–	da-hdahsí	<i>tapping</i>	*-dahsi

h is almost never epenthesized before reduplicated syllables beginning with a fricative, as illustrated in (231). The only counterexample in my corpus is given in (232).

- (231) aráxaa *burn* → aráxaa-xaa *flame* *-xaa
sugí *limp* → sug-sugí *limber* sugí
- (232) néèxi *dangle* → néèxi-hxi *glare, reflection* néèxi

There are a few cases when the instrumental stem is resyllabified and part of the instrumental prefix participates in reduplicant formation, as in (233).

- (233) nagaahí /naga-ahí/ *pull sth* → nagaahaahí *pull on sth repeatedly*

In many cases, the unreduplicated form is not found synchronically in the language, as illustrated in (234).

- (234) cí-hcihee *drizzle*
co-hcohxí *brittle*
dah-dahxí *clicking* (-dahxi is a bound root used with instrumental prefixes)
dah-dahsí *tapping* (-dahsi is a bound root used with instrumental prefixes)
cúù-cuudi *slippery* (-cuudi is a bound root used with instrumental prefixes)
cúù-cuuxi *crunch* (-cuuxi is a bound root used with instrumental prefixes)
xéè-xee *dangle*
sáà-saa *bright* (the unreduplicated form survives in the place name
Mirí-saa Aasis Williston < water-bright creek)

4.11 Derivational suffixes

4.11.1 -'hi 'momentaneous'

Verbs that are derived with the momentaneous⁴³ suffix -'hi express occurrences that are: (1) sudden and unexpected, (2) momentaneous or instantaneous, or (3) of short duration. The pattern is not fully productive and some of the derived stems have a lexicalized meaning. The momentaneous suffix assigns dominant accent to the immediately preceding syllable that overrules and neutralizes all other accents, including pitch patterns associated with inflectional patterns, that precede it in the stem. It also triggers ablaut on the preceding syllable.⁴⁴ Derivation of momentaneous stems is illustrated in TABLE 4.58.

⁴³ Robinett's (1955b:161) label 'momentaneous' for this suffix was also used by Jones (1984); Boyle (2007:159), following Graczyk (2007:107), glosses it as 'punctual'.

Instead of -'hi, Robinett, Jones, and Boyle incorrectly identify the momentaneous suffix as -áhi. If this were true, the combination of the momentaneous suffix and the preceding short vowel would result in a long vowel or a diphthong, however, this does not happen, although -'hi does trigger ablaut. The underlying form of the momentaneous suffix is revealed when it follows a non-ablauting stem-final syllable, as after **u** in *birurúhi* *to fart poppingly*.

⁴⁴ Boyle (2007:159) claims that "the formation of the derived stem is highly irregular". Actually, the only unusual feature associated with the momentaneous suffix is the dominant accent it assigns to the preceding syllable. Boyle was particularly led astray by several inflectionally irregular verb forms, such as *nááhi* *3P.PL.go* in *nááha'a wareec* /nááhi-²a wareec *3go.PL -PL EVID/ they went* that he analyzed as a momentaneous construction */nee-**ahi**-²a wareec/, and by the middle stem *iruuhí* *stand up* in *iruuhí wareec* /iruuhí wareec *stand.up EVID/ they stood up*, that he analyzed as */iru-**ahi** wareec/ (Boyle 2007:160, 162).

TABLE 4.58. DERIVATION OF MOMENTANEOUS VERBS

BASE	GLOSS	MOMENTANEOUS STEM	GLOSS
hiráwi	<i>sleep</i>	hirawáhi	<i>take a nap</i>
ígaa	<i>see sth</i>	igááhi	<i>catch a glimpse of sth</i>
néè	<i>go</i>	naaháhi ⁴⁵	<i>leave suddenly</i>
ichéè	<i>wake up</i>	ichááhi	<i>wake up with a start</i>
óòcihgee	<i>rest</i>	oocihgááhi	<i>take a break</i>
náhuuri	<i>inhale sth</i>	nahuuráhi	<i>have a puff of sth (e.g., cigarette)</i>
núhxahbi	<i>snatch sth away</i>	nuhxahbáhi	<i>snatch sth suddenly away</i>
núwiiri	<i>twist sth</i>	nuwiiráhi	<i>turn sth on (as a radio)</i>
daxbí	<i>be high-pitched noise</i>	daxbáhi	<i>be sudden sharp sound</i>
dichí	<i>be stout, rotund</i>	dicháhi	<i>be a thud</i>
–	–	dahxáhi	<i>clatter, be rapping sound</i>
–	–	dahsáhi	<i>be slapping sound</i>
núhsia	<i>twitch</i>	nuhsíhi	<i>twitch once⁴⁶</i>

Interaction between the ablauting long *ee* and the dominant accent associated with the momentaneous morpheme is contrasted with non-momentaneous forms in (235) and (236). Note that an epenthetic *h* is inserted between some long vowel and diphthong-final stems and the momentaneous suffix, as in (235a).

- (235) a. **Naraaháhi?** -- **Éè, maaraaháhic.** b. **Náree??** -- **Éè, maaréèc.**
ná-néè-´hi-[?] -- éè maa-néè-´hi-c ná-néè-[?] -- éè maa-néè-c
2A-go-MOM-INTER -- yes 1A-go-MOM-DECL 2A-go-INTER -- yes 1A-go-DECL
Did you suddenly leave? -- *Yes, I suddenly left.* *Did you go* -- *Yes, I went.*
- (236) a. **Xadádagha mahááhiwic.** b. **Xadádagha mahéèwic.**
xadádagi-haa ma-héè-´hi-wi-c xadádagi-haa mahéè-´hi-wi-c
fast-ADV 1A-do-MOM-1FUT-DECL fast-ADV 1A.do-1FUT-MOM-DECL
I'll do it fast right away. *I'll do it fast.*

⁴⁵ The epenthetic *h* makes this an irregularly formed momentaneous stem.

⁴⁶ In *núhsia* to *twitch* > *nuhsíhi* to *twitch once* the second mora of the stem-final diphthong is deleted and the remaining mora does not ablaut.

An epenthetic **h** is inserted before a stop and short vowel sequence that is immediately followed by the momentaneous suffix. In at least one word, **cagí** *to be good*, the epenthetic **h** follows the consonant. The pattern is illustrated in TABLE 4.59.

TABLE 4.59. STEM ASPIRATION IN DERIVATION OF MOMENTANEOUS VERBS

BASE	GLOSS	MOMENTANEOUS STEM	GLOSS
awáxaadi	<i>shine</i>	awaxaahdáhi	<i>twinkle</i>
báhcagi	<i>cut sth</i>	bahcahgáhi	<i>cut sth with a quick motion</i>
báhgubi	<i>tuck sth in</i>	bahguhbáhi	<i>tuck sth in quickly</i>
nágoobi	<i>chew a hole into sth</i>	nagoohbáhi	<i>chew a hole into sth (as mice do)</i>
naghîdi	<i>squeeze into sth small</i>	naghiihdáhi	<i>get quickly in sth small</i>
nagsibí	<i>pass sth, be past sth</i>	nagsihbáhi	<i>miss sth; be slightly past sth</i>
núgoobi	<i>make a hole in sth</i>	nugoohbáhi	<i>make a hole in sth quickly</i>
núcgabic	<i>pinch sb</i>	nucgahbáhi	<i>give sb a quick pinch</i>
(maa)ruudí	<i>eat (sth)</i>	(maa)ruuhdáhi	<i>eat (sth) quickly</i>
cagí	<i>be good</i>	cagháhi	<i>feel better</i>

Examples (237)–(241) illustrate the usage of momentaneous verbs in context.

- (237) **Madóòbi narahuuráhi?**
 ma-idóòbi ná-náhuuri-**'hi-**?
 1POS-tobacco 2A-inhale-MOM-INTER
Do you want a puff of my cigarette?
- (238) **Garíhga oorigí dicháhiggeec.**
 garíhga aru-nigí dichí-**'hi-hgee-c**
 lightning REL-hit stout-MOM-3CAUS.INDIR-DECL
The lightning hit with a thud.
- (239) **Mihgiragadiàrug aruwiicagháhic.**
 mihgi-nagadià-rúg aru-mii-cagí-**'hi-c**
 1REFL-stretch-COND IRR-1B-good-MOM-DECL
I'll feel better after I stretch myself out.
- (240) **Idáà, déésга, iawaagsihbáha maaréèc.**
 idáà déésга ii-maa-nagsibí-**'hi-Ø** maa-néè-c
 oh darn INST-1A-pass-MOM-CONT 1A-go-DECL
Oh, darn, I just passed it (as an exit)!

- (241) **Miideeráàwirug** **maawuuhdáhi?iic.**
 mii-dèè-raa-wi-rúg maa-m-nuudí-**hi**-ii-c
 1B-die-APPROX-1FUT INDEF-1A-eat-MOM-HAB.SG-DECL
Whenever I get a sudden feeling of hunger I have a quick bite to eat.

Momentaneous verbs are often used with the imperative speech-act modality (see 6.1.3) to give a sense of urgency to commands. Simple commands are illustrated in (242); commands in context are illustrated in (243) and (244).

- | | | | | | |
|-------|---------------------|----------------------|---|------------------------|-------------------------------|
| (242) | Miiguxdíga! | <i>Help me once!</i> | > | Miiguxdáhiga! | <i>Help me quickly!</i> |
| | Hagáàdha! | <i>Wait!</i> | > | Hagaadhááha! | <i>Wait a moment!</i> |
| | Híh! | <i>Drink it!</i> | > | Híáha! | <i>Drink right away!</i> |
| | Maarúúd! | <i>Eat!</i> | > | Maaruuhdáha! | <i>Hurry up and eat!</i> |
| | Maaruudáàra! | <i>Eat (PL)!</i> | > | Maaruuhdáhaara! | <i>Hurry up and eat (PL)!</i> |

- (243) **Naghihdáhag** **mirihbàara!**
 naghíidi-**hi**-g mirihbí-ara
 get.in-MOM-CRD bathe-IMP.PL
Get in the bathtub and bathe!

- (244) **Niisabág** **nuuhdáhag** **náà!**
 nii-sabí-g nuudí-**hi**-g nèè-Ø
 2B-hurry-CRD eat-MOM-CRD go-IMP.SG
Hurry up, eat it (up) and go!

Momentaneous verbs often take future suffixes (see 6.5.2) to signal either the imminence of an activity one is going to undertake or that the action will be swift, as in (245)–(248).

- (245) **Mahgigsáhiwic.**
 ma-hgigsí-**hi**-wi-c
 1A-fix-MOM-1FUT.SG-DECL
I'll fix it right away.

- (246) **Húh!** **Niiwahgidaaháhiwic.**
 húù-Ø nii-ma-hgidèè-**hi**-wi-c
 come-IMP.SG 2B-1A-beat.in.game-MOM-1FUT.SG-DECL
Come, I'll beat you right away!

(247) Hagáàdha! Maawuuhdáhiwic.
 hagaàdhee-Ø maa-m-nuudí-’hi-wi-c
 wait-IMP.SG INDEF-1A-eat-MOM-1FUT.SG-DECL
Wait! I’ll have a quick bite.

(248) Oocihgiwááhiwiha’c.
 óocihgee-waa-’hi-wihi-’a-c
 rest-1CAUS.DIR-MOM-1FUT.PL-PL-DECL
We’ll take a break.

Finally, momentaneous constructions may indicate a small degree of a quality or amount, as in (249)–(252).

(249) a. Agúxaac. *It’s farther away..*
 b. Aguxáhic. *It’s **a little** farther.*

(250) a. Gihicòògirug arucagíwa. *I wish it were cool.*
 b. Gihicoogáhirug arucagíc. *I wish it cooled **a little**.*

(251) a. Arubiragás nagsibíc. *It’s past 10 o’clock.*
 b. Idawáara biragá nagsihbáhi wareec. *He’s **a little** over 10 years old.*

(252) Mací marábagua garísdac. Harúg maráhgisagua mací a’hbáhic.⁴⁷
 ma-icí ma-irága-hgua garísda-c harúg ma-iráhgisa-hgua ma-icí a’hbáhi-c
 1POS-foot 1POS-right-LOC small-DECL and 1POS-left-LOC 1POS-foot bigger-DECL
My right foot is small. However, my left foot is bigger.

4.11.2 -hdi ‘desiderative’

A limited number of verbs, most relating to various bodily functions, can be combined with the desiderative suffix **-hdi** to convey a sense of uncontrollable urge or need. The inflectional class of desiderative verbs remains unchanged, i.e., if the base is inflected as an active transitive verb, then the derived desiderative is so inflected as well. Derivation of desiderative verbs is illustrated in TABLE 4.60.

⁴⁷ The a’hbáhi *to be bigger* has no non-momentaneous counterpart.

TABLE 4.60. DERIVATION OF DESIDERATIVE VERBS

BASE	GLOSS	DESIDERATIVE STEM	GLOSS
<i>bíà</i>	<i>fart</i>	<i>bíàhdi</i>	<i>have to fart</i>
<i>cagí</i>	<i>be good</i>	<i>cagíhdi</i>	<i>be pretty, cute</i>
<i>eerí</i>	<i>defecate</i>	<i>eeríhdi</i>	<i>need to defecate</i>
<i>eexí</i>	<i>urinate</i>	<i>eexíhdi</i>	<i>need to urinate</i>
<i>garéeè</i>	<i>vomit</i>	<i>garéeèhdi</i>	<i>be nauseous, need to vomit</i>
<i>hiráwi</i>	<i>sleep</i>	<i>hiráwihdi</i>	<i>be sleepy</i>
<i>húá</i>	<i>cough</i>	<i>húáhdi</i>	<i>have to cough</i>
<i>gí'ria</i>	<i>ride a horse</i>	<i>gí'riahdi</i>	<i>feel like riding (sexual connotation)</i>
<i>maahî</i>	<i>drink</i>	<i>maahîhdi</i>	<i>feel like drinking</i>
<i>maa'iré'</i>	<i>speaking sth</i>	<i>maa'iré'hdi</i>	<i>be talkative</i>
<i>míà</i>	<i>be a woman</i>	<i>míàhdi</i>	<i>be a berdache</i>
<i>macéé</i>	<i>be a man</i>	<i>macééhdi</i>	<i>be a tomboy</i>
<i>néè</i>	<i>go</i>	<i>néèhdi</i>	<i>be eager to go</i>
<i>xaréé</i>	<i>rain</i>	<i>xarééhdi</i>	<i>be going to rain</i>
–	–	<i>gígíhdi</i>	<i>be careful</i>
–	–	<i>ú'a'hdi / ú'à'hdi</i>	<i>laugh at sb</i>
–	–	<i>xirúhdi</i>	<i>run at full speed (of animals)</i>
–	–	<i>nóògua'hdi / nóògua'sdi</i> ⁴⁸	<i>be spoiled, behave like a brat</i>

The use of desiderative verbs in context is illustrated in examples (253)–(258).

- (253) *Idawaawadúhdi*.
 ida-maa-madú-**hdi**-c
 3POS-INDEF-exist-**DES**-DECL
He is friendly.
- (254) *Ooruudíhdaacisd*.
 aru-nuudí-**hdi**-aci-sd
 IRR-eat-**DES**-COMPR-DEF
It was delicious.
- (255) *Mirisibísahe maa'aruhîhdihaac*.
 mirí-sibísa-hee maa-arú-hî-**hdi**-dhaa-c
 water-black-this INDEF-REL-drink-**DES**-NEG-DECL
This coffee is undrinkable.

⁴⁸ Besides *nóògua'sdi* (a free variant of *nóògua'hdi*) my corpus contains no other examples of the suffix *-sdi*.

- (256) **Ma[?]eexíhdi[?]hisaacic.**
 ma-eexí-**hdi**-hisa-aci-c
 1A-urinate-**DES**-SIM-COMPR-DECL
I kind of have to pee.
- (257) **Oorárahó[?] aráhirihdo[?]?**
 aru-nárahi-o[?] ná-íhíri**hdi**-[?]o-[?]
 IRR-2go.PL-PL 2A-eager.**DES**-PL-INTER
Are y'all anxious to go?
- (258) **Nídawaa[?]u[?]sia maa[?]íhírihdaara!**
 nída-maa-ú[?]sia maa-íhíri**hdi**-ara
 2POS-INDEF-arrive 3OBJ.PL-eager.**DES**-IMP.PL
Be (pl.) hospitable to your visitors! (i.e., be eager to [serve] them)

4.11.3 -hcági 'limitive'

The limitive suffix **-hcági** derives denominal stative verbs. The basic meaning of **-hcági** can be glossed as 'only' or 'nothing but'. In this sense it is also used as an adverbial suffix that can modify words belonging to any lexical class (quantifiers are described in 13.5). The derivation of limitive verbs is illustrated in TABLE 4.61.

TABLE 4.61. DERIVATION OF LIMITIVE VERBS

BASE	GLOSS	LIMITIVE STEM	GLOSS
awá	<i>earth, dirt</i>	awahcági	<i>be dusty</i>
awaxóòda	<i>salt; alali</i>	awaxóòdahcági	<i>be salty</i>
buuxagá	<i>sand</i>	buuxagahcági	<i>be sandy</i>
caráà	<i>grease, lard, oil</i>	caráàhcági	<i>be greasy</i>
dibíà	<i>mud</i>	dibíàhcági	<i>be muddy</i>
îiri	<i>blood</i>	îirihcági	<i>be bloody</i>
mirí	<i>water</i>	mirihcági	<i>be wet</i>

The use of limitive verbs is illustrated in (259) and (260).

- (259) **Nídahba dibíàhcagic.**
 ní-huubá dibíà-**hcági**-c
 2POS-shoe mud-**LIM**-DECL
Your shoes are all muddy.

- (260) **Dóòhseewa niiwiri**hcági**ria'?**
 dóòhseewa nii-miri-**hcági**-ria-?
 why 2B-water-LIM-REFL-INTER
How come you are all drenched?

Combinations of noun and the limitive suffix do not always yield stative verbs. Sometimes the reading of the limitive suffix is adverbial (*only, nothing but*), as illustrated in (261).

- (261) **Miri**hcági** báàhxuhisahgeec.**
 miri-**hcági** báàhxu-hisa-hgee-c
 water-LIM pour-SIM-DIM-DECL
It's raining cats and dogs. / It's a downpour.

4.11.4 -hgee 'diminutive'

The diminutive -hgee looks identical to the indirect causative suffix. Some speakers of the Independence dialect use -hgee as a modal suffix with both nouns and verbs to soften their tone of speech. The diminutive suffix, however, is not common in verb derivation. Lexicalized diminutive verbs are inflected with B-set prefixes. Examples of diminutive verb derivation are given in (262) and an example of usage in (263).

- (262) **cagíhdi** *be pretty* → **cagíhdi**hgee** *be cute*
dichí *be stout* → **dichí**hgee** *be chubby*
cagí *be good* → **gicagí**hgee** *get better* < hgi- GI, **cagí** good, -hgee DIM******

- (263) **Spot, agíhdiàwa niicagíhdi**hgee**c.**
 Spot agíhdiàwa nii-cagí-hdi-**hgee**-c
 Spot very 2B-good-DES-DIM-DECL
Spot, you are very cute.

4.11.5 -hisa 'simulative'

The simulative suffix -hisa is extremely productive in verb derivation and refers to a quality or activity typical of the meaning denoted by the verb. The approximative sense that the verb

assumes makes its interpretation in some contexts derogatory. Examples of derivation are in (264).

- (264) *gagíxi* *be round* → *gagíxihisa* *be roundish*
óhxaadi *be white* → *óhxaadihisa* *be whitish*
garéèhdi *need to vomit* → *garéèhdihisa* *be nauseated*

A few stems are not found synchronically in the language without *-hisa*, as in (265).

- (265) *háhheehisa* *be quiet* (**háhhee*)

4.12 Negation

Clausal negation is indicated by the negative suffix *-dhaa* that is attached to the predicate head, as in (266)–(270).

- (266) *Macéédhaac.*
macéé-dhaa-c
 man-NEG-DECL
*He is **not** a man.*
- (267) *Maaʔiiʔúúdi madú wareeg, úʔsiadhaac.*
maaʔiiʔúúdi madú waree-g úʔsia-dhaa-c
 reason exist EVID-CRD arrive-NEG-DECL
Something must have happened, he hasn't arrived.
- (268) *Hiirahbídhaa agáwaasd.*
hiirahbí-dhaa agáhee-waa-sd
 difficult-NEG suppose-1CAUS.DIR-DEF
I didn't think it would be hard.
- (269) *Díà miháàwidhaagsáwa iiʔawóòhic.*
díà mi-hiráwi-dhaa-gsá-wa ii-maa-óòhi-c
 late 1C-sleep-NEG-USI-SIMULT INST-1A-accustomed-DECL
I often go to bed late; therefore I am used to it.
- (270) *Maaʔaruʔisíà miiʔirigidhaarug miibáhgixaara!*
maaʔaruʔisíà mii-írigi-dhaa-rúg mii-báhgixi-ara
 evil 1B-hit-NEG-COND 1B-go.around-IMP.PL
Let the evil go around us so that it won't hit us.

The negative existential verb *neesá* is used to negate existence, as in (271), and to negate possession, as in (272). It is likely that the negative existential verb is also used to form negative perfective constructions as in Crow (c.f., Graczyk 2007:154); however, there are no tokens in my database.

(271) *Irúgsidi neesác.*
 irúgsidi **neesá-c**
 meat **not.exist-DECL**
There's no meat.

(272) *Madúùwaca neesác. Miigirasáàcic.*
 mada-ùùwaca **neesá-c** mii-girasáàci-c
 1POS-money **not.exist-DECL** 1B-poor-DECL
I don't have money. I'm poor.

4.13 Noun incorporation

With a few exceptions, noun incorporation is not a productive process in Hidatsa. Although a few verbs, such as *aréʔ* *to ache*, regularly incorporate inalienably possessed nouns denoting body parts, the overwhelming majority of cases involving incorporation are lexicalized combinations. Because restricted productivity makes task-oriented elicitation of incorporating constructions difficult, most of the data in this chapter were procured by chance.

Although noun incorporation resembles noun derivation by compounding nouns with verbs (see 7.2.3.2), it is not subject to the same morphophonemic rules at the word boundary between the two compounded elements. Until more data become available, I will not attempt to account for the seeming irregularities.

The largest number of incorporating nouns belong to the class of inalienably possessed body parts. The possessed noun and the verb constitute an intransitive clause and the complex

stem is inflected with possessive prefixes that indicate inalienable possession. Sample paradigms are presented in TABLE 4.62.

TABLE 4.62. INFLECTION OF INCORPORATED INALIENABLY POSSESSED NOUNS

DERIVATION	GLOSS	3SG	1SG	2SG
<i>iidá</i> face + <i>íidha</i> furry	<i>have a beard</i>	<i>íidiidhac</i>	<i>míidiidhac</i>	<i>níidiidhac</i>
<i>iidá</i> face + <i>adéʔ</i> hee	<i>show one's face</i>	<i>íidadeʔheec</i>	<i>míidadeʔheec</i>	<i>níidadeʔheec</i>
<i>iihsá</i> tooth + <i>aréʔ</i> ache	<i>have a toothache</i>	<i>íishareʔc</i>	<i>míihshareʔc</i>	<i>níihshareʔc</i>
<i>aahdúù</i> head + <i>aréʔ</i> ache	<i>have a headache</i>	<i>ááhdarec</i>	<i>mááhdarec</i>	<i>nááhdarec</i>
<i>aahdúù</i> head + <i>áʔda</i> dull	<i>be bald</i>	<i>ááhdaʔdac</i>	<i>mááhdaʔdac</i>	<i>nááhdaʔdac</i>
<i>aahdúù</i> head + <i>adagí</i> white	<i>have white hair</i>	<i>áàhdadagic</i>	<i>mááhdadagic</i>	<i>náàhdadagic</i>
<i>aahdúù</i> head + <i>írighee</i> bump sth	<i>bump one's head</i>	<i>ááhdiri-gheec</i>	<i>mááhdiri-gheec</i>	<i>nááhdiri-gheec</i>
<i>eerí</i> stomach + <i>aréʔ</i> ache	<i>be in labor</i>	<i>éérareʔc</i>	<i>maʔéérareʔc</i>	<i>náʔeerareʔc</i>
<i>eerí</i> stomach + <i>ihdià</i> big	<i>be pregnant</i>	<i>éérihdiac</i>	<i>maʔéérihdiac</i>	<i>náʔeerihdiac</i>
<i>ixúá</i> body + <i>aréʔ</i> ache	<i>be sick</i>	<i>ixúàʔreʔc</i>	<i>maxúàʔreʔc</i>	<i>níxuaʔreʔc</i>

The bond between the verb and the incorporated noun varies from obligatory to optional. For example, in carefully enunciated speech it is possible to pronounce the compound *íihshareʔc* *he has a toothache* in (273a) as two separate words in (273b). On the other hand, ‘to have a headache’ in (274a) occurs only as a compound and never as a phrase.

(273) a. *Íihshareʔc.* = b. *lihsá aréʔc.*
iihsá-aréʔ-c *iihsá aréʔ-c*
 tooth-ache-DECL tooth ache-DECL
He has a toothache. *He has a toothache.*

(274) a. *Mááhdareʔc.* b. **Maahdú aréʔc.*
m-aahdúù-aréʔc **m-aahdúù aréʔ-c*
 1POS-head-ache-DECL **1POS-head ache-DECL*
I have a headache. **I have a headache.*

It is not always possible to distinguish between noun incorporation as a lexical process and noun incorporation as a syntactic process. A small number of expressions involving inalienably possessed nouns have one meaning when the noun is incorporated and another when it is a separate word. For example, when *eerí* *belly* and *aré?* *to ache* are two separate words they mean ‘to have a stomachache’, as shown in (275b). However, when ‘belly’ is incorporated by the verb ‘to ache’, as in (275a), the compound has a lexicalized meaning ‘to go into labor’. Another example is (276a), in which the incorporating expression has a lexicalized meaning ‘to be sick’, while the unincorporated form in (276b) has the literal meaning ‘to have an aching body’. Note that although in the underlying form *maxúá* *my body* has accent on the second mora of the diphthong, in the surface form it is pronounced with the falling pitch that indicates accent shift to the first mora.

- | | | | | | |
|-------|----|-----------------------|---|----|------------------------------|
| (275) | a. | <i>Ma'ээраре?c.</i> | ≠ | b. | <i>Ma'eerí aré?c.</i> |
| | | ma-eerí-aré?-c | | | ma-eerí aré?-c |
| | | 1POS-belly-ache-DECL | | | 1POS-belly ache-DECL |
| | | <i>I am in labor.</i> | | | <i>I have a stomachache.</i> |
| (276) | a. | <i>Maxúà're?c.</i> | ≠ | b. | <i>Maxú aré?c.</i> |
| | | ma-ixúá-aré?-c | | | ma-ixúá aré?-c |
| | | 1POS-body-ache-DECL | | | 1POS-body ache-DECL |
| | | <i>I am sick.</i> | | | <i>My body aches.</i> |

The incorporated forms of *maxúá* *my body* and *ixúá* *his/her body* both have a falling pitch pattern (*maxúà* and *ixúà*, respectively) that at present cannot be explained. (The second person form *níxua* has accent on the second person possessive prefix.) Other unexplained shifts of accent and pitch contour occur in the incorporated third person forms of *eerí* *his/her stomach* in (277) and *aahdúù* *his/her head* in (278).

- (277) 1SG: **ma'éeirihdiac** *I am pregnant* < **ma-** IPOS **eerí** stomach + **ihdià** be big
 3SG: **èèirihdiac** *she is pregnant* < **eerí** stomach + **ihdià** be big
- (278) 1SG: **mááhda'dac** *I am bald* < **m-** IPOS **aahdúù** head + **á'da** be dull gray
 3SG: **ááhda'dac** *he is bald* < **aahdúù** head + **á'da** be dull gray

In the case of 'to be bald' the expected third person form **ááhda'dac** *he is bald* has been documented as well. The only token of the inchoative first person form with the GI-morpheme also has an unexpected falling pitch pattern, as in (279).

- (279) **Giwáàhda'dac.**
 hgi-m-aahdúù-á'da-c
 GI-1POS-head-dull.gray-DECL
I'm getting bald.

The nature of the mechanism that triggers pitch drop after the incorporated noun, even when the last syllable of the noun is accented, remains unclear. According to the pitch spreading rule (see 2.3.1) both compounded elements should retain their high pitch. However, as can be seen in example (280), it is not the case in some incorporating stems, in which the compounded verb has low pitch.

- (280) **Míih sare'c.**
 m-iihsá-aré'-c
 1POS-tooth-ache-DECL
I have a toothache.

Noun incorporation may also be identified when the underlying verb-initial consonant cluster is realized at word boundary between two compounded words, as in (281b).

- (281) a. **Awá siic.** = b. **Awáhsiiic.**
 awá **hsíi-c.** awá-**hsíi-c**
 ground foggy-DECL ground-foggy-DECL
It's foggy. *It's foggy.*

Although so far most examples have involved stative verbs, transitive verbs may also incorporate inalienably possessed nouns. An example is (282b).

- (282) a. **Maahdú írighiwaac.**
 ma-ahdúù írigi-hiwaa-c
 1POS-head bump.into-1CAUS.DIR-DECL
I bumped my head.
- = b. **Mááhdirighiwaac.**
 ma-ahdúù-írighi-hiwaa-c
 1POS-head bump.into-1CAUS.DIR-DECL
I bumped my head.

According to the description of the GI-morpheme in section 4.8.5, under most circumstances **hgi-** may precede or follow a pronominal prefix without any change in meaning. In the case of lexical nouns, the placement of **hgi-** in front of the noun indicates noun incorporation, as in (283a). If **hgi-** is added to the verb, as in (111b), we are dealing with two phonological words.

- (283) a. **Gihucíwaduc.** = b. **Hucí giwaduc.**
hgi-hucí-madú-c hucí **hgi**-madú-c
 GI-wind-exist-DECL wind GI-exist-DECL
The wind has picked up. *The wind has picked up*

The status of the compounded noun and verb as a single phonological word is further confirmed by the placement of the GI- prefix in incorporating stems with a lexicalized meaning, in which case the prefix always precedes the noun. For example, **naadaxiibí** *to be lazy* is an idiom that literally means ‘to have a wrinkled heart’ (**naadá** *heart* + **xiibí** *to be wrinkled*). The prefix **hgi-**, which in this case has an inchoative meaning, can only be inserted in the initial position before the whole lexicalized phonological word, as in (284a). If **hgi-** were prefixed to the verb, the meaning would become literal and nonsensical, as shown in (284b).

- (284) a. **Giwaradaxiibíc.** b. ***Maradá gixiibíc.**
hgi-ma-naadá-xiibí-c *ma-naadá **hgi**-xiibí-c
 GI-1POS-heart-wrinkled-DECL *1POS-heart GI-wrinkled-DECL
I am getting lazy. **My heart is getting wrinkled.*

Another indicator of noun incorporation is the downtoner *nuwa some* that typically follows the noun. In the case of noun incorporation, however, it is grammatical only before the noun, as in (285).

- (285) **Nuwarîd'ade'ha!**
nuwa-n'-iidá-adé'-hee-Ø
some-2POS-face-appear-3CAUS.DIR-IMP.SG
At least (go and) show your face!

The main question raised by possessive incorporation is, what are the grammatical relations? Does the possessed noun still act as the subject of the verb, or is the possessor reinterpreted as the syntactic subject (despite still appearing with possessive morphology)? There are indications that noun incorporation in Hidatsa is undergoing reanalysis. Presumably the (b) examples in (286)–(288), in which possessive inflection can be replaced by a B-set prefix, the possessor has been reinterpreted as a subject; but further investigation is needed to figure out what is going on in cases where the possessive inflection is retained. Finding out more about the syntactic properties of subjects (e.g., what counts as a subject for purposes of switch reference, for control-type phenomena in complement clauses, etc.) should help to clarify the status of grammatical relations.

- | | | | | | |
|-------|----|--|---|----|---|
| (286) | a. | Maradaxiibíc.
ma-naadá-xiibí-c
1POS-heart-wrinkled-DECL
<i>I am lazy.</i> | = | b. | Miiraadaxiibíc.
mii-naada-xiibí-c
1B-heart-wrinkled-DECL
<i>I am lazy.</i> |
| (287) | a. | Ma'éeerihdiac.
ma-eeri-ihdíà-c
1POS-belly-big-DECL
<i>I am pregnant.</i> | = | b. | Mii'éeerihdiac.
mii- eeri-ihdíà-c
1B-belly-big-DECL
<i>I am pregnant.</i> |
| (288) | a. | Maraxúgareec.
ma-náàxu-garéé-c
1POS-lung-rotten-DECL
<i>I have tuberculosis.</i> | = | b. | Miirààxugareec.
mii-náàxu-garéé-c
1B-lung-rotten-DECL
<i>I have tuberculosis.</i> |

In most cases only B-set prefixes are allowed if the incorporated noun, such as *húá* *cough* in (289), is alienably possessed.

- (289) *Miihuaragabadíc.*
mii-**húá**-nagabadí-c
1B-**cough**-contract-DECL
I caught a cold.

Hidatsa also allows what Miner (1986) termed Noun Stripping and Mithun (1984) Composition by Juxtaposition. In the case of noun stripping, the noun and the verb remain separate words phonologically but the juxtaposed noun is stripped of the articles, demonstratives, and case markers. The demoted noun loses its status as a syntactic argument and the two juxtaposed words function as a single intransitive predicate.

The effects of noun stripping are illustrated in (290). As we saw in 2.4.2, morpheme-final vowels are often deleted at a morpheme boundary in compounds. If the affected syllable has a long vowel, then invariably both moras are deleted. However, in (290a) the final syllable in the juxtaposed noun, *ihúù* *mother*, loses only the second, unaccented, mora. According to section 2.4.3, the shortening of final long vowels is indicative of the right word boundary. This indicates that in (290) both *ihúù* and *á'ciwi* are separate phonological words. Although the sentence in (290a) appears to have AOV structure, the ergative case marker *-rí* in (290b) is not grammatical; therefore, *maagarísda* *child* cannot be the transitive Agent and, as a corollary, *ihúù* *mother* cannot be the transitive Object. Finally, since the definite article *-s* in (290c) cannot intervene between *ihúù*, which is in the “object” position, and the verb that follows, the only possible analysis is to treat *ihúù* and *á'ciwi* as a single grammatical word, which functions as an intransitive predicate that happens to comprise two phonological words.

- (290) a. **Maagarísdas ihú a[?]ciwic.**
 maagarísdas ihú á[?]ciwi-c
 child-DEF mother cry.for-DECL
The child is crying for mother.
- b. ***Maagarísdari ihú a[?]ciwic.**
 maagarísdarí ihú á[?]ciwi-c
 child-ERG mother cry.for-DECL
- c. ***Maagarísdahé ihúùs a[?]ciwic.**
 maagarísdahé ihúùs á[?]ciwi-c
 child-this mother-DEF cry.for-DECL

Noun incorporation in some stems alternates between compounding and noun stripping depending on the grammatical person of the inflected form. There are two patterns of alternation. In the first type, illustrated with *míàhxdee* *to be jealous* in (291), the third person form in (291a) occurs only as a compound, whereas the incorporated noun in the first and second person forms may occur both as a stripped noun, as in (291b), or in a compound, as in (291c). The “stripped” noun in (291b) is as a separate phonological word and the verb is inflected with an A-set prefix. The compound in (291c) is inflected with a B-set prefix.

The second type of alternation is illustrated in (292). The stem *Hiraaciré[?]* *to speak Hidatsa* occurs routinely as a compound in the third person, as in (292a), but the noun is always stripped if the stem is inflected for the first or second person, as shown in (292b-c). In the second type of noun incorporation the compounded third person form can also be broken up in slow, enunciated speech, as shown in (292d). More examples of variation between compounding and noun stripping are in TABLE 3.6.

- (291) a. **Míàhxdeec.**
 míà-hxdee-c
 woman-jealous-DECL
He is jealous.
- b. **Míà awáhxdeec.**
 míà maa-hxdee-c
 woman 1A-jealous-DECL
I am jealous.
- c. **Miiwíàhxdeec.**
 mii-míà-hxdee-c
 1B-woman-jealous-DECL
I am jealous.
- (292) a. **Hiraacaré[?]c.**
 Hiraacá-iré[?]-c
 Hidatsa-speak-DECL
He speaks Hidatsa.
- b. **Hiraacá waré[?]c.**
 Hiraacá ma-iré[?]-c
 Hidatsa 1POS-speak-DECL
I speak Hidatsa.
- c. **Hiraacá ríre[?]c.**
 Hiraacá ní-iré[?]-c
 Hidatsa 2POS-speak-DECL
You speak Hidatsa.

- d. **Hiraacá iré?c.**
 Hiraacá iré?-c
 Hidatsa speak-DECL
He speaks Hidatsa.

In some respects noun stripping looks strikingly similar to the article-less NP described in 9.1. One question that needs to be answered by future research is whether the sequence of a generic noun and verb is subject to any adjacency requirements.

Although it is unusual for an incorporated noun to occur in a coordinate construction, it is possible with the verb ‘to speak something’. In (293), the two nouns, **Aragaráhu Arikara** and **Hiraacá Hidatsa**, are linked with the coordination suffix **-g** that is added to the independent noun.

- (293) **Aragaráhug Hiraaciré?c.**
 aragaráhu-g Hiraacá-iré?-c
 Arikara-CRD Hidatsa-speak-DECL
*He speaks Arikara **and** Hidatsa*

An incorporating stem can be causativized, effectively transitivizing it and adding an additional argument. Compare, for example, the construction in (294a), in which the stripped noun is inflected possessively, with the causativized stem in (294b), which is inflected with a B-set prefix.

- (294) a. **Maradá guhbáác.** b. **Masúga?he miiraadá guhbáhaa?ac.**
maa-naadá guhbáá-c masúga-?a-hee **mii-naada guhbáá-hee-?a-c**
1POS-heart bothered-DECL dog-PL-this **1B-heart bothered-3CAUS.DIR-PL-DECL**
I am annoyed. *The dogs annoy me.*

Finally, certain types of complex nominals can also be incorporated. Although the conditions that allow complex-nominal incorporation require further documentation, a few examples are given here. (295)–(297) are examples of postpositional phrase incorporation. (298)

and (299) are examples of incorporation that appears to have something to do with the instrumental prefix *ii-*.

- (295) **Isbahxeehdiibádaadic.**
ixbahxéé-**hdaa**-ii-bádaadi-c
elbow-INST-INST-nudge-DECL
She nudged him with her elbow.
- (296) **Sibísahtii'oodheec.**
sibísa-**hdaa**-ii-óòri-hee-c
black-INST-INST-ripe-3CAUS.DIR-decl
She dyed it black.
- (297) **Héèrahdigaac.**
héèra-**hdaa**-ígaac-c
middle-INST-look-DECL
He looks forward to her coming.
- (298) **Iiwaagarísdiiwia hiriic.**
ii-maagarísda-íiwia hiri-c
INST-child-cry do-DECL
It is crying like a child (e.g., a cat or screech owl).
- (299) **Icihbii'awáàgic.**
icí-ihbú-**ii**-awáàgi-c
foot-tip-INST-sit.down-DECL
He is squatting.

5 Transitive verb inflection

Hidatsa employs two systems of morphosyntactic alignment that distinguish between the arguments of transitive and intransitive verbs. The two core arguments of transitive verbs, **agent (A)** and **object (O)**, and the single core argument of intransitive verbs, **subject (S)**, are marked by (1) pronominal prefixes on verbs (split-intransitive alignment) and (2) suffixes on noun phrases (ergative alignment, see 9.5).

Split-intransitive alignment, which is marked by pronominal prefixation on verbs, is based on the notion of volition. In such systems, participants that are characterized by the property of control over the activity are initiators of events. Such participants are marked on verbs with A-set prefixes regardless of the valence of the verb. In contrast, participants that have no control over the activity, such as objects in transitive clauses and S-arguments of verbs that describe states, are marked on verbs with B-set prefixes.

Since some S-arguments are clearly in control of the activity that certain intransitive verbs describe (e.g., *diríá* to run, *awáàgi* to sit down), they are marked in the same way as A-arguments of transitive verbs, that is, with A-set prefixes. S-arguments that are not in control of activities and states described by the second type of intransitive verbs (e.g., *hiirá* to be slow, *háchageegi* to hiccup) are marked on verbs in the same way as O-arguments of transitive verbs, that is, with B-set prefixes. Because the marking of S-arguments is split along the lines of volition ($S_a=A$; $S_o=O$), this system is known as the split-intransitive alignment.

In other words, in a split-transitive system some subjects of intransitive verbs are treated in the same way that subjects of transitive verbs are treated, while other subjects of intransitive verbs are treated in the same way that objects of transitive verbs are treated.

Ergative alignment (see 9.5), which is marked by case marking on noun phrases, categorizes all intransitive S-arguments like transitive O-arguments of transitive verbs – both are left unmarked. The A-argument of transitive verbs is specified by suffixation (S=O; A separate).

A common view of morphosyntactic alignment classifies morphologically complex languages into nominative-accusative, ergative-absolutive, and split-intransitive types. The separation of the three systems is implied by Pustet in her 2002 article on Lakota and Osage split-intransitivity, in which she hypothesizes that different subtypes of split-intransitive languages have a tendency to evolve over time into nominative-accusative or ergative-absolutive languages (2002).

The coexistence of ergative alignment with split-intransitive alignment in the same language is a particular type of alignment split that has not been reported in the typological literature. The presence of both split-intransitivity and ergative case-marking in Hidatsa poses a challenge to Pustet's hypothesis. Although the nominative and ergative language types, both of which are marked on nouns, are clearly in complementary distribution with each other, there is no reason why the verb-marking split-intransitive system should be incompatible with either one of the noun-based case-marking systems. In Hidatsa, both the split-intransitive and ergative alignment types are manifestations of the same underlying principle of transitivity-based core-argument disambiguation that is projected through different value systems onto verbal and nominal morphology, respectively. Neither system interferes with the other, and both work toward a common goal.

The discovery of middle verbs in Hidatsa (see 3.3) somewhat complicates the alignment of verbs in the lines of volition (or agency) and transitivity. Prototypical middle verbs are neither transitive nor intransitive, but combine the properties of the transitive A and O with the

intransitive S in a single prefix. In addition to the convergence of semantic properties, the C-set pronominal prefixes, which are used to mark middle verbs, tellingly also combine morphological elements from both A- and B-set prefixes. On one hand the C-set prefixes *mi-* and *ní-* look like the shortened B-set prefixes *mii-* and *nii-*; on the other, the C-set second person prefix *ní-* is accented just like the second person A-set prefix *ná-*. Since the argument structure of middle verbs falls outside the scope of the traditional notions of transitivity, it will not be discussed further in this chapter.

5.1 Split-intransitivity

From a typological perspective, Hidatsa is a split-intransitive type language (also known as an active-stative type language). This means that the core arguments of a clause are marked by two types of pronominal prefixes that are grouped into two sets: the A-set prefixes (1 *maa-*, 2 *ná-*, 3 \emptyset) mark the transitive agent and the subject of the first subset of intransitive verbs, whereas the B-set prefixes (1 *mii-*, 2 *nii-*, 3 \emptyset) mark the transitive object as well as the subject of the second subset of intransitive verbs. The primary principle that divides intransitives into the two subsets is based on control: the S-argument is marked like an agent (A) if the subject is in control of the intransitive activity; it is marked like a transitive object (O) if the subject is not in control of an intransitive activity⁴⁹. Since the grammatical subject S is marked by two different types of prefixes, such a system is also known as a split-S alignment.

Intransitive verbs that mark the subject with B-set prefixes are called ‘stative verbs’. Most of the stative verbs describe states and qualities, such as *hisí* *to be red* and *xaráhxi* *be skinny*, but

⁴⁹ The only exception to this generalization is the plural object prefix *maa-* (see 5.2) which never occurs in the role of an intransitive subject.

a few, such as *gáàxuga* to *joke*, *geebí* to *gasp*, and *háchageegi* to *hiccup*, are processes and activities.

Intransitive verbs that mark the subject with A-set prefixes are called ‘intransitive active verbs’. Also known simply as ‘intransitive verbs’, in Hidatsa, unlike in some other languages, they almost never denote qualities or states; instead, they describe activities and processes that are not directed at an object. Typical intransitive active verbs include *diríá* to *run*, *gháà* to *laugh*, and *miidí* to *crawl*. The overwhelming majority of intransitive active verbs is characterized by control over the activity by the participant, but a few, such as *húá* to *cough*, *déè* to *die*, and *gibsúgi* to *belch*, are not controlled.

Verbs that employ the A-set prefixes to mark the transitive agent and B-set prefixes to mark the transitive object on a single stem are known as ‘transitive active verbs’, or simply ‘transitive verbs’. All verbs that employ A-set prefixes to indicate core arguments, both transitive and intransitive, are collectively known as ‘active verbs’.

In TABLE 5.1, the classification of verbs according to active and stative morphology, presented in columns, is projected onto the transitive and intransitive subcategorization frames in rows.

TABLE 5.1. ACTIVE-STATIVE MORPHOLOGY AND THE ARGUMENT STRUCTURE OF VERBS

	ACTIVE VERBS (A-SET PREF.)	STATIVE VERBS (B-SET PREF.)
TRANSITIVE ARGUMENTS	A	O
INTRANSITIVE ARGUMENTS	S _a	S _o

Split subject-marking is illustrated in (1) with inflected paradigms of the stative verb *hiidá* to *be fast* and the intransitive active verb *diríá* to *run*, both of which are intransitive. Note the pronominal prefixes are identical both in the singular and plural.

(1)	STATIVE (B-SET PREFIXES)		ACTIVE INTRANSITIVE (A-SET PREFIXES)	
	3 SG	hiidác <i>he is fast</i>	diríac <i>he runs</i>	
	1 SG	mii-hiidác <i>I am fast</i>	maa-diríac <i>I run</i>	
	2 SG	nii-hiidác <i>you are fast</i>	ná-diríac <i>you run</i>	
	3 PL	hiidá?c <i>he is fast</i>	diríí?ac <i>he runs</i>	
	1 PL	mii-hiidá?c <i>I am fast</i>	maa-diríí?ac <i>I run</i>	
	2 PL	nii-hiidá?c <i>you are fast</i>	ná-diríí?ac <i>you run</i>	

Possible combinations of A-set prefixes, marking the agent, and B-set prefixes, marking the object, are illustrated in TABLE 5.2. First and second person A-set prefixes have several allomorphs, presented earlier in TABLE 3.2; only the unmarked first person prefix **maa-** and second person **ná-** are given in TABLE 5.2. Plural number may be indicated by any of the plural suffixes (e.g., **-?a**, **-?o**, **-fíru?**, **-ara**), but only **-?a** is given in the table whenever the stem in the main clause is inflected for the plural agent. Verbs in coordinate clauses (see 17.3.2) and serial verb constructions (see 17.5) are not marked for plural.

TABLE 5.2. COMBINATIONS OF AGENT AND OBJECT AFFIXES ON TRANSITIVE VERB

AGENT	OBJECT (underlined)					
	1 SG	2 SG	3 SG	1 PL	2 PL	3 PL
1 SG		<u>niiwaa...</u>	Ømaa...		<u>niiwaa...?a</u>	<u>maawaa...</u>
2 SG	<u>miirá...</u>		Øná...	<u>miirá...?a</u>		<u>maará...</u>
3 SG	<u>miiØ...</u>	<u>niiØ...</u>	ØØ...	<u>miiØ...?a</u>	<u>niiØ...?a</u>	<u>maaØ...</u>
1 PL		<u>niiwaa...?a</u>	Ømaa...?a		<u>niiwaa...?a</u>	<u>maawaa...?a</u>
2 PL	<u>miirá...?a</u>		Øná...?a	<u>miirá...?a</u>		<u>maará...?a</u>
3 PL	<u>miiØ...?a</u>	<u>niiØ...?a</u>	ØØ...?a	<u>miiØ...?a</u>	<u>niiØ...?a</u>	<u>maaØ...?a</u>

Whenever both core arguments are marked in an active transitive verb stem, the B-set object prefix always precedes the A-set agent prefix. The only exception to this rule is the irregularly inflected verb **gú?** *to give something to somebody*, in which case the agent prefix precedes the object prefix (see 5.3 and 17.5.2).

5.2 Plural object marking

First and second person plural objects are always marked with the plural suffix regardless of the number of the agent.

In (2), the absence of the plural suffix *-ʔa* before the definite article *-s* in *maawidabás* *the liar* and the singular form of the demonstrative focus phrase *séʔwa* *that one* confirm that there is only one liar (the agent); therefore the plural *-ʔa* in *miireechááʔac* can only denote a plural object. The plurality of the object in the gloss of *miireechááʔac* as ‘he is annihilating *us*’ is further confirmed by the imperative stem in the sentence that follows, *garáàra!* *run away!*, which is formed with the plural impertive suffix *-ara*.

- (2) *Heʔsaag* *maawidabas seʔwa* *miireechaaʔac.* *Garáàra!*
 heʔsèè-g *maa-midabá-s séʔ-wa* *mii-neesá-héé-ʔa-c* *garéè-ara*
 do.this-CRD *INDEF-lie-DEF that-FOC* *1B-not.exist-3CAUS.DIR-PL-DECL* *flee-IMP.PL*
That one, the liar, he is annihilating us. Run away! (Harris 1939: 214)

The same argument can be made for the sentence in (3), in which the agent *hirí* *this one* is in the singular (as opposed to *hiróʔ* *these ones*); therefore the plural suffix *-ʔo* in the relative clause must be co-indexed with the first person object. In (4), the plurality of the object is encoded in the mass noun *nuxbáàga* *people*, but the number of the agent is ambiguous; there is no overt agentive noun phrase, therefore *niiwááʔac* could be translated either as ‘I tell you’ or ‘we tell you’.

- (3) *Hirí wareec* *aguwiiʔadarúúhoʔ.*
 hirí waree-c *agu-mii-adarúú-hee-ʔo*
 this EVID-DECL *REL-1B-injure-3CAUS.DIR-PL*
This must be the one who caused us trouble. (NDILP 1978: 36)

- (4) *Nuxbaagaʔó,* *hahóó* *niiwaaʔac.*
nuxbáàga-ʔo-ʔ *hahóò* *nii-maa-ʔa-c*
people-PL-VOC thanks *2B-I.say-PL-DECL*
I / we say, “Thank you to you all!”

Plurality of the object may also be marked by suppletive plural stems of transitive verbs. The command in (5) is given to a single person, as indicated by the morphologically empty singular imperative form, and it refers to a single door, as indicated by the root *naagí* *to be sitting* that only refers to singular subjects. The command in (6), on the other hand, clearly refers to several doors, as indicated by the plural suppletive form *gáá* of *naagí* *to sit*. Since the command refers to a plural subject, the illocutionary act is marked with the plural form of the imperative speech-act marker. It is unclear whether a single person or a group is addressed since the plural imperative suffix *-ara* is, in any case, obligatory because of the plural grammatical object.

(5) *Mirèè rusga naagíhgeedha!*
 mirèè núsgi-Ø **naagí**-hgee-dhaa-Ø
 door unblock-CONT **sit.SG-3CAUS.INDIR-NEG-IMP.SG**
Don't leave the door open!

(6) *Mirèè núsga gááhgedhaara!*
 mirèè núsgi-Ø **gáá**-hgee-dhaa-ara
 door unblock-CONT **sit.PL-3CAUS.INDIR-NEG-IMP.PL**

Adiwahú aruciríáheec.
 adí-awahú aru-ciríà-hee-c
 house-inside IRR-cold-1CAUS.DIR-DECL

Don't leave the doors open! It's going to make the indoors cold.

Third person plural object is always indicated by the prefix *maa-*, but plural suffixes are used only if the agent is plural, too. Possible combinations of the third person plural object prefix with singular and plural agent forms are given in the second and third column of TABLE 5.3. Singular agent and singular object forms are provided in the first column for comparison.

TABLE 5.3. COMBINING AGENT AND 3 PERSON OBJECT AFFIXES: *gurèè* 'TO CHASE SB'

SG AG → SG OBJ		SG AG → PL OBJ		PL AG → PL OBJ	
<i>gurèèc</i>	<i>he</i> → <i>him</i>	<i>maagurèèc</i>	<i>he</i> → <i>them</i>	<i>maaguráà'ac</i>	<i>they</i> → <i>them</i>
<i>maagurèèc</i>	<i>I</i> → <i>him</i>	<i>maawaagurèèc</i>	<i>I</i> → <i>them</i>	<i>maawaaguráà'ac</i>	<i>we</i> → <i>them</i>
<i>nágureec</i>	<i>you</i> → <i>him</i>	<i>maarágureec</i>	<i>you</i> → <i>them</i>	<i>maaráguraa'ac</i>	<i>you</i> → <i>them</i>

In addition to the pronominal prefixes laid out in TABLE 5.2, grammatical relations may also be expressed by the reflexive prefix **magi-** (see 4.9), which indicates that each of the participants simultaneously occupies both the role of agent and patient with respect to each other, as illustrated in (7).

- (7) **Magibágiriadhaara!**
magi-bági.ria-dhaa-ara
 RECIP-push.REFL-NEG-IMP.PL
Don't push each other!

Finally, plurality of the possessor can also be indicated by the plural inflection of the verb. Although the verb **agúxaa** *to be further* in (8) is not transitive, the fact that it is inflected for the plural while the inalienably possessed noun **aadí** *his house* is in the singular (instead of **aadó'** *their house*) can only mean that the plurality of the possessor is implied.

- (8) **Aadí** **agúxaa'ac** **Mandaree** **se'róhaag** / **se'hgúhaag.**
 aadí agú-xaa-**a-c** Mandaree se'-ró-haag / se'-hgua-haag
 3POS.lodge further-GOAL-PL-DECL Mandaree that-LOC-SOURCE / that-LOC-SOURCE
Their house is further than Mandaree.

5.3 Non-derived ditransitive verbs

A small number of non-derived ditransitive verbs subcategorize for two objects. Nevertheless, utterances with the agent, direct object, and indirect object noun phrases overtly specified almost never occur in natural discourse. Participants are typically introduced one by one in intransitive or transitive clauses, and in intransitive clauses at least one of them is disambiguated by context. Direct objects are disambiguated from indirect object mainly by word order, especially if other clues, such as differences in animacy, are not available. The three most common ditransitive active verbs are listed in (9) and an example with overt direct and indirect object is (10).

- (9) *gúʔ* *to give sth to an individual*
gahéè *to give sth to a group*
giwéʔ *to tell sth to sb*

- (10) *Hirí gúáwa gúʔ!*
hiri gua-wa gúʔ-Ø
this that-FOC give-IMP.SG
Give this to that one!

More examples and a table illustrating the full combinatory potential of pronominal prefixes with *gúʔ* and *gahéè* can be found in 17.5.2.

Boyle has suggested that in Hidatsa “there is a small set of transitive stative verbs” where “both the pronominal subject and object are of the B-set” (Boyle 2007: 144). A partial paradigm he provides is actually an example of the middle verb *iighací* *to understand something*. Although middle verbs (see 3.3), which are inflected with C-set prefixes (1 *mi-*, 2 *ní-*, 3 *i-*), are normally not transitive, there are at least two exceptions, as the object, indicated with a B-set prefix, can be marked both on *iighací* and also *iigigúà* *to hear sth*. Accent on the C-set second person prefix *ní-* disambiguates it from the unaccented B-set second person prefix *nii-*. Incorrect accent marking in Boyle’s examples accounts for his erroneous analysis: his *miiriikháciic* *you understand me* should have an accented C-set second person prefix, as in *miiríghacíc* (*mii- 1B, ní- 2C, iighací understand, -c DECL*).

Although there are no stative verbs that are subcategorized for two arguments, two B-set prefixes may co-occur with stems whose valence has been increased through the process of causativization (see 4.7.2). In such cases the causee and object occur together initially in the verb, as in (11) and (12). Note that additional data are required to account for the variation in the order of the prefix for the causee object and the prefix for the object of the causative verb. The agent (causer) in the examples is expressed by the pronominal indirect causative suffix.

(11) **Guarí niwii'iráhbiheec.**
 gua-rí **nii-mii-iráhbi-hgee-c**
 that-ERG **2B-1B-prick-3CAUS.INDIR-DECL**
He made me prick you.

(12) **Miiriigí'hgeec.**
mii-nii-gí'hgee-c
1B-2B-pack.on.back-3CAUS.INDIR-DECL
He asked me to carry you on my back.

There is another strategy, however, which requires further documentation, that seems to validate Boyle's claim that some stative stems, albeit derived ones, may be transitivized. The otherwise intransitive stative verb *xéewi* *to be lonesome* (1SG *miixéewic*, 2SG *niixéewic*) is used transitively in example (13) when the instrumental prefix *ii-* is inserted between the “agent” and “object” B-set prefixes.

(13) **Nii'iiwixéewic.**
nii-ii-mii-xéewi-c
2B-INST-1B-lonesome-DECL
I am lonesome for you.

5.4 Object marking in causative stems

The principles of marking core arguments on a causative verb are similar to the description above, except that the position of the pronominal causative affix, which marks the agent, is stem-final. As in other transitive verbs, the B-set object prefixes, which mark the causee, are verb-initial and the plural suffix, if present, is added directly to the inflected causative suffix.

Examples of various transitive combinations with the causative stem *gháhee* *to make somebody laugh* are in (14a-d).

(14) a. **miigháheec**
mii-gháà-hee-c
1B-laugh-3CAUS.DIR-DECL
he made me laugh

b. **maagháwaac**
maa-gháà-waa-c
3OBJ.PL-laugh-1CAUS.DIR-DECL
I made them laugh

c. **maagháwaa’ac**

maa-gháà-waa-’a-c

3OBJ.PL-laugh-1CAUS.DIR-PL-DECL

we made them laugh

d. **miigháraa’ac**

mii-gháà-raa-’a-c

1B-laugh-2CAUS.DIR-PL-DECL

a) *you (pl.) made me laugh*

b) *you (sg.) made us laugh*

c) *you (pl.) made us laugh*

An example with three arguments is given in (15). Note that the overt ergative construction **se’ri** after **ihgás** *the mother* is optional since the three arguments (**ihgás** *the mother* > **mii- 1B** > **ahí** *turnip*) are disambiguated according to their relative ranking on the animacy and agentivity scales (see 9.6.1 and 9.6.2).

- (15) **ihgás** (**se’ri**) **ahí** **miibhíhgeec.**
 ihgá-s se’-rí ahí mii-bhí-hgee-c
 mother-DEF that-ERG turnip 1B-dig-3CAUS.INDIR-DECL
My mother let me dig turnips.

Hidatsa and Crow prefix order in causative constructions is of interest from the perspective of comparative Siouan, since in Lakota the prefix for the causee goes on the causative marker, not at the beginning of the whole stem; only prefixes for the object of the causative verb go at the beginning of the whole stem.

6 Modality, aspect, and tense

This chapter describes the closely related categories of modality, aspect, and tense. The most important of the three is modality, which is subdivided into several subcategories. Every Hidatsa utterance, with the exception of interjections, is obligatorily marked for one or several modal categories, which include speech-act modality (always required), evidential modality (required in most constructions when the information is second-hand or inferred, and inherent in progressive constructions), deontic (permissions) and dynamic (ability) modality, and epistemic modality (judgments, expressed with tense affixes). The types of modality found in Hidatsa are presented in TABLE 6.1. (adapted for Hidatsa from Nordström 2010: 16).

TABLE 6.1. PRINCIPAL TYPES OF MODALITY IN HIDATSA

Event modality	Propositional modality	Speech-act modality
- deontic modality	- evidential modality	- declaratives
- dynamic modality	- epistemic modality	- interrogatives
		- imperatives

There are two morphological aspects: the habitual and the usitative; and two, the progressive and the continuative, which are expressed periphrastically with auxiliary posture verbs.

Hidatsa is a future–nonfuture language, *i.e.*, it overtly marks future events but does not distinguish morphologically between the present and past tenses. There are two future tenses that are used not only to describe unrealized events, but also volition, epistemic judgments, and hypothetical (irrealis) events.

The history of description of the Hidatsa modal system presents a cautionary tale of linguistic theories based on incomplete analyses. There are at least 17 speech-act markers and 4 evidential markers in Hidatsa that fall into two natural classes, illocutionary suffixes and

evidential enclitics.⁵⁰ Until recently, the two modal classes were not distinguished from each other, and all descriptions of the Hidatsa modal system contained numerous omissions and incorrect forms. Nevertheless, the grossly misunderstood, inadequately described, and misanalyzed Hidatsa data have found their way into popular linguistics textbooks as well as having been used as cornerstone data in several theoretical papers.

In 1955, Florence Robinett published her master's thesis on Hidatsa morphophonemics in the *International Journal of American Linguistics* (Robinett 1955a), in which she identified two evidential enclitics and eight speech-act markers. In 1965, G. H. Matthews published *Hidatsa Syntax*, a generative description in which he identified six “moods” in Hidatsa (identified by four speech-act and two evidential markers), all apparently borrowed from but not credited to Robinett (G. H. Matthews 1965: 99). Elsewhere (G. H. Matthews 1965: 107) he also identifies two command markers, seemingly also borrowed from Robinett, but does not include them with his other moods. Amazingly, Matthews's analysis has remained the “received” view of the Hidatsa system that has been cited in numerous books and articles for almost forty years with little or no credit given to Robinett. Some, such as Palmer in his textbook on *Mood and Modality* (2001: 37), simply found the Hidatsa system “interesting” while admitting that “there are serious problems about the interpretation”, whereas others, such as Zwicky (1985b) and (1985a), made extensive theoretical assumptions based on the faulty data in Matthews's *Hidatsa Syntax*.⁵¹

⁵⁰ Although I believe that this grammar contains an exhaustive inventory of Hidatsa modal particles, the discovery of a few more cannot be ruled out.

⁵¹ Matthews's list contains the following “moods”: 1. *wareac quotative* (*waréè EVIDENTIAL*), 2. *rahe report* (*rahéè REPORTATIVE*), 3. *oak indefinite* (*-dóòg SPECULATIVE*), 4. *-c period* (*-c DECLARATIVE*), 5. *-ski emphatic* (*-sgíí EMPHATIC*), 6. *-³ question* (*-³ INTERROGATIVE*), 7. *-(a)h optative* (*∅ IMPERATIVE*), and 8. *-(a)ka imperative* (*-ga PRECATIVE*).

Matthews's description of the modal particles he identifies is in most cases incorrect. For example, his *wareac*

Jones (1984) lists three of the four evidential enclitics and most of the illocutionary speech-act suffixes. Even more (but not all) illocutionary suffixes occur in his unanalyzed field transcriptions of elicited vocabulary.

Boyle (2007) attempts to systematize the data pertaining to modality in Hidatsa, but, unfortunately, introduces more erroneous forms. He recognizes three of the four evidential enclitics but splits one of them, the opinionative *rahéè*, into singular *rahee* and plural *rahaa*, not realizing that the vowel change in the plural form is caused by ablaut before the plural suffix *-ʔa*. He correctly identifies nine speech-act markers, but also introduces two non-existent ones (Boyle 2007: 197).⁵²

quotative is actually a combination of two particles, an evidential enclitic *waréè*, which combines with most illocutionary speech-act markers, and an illocutionary marker *-c*, which combines with all other evidential markers.

Occasionally Matthews's examples contain other speech-act markers that he does not include among his inventory of Hidatsa "moods". He recognizes, for instance, the "remote past" marker *stao* (*-sdaaʔ* *DEFINITIVE*), but not as a "mood" marker. Matthews claims that "none of my examples came directly from Lowie, R. H., *Hidatsa Texts*: but wherever possible I have chosen examples that are similar to or identical with sentences that occur in Lowie's book" (Matthews 1965: 99). In reality it seems that he has "created" much of his Hidatsa data by drawing on the vocabulary and expressions in Lowie's texts and then freely combining them in order to make the data match with the theories. For example, no Hidatsa speaker would ever produce a sentence like *wíra ápári ki stao wareac* *the tree began to grow* (Matthews 1965: 115). To make this sentence grammatical, *hgi-* *begin* would have to be prefixed to *abári* *to grow*, and the illocutionary suffix *-sdaaʔ*, which occupies the same slot with the declarative suffix *-c* in the morpheme template, would have to replace the latter following the evidential enclitic *waréè*, as in *Mirá giʔabári wareec / wareesdaaʔ*. *The tree began to grow*.

⁵² Boyle identifies *hahka* as a permissive speech-act marker. It is, in fact, an enclitic that is used with deontic and dynamic modalities that has to be *followed* by any of the illocutionary, or speech-act, suffixes.

The past emphatic speech-act marker *-aha* that Boyle identifies is actually an emphatic speech-act marker *-he* that can be used either in future, present, or past statements. Apparently Boyle incorrectly heard the final vowel in the example he gives, *míàs iigiracóòbaʔahe* (in fast speech *iigiracóòbaʔhe*) *they kissed the woman*, as *a*, and misconstrued the echo vowel of the plural suffix *-ʔa* as part of the emphatic suffix.

Another unique area that has been overlooked or misanalyzed in previous descriptions of Hidatsa is the cumulative exponence of the notions of posture, evidentiality, and aspect in three interrelated sets of position, or posture, verbs. There are ten or eleven such verbs, most of which occur in Jones's field notes. Boyle (2007: 178) describes five, overgeneralizing or misanalyzing all but one of them, and provides incorrect plural forms for all except one. Since Boyle identified only five posture verbs he was unable to describe them as interrelated sets.

Since the morphological categories comprising modal notions are clearly the most misunderstood — yet paradoxically the best “known” features in Hidatsa — I will provide more examples and data in each subsection of this chapter than is the usual practice in descriptive grammars. I will raise a few questions and identify aspects that need further clarification, but in the end I hope to provide a comprehensive description of the notions of modality, aspect, and tense in Hidatsa.

6.1 Speech-act modality

According to the speech act theory first put forward by Austin (1962) and later developed further by Searle (1969), the speech acts that we produce proceed from the context of the situation in which they are produced and are therefore pragmatic acts, rather than mere linguistic acts. Hidatsa is one of those languages that has grammaticalized the implied, or intended meaning, of every speech act in addition to its literal meaning. Thus, the propositional content of every utterance (or locutionary act) is always combined with an indicator of the illocutionary force of that utterance. The illocutionary force of every well-formed Hidatsa utterance (in the simplest case an independent clause) is indicated by an obligatory matrix clause-final marker.

The main purpose of speech-act markers in Hidatsa is to add illocutionary force to the locutionary, or literal meaning, of an utterance. The speech-act markers do not alter the

propositional content of utterances, they merely permit us to draw inferences about the speaker’s intentions, assumptions, and attitudes. Thus, a simple statement like “he speaks Hidatsa” can be uttered assertively, emphatically, as an exclamation, or a simple neutral statement without any attitudinal overtones.

Speech-act markers in Hidatsa can be divided into three categories of unequal size: statements, commands, and questions. Each category contains a number of grammaticalized speech acts identified by traditional grammatical labels, such as interrogative, declarative, and imperative. The feature differentiating minor speech-act types from each other in each of the three categories is the force of assertion. The statements category comprises the largest number of grammaticalized speech acts, questions have three, and commands two. As Givón (1984: 318) has pointed out, the “major well-coded speech-acts [*i.e.*, statements, questions, and commands] are just the most common, conventionalized (‘grammaticalized’) prototypes”. In reality, the prototypes are distributed along a continuum space organized along a number of social-psychological dimensions (Givón 1984: 318).

The three major types of speech acts and their realizations in Hidatsa are listed in TABLE 6.2.

TABLE 6.2. SPEECH-ACT TYPES AND ILLOCUTIONARY MARKERS

SPEECH-ACT TYPE	SUFFIX	GLOSS
STATEMENTS		
	-c	<i>declarative (DECL)</i>
	-cgíí	<i>presumptive (PRES)</i>
	-he	<i>emphatic (EMPH)</i>
	-wa	<i>exclamative (EXCL)</i>
	-íí	<i>intensive (INTENS)</i>
	-s / -sd / -sdaa’	<i>definitive (DEF)</i>
	-sgíí	<i>mitigative (MIT)</i>
	-dóòre	<i>assertive (ASSERT)</i>
	-dóòres	<i>definitive assertive (ASSERT)</i>
	-dóòreewa	<i>exclamative assertive (ASSERT)</i>

QUESTIONS	-ʔ	<i>interrogative (INTER)</i>
	-ʔgíí	<i>interrogative presumptive (INTER.PRES)</i>
	-dóòg	<i>speculative (SPEC)</i>
COMMANDS	-∅ / -ara	<i>imperative (IMP.SG / IMP. PL)</i>
	-ga	<i>precative (PREC)</i>

Although it is possible to consider utterances comprising only interjections or vocatives as a separate speech-act type, in this grammar they are treated separately in section 14.4.

The domain of most illocutionary markers in Hidatsa is a sentence that may be a single independent clause, or may include relative, adverbial subordinate, or coordinated clauses. Speech-act suffixes and evidential enclitics (see 6.2) are not necessarily sentence final since other constituents of the sentence may follow the verb and the illocutionary suffix. Examples (1) and (2) illustrate variation in word order.

- (1) a. **Agihdíàwa áàdus gigéèc hirí.**
 agihdíàwa áàdu-s gigéè-c hirí
 very father-DEF resemble-DECL this
This one really looks like his father.
- b. **Agihdíàwa gigéèc ihúùs hirí.**
 agihdíàwa gigéè-c ihúù-s hirí
 very resemble-DECL mother-DEF this
This one looks really like her mother.
- (2) a. **Irúgsidiruwa nááhag núhcaara!**
 irúgsidi-nuwa nááhi-g núhci-ara
 meat-some go.PL-CRD take-IMP.PL
Go get some meat!
- b. **Irúgsidiruwa núhcaara nááhag!**
 irúgsidi-nuwa núhci-ara nááhi-g
 meat-some take-IMP.PL 3go.PL-CRD
Go get some meat!

6.1.1 Statements

Statements are utterances that denote factuality of unmarked epistemic value. In Hidatsa, statements can be neutral (declarative), emphatic, assertive, exclamative, definitive, or presumptive.

6.1.1.1 -c ‘declarative’

Utterances with the declarative **-c** are neutral statements without any attitudinal overtones. It is the most common speech-act marker in Hidatsa. There are numerous examples of neutral statements ending with **-c** in this grammar. Sentences in (3) illustrate the fact that such statements carry neutral illocutionary force regardless of their literal meaning.

- (3)
- | | | |
|------------------------------|---------------------------------|---|
| Xarééc. | <i>It's raining.</i> | < xaréé-c <i>to rain-DECL</i> |
| Xarééhisaacic. | <i>It's kinda raining.</i> | < xaréé + hisa-aci <i>SIM-COMPR</i> |
| Garisdhéeraca xarééc. | <i>It rained just a little.</i> | < xaréé + garisdhéé-raca <i>be little-COMPR</i> |
| Xareegáádic. | <i>It really rained.</i> | < xaréé + gáádi <i>VER</i> |
| Xaréé agihdíheec. | <i>It rained hard.</i> | < xaréé + agihdíhee <i>be excessive</i> |

6.1.1.2 -cgíí ‘presumptive’

Among the Hidatsa utterance initiators (see Chapter 14), one, **gíí** (the equivalent of English *oh*, *well*, or *oh well*), may also occur utterance finally. In this position it has become grammaticalized and merged with the preceding declarative marker **-c** (or definite marker **-s**, see 6.1.1.7). The ensuing **-cgíí** expresses presupposition or hypothesis regarding the fact denoted by the verb. This

speech-act marker is (almost?) always preceded by one of the singular future suffixes (see 6.5.2).⁵³ The following are examples of presumptive statements with *-cgíí*.

- (4) **Óòbi mahgighíág maa'arucagí awásgeewicgi.**⁵⁴
 óòbi maa-hgi-híi-g maa-arucagí maa-ísgee-wi-**cgíí**
 tobacco 1A-GI-drink-CRD INDEF-REL-good 1A-think-1SG.FT-PRES
I'll have a cigarette and think good thoughts.
- (5) **Maaráàg mîidade'waawicgi.**
 maa-néè-g m-îida-adé'-waa-wi-**cgíí**
 1A-go-CRD 1POS-face-appear-1CAUS.DIR-1SG.FT-PRES
All right, I suppose I'll go and show my face.
- (6) **Hirigháà ooráàwiis hîhicgi.**
 hiri-gháà aru-náàwii-s hîi-hi-**cgíí**
 this-ADV.TEMP REL-three-DEF get.here-3SG.FT-PRES
It must be about 3 o'clock by now.
- (7) **Mark híá réèhicgi Mirahaciwáàgus se'hgua.**
 Mark híi-Ø réè-hi-**cgíí** mirahací-máàgu-s se'-hgua
 Mark get.to-CONT RES-3SG.FT-PRES willow-high there-LOC
Mark should be in Bismarck by now.

Presumptive speech acts are often used to make epistemic statements that pertain to the degree of certainty. They should not be confused with opinionative evidentiality (6.2.1), which only indicates that there is no other source of information but the speaker's personal opinion. Comparison between a declarative speech act involving opinionative evidentiality in (8a) and a presumptive speech act indicating no source of information in (8b) illustrate the difference.

- (8) a. **Hiraacá gigéèc.**
 Hiraacá gigée-c
 Hidatsa OPIN-DECL
I guess he's Hidatsa.
- b. **Hiraacáhicgi.**
 Hiraacá-hi-**cgíí**
 Hidatsa-3SG.FT-PRES
He must be Hidatsa.

⁵³ I have been unable to confirm whether the speech-act marker *-cgíí* is compatible with plural future suffixes. The speakers I have worked with have not volunteered any plural forms and they have been reluctant to accept plural forms I have created.

⁵⁴ The verb *hîi* to drink sth has an irregular GI-form *gighîi*.

6.1.1.3 -he ‘emphatic’

Depending on the context, the emphatic speech-act marker **-he** makes a statement either (1) emphatically more forceful, or (2) more light-hearted. Examples (9)–(11) illustrate the first type of emphatic statements.

- (9) **Aruhe[?]séè raheehe.**
 aru-he[?]-séè rahee-**hee**
 IRR-this-do REP-EMPH
He said [emphasized] he was going to do it (I don’t know what is holding him up).
- (10) **Eewáhgeerug ooriwahgiwé[?]he.**
 ééhgee-wa-rúg aru-nii-ma-hgi.wé[?]-**he**
 know-1A-COND IRR-2B-1A-tell-EMPH
If I knew it I would tell you. / If I find out I will tell you.
- (11) **Giráàs dóòhгаа háhgurug ééhgeedhaac. -- Cagí wareehe.**
 giráàs-s dóò-hгаа háhgu-rúg ééhgee-dhaa-c -- cagí waree-**he**
 husband-DEF where-LOC be.at-COND know-NEG-DECL -- good EVID-EMPH
She doesn’t know where her husband is. -- Good for her!

The emphatic speech act is often used by the speaker to make lighthearted statements about themselves, as in (12)–(14).

- (12) **Maa[?]aru[?]íbcá aruwahéèhsa maradá xiibág maaragihe.**
 maa[?]aru[?]íbcá aru- ma-hirí-hsaa ma-naadá xiibí-g maa-naagí-**hee**
 beading IRR-1A-do-CONC 1POS-heart wrinkled-CRD 1A-be.seated-EMPH
I have some beading to do but here I sit being lazy.⁵⁵
- (13) **Díà arudabé eewáhgeedhaac. Híí gugháà eewáhgeehe.**
 díà aru-dabéè ééhgee-wa-dhaa-c híí gúá-gháà ééhgee-wa-**hee**
 long.time REL-who know-1A-NEG-DECL INTERJ that-ADV.TEMP know-1A-EMPH
I didn’t know who it was for a long time. Finally I do know.
- (14) **Niidóòsa[?] -- Gíí miixagáàraca maawahgúàcihe.**
 nii-dóòsa-[?] -- gíí mii-xagáà-raci-Ø maa-mahgú-aci-**hee**
 1B-how-INTER -- INTERJ 1B-move-COMPR-CONT 1A-dwell-APPROX-EMPH
How are you doing? -- Oh, I am still somehow moving around.

⁵⁵ The literal meaning of **naadá xiibí** is ‘to have a wrinkled heart’, but idiomatic meaning is ‘to be lazy’.

6.1.1.4 -wa ‘exclamative’

The exclamative marker **-wa** conveys a sense of strong emotional reaction to a situation, as in (15)–(18).

- (15) **Miigixawáàriarug** **arucagíwa!**
mii-hgi-xawáà-ria-rúg aru-cagí-**wa**
1B-GI-lose.weight-REFL-COND IRR-good-EXCL
It would be good if I lost weight.
- (16) **Maradá** **núxuhxic.** -- **Nírada** **madúwa!**
ma-naadá núxuhxi-c -- ní-naadá madú-**wa**
1POS-heart break-DECL -- 2POS-heart exist-EXCL
He broke my heart. -- As if you have a heart!
- (17) **Sé?** **dáàbeehgeewa!** **Móðhcaac.**
se? dáàba-ééhgee-**wa** móðhcaa-c
that what-know-EXCL coyote-DECL
What does he know! He’s an old coyote.
- (18) **Miicagíwa!**
mii-cagí-**wa**
1B-good-EXCL
Oh, the heck with me!

6.1.1.5 -íí ‘intensive’

The intensive suffix **-íí** indicates a high degree of a quality expressed by a stative verb, as in (19)–(22). It is unusual among speech-act markers as it triggers ablaut on the preceding vowel.

- (19) **Maa’araxibheecigua** **caga’íí.**
maa-araxibhee-cigúà cagí-Ø-**íí**
INDEF-bake-sweet good-CONT-INTENS
The sweetbread is really good.
- (20) **Niiraadá** **xiiba’íí!**
nii-naadá xiibí-Ø-**íí**
2B-heart wrinkled-CONT-INTENS
You are just lazy!

- (21) **Adiwahú** **buʔáàʔii.**
 adí-awahú buʔéè-Ø-íí
 house-inside smoky-CONT-INTENS
It is really steamy in the house.
- (22) **Oxdaaréè** **mirí** **aruʔaʔghúù** **cigúàʔii.**
 oxdaaree mirí aru-aʔg-húù cigúà-Ø-íí
 cedar(in.Mandan) water REL-PORT-come sweet-CONT-INTENS
*The water that Cedar brings to me is oh so sweet!*⁵⁶

The intensive suffix appears to be a recent addition to the inventory of speech-act markers. Most likely it is an apocopated form of the second element in intensifying serial verb construction *V* + **iihirí(c)** *very, extremely*, which is then blended with the preceding stem. The intensive suffix can always be substituted by its unapocopated form, as in (23) below. The stem ablaut before the intensive suffix arises diachronically from the continuative serial construction (see 17.5.1) of **iihirí** and the preceding verb.

- (23) **Mará** **birábuuraʔii** / **iihiríc.**
 m-ará birábuuri-Ø-íí / **ii-hirí-c**
 IPOS-hair fine- CONT-INTENS / INST-**make**-DECL
My hair is so thin!

The intensive suffix is one of the few speech-act markers that seems to be able to occur in non-matrix clauses, as in (24).

- (24) **Cawáàʔii** **aruwaríàhi** **isíàc.**
 cawéè-Ø-íí aru-m-iríàhi isíà-c
 hot-CONT-INTENS REL-IPOS-breathe bad-DECL
It's so hot it's hard to breathe.

⁵⁶ *Óxdaṅre* is a Mandan word for ‘cedar’ (*miraxubáà* in Hidatsa). In this example it is the name of a small Hidatsa girl who is being praised by her otherwise Hidatsa-speaking Mandan grandmother.

6.1.1.6 -s, -sd, -sdaa' 'definitive'

The three definitive speech-act markers *-s*, *-sd*, and *-sdaa'* are largely interchangeable. They typically refer to accomplished facts and are strongly associated with past events and states. Definitives are also used to make forceful (definitive) statements about the present and to make emphatic exclamations. In casual speech *-sd* is most frequently used. *-sdaa'* is more common in carefully enunciated speech style and in some speakers' idiolects. The suffix *-s*, which occurs less often than the other two, is homophonous with the definite determiner *-s* (see 9.2). There are some finer, yet to be identified, distinctions since the three are not always entirely interchangeable, as illustrated in (25).

(25) ^{ok}Cagís! = ?*Cagísd! = ^{ok}Cagísdaa'! *The heck with him!* < *cagí be good*

This suffix *-s* not only looks identical to the definite determiner, but it also seems to share the semantic features of definiteness. There are only a few examples of this suffix used as a speech-act marker in my database, two of which are given in (26) and (27).

(26) He'sa'îis.
he'sá-îi-s
be.thus-HAB.SG-DEF
It used to be like this.

(27) Madaruxbáàga wareec. Míhgi eewáhgeedhaas.
mada-nuxbáàga waree-c m-íhgi ma-ééhgee-dhaa-s
1POS-people EVID-DECL 1-PRO 1A-know-NEG-DEF
It turns out he's my relative. I didn't know myself.

Definitive speech acts are most often used for making strong statements about past events, as illustrated in (28)–(30).

(28) **Mirí Ooráàwu'aasis se'hgua áhgu'iiru'sdaa'.**
 mirí aru-náàwu-áàsi-s se'hgua áhgu-iiru'-**sd**aa'
 water REL-deep-creek-DEF that-LOC dwell.PL-HAB.PL-DEF
They used to live in Lucky Mound.

(29) **Hiirahbídhaa agáwaasd.**
 hiirahbí-dhaa agá-waa-**sd**
 difficult-NEG suppose-1CAUS.DIR-DEF
I didn't think it would be hard.

(30) **Guasáà aruséh he'sá agáwaasd.**
 guaséè-Ø aru-séé he'sá agá-waa-**sd**
 that.manner-CONT REL-say thus suppose-1CAUS.DIR-DEF
I thought that's how you say it.

The definitive is also used in forceful statements about the present. (31a) is a forceful definitive present statement compared to a neutral declarative statement in (31b). Two more definitive statements about the present are given in (32) and (33).

(31) a. **He'séè'iisdaa'.** *He always does this, doesn't he / huh!?*
 b. **He'séè'iic.** *He always does it. [neutral statement]*

(32) **Hirí'ihgi maarúcosaaci'iisdaa'!**
 hirí'ihgi maa-núcisi-aci-ii-**sd**aa'
 this.PRO INDEF-toss-COMPR-HAB.SG-DEF
[You] this one, you always throw things around, don't you! (i.e., Don't slam things around, put them away nicely.)

(33) **Aruwááhua's eeráhgeesdaa'. Se'hguhaahcághaa iiráà!**
 aru-mááhu-'a-s ná-ééhgee-**sd**aa' se'hgua-haa-hcági-haa ii-néè-Ø
 REL-1come.PL-PL-DEF 2A-know-DEF that-LOC-PATH-LIM-ADV INST-go-IMP.SG
You know the way we came here. Go only that way!

Semantic differences between the declarative **-c** and the definitive **-sd/-sd**aa' are contrasted in (34)–(37). Whereas declarative speech acts with **-c** can have both present and past readings, definitive speech acts with **-sd/-sd**aa' are mostly interpreted as referring to something that occurred in the past.

- (34) a. **Maahiigsa'ífc.**
 maa-híi-gsá-íi-**c**
 INDEF-drink-USI-HAB.SG-DECL
He drinks all the time.
- b. **Maahiigsa'ífsd.**
 maa-híi-gsá-íi-**sd**
 INDEF-drink-USI-HAB.SG-DEF
He used to drink all the time.
- (35) a. **Mii'agháàghaa'ac.**
 mii-agháàga-hee-^{?a}-**c**
 1B-late-3CAUS.DIR-PL-**DECL**
They made me late.
- b. **Mii'agháàghaa'asdaa'.**
 mii-agháàga-hee-^{?a}-**sdaa'**
 1B-late-3CAUS.DIR-PL-**DEF**
They were the reason I was late.
- (36) a. **Mahúùs** **maabháàhge** **cagíheec.**
 ma-ihúù-s maa-bháàhgee cagí-hee-**c**
 1POS-mother-DEF INDEF-signal good-CAUS-**DECL**
My mother is good at sign language.
- b. **Mahúùs** **maabháàhge** **cagíheesd.**
 ma-ihúù-s maa-bháàhgee cagí-hee-**sd**
 1POS-mother-DEF INDEF-signal good-**DEF**
My mother used to be good at sign language.
- (37) a. **Adáàsigua** **miráxadihga** **háhguc.**
 adáàsi-hgua miráxadihgee-Ø háhgu-**c**
 outside-LOC play-CONT be.around-**DECL**
He is playing outside.
- b. **Adáàsigua** **miráxadihga** **háhgusd** **húùrisiru.**
 adáàsi-hgua miráxadihgee-Ø háhgu-**sd** húùri-si-rú
 outside-LOC play-CONT be.around-**DEF** yesterday-PAST-TEMP
He was playing outside yesterday.

The definitive speech-act marker is also used for expletive interjections. Compare the emphatic usage of **-s** and **-sdaa'** in (38a) with a neutral statement ending with **-c** in (38b).

- (38) a. **Niicagís! = Niicagísdaa'!** *The heck with you!* < **nii** 1B, **cagí** good, **-s/-sdaa'** **DEF**⁵⁷
- b. **Niicagíc.** *You are good.* < **nii** 1B, **cagí** good, **-c** **DECL**

⁵⁷ The second person prefix **nii-** makes this expression unambiguously derogatory. However, a similar expression **cagísdaa'** without an overt person marker could be interpreted, according to the context, either as literally *it was good*, or as an expletive *the heck with him*.

6.1.1.7 -sgíí ‘mitigative’

The mitigative suffix **-sgíí** is a grammaticalized combination of the interjection **gíí** and the definite speech act marker **-s/-sd/-sdaa’**. The mitigative suffix softens a statement or adds a sense of hesitation to it. A neutral declarative statement, a definite statement, and a mitigative statement are compared in (39) and (40).

- (39) a. **Maaréèhdic.** *I was eager to go.* (neutral)
 b. **Maaréèhdisd.** *I was eager to go .* (definitive)
 c. **Maaréèhdisgi.** *Well, I wanted to go, but...* (hesitant).
- (40) a. **Gú wahéèc.** *I did that.* (neutral)
 b. **Gú wahéèsd.** *I did that (already).* (definitive)
 c. **Gú wahéèsgi.** *Oh, I (already) did that.* (lighthearted)

Events described with mitigative illocutionary force are often interpreted as having happened in the past. Mitigative speech acts with **-sgíí** are somewhat similar to emphatic speech acts marked with **-he** (see 6.1.1.3), the main differences lying in temporal scaffolding. The present reading with the emphatic suffix and past reading with the mitigative is contrasted in (41).

- (41) a. **Gíí cagíhe!** *Oh, it is good / was good!* (present or past)
 b. **Cagisgíí!** *Oh, it *is good / was good!* (only past)

More examples of **-sgíí** are given in (42) to (44).

- (42) **Mabahcága marígusgii.**
 ma-báhcagi-Ø ma-ní-gú²-sgíí
 1A-cut-CONT 1A-2B-give-MIT
I sliced it for you (early on, i.e., it’s been taken care of).
- (43) **Madawaa’iháà’îru’sgii.**
 mada-maa-iháà-îru²-sgíí
 1POS-INDEF-different-HAB.PL-MIT
They used to be our enemies.

- (44) **Miiwaaxadagídhaa’iisgii.**
 mii-maaxadagídhaa-íi-**sgíí**
 1B-energetic-HAB.SG-MIT
I used to be energetic / fast.

6.1.1.8 -dóòre, -dóòres, -dóòreewa ‘assertion’

The three assertive speech-act markers **-dóòre**, **-dóòres**, and **-dóòreewa** are used for asserting a fact rather than making a simple declarative statement. The basic form is **-dóòre**, and the other two are synchronically analyzable as combinations of the assertive **-dóòre** plus the exclamative **-wa** and possibly the definite **-s**. The short **e** in **-dóòres** may indicate that what is synchronically perceived as the definite suffix **-s** may have its origin in a diachronic cluster that has caused the final vowel before it to shorten.

6.1.1.8.1 -dóòre ‘assertive’

The assertive suffix **-dóòre** is used when the speaker wants to assert a fact instead of simply stating it, as illustrated in (45)–(50).

- (45) **Niidóòre.**
 níi-**dóòre**
 2PRO-ASSERT
It’s up to you.
- (46) **Cagidóòre.**
 cagí-**dóòre**
 good-ASSERT
It is good enough.
- (47) **Miréeè súhgadoore.**
 miréeè súhga-**dóòre**
 door wide-ASSERT
The door is wide (so don’t contradict me).

- (48) **Aruwaaghuuwidóòre!**
 aru-maa-naghuuwi-**dóòre**
 IRR-1A-attempt.at-ASSERT
I'll give it a try (e.g., to see if I can win).
- (49) **Oorii?awáàguxda maawagidóòre.**
 aru-nii-maa-àguxdi-Ø maa-maagi-**dóòre**
 IRR-2B-1A-wait-CONT 1A-lie-ASSERT
I'll be lying here waiting for you (as in a hospital).
- (50) **Maa?ààchihgeegsahisadoore!**
 maa-ààci-hii-hgee-gsá-hisa-**dóòre**
 INDEF-breast-drink-3CAUS.INDIR-USI-SIM-ASSERT
You look as if you breastfeed all the time (e.g., your shirt is soiled or sloppy).

This suffix is often used to make observation-based statements and judgments about appearances. In such statements the assertive speech-act marker is often preceded by the compromisive **-aci/-raci** (see 6.6.5) to soften the tone of the statement, as in (51)–(54).

- (51) **Xáhaacidoore.**
 xáxi-aci-**doore**
 high-COMPR-ASSERT
She is rather gangly.
- (52) **Gú dasgáàcidoore.**
 gúá dasgí-aci-**doore**
 that flabby-COMPR-ASSERT
He is flabby.
- (53) **Ará birábuuraacidoore.**
 ará birábuuri-aci-**doore**
 hair fine-COMPR-ASSERT
She has fine fly-away hair.
- (54) **lidáhge gháwuucaacidoore.**
 iidá-hgee gháwuuci-aci-**doore**
 face-DIM shrivel-COMPR-ASSERT
She has a rather pitiful dried face.

The assertive **-dóòre** is also used in a non-speech-act marking role (often derogatorily) in reference to someone's characteristic features, as in (55).

- (55) Néèc Ibîidi Súhgadoore.
 Néè-c ibîidi súhga-**doore**
 go-DECL rump wide-ASSERT
There he goes that Big Wide Butt!

6.1.1.8.2 -dòòres ‘definitive assertive’

The definitive assertive suffix **-dòòres** is synchronically analyzable as a combination of the simple assertive **-dòòre** and the definite marker **-s**. Statements with **-dòòres** are sometimes uttered in a slightly annoyed tone of voice, as when one’s interlocutor against all expectation has forgotten something and needs to be reminded about it, or when one needs to assert a claim against opposition.⁵⁸ Such assertions are often made in reference to something that has already happened or is an established fact. The definitive assertive **-dòòres** is often freely interchangeable with the regular assertive **-dòòre** without a change in meaning. Examples (56)–(62) illustrate the use of the definite assertive in context.

- (56) Maríhgigudoores.
 ma-ní-hgi-gú?-**dòòres**
 1A-2B-GI-give-ASSERT
I gave it back to you!
- (57) Madhéé mii’arówiadoores.
 madhahéé mii-ná-óòwia-**dòòres**
 already 1B-2A-show-ASSERT
You already did show me.
- (58) Nábahcagi wareedoores.
 ná-báhçagi waréè-**dòòres**
 2A-cut EVID-ASSERT
Apparently you already did cut it.
- (59) Maaréèruhsaa mahgúdhaa’iidoores.
 maa-néè-rúhsaa mahgú-dhaa-îi-**dòòres**
 1A-go-CONC.COND dwell-NEG-HAB.SG-ASSERT
Even if I go he’s never home.

⁵⁸ Similar statements are made in German with the help of assertive *doch*.

- (60) **Ahú madúdóòres.**
 ahú madú-**dóòres**
 many exist-ASSERT
There was a lot!
- (61) **limiigáàxugag seewáàdoores.**
 ii-mii-gáàxuga-g séé-wáà-**dóòres**
 INST-1B-joke-CRD say-1CAUS.DIR-ASSERT
I just said it as a joke (i.e., I was teasing).
- (62) **Nii?aguwaaguxdidóòres. Húág miiguxdá!**
 nii-agu-maa-guxdí-**dóòres** húù-g mii-guxdí-Ø
 2B-REL-INDEF-help-ASSERT come-CRD 1B-help-IMP.SG
*You're supposed to be a helper, come and help me!*⁵⁹

6.1.1.8.3 -*dóòreewa* 'exclamative assertive'

The assertive exclamative *-dóòreewa* may be a combination of the assertive *-dóòre* and the exclamative *-wa*. My database contains very few usages with assertive exclamatives. The most frequent one is a common exclamation in (63), used to express delight.

- (63) **Cagidóòreewa!**
 cagí-**dóòreewa**
 good-ASSERT
Pretty good! Very good!

6.1.2 Questions

Questions are utterances that are used to request information. However, some utterance types that belong morphologically to the category of interrogative speech-acts in Hidatsa are used as cohortatives.

⁵⁹ This was jokingly said by a parent or a grandparent in the 1940s to a child who was a member of the Helpers Committee.

6.1.2.1 -ʔ ‘interrogative’

Both content and polar questions are formed with the matrix-verb final glottal stop -ʔ: The interrogative speech-act suffix in content questions is illustrated in (64)–(67).

- (64) **Madawaaʔaráxibhe dabéèri / agudóòri bhéèʔʔ**
 mada-maaʔaráxibhee dabéè-rí / agudóò-rí bhéè-ʔ
 1POS- bread who-ERG / which.on-ERG eat.up-INTER
Who / which one ate up my bread?
- (65) **Dáàbawa nábhag náwahguʔʔ**
 dáàba-wa ná-bhí-g ná-mahgú-ʔ
 what-FOC 2A-dig-CRD 2A-stay-INTER
What are you digging?
- (66) **Maciʔáàgadeʔhaaʔas dóòru gááʔʔ**
 ma-icí-ààga-adéʔ-hee-ʔa-s dóò-rú gáá-ʔ
 1POS-foot-top-appear-3CAUS.DIR-PL-DEF where-LOC lie.PL-INTER
Where are my low-top moccasins?
- (67) **Dabíàʔwa maarígubaabag áàrahguoʔʔ**
 dabéè-ʔa-wa maa-nʔ-ígúba-aba-g ná-áhgu-o-ʔ
 who-PL-FOC 3OBJ.PL- 2POS-together-COL-CRD 2A-be.at.PL-PL-INTER
Who all are yʔall staying with?

Examples (68) and (69) illustrate the interrogative speech-act in polar, or yes/no-questions.

- (68) **Niiʔaragaráhuʔʔ**
 nii-aragaráhu-ʔ
 2B-Arikara-INTER
Are you Arikara?
- (69) **Mirí náàwuʔʔ**
 mirí náàwu-ʔ
 water deep-INTER
Is the water deep?

Example (70) demonstrates that the interrogative suffix is not always necessarily in the utterance-final position.

- (70) **Dabéèwa maagí[?] hiró?**
 dabéè-wa maagí-[?] hiróó
 who-FOC lie-INTER here
Who's buried here? (lit. Who lies here?)

The interrogative suffix is also used to make cohortative suggestions, as in (71).

Cohortative expressions can only be used in first person plural utterances. They are translated into English as 'let's V'. With some verbs, such as **née** *to go* in (72), cohortative expressions can also be interpreted as questions. The exact interpretation depends on the context, intonation, and other similar factors. Some verbs and situations allow only the cohortative reading of such constructions.

- (71) **Aru[?]òògciaru awawáàgo[?]!**
 aru-òògciaru ma-awáàgi-o-[?]
 REL-shade-LOC 1A sit.down-PL-INTER
Let's sit in the shade!

- (72) **Awáguhaa mááho^{??}?**
 awá-hgua-haa mááhi-o-[?]
 land-LOC-PATH 1go.PL-PL-INTER
Shall we walk? or Let's go on foot!

Negative cohortative constructions, as in (73), are formed according to the same pattern.

- (73) **Mááhidhoo[?]!**
 m-nááhi-dhaa-[?]o-[?]
 1go.PL-NEG-PL-INTER
Let's not go!

6.1.2.2 -[?]gíí 'interrogative presumptive'

The interrogative presumptive suffix -[?]gíí is a grammaticalized combination of the interrogative suffix -[?] and the interjection gíí. This speech-act marker is always preceded by one of the future suffixes. Questions with -[?]gíí are addressed to oneself and indicate that the speaker is uncertain about the possible outcome of a situation.

- (74) **Cagíhi?gii?**
 cagí-hi-?gíí
 good-3FT.SG-INTER.PRES
Will it be alright, I wonder?

6.1.2.3 -dóòg ‘speculative’

Sentences ending with the speculative suffix **-dóòg** can be translated into English as “I wonder” or “could it be that”. The speculative is used for introspective questions addressed to oneself and it indicates that the speaker is uncertain about his judgment.

In (75), a speculative speech-act with **-dóòg** is contrasted with an interrogative speech-act marked with **-?**.

- (75) a. **Dáàbadoog.** *I wonder what it could be.* < **-dóòg** SPEC
 b. **Dáàba??** *What is it?* < **-?** INTER

Speculative speech-acts are considered statements in some languages; however, morphological restrictions indicate that on structural grounds they have to be considered questions in Hidatsa. One of the indicators is that the speculative enclitic **-dóòg** must follow the interrogative form of the future suffix (see 6.5.2). In example (76) the speculative enclitic is preceded by the second person future suffix **-rihi** that is used only in questions. The same sentence would be ungrammatical if the speculative enclitic were preceded by the second person future tense suffix **-ri**, which is reserved for statements. Example (77) is a sentence from a traditional text where the first person interrogative future tense suffix **-wihi** is used instead of the more common first person future suffix **-wi** that is used only in statements.

- (76) **Mago?xbáà** **nágiraas** **mii?ihgaawahiridhaarus** **hiríc.**
 ma-igó?xba-[^] ná-giráà-s mii-ihгаа.wa.hirí-dhaa-rús hirí-c
 1POS-female.friend-VOC 2A-husband-DEF 1B-stare.at-NEG-CONC do-DECL

Násirihidoog. / ***Násiridoog.**
 ná-íisi-rihi-dóòg / ná-íisi-ri-dóòg
 2A-throw.away-2FT.INTER-SPEC / 2A-throw.away-2FT.SG-SPEC

*Friend, your husband can't take his eyes off me. Will you discard him, I wonder.*⁶⁰

- (77) **Dóòshewarug** **nuuwuudíwihidoog** **iríàci wareec.**
 dóòhsee-waa-rúg nuwa-m-nuudí-wihi-dóòg iríàci waree-c
 do.what-1CAUS.DIR-COND some-1A-eat-1FT.INTER-SPEC think EVID-DECL
I wonder which will be the best way for me to eat some. (Harris and Voegelin 1939: 212)

More examples of speculative speech-acts are given in (78)–(83).

- (78) **Aruhe'sáwaadoog?**
 aru-he'séè-waa-dóòg
 IRR-do.this-1CAUS.DIR-SPEC
I wonder if I'm supposed to do it.

- (79) **Dóòhseehisa hiridóòg?**
 dóòhsee.hisa hirí-dóòg
 how do-SPEC
I wonder how he did it.

- (80) **Híí he'sadóòg.**
 híí he'sá-dóòg
 INTERJ like.this-SPEC
Maybe it happened that way.

- (81) **Maabéhe Hiraacá iidáàwa'doog.** -- **Dabéèri ééhgees.**
 maabéhee Hiraacá ii-dáàwi-a'-dóòg -- dabéè-rí ééhgee-s
 today Hidatsa INST-how.many-PL-SPEC -- who-ERG know-DEF
I wonder how many Hidatsas there are now. -- Who knows.

- (82) **Maaruwá guucíhidoog.** **Úùhsi guucíhidoog.**
 maa-nuwá hguucí-hi-dóòg úùhsi hguucí-hi-dóòg
 INDEF-some retrieve-3FT.INTER-SPEC his.butt retrieve-3FT.INTER-SPEC
*I wonder if he is going to get something. Could it be that he is going to get his own butt.*⁶¹

⁶⁰ These are lyrics from a popular Enemy-Woman Society song.

⁶¹ This is a humorous play on words from a well-known hand-game song. The original lyrics are **Dáàba guucíhidoog?**
What is he going to get?

- (83) **Idáá hiró? magigaríxaba?doog.**
 idáá hiri-²ó magi-garíxabi-²a-**dóòg**
 hey this-PL RECIP-adhere-PL-SPEC
Hey (female speaking), are those two just stuck to each other?! (i.e., they are talking just with each other)

The speculative enclitic can also be used instead of **-hahgá** and **-hagháá** (see 6.6.1) to give estimates, as in (84).

- (84) **doobadóòg** *about four* < **doobá** *four*
biragihdíà nuubadoog *about two hundred* < **biragihdíà** *hundred*, **núùba** *two*
maabixubá núùbadoog *about two weeks* < **maabixubáà** *week*, **núùba** *two*

The speculative **-dóòg**, along with the assertive **-dóòre** and mitigative **-sgíí**, is one of the few speech act markers that apparently can be used with non-matrix clauses, as in (85).

- (85) **Ígaahidoog** **eewáhgeedhaac.**
 íгаа-hi-**dóòg** ééhgee-wa-dhaa-c
 see-3FT.INTER-SPEC know-1A-NEG-DECL
I don't know if he saw it.

6.1.3 Commands

Commands are used to elicit action from one or more addressees either by directing them or suggesting that they engage in an activity. Prohibitive, or negative, commands direct the addressee to refrain from an activity. In Hidatsa, there are two types of commands. The more common one is a prototypical imperative that has no other attitudinal connotations. The other one, the precative, softens the tone of the command and makes it appear more like a polite request or an entreaty rather than an order. Imperative and precative forms of active stems are inflected for number but not for person. Commands formed from middle and reflexive verbs are inflected for second person and number.

Whereas declarative and interrogative markers combine freely with most word classes, illocutionary suffixes marking commands occur only with verbs since they prototypically request or demand action.

6.1.3.1 *-∅ and -ara* ‘imperative’

The imperative speech-act is used to form categorical commands. It is unusual among speech-acts in that it has distinct forms for singular and plural addressees: *∅* in the singular and *-ara* in the plural. The plural suffix triggers ablaut on the word it attaches to. The singular imperative suffix triggers ablaut on most stems, except with a subset of *e*-final verbs or when the final vowel is deleted.

Imperative forms of irregular motion verbs are treated separately in TABLE 3.9 in Chapter 3, and imperative forms of irregular posture verbs in TABLE 6.13 in this chapter.

Singular imperative commands follow four distinct patterns (or more, if ablauting *ee*-final stems are considered separately), as described below.

In the first pattern in TABLE 6.3 the final short vowel is deleted after single consonants other than *h* in the singular and the contrast is neutralized word finally so that *r* → *d* and *w* → *b* (see 2.4.4). All examples of active verbs in my database ending with a short vowel that are preceded by a single consonant end with an *i*. Future research will, perhaps, uncover active stems that end with other short vowels.

TABLE 6.3. IMPERATIVE INFLECTION OF VERBS WITH STEM-FINAL (V)VCV

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
náhdabi	attack sb (as a dog)	náhdab!	náhdabaara!
nagagíbi	shave or scrape sth	nagagíb!	nagagíbaara!
maaruudí	eat	maaruúd!	maaruudáàra!
araxaadí	claw one's way up	araxáád!	araxaadáàra!
náhcagi	bite off sth as a string	náhcag!	náhcagaara!
girusúùgi	wash sth	girusúùg!	girusúùgaara!
hagáci	butcher sth	hagác!	hagácaara!
báxeesi	pierce sth	báxees!	báxeesaara!
báhgixi	go around sth	báhgix!	báhgixaara!
cixí	jump	cix!	cixáàra!
nagahuurí	fan sth	nagahúúd!	nagahuuráàra!
miréèri	enter	miréèd!	miréèraara!
gaarí	ask for sth	gáád!	gaaráàra!
gîiri	look for sth	gîid!	gîiraara!
naghuuwí	attempt at sth	naghúúb!	naghuuwáàra!
náàwi	come in a direction	náàb!	náàwaara!

Example (86) illustrates the first pattern of imperative inflection in a sentence.

- (86) Marúù, maarúúd!
 ma-írúù-` maa-nuudí-Ø
 IPOS-older.sister-VOC INDEF-eat-IMP.SG
Older sister, eat! (woman speaking)

The final short vowel is preserved and undergoes ablaut in the singular if the single consonant preceding it is **h**. Currently documented examples are only **i**-final. The pattern is illustrated in TABLE 6.4.

TABLE 6.4. IMPERATIVE INFLECTION OF VERBS WITH STEM-FINAL (V)VHV

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
báàhí	sing sth	báàḥa!	báàhaara!
núùhí	lift sth	núùḥa!	núùhaara!
nagaahí	pull sth	nagaaḥá!	nagaahààra!

Example (87) illustrates the second pattern of imperative inflection in a sentence.

- (87) *Níruuhag nagcíhgae nahá!*
 ní-núùhi-g nagcíhgee-Ø nahí-Ø
 2C-lift-CRD line.up-CONT stand-IMP.SG
Stand up and get in a row!

Final short vowels that are preceded by a consonant cluster are not deleted in the singular.

The final short *i* undergoes ablaut. The pattern is illustrated in TABLE 6.5.

TABLE 6.5. IMPERATIVE INFLECTION OF VERBS WITH STEM-FINAL (V)VCCV

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
<i>náhbi</i>	<i>bite sth</i>	<i>nahba!</i>	<i>nahbaara!</i>
<i>giragabhí</i>	<i>pick sth up</i>	<i>giragabhá!</i>	<i>giragabháàra!</i>
<i>nadhí</i>	<i>beat sth</i>	<i>nadhá!</i>	<i>nadháàra!</i>
<i>núdhi</i>	<i>tie sth</i>	<i>núdha!</i>	<i>núdhaara!</i>
<i>aradohdí</i>	<i>shake sth with foot</i>	<i>aradohdá!</i>	<i>aradohdáàra!</i>
<i>núsgi</i>	<i>open sth</i>	<i>núsga!</i>	<i>núsgaara!</i>
<i>núhci</i>	<i>take sth, buy sth</i>	<i>núhca!</i>	<i>núhcaara!</i>
<i>hasíhsi</i>	<i>cut sth by incising</i>	<i>hasíhsa!</i>	<i>hasíhsaara!</i>
<i>núsahsi</i>	<i>put hands into sth</i>	<i>núsahsa!</i>	<i>núsahsaara!</i>
<i>giradahxí</i>	<i>gnaw on sth</i>	<i>giradahxá!</i>	<i>giradahxáàra!</i>
<i>mahgú / áhgu</i>	<i>be at some place</i>	<i>mahgú!</i>	<i>áhguara!</i>

The second mora of stem-final long vowels and diphthongs is deleted, as in TABLE 6.6.

TABLE 6.6. IMPERATIVE INFLECTION OF VERBS WITH STEM-FINAL VV

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
<i>bácaa</i>	<i>string sth, lace sth</i>	<i>báca!</i>	<i>bácaara!</i>
<i>bádaa</i>	<i>bust sth</i>	<i>báda!</i>	<i>bádaara!</i>
<i>báxaa</i>	<i>smooth sth by pressing</i>	<i>báxa!</i>	<i>báxaara!</i>
<i>báhdaa</i>	<i>tip sth over</i>	<i>báhda!</i>	<i>báhdaara!</i>
<i>báhxaa</i>	<i>stab sb</i>	<i>báhxa!</i>	<i>báhxaara!</i>
<i>hacáà</i>	<i>cut narrow strips of sth</i>	<i>hacá!</i>	<i>hacáàra!</i>
<i>núùbaa</i>	<i>spread sth out</i>	<i>núùba!</i>	<i>núùbaara!</i>
<i>núùsaa</i>	<i>leave sth behind</i>	<i>núùsa!</i>	<i>núùsaara!</i>
<i>núùxaa</i>	<i>spread sth flat out</i>	<i>núùxa!</i>	<i>núùxaara!</i>
<i>núgaraa</i>	<i>tear sth up</i>	<i>núgara!</i>	<i>núgaraara!</i>
<i>núhxaraa</i>	<i>shell sth</i>	<i>núhxara!</i>	<i>núhxaraara!</i>
<i>nágaraa</i>	<i>tear sth up with teeth</i>	<i>nágara!</i>	<i>nágaraara!</i>

nagadáà	<i>break sth, crack sth</i>	nagadá!	nagadáàra!
naghíà	<i>drive sth</i>	naghí!	naghíàra!
báگیرia	<i>push sth</i>	báگیری!	báگیریارا!
diríá	<i>run</i>	dirí!	diríára!
núcarua	<i>drag sth</i>	núcaru!	núcaruara!
súá	<i>spit</i>	súh!	súára!

Words ending with **ee** follow a pattern whereby the final long vowel is shortened. In the imperative, **i**-ablaut is realized only in the plural, whereas **a**-ablaut is realized both in the singular and plural, as in TABLE 6.7. There are no active or middle verbs that end with a long **uu** which would otherwise be expected to take the shape **-uara** in the plural imperative.⁶²

TABLE 6.7. IMPERATIVE INFLECTION OF VERBS WITH STEM-FINAL LONG *ee*

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
i-ABLAUT			
habéè	<i>hack sth up</i>	habé!	habíàra!
bádaree	<i>stick sth sharp into sth</i>	bádare!	bádariara!
núdaree	<i>grab sth soft (as mud)</i>	núdare!	núdariara!
séé	<i>say sth</i>	séh!	síára!
a-ABLAUT			
géèsee	<i>watch sth</i>	géèsa!	géèsaara!

Both the ablauting and non-ablauting monosyllabic imperative forms that are formed by shortening the final vowel are pronounced with a final phonetic [h] in the singular, as in (88).

- (88) **húù** *come* → **Húh!** *Come here!*
séé *say sth* → **Séh!** *Say it!*

Command forms of middle and reflexive verbs are inflected for second person (**n'-**) in the imperative. The pattern is presented in TABLE 6.8.

⁶² Motion verbs **húù** *to come* and **gúú** *to come back* have suppletive plural forms that end with a short **u**; for details see Table 3.9.

TABLE 6.8. IMPERATIVE INFLECTION OF MIDDLE, REFLEXIVE, AND INSTRUMENTAL VERBS

STEM	GLOSS	SINGULAR IMPERATIVE	PLURAL IMPERATIVE
ichéè	wake up	nícha!	níchaara!
iháàri	finish, get done	níhaad!	níhaaraara!
ihgirusià	get undressed	níhgirusi!	níhgirusiara!
ihgiruwîri	turn around	níhgiruwîid!	níhgiruwîiraara!
ihgigèèseeria	watch out for oneself	níhgigeeseeri!	níhgigeeseeriara!
ihgigirásiria	humble oneself	níhgigirásiri!	níhgigirásiriara!
iigigúà	hear sth	nîgigu!	nîgiguara!

The imperative speech-act modality is also used for prohibitive commands by adding the imperative suffix to the negative *-dhaa*, as in (89)–(92).

- (89) **Gîxídhá!** **líghéèrac!**
 gîxí-**dhaa-Ø** ii-guhgá-*hee-raci-Ø*
 whine-NEG-IMP.SG INST-stop-3CAUS.DIR-COMPR-IMP.SG
Don't whine! Stop it right now!
- (90) **límiigáàxugag** **seewáàc.** **Aré'heedhá!**
 ii-mii-gáàxuga-g séé-wáà-c aré'*hee-dhaa-Ø*
 INST-1B-joke-CRD say-1CAUS.DIR-DECL get.angry-NEG-IMP.SG
I was only joking. Don't get mad!
- (91) **Mirí aru'awáxaadigua** **awáàgidháara!** **Aru'òògciáhguá** **awáàgaara!**
 mirí aru-awáxaadi-hgua awáàgi-**dhaa-ara** aru-òògciá-hgua awáàgi-ara
 sun REL-shine-LOC sit.down-NEG-IMP.PL REL-shade-LOC sit.down-IMP.PL
Don't sit in the sun! Sit in the shade!
- (92) **Xaréé'abhúhga óòwiadháara!** **Xaréé arudíàc.** / **Díà** **aruxarééc.**
 xaréé-abhúhga óòwia-**dhaa-ara** xaréé aru-díà-c / díà aru-xaréé-c
 rain-hat point-NEG-IMP.PL rain IRR-long.time-DECL / long.time IRR-rain-DECL
Don't point at the rainbow! Or else it will rain for a long time.

Prohibitive commands with middle, reflexive, and instrumental verbs are also formed by adding the imperative suffix to the negative suffix *-dhaa*, and the verb is inflected for second person, as in (93)–(95).

- (93) **Nîhxaahcagiriadha!**
 n´-îhxaa-hcági-ria-dhaa-Ø
 2C-dirt-LIM-REFL-NEG-IMP.SG
Don't get dirty!
- (94) **Níhgcagiriadhaara!**
 n´-ihgi-cági-ria-dhaa-ara
 2C-REFL-good-REFL-NEG-IMP.PL
Don't brag about yourselves!
- (95) **Nîchaadha!**
 n´-iicháà-dhaa-Ø
 2C-pout-NEG-IMP.SG
Don't pout!

6.1.3.2 -ga 'precative'

The precative suffix **-ga** forms a command that is more like a polite request. It cannot be used for prohibitive commands. Precative forms are often translated into English with modifying adverbs 'once' or 'just'. Examples are (96) and (97).

- (96) **Maacagíraarug** **isá** **sééga!**
 maa-cági-raa-rúg isá séé-ga
 INDEF-good-2CAUS.DIR-COND again say-PREC
Please say it again!
- (97) **Madawáàhdi bágiria'ga** **maacagíraa'rug!**
 mada-máàhdii bágiria-[?]a-ga maa-cági-raa-[?]a-rúg
 1POS-vehicle push-PL-PREC INDEF-good-2CAUS.DIR-PL-COND
Could you guys please push my car a little!

Singular and plural imperatives forms are contrasted with precative forms in (98).

- | | | | | |
|------|-------------------------------|-------------------|--------------------------------|------------------------|
| (98) | IMP.SG / IMP.PL | | PREC.SG / PREC.PL | |
| | náà! nááhaara! | <i>go!</i> | néèga! nááha'ga! | <i>go once!</i> |
| | húh! nááhuara! | <i>come here!</i> | húùga! nááhua'ga! | <i>come here once!</i> |
| | séh! síára! | <i>say it!</i> | sééga! síá'ga! | <i>say it once!</i> |
| | násaad! násaadaara! | <i>name it!</i> | násaadiga! násaada'ga! | <i>just name it!</i> |
| | náhdishi! náhdishaara! | <i>taste it!</i> | náhdihsga! náhdihsa'ga! | <i>taste it once!</i> |

6.2 Evidentiality

Hidatsa uses evidential enclitics to indicate the source of indirect information. There are four of them, one of which has only recently been grammaticalized and is not fully productive.

The evidential enclitics have many verb-like properties. They always follow the matrix verb in a manner reminiscent of serial verb constructions and illocutionary suffixes marking speech-act modality are attached to them. However, none of the evidential enclitics are inflected for person, but one of them, *rahée* *reportative*, is inflected for number to indicate the number of the source of information. The plural suffix marking the number of the grammatical subject follows the matrix verb and precedes the enclitic. Evidentials here are written separately from the word they follow to indicate their higher degree of wordhood in comparison to suffixes. The evidential enclitics are listed in TABLE 6.9.

TABLE 6.9. EVIDENTIAL ENCLITICS

EVIDENTIAL ENCLITIC	GLOSS
<i>gigée</i>	<i>OPINIONATIVE</i>
<i>rahee</i>	<i>REPORTATIVE</i>
<i>waree</i>	<i>EVIDENTIAL</i>
<i>wihée</i>	<i>OBSERVATIVE</i>

In addition to evidential enclitics that are independent of speech-act modality, tense, and aspect, evidence of information is also indicated by evidential positional verbs in periphrastic aspectual constructions. The cumulative exponence of aspect and auditory evidence in such auxiliary constructions is described in section 6.4.2.

6.2.1 *gigée* ‘opinionative’

The opinionative enclitic *gigée* indicates that there is no evidence for the information other than the speaker’s opinion or guess. Opinionative statements are usually translated into English with expressions “I think” or “I guess”. Examples are (99)–(103).

- (99) **Guhgá réè gigeec.**
 guhgá réè **gigéè-c**
 ready PROG OPIN-DECL
I guess it's almost ready (the food).
- (100) **Garumîraci gigeeh.**
 garú-m-îi-raci **gigéè-he**
 LIM-1-PRO-COMPR OPIN-EMPH
I guess I'm about the only one.
- (101) **Hirí maagarísdadis se'hguhaag húú gígèc.**
 hiri maagarísda-adí-s se'-hgua-haag húù **gígèè-c**
 this child-lodge-DEF there-LOC-SOURCE come OPIN-DECL
This child must have come from the House of Infants.⁶³
- (102) **Miiháchageegic. Irúgsidi aruwuudí gígèc.**
 mii-háchageegi-c irúgsidi aru-m-nuudí **gígèè-c**
 1B-hiccup-DECL meat IRR-1A-eat OPIN-DECL
I'm hiccupping. I'm going to eat meat. (common superstition)
- (103) **Maaruwá dáàba ma'îihee gigeec.**
 maa-nuwá dáàba ma'îihee **gigéè-c**
 INDEF-some what want OPIN-DECL
I think something is going to happen.

The opinionative evidentiality can only reflect the first person perspective. For second and third person, only lexical verbs, such as **agáhee** *to presume something*, are used instead of the evidential enclitic, as demonstrated in (104).

- (104) **He'sá agáwaac. / He'sá gígèc.** *I suppose so.*
He'sá agáheec. / *He'sá gígèc. *He thinks so.*

Like other evidential enclitics, **gigéè** is most likely a grammaticalized lexical verb. In fact, the verb **gigéè** *to resemble somebody*, may very well be that verb. The verb, unlike the evidential enclitic, is inflected for person and number, as in (105)–(107).

⁶³ Said of children who display unusual talents or are special in some other way, a precocious child. The House of Infants is a mythical place where infants live before they are born. Several buttes and other landmarks in North Dakota have been associated with the House of Infants.

- (105) **lhú gigéèc.**
 ihúù hgigéè-c
 mother resemble-DECL
She looks like her mother.
- (106) **Mààdus se[?]wa mahgigéèc.**
 m-àadu-s se[?]-wa maa-hgigéè-c
 1POS-father-DEF that-FOC 1A-resemble-DECL
I look like my father.
- (107) **Marisás miigigéèc.**
 ma-irisá-s mii-hgigéè-c
 1POS-son-DEF 1B-resemble-DECL
My son takes after me.

6.2.2 *rahee* ‘reportative’

As the name implies, the reportative *rahee* conveys the idea that the information comes from some other person. It can be glossed as ‘he/she/they said’. The function of the reportative is to indicate the type of source of information without necessarily revealing the identity of the source. This evidential category should not be confused with quoting somebody.

The reportative is unique among evidentials because it is inflected for the plural if the source of information comprised more than one individual. The plural suffix on the preceding stem marks plurality of the grammatical subject. The singular and plural sources of information are contrasted in (108a) and (108b).

- (108) a. **îwîa nahgú raheec.**
 îwîa nahgú raheec-c
 cry be.sitting REP-DECL
She told me that he was crying.
- b. **îwîa nahgú rahaa[?]ac.**
 îwîa nahgú rahee-[?]a-c
 cry be.sitting REP-PL-DECL
They told me that he was crying.

Additional examples of reportative evidentiality are in (109)–(111).

- (109) **Aru[?]áchaa migú raheec.**
 aru-áchaa mi-gú[?] raheec-c
 REL-claim 1B-give REP-DECL
He said he’ll save a place for me.

(110) **Mirúxibhi** **úʔaa** **raheec.**
 mirúxibhi úʔaa **rahee-c**
 ice.cream covet **REP-DECL**
He said he wishes for icecream.

(111) **Maaʔasí** **néè** **raheec.**
 maa-así **néè** **rahee-c**
 INDEF-travel go **REP-DECL**
He said he went travelling.

6.2.3 *waree* ‘evidential’

The “default” evidential *waree* refers to events and states which the speaker did not observe. It is the most frequently encountered evidential enclitic in Hidatsa and it has four functions. First, it is used as a narrative marker indicating that the story originates from secondary sources and the narrator did not personally bear witness to the events. The general “hearsay” function of *waree* should not be confused with the reportative *rahee* that is only used when the source of information is a specific person. Virtually every sentence, except direct quotations, in stories told in the traditional narrative style ends with *waree*. Recent translations of Bible passages rely heavily on the narrative ending as well. An alternative label, ‘quotative’, for the narrative style ending is not particularly suitable for Hidatsa since quoted speech is indicated with another construction that involves marking the quoted segment with the verb *héè* *to say something*.

(112) is a passage about a coyote and a buffalo illustrating the use of *waréeè* in a traditional narrative.

(112) **Ícihgawaahiris** **asá** **nuwí** **wareesgi.** **Gasá** **nuwá**
 ícihga-maa-hirí-s **así-Ø** **nuwí** **waree-sgii** **hgi-así-Ø** **nuwí-Ø**
 first-INDEF-make-DEF roam-CONT go.around **EVID-DEF** GI-roam-CONT go.around-CONT
First Maker was wandering along. As he was going along

arîdag **arîru** **midéèwa** **ígaag** **icgháá** **néè** **wareec.**
 arîidi-g **arîi-rú** **midéè-wa** **ígaag** **icgí-háà** **néè** **waree-c**
 hungry-CRD road-LOC buffalo-INDEF see-CRD fit-ADV go **EVID-DECL**
he was hungry and he saw a buffalo on the road and toward it he went.

The second function of *warée* is to indicate that the information is based on indirect evidence. As in the narrative style, the speaker's knowledge of the events is indirect and based on hearsay. Among other situations, this evidential is used when reporting on other people's health problems or death, unless the narrator was present at the moment of the event. It is also used when gossiping. Examples (113)–(120) illustrate the use of *warée* 'indirect evidence'.

- (113) *îiri núhcixidhaag déè wareec.*
îiri núhcixi-dhaa-g déè waree-c
 blood coagulate-NEG-CRD die EVID-DECL
He hemorrhaged to death.
- (114) *Naadá giixxabí wareec.*
naadá giixxabí waree-c
 heart stop EVID-DECL
He had a heart attack.
- (115) *Maahiigsá wareec.*
maa-hii-gsá waree-c
 INDEF-drink-USI EVID-DECL
He is a drunk.
- (116) *Aadí maa'irídiheegsa wareec.*
aadí maa-irídihee-gsá waree-c
 3POS.lodge INDEF-frighten-USI EVID-DECL
His house is haunted.
- (117) *Maa'oorúdhadiguhaag gadaarí wareec.*
maa-arú-núdhí-adí-hgua-haag hgi-adaarí waree-c
 INDEF-REL-tie-lodge-LOC-SOURCE GI-exit EVID-C
He got out of jail.
- (118) *Mààhdi báhdaawa nasghú wareec.*
máàhdii báhdaa-wa nasghú waree-c
 vehicle tip.over-SIMULT thrown.off EVID-DECL
He was thrown out of the car when it tipped over.
- (119) *Cagísdaa' maasée wareehe!*
cagí-sdaa' maa-sée waree-he
 good-DEF INDEF-say EVID-EMPH
Who cares what he said!

- (120) **Dáá maagíwa óhgibaaba' wareec.**
 déè maagí-wa óhgibaabi-ʔa **waree-c**
 die lie-SIMULT find-PL **EVID-DECL**
He was found dead.

In the third function **waréè** is used to make epistemic judgments expressing a possible or reasonable conclusion based on indirect evidence. Epistemic constructions can be translated into English as “it must be”, or “it could be”, as in (121) to (127).

- (121) **Hucí madu wareeg, mirààba siríá áàghic.**
 hucí madú **waree-g** mirààba siríá-Ø áàghi-c
 wind exist **EVID-CRD** leaves rustle-CONT sound.EVID.PL-DECL
There must be wind, the leaves are rustling.

- (122) **Maaʔiiʔúùdi madú wareeg, hiraagáca úʔsiadhaac.**
 maaʔiiʔúùdi madú **waree-g** hiraagáca úʔsia-dhaa-c
 reason exist **EVID-CRD** still arrive-NEG-DECL
Something must have happened, he hasn't arrived yet.

- (123) **Maaruwá iiʔiréʔru nááhuʔiiruʔ wareec.**
 maa.nuwá ii-iréʔ-rú nááhu-íiruʔ **waree-c**
 something INST-speak-TEMP come.PL-HAB.PL **EVID-DECL**
If you talk about something, it could come true.

- (124) **Heʔsá wareesdaaʔ.**
 heʔsá **waree-sdaaʔ**
 like.this **EVID-DEF**
It seems that's the way it happened.

- (125) **Idawàara biragá nagsihbáhi wareec.**
 ida-mààraa biragá nagsibí-áhi **waree-c**
 3POS-winter ten past-MOMENT **EVID-DECL**
He is probably a little over ten years old.

- (126) **Maaruwá déè wareec.**
 maa-nuwá déè **waree-c**
 INDEF-some die **EVID-DECL**
Someone must have died.

- (127) **Hiraagáca isdá sahaa naagic. Agihdíàwa cixíhaaʔa wareec.**
 hiraagáca isdá sáhi-haa naagí-c agihdíàwa cixí-hee-ʔa **waree-c**
 still eye wide-ADV sit-DECL very jump-3CAUS.DIR-PL **EVID-DECL**
He was sitting eyes wide open. He must have been really frightened.

Finally, **waree** is also used to express reaction to unexpected new information, although it is probably not correct to describe it as a mirative marker. The first “mirative” use can be glossed ‘as it turns out’. In such case the information stems from one’s own realization of the state of affairs. Examples are (128)–(132).

- (128) **Niiwaarawíhisaacic.** **Nîi** **wareec.**
 nii-maa-arawí-hisa-aci-c nîi **waree-c**
 2B-1A-recognize-SIM-COMPR-DECL 2-PRO **EVID-DECL**
I thought I recognized you, it was you!
- (129) **Madaruxbáàga wareec.** **Míhgi** **ewáhgeedhaas.**
 mada-nuxbáàga **waree-c** m-íhgi maa-ééhgee-dhaa-s
 1POS-people **EVID-DECL** 1-PRO 1A-know-NEG-DEF
It turns out he’s my relative. I didn’t know myself.
- (130) **Íгаа мааһу́с.** **Һаһса́а һи́рава** **мааги́** **wareec.**
 íгаа maa-húù-c hahsáá hiráwi maagí **waree-c**
 see 1A-come-DECL but sleep be.lying **EVID-DECL**
I came to see him, but he was sleeping.
- (131) **Mirisibísa gubíc,** **níhaari** **wareeg.**
 mirí-sibísa gubí-c n-iháàri **waree-g**
 water-black smell-DECL finish **EVID-CRD**
It smells of coffee. Oh, you made some!
- (132) **He’sá waree’?** / **He’sá wareec.**
 he’sá **waree-’** / he’sá **waree-c**
 like.this **EVID-INTER** / like.this **EVID-DECL**
Oh, is that how it is? / Oh, is that how it is.

As a variation of the mirative usage, **waree** also expresses sudden realization of something, as in (133).

- (133) **Éè, miihacúùdiria wareec.**
 èè mii-hacúùdi-ria **waree-c**
 oh 1B-slit-REFL **EVID-DECL**
Oh, I’ve cut myself somehow.

As other evidential enclitics, **waree** may have evolved from a lexical verb. In contemporary Hidatsa, there is only one verb that remotely resembles the inferential enclitic –

giwaréè to be surprised (1SG mahgiwaréèc). The verbal root *waree always occurs with the GI-prefix. Another stem derived from *waréè is the reflexive *ihgiwaree* to brag about oneself.

6.2.4 *wihee* ‘observative’

The last evidential enclitic in Hidatsa is the observative *wihee*, a contraction of the third person form of *ma’îhee* to want sth. Usually the contracted form is used in the evidential sense. The meaning of the observative is based on direct evidence and it indicates near or unavoidable future. It is used most often with impersonal verbs or with verbs lacking an obvious agent, especially in reference to weather-related phenomena. The observative is not fully grammaticalized and not as frequent as the other evidential enclitics in the spoken discourse. Alternatively, this construction could be analyzed as a type of modal future.

Observative constructions are illustrated in examples (134)–(137).

- (134) *Gi’aréè wiheec.*
 hgi-aréè wa’îhee-c
 GI-warm OBS-DECL
It (the weather) is going to get warm.
- (135) *Giciríà wiheec / wa’iitheec.*
 hgi-ciríà wa’îhee-c
 GI-cold OBS-DECL
The weather is getting cold. (“it wants to get cold”)
- (136) *Maabí cawéè wa’iitheec.*
 maabí cawéè wa’îhee-c
 day hot OBS-DECL
It’s going to be a hot day.
- (137) *Maa’aru’isíà madú wîheerus miibáhigixa néhgaara!*
 maa-arú-isíà madú wîhee-rúhsaa mii-báhigixi-Ø nêè-hgee-ara
 INDEF-REL-bad exist OBS-CONC.COND 1B-avoid-CONT go-3CAUS.INDIR-IMP.PL
If any bad luck comes around, send it around us!

6.3 Aspect

Hidatsa has two aspectual categories that are indicated morphologically – the habitual and the usitative that are expressed by suffixation; and two others, the continuative and the progressive, are expressed periphrastically in serial constructions with auxiliary posture verbs (see 6.4). The discussion in this section is limited to morphological exponence of grammatical aspect.

6.3.1 *-îi* / *-îiru* ‘habitual’

The habitual aspect describes activities and states that recur over time, generally out of habit.

Habitual verbs are also used in gnomic statements, such as ‘they speak Hidatsa’, in contrast to episodic statements, such as ‘they spoke Hidatsa last night’.

In (138a-b), the unmarked present progressive is contrasted with the present habitual, and in (139) an unmarked past event with the past habitual. The habitual aspect in both examples is expressed with the suffix *-îi*.

- (138) a. *Guurú xééc.*
gúá-rú xéé-c
that-LOC leak-DECL
It is leaking there.
- b. *Guurú xee’îic.*
gúá-rú xéé-îi-c
that-LOC leak-HAB.SG-DECL
It leaks there.
- (139) a. *Éèca hiraacirá’g sééc.*
éèca hiraacá-iré²-g séé-c
all Hidatsa-speak-CRD say-DECL
She said everything in Hidatsa.
- b. *Éèca hiraacirá’g see’îic.*
éèca hiraacá-iré²-g séé-îi-c
all Hidatsa-speak-CRD say-HAB.SG-DECL
She used to say everything in Hidatsa.

The habitual suffix is inflected for number. Singular forms of habitual stems are formed with *-îi* and plural forms with *-îiru* (most common), *-îiru²*, or *-îiruu* (least common). These three plural forms are free variants of a single underlying plural morpheme. Only before evidential enclitics is *-iiru²* the preferred form. Neither the singular nor the plural suffix causes ablaut on the preceding vowel. Plural habitual verb forms are illustrated in (140)–(142).

- (140) **Maaruudí cagíhee'iiruc.**
 maa-nuudí cagí-hee-**îru-c**
 INDEF-eat good-3CAUS.DIR-**HAB.PL-DECL**
They always eat well.
- (141) **Mià adaarirú awúá'di miréèridhaa'iiruuc.**
 mià adaarí-rú awúá'di miréèri-dhaa-**iiruuc-c**
 woman menstruate-TEMP sweat.lodge enter-NEG-**HAB.PL-DECL**
When women menstruate they don't go into sweats.⁶⁴
- (142) **Maaruwá ii'iré'ru nááhu'iiru' wareec.**
 maa-nuwá ii-iré'-rú nááhu-**îru'** waree-c
 INDEF-some INST-speak-TEMP come.PL-**HAB.PL** EVID-DECL
If you talk about something it'll happen./ If you talk about someone that person always comes.

Habitual statements refer to customary or habitual behavior or conditions that are most often translated into English with 'usually', 'used to', 'always', or 'never', as in (143)–(145).

- (143) **Maaréèruhsaa mahgúdhhaa'iiruc.**
 maa-néè-rúhsaa mahgú-dhaa-**îru-c**
 1A-go-CONC.COND be.at-NEG-**HAB.PL-DECL**
*Even if I go they're **never** home.*
- (144) **Miixaráhxi'iic maadadágua.**
 mii-xaráhxi-**î-c** maa-dadá-hgua
 1B-emaciated-**HAB.SG-DECL** INDEF-long.time-LOC
*I **used to** be skinny a long time ago.*
- (145) **Óhbaarug maawuudídhhaa'iic.**
 óhbaa-rúg maa-m-nuudí-dhaa-**î-c**
 evening-COND INDEF-1A-eat-NEG-**HAB.SG-DECL**
*I **usually** don't eat in the evening.*

The habitual is also used in reference to innate or acquired abilities, as in (146a)–(149a). The interpretation is episodic when the habitual suffix is not present, as in (146b)–(149b).

⁶⁴ Women are traditionally not supposed to participate in the sweat-lodge ceremony while menstruating. Although the literal meaning of **awúá'di miréèri** is 'to enter the sweat lodge', it implies full participation in the activities that take place there.

- (146) a. *Hiraacá níre'ii'?* *Do you speak Hidatsa?*
 b. *Hiraacá níre'?* *Did you speak Hidatsa?*
- (147) a. *Aragaráhu iré'iiic.* *He is an Arikara speaker.*
 b. *Aragaráhu iré'c.* *He spoke / is speaking Arikara.*
- (148) a. *Maawabaahídhaa'iiic.* *I don't sing. (maa- INDEF, ma-báàhi I-sing, -dhaa NEG)*
 b. *Maawabaahídhaac.* *I didn't sing.*
- (149) a. *Máàhdi náàghia'ii'?* *Do you drive? (máàhdii vehicle)*
 b. *Máàhdi náàghia'?* *Did you drive a car?*

6.3.2 -*gsá* 'usitative'

The suffix *-gsá* expresses usitative aspect and refers to customary actions and recurring states that can be glossed as 'always', 'often', or 'a lot'. The usitative aspect differs from the habitual aspect in the same way that the English expression 'he smokes' (habitual, gnomic) differs from 'he always smokes' (customary). Jones (1984) and Boyle (2007:168) labeled *-gsá* 'frequentative', but that gloss is not a precise way to describe its properties since frequentative events are usually interpreted as iterative activities perceived as single durational events. In a non-technical sense it is probably acceptable to say that usitative events occur "frequently", but only in the customary sense.

Examples with the usitative *-gsá* are seen in (150)–(155).

- (150) *Gú maaguhbáheegsac.*
gúá maa-guhbáhee-gsá-c
 that INDEF-bother-**USI**-DECL
He teases a lot.
- (151) *Maaraagsác* *agihdiàwa.*
maa-náá-gsá-c *agihdiàwa*
 INDEF-2drink-**USI**-DECL very
You drink too much. / You're an alcoholic.

- (152) **Maagarísdahe** **îwiagsac.**
 maagarísda-hee îwia-**gsá-c**
 child-this cry-**USI-DECL**
This child is always crying.
- (153) **ligixi?áà** **giwaagaraaxisagsác.**
 ii-hgi-xi?éè-Ø hgi-maa-hgi-araaxisá-**gsá-c**
 INST-GI-old-CONT GI-INDEF-GI-ignorant-**USI-DECL**
He's getting old and forgetful.
- (154) **Níre?gsawa** **miihiráwihdiraac.**
 n'-iré?-**gsá-wa** mii-hiráwi-hdi-raa-c
 2POS-speak-**USI-SIMULT** 1A-sleep-DES-2CAUS.DIR-DECL
You are so talkative that you make me sleepy.
- (155) **Niiwahgarácheedhaac** **niiwidabagsáwa.**
 nii-maa-garáchee-dhaa-c nii-midabá-**gsá-wa**
 2B-1A-believe-NEG-DECL 2B-lie-**USI-SIMULT**
I don't believe you because you always lie / you are a liar.

Another common usage of the usitative is to describe characteristic personality traits; it is frequently translated into English with an agentive noun. Examples are (156)–(160).

- (156) **lichaagsá?c.**
 iicháà-**gsá-?a-c**
 pout-**USI-PL-DECL**
They pout a lot.
- (157) **Maa?arugáàxugagsac.**
 maa-aru-gáàxuga-**gsá-c**
 INDEF-REL-joke-**USI-DECL**
He jokes a lot. / He is a joker.
- (158) **îwahu** **iré?gsac.**
 îi-awahú iré?-**gsá-c**
 mouth-inside speak-**USI-DECL**
He always mumbles. / He is a mumbler.
- (159) **Madawasúgas** **maaráhcigsac.**
 mada-masúga-s maa-náhci-**gsá-c**
 1POS-dog-DEF INDEF-bite-**USI-DECL**
My dog bites. / My dog is a biter.

- (160) **Icúàsga éèhgu iciri'gsác.**
 icúùwasga éèhgua icí-ní'-**gsá**-c
 horse that foot-shoot-**USI**-DECL
That horse is always kicking.

The combinatory potential of **-gsá** is restricted to active verbs and stative verbs describing recurring states. Whereas both the usitative **-gsá** and habitual **-î** are combinable with active verbs, as in (161)–(164), only the habitual is grammatical with stative verbs describing qualities, as demonstrated by the stative stem **ichíà** *to be strong* in (165). The usitative can be used with stative stems that describe temporary states, however, as confirmed by the first person stative prefix **mii-** in (166).

- (161) HAB: **Óòbhii'iic.** *He smokes. or He is a smoker.*
 USI: **Óòbhiigsac.** *He smokes a lot.*
- (162) HAB: **Gaagsá aráxawaa'iic.** *I typically/usually burn the potatoes.*
 USI: **Gaagsá aráxawaagsac.** *I always burn the potatoes.*
- (163) HAB: **Awaasahcági muudi'iic.** *I eat only beans.* < **awaasá** beans, **-hcági** LIM
 USI: **Awaasá muudigsác.** *I eat beans a lot.*
- (164) HAB: **Maa'òòdhiwaa'iic.** *It's me who usually cooks.*
 USI: **Maa'òòdhiwaagsac.** *It's me who always cooks.*
- (165) HAB: **Mii'ichíà'iic.** *I am typically/usually strong.*
 USI: ***Mii'ichíàgsac.** *I am always strong.*
- (166) a. **Miiwíàhxdeegsac.** *I'm (often) jealous of my wife.*
 b. **Miigáàxugagsac.** *I joke a lot.*
 c. **Miirúhcixigsac.** *I have fainting spells. or I faint a lot. (as an epileptic)*

Habitual and usitative stems in (167) are contrasted in a single sentence.

- (167) **Maré'gsawa mii'agháàga'iic.**
 ma-iré'-**gsá**-wa mii-agháàga-**î**-c
 1-speak-**USI**-SIMULT 1B-late-**HAB.SG**-DECL
I'm usually/often late because I talk a lot.

The usitative *-gsá* and habitual *-î* can co-occur in the same stem. When occurring together, the verb usually expresses a customary or recurring activity that is or used to be a habit, especially in reference to past habits, as in (168).

- (168) *Maahiigsa'íísd.* (Hahsáá goowíheec.)
 maa-hî-gsá-î-sd (hahsáá goowí-hee-c)
 INDEF-drink-USI-HAB.SG-DEF (but finished-3CAUS.DIR-DECL)
He used to drink all the time. (But he quit).

6.4 Positional verbs

One of the most interesting features of Hidatsa morphology is its innovative system of positional verbs. Positional verbs and their use as aspectual auxiliaries are common in many language families. In fact, it is a feature that is found in all Siouan languages, as well as in many other Plains languages of the area. What makes the Hidatsa system typologically unique is the combination of position and posture with evidentiality.

Although they describe the posture and position of people, animals, or objects, positional verbs are even more common in serial verb constructions in the role of auxiliary verbs with aspectual or evidential overtones. Semantically positional verbs denote posture, position, existence, and general location. Their primary function, when used lexically, is to describe an animate or inanimate entity's 'posture'; i.e., whether somebody or something is in a sitting, standing, or lying position, or whether somebody or something is moving around. The second function of positional verbs is to form existential constructions where the posture of the described entity, even though understood literally, is of secondary importance. The final function of positional verbs is to express aspect and evidence when in the role of modal auxiliaries. Even in the auxiliary modal function the actual posture described by the verbs is still to be literally

interpreted while the focal point of the construction lies in modality. In addition to their literal meanings and grammatical functions, positional verbs often occur in idiosyncratic collocations.

Although all positional verbs are intransitives that take nominal subjects, they can also be transitivized through causativization.

Serial constructions of verbs (see 17.5) are exceedingly common in Hidatsa and from a syntactic point of view positional verbs are in no respect different from other verbs that participate in such constructions. However, from a semantic perspective, and in light of the degree of grammaticalization and morphological peculiarities they share, it becomes readily apparent that they should be treated separately from other verbs and syntactic constructions.

There are two cross-cutting parameters for classifying positional verbs. The first parameter sorts them into three classes. Verbs belonging to the first class describe literally the posture of both animate or inanimate entities. They serve in an auxiliary function in constructions that describe states and activities over which one has no control (e.g., sleeping, crying). Verbs in the second class are used only in an auxiliary evidential function and describe the most probable posture of some unseen but audible source of sound. The literal meaning of verbs belonging to the third class describe the location of animate entities. In an auxiliary function, verbs in the third class are used in serial constructions for activities over which one has control (e.g., cooking, whittling).

The second parameter divides positional verbs into verbs of posture and verbs of location. The majority of positional verbs are unambiguous in their description of posture. However, there are also two verbs, *mahgú* and *háhgu*, that do not specify posture but describe location. Finally, one verb, *nahgú*, straddles both categories, describing both posture (sitting) and location.

The two categories of positional verbs form a natural class, distinguished from other types of verbs by their suppletive plural stems that are identical or nearly identical for most members in each of the three classes. Movement verbs are marginal members of this natural class as their plural forms, although irregular, are different from other positional verbs. Even though most movement verbs have irregular plural forms, one of them, *nuwí* to move around, seems to have a particularly bleached meaning and is used almost exclusively in auxiliary constructions. However, the inclusion of *nuwí* with positional verbs at this moment remains tentative; unlike other positionals it does not form a derivational word family with the evidential positional verb *háàwi* that it is paired with.

The two categories and three classes of positional verbs are presented in TABLE 6.10. The symbol ↔ represents lexical series based on analogy. The symbol ⇕ represents lexical series based on derivation. Words in the bold box are based on posture. Words in the box with thin lines (the bottom row) are based on location. One word, *nahgú*, belongs to both categories.

TABLE 6.10. POSITIONAL VERBS

AUXILIARY MEANING	LITERAL MEANING						
	SITTING		LYING		STANDING		MOVING
NO CONTROL (CONT aspect)	<i>naagí</i>	↔	<i>maagí</i>		<i>naharéé</i>		<i>nuwí</i>
	⇕		⇕		⇕		
SOUNDS (evidentiality)	<i>naaghí</i>	↔	<i>maaghí</i>		<i>naháà</i>		<i>háàwi</i>
	⇕		⇕				
CONTROL (PROG aspect)	<i>nahgú</i>	↔	<i>mahgú</i>	↔	<i>háhgu</i>		
			SPECIFIC LOCATION		GENERAL LOCATION		

6.4.1 Basic posture verbs

There are three basic posture verbs in Hidatsa: *naagí* to be sitting, *maagí* to be lying, and *naharéé* to be standing. An unusual feature that unites these three verbs is the suppletive plural forms they share. (Plural suppletion is not common in Hidatsa. For most verbs, plural forms are marked by plural suffixes.) The level of uniformity is probably indicative of the degree of their grammaticalization.

It is important to remember that positional verbs form a continuum in Hidatsa. Many other verbs can participate in similar existential or auxiliary functions as the ones discussed here; however, what sets sitting, lying, and standing apart (aside from obvious similarities between the singular stems as well as plural formation) is the fact that no other verbs have evidential counterparts. A fourth verb, *nuwí* to be moving around, is tentatively included with the three basic posture verbs; however, the relationship between *nuwí* and its evidential counterpart *háàwi* is not based on morphology.

The inflectional paradigms of the basic posture verbs are presented in TABLE 6.11.

TABLE 6.11. BASIC POSTURE VERBS

	<i>naagí</i> / <i>gáá</i> <i>be sitting</i>	<i>maagí</i> / <i>gáá</i> <i>be lying</i>	<i>naharéé</i> / <i>nahagáá</i> <i>be standing</i>	<i>nuwí</i> / <i>náári</i> <i>be moving around</i>
3SG	<i>naagíc</i>	<i>maagíc</i>	<i>naharééc</i>	<i>nuwíc</i>
1SG	<i>maaragíc</i>	<i>maawagíc</i>	<i>maaraharééc</i>	<i>maaruwíc</i>
2SG	<i>náragic</i>	<i>náwagic</i>	<i>náàrahareec</i>	<i>náruwic</i>
3PL	<i>gáác = gáá’ac</i>	<i>gáác</i>	<i>nahá gáá’ac / naha gáác</i>	<i>náária’c</i>
1PL	<i>magáá’ac / magáác</i>	<i>magáá’ac / magáác</i>	<i>maaraha magáá’ac</i>	<i>máária’c</i>
2PL	<i>nágaa’ac / nágaac</i>	<i>nágaa’ac / nágaac</i>	<i>náàraha nágaa’ac</i>	<i>nárania’c</i>

6.4.1.1 Existential constructions

Hidatsa employs two types of constructions to make existential statements. The first type is used to state that something exists without reference to its location, position, or shape. Such constructions are formed with the existential verbs **madú** *there is* and **neesá** *there isn't*, as in (169) and (170).

- (169) **Hucí maduc.** *There is wind.*
 Áàiiwiri maduc. *There is milk (available).*
- (170) **Hucí neesac.** *There is no wind.*
 Madxuhdí neesac. *I have no gloves. /my-gloves there-is-not/*

The second type of existential constructions is used to make existential statements in reference to a specific location. In such statements the referent is always classified by an existential verb for its posture and shape. Such statements can be produced and interpreted as existentials, as in (171a), or literally, as in (171b). Either way, the choice of verb depends on the specific posture of the referent if a specific location is referred to.

- (171) **Guurú naagíc.** a. *He is there.*
 b. *He sits there.*
 Mixdaarú maagíc. a. *He is under it.*
 b. *He lies under it.*
 Hiróó naharééc. a. *He is here.*
 b. *He stands here.*

In existential constructions, birds are usually referred to as sitting, large four-legged animals and vehicles with four wheels as standing, and small animals according to the actual posture they have assumed. Small inanimate objects that do not have an elongated shape either sit or lie. Posture words often participate in fixed expressions. Examples (172)–(174) illustrate the usage of positional verbs in existential sentences according to the conventionalized understanding of shape, as in (172) and (173), and in collocations, as in (174).

(172) **Madawáàhdi** **adáàsigua** **naharééc** (*naagíc / *maagíc).
 mada-máàhdii adáàsi-hgua **naharéé-c** (*naagí-c / *maagí-c)
 IPOS-vehicle outside-LOC **stand-DECL** (*sit-DECL / *lie-DECL)
My car is outside.

(173) **Gugáá** **maa'abhúhgawa** **maagíc** (*naagíc / *naharééc).
 gua-hгаа maa-abhúhga-wa **maagí-c** (*naagí-c / *naharéé-c)
 that-LOC INDEF-hat-INDEF **lie-DECL** (*sit-DECL / *stand-DECL)
There is a hat there.

(174) **Maarúdhadigua** **naagíc** (*maagíc / *naharééc).
 maa-núdhí-adí-hgua **naagí-c** (*maagí-c / *naharéé-c)
 INDEF-tie-house-LOC **sit-DECL** (*lie-DECL / *stand-DECL)
*He is in jail.*⁶⁵

6.4.1.2 Auxiliary continuative constructions

Serial constructions involving two verbs are exceedingly common in Hidatsa. As a rule, both verbs maintain their lexical independence in such constructions. However, a few common verbs, including the basic posture verbs, undergo a process of auxiliarization and lose their lexical transparency.

Basic posture verbs are commonly used in the auxiliary function to express states and the continuative aspect of activities that the subject has no control over. Only a limited number of active verbs can be used in the continuative aspect. Basic posture verbs in auxiliary function are illustrated in (175)–(178). Both the main verb and the aspectual auxiliary are inflected for person, as in (177) and (178).

(175) **Adixáàbi** **báhca** **naharééc** (*naagíc).
 adí-xáàbi báhci-Ø **naharéé-c** (*naagí-c)
 house-thin upright-CONT **stand-DECL** (*sit-DECL)
The tent is up.

⁶⁵ As in several other plains languages, ‘jail’ is called ‘a place where they tie it’, or *maarúdhadi* (either in reference to tying up the prisoners, or, according to another interpretation, to shoestrings that are removed from the inmates shoes).

- (176) **Mirèè sáhga naagíc.**
 mirèè sáhgi-Ø **naagí-c**
 door open-CONT **sit-DECL**
The door is wide open.
- (177) **Hirughirí iimaadá maawagíc.**
 hirughirí ii-maa-déè-Ø **maa-maagí-c**
 over.here INST-1A-die-CONT 1A-**lie-DECL**
Here I lie dead.
- (178) **Maréʹdhaawa mahgaraaxisá maaruwíc.**
 ma-iréʹ-dhaa-wa ma-hgi.araaxisá maa-**nuwí-c**
 1POS-speak-NEG-SIMULT 1A-forget 1A-**move.about-DECL**
Since I don't speak it (anymore), I forget as days go by.

The use of posture verbs in serial constructions has become lexicalized in many idiomatic expressions pertaining to natural phenomena, such as the blizzard in (179) and haze in (180), both of which “stand”, and the wind that “sits” in (181). Natural phenomena that are characterized according to their conventionalized natural “posture” also include heavenly bodies.

- (179) **Nagahuudháá naharééc.**
 nagahuudhéé-Ø **naharéé-c**
 blizzard-CONT **stand-DECL**
It is a blizzard.
- (180) **Awáhsia naharééc.**
 awá.hsii-Ø **naharéé-c**
 land.hazy-CONT **stand-DECL**
The haze is continuing.
- (181) **lihucí mirèèra naagíc.**
 ii-hucí mirèèri-Ø **naagí-c**
 INST-wind enter-CONT **sit-DECL**
It is drafty in the room.

6.4.2 Evidential posture verbs

Hidatsa has developed a unique class of evidential posture verbs encoding auditory sensory information that is nearly symmetrical with the set of basic posture verbs and to a large extent

derived from it. Evidential posture verbs never occur independently as main verbs. They are used exclusively in serial constructions where they function as progressive or continuative aspect markers. This series of verbs functions also as evidential auxiliaries as they are used in lieu of basic posture verbs when the speaker's only source of information about a situation is auditory, as opposed to witnessing it directly or having general knowledge about it.

The difference between ordinary and evidential posture verbs is illustrated in (182).

- (182) a. **Móòhcaawa** **múá** **naaghíc.** b. **Móòhcaawa** **múá** **naagíc.**
 móòhcaa-wa múà-Ø **naaghí-c** móòhcaa-wa múà-Ø **naagí-c**
 coyote-INDEF howl-CONT **sit.EVID-DECL** coyote-INDEF howl-CONT **sit-DECL**
A coyote is howling (I hear it but don't see it). *A coyote is howling (I see it).*

There are four evidential posture verbs in Hidatsa; they only occur in third person. Even though the second person as a referent is conceivable in the real world, such forms do not occur in Hidatsa. Examples of evidential posture verbs inflected for first and second persons occasionally described in the literature, as in Boyle (2007: 178), have typically been elicited from younger and less fluent speakers.

The three core members of the series **naaghí** *to make sound while sitting*, **maaghí** *to make sound while lying*, and **naháà** *to make sound while standing* share an identical suppletive form **áàghi** in the plural. The plural form of the last member, **háàwi** *to make sound while moving*, needs further confirmation.

Evidential posture verbs and their inflections are presented in TABLE 6.12.

TABLE 6.12. EVIDENTIAL POSTURE VERBS

	SITTING naaghí / áàghi	LYING maaghí / áàghi	STANDING naháà / áàghi	MOVING háàwi / ?
3SG	naaghíc	maaghíc	naháàc	háàwic
3PL	áàghaʔc	áàghaʔc	áàghaʔc	?

The posture-based evidential system is typologically unusual because the choice of a specific auxiliary depends on conventionalized real-world knowledge since the choice of evidential verbs depends on the most likely posture of the sound-producing agent. Examples (183)–(186) describe several ongoing sound-related activities. The word selected on each occasion corresponds to the stereotypical posture of the sound-producing agent in such situations.

(183) **Móòhcaawa** **múá** **naaghíc** / **háàwic.**
 móòhcaa-wa múà-Ø **naaghí-c** / **háàwi-c**
 coyote-INDEF howl-CONT **sit.EVID-DECL** / **move.around.EVID-DECL**
A coyote is howling.

(184) **Sáàga** **nagá** **maaghíc.**
 sáàga nagí-Ø **maaghí-c**
 frog croak-CONT **lie.EVID-DECL**
A frog is croaking.

(185) **Midéès** **múá** **naháàc.**
 mideè-s múà-Ø **naháà-c**
 cow-DEF moo-CONT **stand.EVID-DECL**
The cow is mooing.

(186) **Máàhdiiwa** **diríá** **naháàc** / **naaghíc** / ***maaghíc.**
 máàhdii-wa diríá **naháà-c** / **naaghí-c** / ***maaghí-c**
 car-INDEF run **stand.EVID-DECL** / **sit.EVID-DECL** / ***lie.EVID-DECL**
A car engine is running.

Evidential posture verbs other than the ones describing stereotypical situations may be used if the speaker knows the exact posture of the sound-producing agent. For example, the speaker in (187) hears a child (**maagarísda**) crying (**îwíá**) whom she previously left in a lying position (e.g., a baby), sitting position (e.g., an older child), or a standing position (e.g., a child being punished). The difference between the three is not reflected in non-technical translations.

(187) a. **Maagarísda îwíá maaghíc.** *The child is crying (in a **lying** position).*
 b. **Maagarísda îwíá naaghíc.** *The child is crying (in a **sitting** position).*
 c. **Maagarísda îwíá naháàc.** *The child is crying (in a **standing** position).*

As is the case with basic posture verbs, the usage of evidential posture verbs is lexicalized in many idiomatic expressions, in particular expressions pertaining to natural phenomena. For example, in Hidatsa the sound of thunder “lies” in the distance, as in (188).

- (188) **Dahú** **nagá** **maaghíc** (*naaghíc / *naháàc).
dahú nagí-Ø **maaghí-c** (*naaghí-c / *naháà-c)
thunder rumble-CONT **lie.EVID-DECL** (*sit.EVID-DECL / *stand.EVID-DECL)
It is thundering in the distance.

Evidential posture verbs in serial constructions are not always allowed even if non-evidential posture verbs are grammatical in parallel constructions. Although the blizzard in (189a) idiomatically “stands”, the same construction is not grammatical when the basic posture word is replaced with its evidential counterpart in (189b).

- (189) a. **Nagahuudháá naharééc.** *It is drifting snow. (lit. blizzard stands)*
b. ***Nagahuudháá naháàc.** **It is sound of a blizzard.*

Unlike regular posture verbs, which often occur as independent lexical verbs, the evidential posture verbs can only be used as auxiliaries. Compare the three sentences in (190): whereas a basic posture verb in an existential construction in (190a) is grammatical, a parallel construction with an evidential posture verb in a non-auxiliary function in (190b) is not. The evidential posture verb becomes grammatical in an auxiliary function in a serial construction in (190c) where it follows the main verb **múà** *to moo*.

- (190) a. **Midéèwa naharééc** adáàsigua. *There is a cow (standing) outside.*
b. ***Midéèwa naháàc** adáàsigua. **There is a cow (making sound) outside.*
c. **Midéèwa múá naháàc** adáàsigua. *There is a cow is mooing outside.*

Evidential posture verbs are freely combinable with evidential enclitics (see 6.2). In example (191), the reportative enclitic **rahéè** implies that another person told me of the thunder

of which he himself had only indirect evidence (i.e., he had heard it but had no visual confirmation).

- (191) **Dahú** **nagá** **maaghí raheec.**
dahú nagí-Ø **maaghí rahee-c**
thunder rumble-CONT **lie.EVID REP-DECL**
He said it was thundering (in the distance).

6.4.3 Locational position verbs

Verbs that belong to the class of locational position verbs in TABLE 6.13 occur both independently and as auxiliaries. The plural stem is suppletive and identical for all three verbs that belong to this class. Only one of these verbs, **nahgú** *to be somewhere in a sitting position, be engaged in an activity in a sitting position*, involves actual posture. The other two verbs, **mahgú** *to be in a specific location, be engaged in an activity*, and **háhgu** *be in the area, be engaged in an activity*, encode no information about the posture of the referent. However, the shared suppletive plural stem, morphologically similar singular stems, and identical functions in auxiliary constructions suggest that the three verbs indeed form a natural class.

TABLE 6.13. LOCATIONAL POSTURE VERBS

	nahgú / áhgu <i>be, continue in a sitting position; be engaged in an activity while sitting</i>	mahgú / áhgu <i> dwell, stay, live somewhere; be at home; be engaged in an activity</i>	háhgu / áhgu <i>be about, in the area; be engaged in an activity</i>
3SG	nahgúc	mahgúc	háhguc
1SG	maarahgúc	maawahgúc	maaháhguc
2SG	nààrahguc	náwahguc	nààhahguc
3PL	áhguaʔc	áhguaʔc	áhguaʔc
1PL	áàwahguaʔc	áàwahguaʔc	áàwahguaʔc
2PL	áàrahguaʔc	áàrahguaʔc	áàrahguaʔc
IMP.SG	nahgú!	mahgú	háhgu!
IMP.PL	áhguara!	áhguara!	áhguara!

6.4.3.1 Existential constructions

Two of the locational verbs, **mahgú** and **háhgu**, identify the referent's location as specific or general without encoding any information about its posture. Both are commonly used as independent predicates in existential constructions. The third verb, **nahgú**, that encodes posture in addition to position, is less common than the other two locationals.

The meanings of **mahgú** form a continuum from more specific to more general. In the most restricted sense **mahgú** means *to be at home*, or *to live at a certain location*, as in examples (192)–(194).

- (192) **Garuwíhcagi maawahgúc.**
garu-m-íhcagi maa-**mahgú-c**
GI-1-by.oneself 1A-**dwel**-DECL
I'm home by myself.
- (193) **Dóòhga náwahgu'?**
dóò-hгаа ná-**mahgú-'**
where-LOC 2A-**dwel**-INTER
Where do you live?
- (194) **Mirí Ooráàwu'aasis se'hgua áhgu'iiru'sdaa'.**
mirí aru-náàwu-áàsi-s se'²-hгаа áhgu-íiru'²-sdaa'
water REL-deep-creek-DEF that-LOC **dwel.PL**-HAB.PL-DEF
They used to live in Lucky Mound.

In a less restricted sense **mahgú** means *to be in a specific location*, as in (195)–(197).

- (195) **Madawaahirígua maawahgúc.**
mada-maa-hirí-hгаа maa-**mahgú-c**
1POS-INDEF-do-LOC 1A-**be.at**-DECL
I'm at work.
- (196) **Mahgúg adí geesa!**
mahgú-g adí géèsee-Ø
be.at-CRD house watch-IMP.SG
Stay and watch the house! (to a dog)

- (197) Madààrug sia'ghàà maawahgúwic.
 madàà-rúg se²-ghàà maa-mahgú-wi-c
 fall-COND that-ADV.TEMP 1A-be.at-1SG.FT-DECL
I will stay until fall.

Finally, in the most general sense, **mahgú** simply means *to exist, live*, as in (198)–(200).

- (198) Dóòsa náwahgu?? -- Gíí, maawahgúàcihe.
 dóòsa ná-mahgú-² -- gíí maa-mahgú-aci-he
 how 2A-dwell-INTER -- oh 1A-be.at-COMPR-EMPH
How are you -- Oh, I'm hanging in there.

- (199) Gíídee cagág mahgúc.
 gíídee cagí-g mahcú-c
 INTERJ good-CRD be.at-DECL
Now look at her! / She's just tame! (said of an old person who used to be wild)

- (200) Gú hiraagáca madháàhgua mahgúc.
 gua hiraagáca madháà-hgua mahgú-c
 that still already-LOC be.at-DECL
He still lives in the past.

The next locational posture verb, **háhgu**, has a general meaning *to be around, be in the area*, as in (201)–(204). In most of the following sentences, replacing **háhgu** with **mahgú** would change the meaning from the general existential to the specific ‘live at’.

- (201) Dóòhgaa náàhahgu??
 dóò-hgaa náà-háhgu-²
 where-LOC 2A-be.around-INTER
Where are you?

- (202) Náàhahgudoores.
 náà-háhgu-doores
 2A-be.around-ASSERT
You were there/around!

- (203) Dáàbaacigua háhguhici. Eewáhgeedhaahe.
 dáàba-aci-hgua háhgu-hi-cgíí maa-ééhgee-dhaa-he
 what-COMPR-LOC be.around-3.SG.FT-PRES 1A-know-NEG-ASSERT
He could be anywhere! I don't know!

- (204) **Maadí** **adáàsigua** **naxbichí** **hahguc.**
 m-adí adáàsi-hgua naxbichí **háhgu-c**
 IPOS-house outside-LOC bear **be.around-DECL**
There's a bear outside my house.

The last locational posture verb, **nahgú**, is not particularly common as an independent predicate. The postural connotation of being in a sitting position is sometimes not apparent when used in existential constructions. Examples of **nahgú** are given in (205)–(207).

- (205) **Hiróó nahgú!**
 hiróó **nahgú-Ø**
 here **be.sitting-IMP.SG**
Stay (sitting) here!

- (206) **Úʔsiag nahgúc.**
 úʔsia-g **nahgú-c**
 arrive-CRD **be.sitting-DECL**
He is here. (lit. he arrived and he's in a sitting position)

- (207) **Adiwahúga maarahgúc.**
 adí-mahúga maa-**nahgú-c**
 house-inside 1A-**be.sitting-DECL**
I'm in the house.

The difference in meaning between **háhgu** and **mahgú** is contrasted in (208a-b).

- (208) a. **Adígua maawahguʔîc.** b. **Gíí, maaháhguʔiic.**
 adí-hgua maa-**mahgú-îi-c** gíí maa-**háhgu-îi-c**
 house-LOC 1A-**be.at-HAB.SG-DECL** oh 1A-**be.around-HAB.SG-DECL**
I'm always at home. *Oh, I'm always around.*

Differences in meaning between all three positional verbs are contrasted in (209a-c).

- (209) a. **Hiraagáca mahgúc.** *He is still here (at home, he hasn't left yet).*
 b. **Hiraagáca háhguc.** *He is still here (in the area).*
 c. **Hiraagáca nahgúc.** *He is still here (sitting, doing something).*

In some situations the three positional verbs are freely interchangeable, as in singular the imperative forms in (210). The third verb, **nahgú**, still implies a sitting position.

- (210) **Cagíhaa háhgu! / mahgú! / nahgú!** *Behave yourself! (cagíhaa well)*

6.4.3.2 Auxiliary constructions

Positional posture verbs are used in serial constructions to indicate the progressive aspect of an ongoing activity. The difference in meaning between *mahgú* and *háhgu* disappears or is negligible in the auxiliary position if the activity occurs in one place. However, *háhgu* is preferred when the activity involves moving around, as in (211).

- (211) *Skyler asá* *háhgu* *arugúúc.*
 Skyler asi-Ø *háhgu*-Ø aru-gúú-c
 Skyler roam-CONT **be.around**-CONT IRR-come.back-DECL
Skyler is walking about now and will come back home.

When *nahgú* is used as a progressive auxiliary verb it implies that the agent is performing the activity in the sitting position, as in (212) and (213).

- (212) *Maa’awábcaa* *maarahgúc.*
 maa-ma-íbcaa-Ø maa-**nahgú**-c
 INDEF-1A-bead-CONT 1A-**be.sitting**-DECL
I am (sitting) beading.

- (213) *liraghúcigua* *naghúca* *nahgúc.*
 ii-naghúci-hgua naghúci-Ø **nahgú**-c
 INST-swing-LOC swing-CONT **be.sitting**-DECL
He’s swinging in the swing.

As it is the only positional verb that encodes posture, *nahgú* cannot be used as an auxiliary in situations that would create a semantic conflict with the posture implied, as with the act of falling in (214). The other two positional verbs, *mahgú* and *háhgu*, are grammatical in this construction.

- (214) *ligihxúà* *mahgúc* / *háhguc* /**nahgúc.*
 ii-hgi-hxúà mahgú / háhgu /*nahgú -c
 INST-GI-fall be.at / be.around /*be.sitting-DECL
He keeps falling.

Often the three positional verbs are freely interchangeable in the auxiliary position with little or no difference in meaning. Whereas (215a) and (215b) have virtually identical semantics, the third construction in (215c) implies that the person who is doing the healing is in the sitting position.

- (215) a. **Maawabhú maawahgúc.** *I'm healing him.*
 b. **Maawabhú maaháhguc.** *I'm healing him.*
 c. **Maawabhú maarahgúc.** *I'm healing him (as I sit here).*
 maa-ma-bhú maa-.....
 INDEF-1A-heal 1A-....

However, the choice of progressive auxiliary is fixed for certain expressions. For example, the Hidatsa pulse is usually described with **nahgú** as “sitting”.

- (216) **Núhsihsia nahgúc.**
 núhsihsia-Ø nahgú-c
 twitch-CONT be.sitting-DECL
It's pulsating (e.g. pulse).

Most verbs unambiguously determine whether the grammatical subject or agent is in control of the event or not. Eating, for example, is always a conscious act on the eater's part and only the progressive aspect is possible, as in (217a). However, a few activities can sometimes be controlled, as thinking in (218a), where the progressive aspect is used with a positional auxiliary, but other times spontaneous and not controlled, in which case the continuative aspect is used with a basic posture-verb auxiliary, as in (218b).

- (217) a. PROGRESSIVE: **Maaruudá nahgúc.**
 maa-nuudí-Ø **nahgú-c**
 INDEF-eat-CONT **be.sitting-DECL**
He is eating.
- b. CONTINUATIVE: ***Maaruudá naagíc.**
***maa-nuudí-Ø naagíc**
***INDEF-eat-CONT sit-DECL**
***He is eating.**

(218) a. PROGRESSIVE:

Maa^ʔarucagí ísgaa nahgúc.
maa-arucagí ísgée-Ø nahgú-c
INDEF-REL-good think.CONT **be.sitting**-DECL
He is thinking good thoughts.

b. CONTINUATIVE:

Maa^ʔarucagí ísgaa naagíc.
maa-arucagí ísgée-Ø naagí-c
INDEF-REL-good think.CONT **sit**-DECL
He is thinking good thoughts (spontaneously).

6.5 Tense and mood

Hidatsa is a future–non-future language. Only the future tense is morphologically marked; verb forms not inflected for the future are interpreted as referring to either the present or the past. The concepts of futurity and modality are closely interrelated in Hidatsa and verb forms inflected for the future are used for epistemic and deontic expressions.

There is also a morphologically marked irrealis category that is used both for future and hypothetical statements.

6.5.1 Present and past

Verb forms not inflected for the future are interpreted as happening either in the present or the past, as in (219).

- (219) Mirawahú núceebic.
mirá-awahú núceebi-c
wood-inside go.into.the.woods-DECL
a) *He is going / goes into the woods.*
b) *He went into the woods.*

Past and present events can be disambiguated by using temporal adverbs, such as **maabéhe** *today* and **húürisiru** *yesterday*. Utterances marked with any of the definitive speech-act

markers *-s*, *-sgíí*, *-sd*, or *-sdaaʔ*, which are strongly associated with an accomplished fact, are normally interpreted as referring to past events as well (see 6.1.1.6).

Examples are (220) and (221).

(220) **Migúsd** **hú̀̀risiru.**
 mii-gúʔ-**sd** **hú̀̀risiru**
 1B-give-DEF **yesterday**
He gave it to me yesterday.

(221) **îcihgawaahiris** **asá** **nuwí** **wareesgi.**
 îcihga-maa-hiri-s así-Ø nuwí waree-**sgíí**
 first-INDEF-make-DEF roam-CONT go.around EVID-MIT
First Maker was traveling along.

When none of the aforementioned cues are present, context is used to disambiguate the present and the past.

6.5.2 Future

Hidatsa and Crow are the only Siouan languages that indicate the future tense by inflection. Whereas in Crow it is accomplished by incorporating an inflected auxiliary verb into the verb stem (Graczyk 2007: 137, 302), in Hidatsa the future marker has become completely grammaticalized and is realized in statements (see 6.1.1) by a set of suffixes that distinguish person and also distinguish number in first and second person. All future statements are doubly inflected with pronominal prefixes and future suffixes. Plurality of first and second person plural forms is indicated doubly by the plural future suffix and the appropriate plural suffix (*-ʔa* or *-ʔo*). The inventory of future statement suffixes is given in TABLE 6.14.

TABLE 6.14. FUTURE STATEMENT SUFFIXES

STATEMENTS			
3SG	-hi	3PL	-hi
1SG	-wi	1PL	-wihi
2SG	-ri	2PL	-rihi

Third person singular and plural statement suffixes are identical, but the two forms are usually disambiguated by the plural suffixes *-ʔa* and *-ʔo* that replace the preceding short vowel. Only before the coordinating suffix *-g* (see 17.3) is the difference neutralized and the vowel in *hi-* undergoes ablaut, as in *ócahdihag... he/they will bury it and...* TABLE 6.15 presents three sample paradigms of the future inflection with a regularly inflected verb *ócahdi* to *bury sth*, and with irregularly inflected suppletive stems *hirí/héè* to *do/make sth* and *néè/nááhi* to *go*.

TABLE 6.15. FUTURE INFLECTION IN STATEMENTS

<i>ócahdi</i> bury sth			
3SG	<i>ócahdihic</i>	3PL	<i>ócahdiháʔc</i>
1SG	<i>awócahdiwic</i>	1PL	<i>awócahdiwiháʔc</i>
2SG	<i>arócahdiric</i>	2PL	<i>arócahdiriháʔc</i>
<i>hirí</i> do sth			
3SG	<i>hiríhic</i>	3PL	<i>hiríháʔc</i>
1SG	<i>mahéèwic</i>	1PL	<i>mahéèwiháʔc</i>
2SG	<i>náheeric</i>	2PL	<i>naheeriháʔc</i>
SG: <i>néè</i> / PL. <i>nááhi</i> go			
3SG	<i>néèhic</i>	3PL	<i>nááhiháʔc</i>
1SG	<i>maaréèwic</i>	1PL	<i>mááhiwiháʔc</i>
2SG	<i>náreeric</i>	2PL	<i>nárahiriháʔc</i>

Curiously, only grammatical person is distinguished in future questions (i.e., interrogative and speculative speech-acts; see 6.1.2.1 and 6.1.2.3) which are also used for cohortative suggestions (see 6.1.2). The three interrogative suffixes, listed in TABLE 6.16, are identical to the plural suffixes used in statements.

TABLE 6.16. FUTURE QUESTION SUFFIXES

QUESTIONS	
3	<i>-hi</i>
1	<i>-wihi</i>
2	<i>-rihi</i>

Plural and singular forms in questions are distinguished by the presence of the plural suffix **-ʔo** that follows the future suffix, as in (222). In (223), an additional cue is provided by the plural suppletive stem **nááhi** *to go* which is used in lieu of **née** *to go* to indicate plural subjects.

- | | | |
|-------|--|---|
| (222) | SG. Mabahcágiwihíʔ?
maa-báhçagi-wihí-ʔ
1A-cut-1FT.INTER-INTER
<i>Shall I cut it?</i> | PL. Mabahcágiwihóʔ?
maa-báhçagi-wihí-ʔo-ʔ
1A-cut-1FT.INTER-PL-INTER
<i>Shall we cut it?</i> |
| (223) | SG. Maaréèwihíʔ?
maa-née-wihí-ʔ
1A-go-1FT.INTER-INTER
<i>Shall I go?</i> | PL. Mááhiwihóʔ?
m-nááhi-wihí-ʔo-ʔ
1A-go.PL-1FT.INTER-PL-INTER
<i>Shall we go?</i> |

In the spoken language the first person plural question form, used in interrogative speech-acts and cohortative expressions, is often contracted by deleting the second syllable in **-wihí** and adding the optionally lengthened plural **-ʔo** directly to the first syllable, as in (224).

- | | |
|-------|--|
| (224) | Miháàwihóʔ! → Miháàwooʔ! <i>Let's sleep!</i> |
| | Heʔsáwaariahgiwihóʔ! → Heʔsáwaariahgiwooʔ! <i>Let's pretend!</i> |

Future suffixes are mutually exclusive with the irrealis prefix **aru-/oo-** (see 6.5.3), but they can always be substituted for the irrealis prefixes with little or no difference in meaning. There is, however, one case of morphological conditioning where **aru-/oo-** is preferred by some speakers over the future suffixes, specifically when the preceding stem syllable is identical with the following future suffix, as in (225b)–(227b).

- | | |
|-------|---|
| (225) | a. Arumiháàwic. <i>I'm going to sleep.</i> |
| | b. * Miháàwic. |

- (226) a. **Aruwaaghwíć.** *I'll give it a try.*
 b. **?*Maaghwíć.**⁶⁶

- (227) a. **Aruhirawáhíc.** *He is going to take a nap.*
 b. ***Hirawáhíc.**

For some speakers combinations of future suffixes with the negative suffix **-dhaa**, as in (228), are ungrammatical. All speakers accept as grammatical identical negative verb-forms with the irrealis marker **aru-/oo-**, as in (228).

- (228) a: **?*Maaréèdhaawíc.** *I won't go.*
 b: **Aruwaaréèdhaac.** *I won't go.*

6.5.2.1 Semantics of future

Future inflection has three usages. (1) It describes events and activities that are expected to occur in the future.

- (229) **Áàdarug** **náreerihí?**
 áàda-rúg ná-néè-**rihi**-?
 morning-COND 2A-go-**2FT.INTER-INTER**
Will you go tomorrow?

- (230) **Hagáàdha!** **Niiwagúbag** **maaréèwíc!**
 hagáàdhee-Ø nii-ma-igúba-g maa-néè-**wi**-c
 wait.1CAUS.DIR-IMP.SG 2B-1POS-together-CRD 1A-go-**1FT.SG-DECL**
Wait! I'll go with you.

(2) Although future suffixes do not co-occur with commands (i.e., imperative and precative speech-acts, see 6.1.3.1 and 6.1.3.2), statements and suggestions with imperative illocutionary force can still be made. First and second person statement forms are used in

⁶⁶ For some speakers, the sequence of the stem-final **-wi** and the first person future suffix **-wi** in **maghuuwíć** is more acceptable than the same sequence in other stems, possibly due to the accent on the stem-final **-wi**. This sequence is attested in the sentence **Hiraaciré? noogaré? aru?ágagahsi maghuuwíć.** *I'll try to write down Hidatsa words.*

directives and first person plural question forms in cohortative expressions. An example of a cohortative is (231) and examples of directives are (232)–(233). It is important to bear in mind that only context, facial expression, or intonational cues tell whether an interrogative speech-act is to be interpreted as a question or a cohortative suggestion, or a declarative speech-act as a statement or a directive.

(231) **Hiróó awadhîwihooʔʔ**

hiróó maa-adhîi-**wihi**-ʔo-ʔ
 here 1A-camp-**1FT.PL-PL-INTER**

a) *Shall we camp here?*

b) *Let's camp here!*

(232) **Héh! Isîác. Goowíwaawihaʔc.**

hee isîà-c goowí-waa-**wihi**-ʔa-c
 INTERJ bad-DECL finish-1CAUS.DIR-**1FT.PL-PL-DECL**

Hey! It's bad. Let's quit doing it (e.g., arguing with each other).

(233) **Mirí îwaxbidhaháà mááhiwihaʔc.**

mirí îwaxbi-dhaa-háà m-nááhi-**wihi**-ʔa-c
 sun go.down-NEG-ADV 1A-go.PL-**1FT.PL-PL-DECL**

Let's go before the sun sets.

Both statements and questions containing future suffixes are sometimes translated with 'should' or 'ought to', as in (234)–(239). Again, the exact interpretation depends on the specific contextual circumstances of the speech act.

(234) **Háheedhaahic.**

há-hee-dhaa-**hi**-c
 abandon-3CAUS.DIR-NEG-**3FT.SG-DECL**

She should divorce him.

(235) **Maaháwaadhaawihaʔc.**

maa-há-waa-dhaa-**wihi**-ʔa-c
 3OBJ.PL-abandon-1CAUS.DIR-NEG-**1FT.PL-PL-DECL**

We should ditch them.

- (236) **Nuwa rááric.**
 nuwa náá-ri-c
 some 2drink-2FT.SG-DECL
You should drink some.
- (237) **Nárahuric.**
 nára-húù-ri-c
 2A-come-2FT.SG-DECL
You should come!
- (238) **Niiwahguhdiwihí??**
 nii-maa-hguhdi-wihí-?
 2B-1A-help-1FT.INTER-INTER
Shall I help you?
- (239) **Nuxbáàga?he dóòhsaa maawaháà maaghéèwihí??**
 nuxbáàga-?a-hee dóòhsaa maa-maa-hirí-Ø maa-gahéè-wihí-?
 people-PL-this how INDEF-1A-do-CONT 1A-give.to.group-1FT.INTER-INTER
What should I do for these people?

The most common way to give oblique commands (i.e., let someone give a command to someone else) is with indirect causatives, as in (240a). Another method, albeit less common, for giving indirect commands is to command a person to tell another person that he *will* do something, as in (240b) and (241).

- (240) a. **Húhga!**
 húù-hgee-Ø
 come-3CAUS.INDIR-IMP.SG
Let him come! / Tell him to come!
- b. **Giwá? Húùhic.**
 giwé?-Ø húù-hi-c
 tell-IMP.SG come-3FT.SG-DECL
Tell him he should come!
- (241) **Icúùwasga a?ghúá migúhic. Giwa?!**
 icúùwasga a?g-húù-Ø mi-gú?-hi-c giwé?-Ø
 horse PORT-come-CONT 1B-give-3FT.SG-DECL tell-IMP.SG
Tell him he should bring me a horse!

(3) Finally, statement forms of future stems are used to indicate possible events, activities, and outcomes. Most such constructions arguably refer to future events, but sometimes the modal interpretation clearly takes precedence over tense. For example, both the non-future form of

dabéè to be *who* in (242a) and the form inflected for future in (242b) have present readings.

Other examples of modal interpretation in reference to non-future events are (243)–(247).

- (242) a. *Dabéèʔʔ*
 dabéè-ʔ
 who-INTER
Who is it?
- b. *Dabéèhiʔʔ*
 dabéè-**hi**-ʔ
 who-**3FT.INTER-INTER**
Who could it be? (of someone knocking at the door)
- (243) *Heʔsáawawihíʔʔ* *Niirahéèri* *heʔsáaraa* *gigeec.*
 heʔsée-waa-**wihí**-ʔ n-iirahéèri *heʔsée-raa* gigeec-c
 do.this-1CAUS.DIR-**1FT.INTER-INTER** 2-PRO.ERG do.this-2CAUS.DIR OPIN-DECL
Would I do such a thing? You must have done it.
- (244) *Cagíhicgii.*
 cagí-**hi**-cgii
 good-**3FT.SG-PRES**
I suppose it's OK.
- (245) *Idawáàra* *axbí* *madúhicgii.*
 ida-máàraa *axbí* *madú-hi-cgii*
 3POS-winter remain exist-**3FT.SG-PRES**
*He must be in his teens.*⁶⁷
- (246) *Aruhíri ééhgeehsiiri hiríhic.*
 aru-híri ééhgee-hsiiri *hirí-hi-c*
 REL-do know-REAS do-**3FT.SG-DECL**
Since he knows how to do it he can do it.
- (247) *Miibadhág* *mááhiwihaʔc.*
 mii-badhí-g m-nááhi-**wihí**-ʔa-c
 1B-fall-CRD 1A-go.PL-**3FT.PL-PL-DECL**
We might fall off.

The warning that is given in the next sentence in (248) is a clue that the horse has not yet kicked the person addressed, therefore the meaning encoded in *-hi* is clearly not the future tense but an epistemic possibility.

⁶⁷ Numbers from 11 to 19 are expressed by numerals 1-9 preceded by the verb *axbí* to remain, be left over. In this example *axbí* has an abstract meaning ‘teens’ as it occurs without an accompanying numeral.

- (248) **Icúùwasga** **nii[?]arabéèhic.** **Iháàdaha!**
 icúùwasga nii-arabéè-**hi-c** iháà-hdaa-**hee-Ø**
 horse 2B-kick-**3FT.SG-DECL** different-GOAL-3CAUS.DIR-IMP.SG
The horse might kick you. Get out of the way!

Finally, second person future forms are used in cautionary constructions to warn someone against doing something, as in (249)–(251).

- (249) **Cagíha!** **Maróòdisga** **náru[?]daaric.**
 cagí-**hee-Ø** ma-nóòdisga ná-núdaa-**ri-c**
 good-3CAUS.DIR-IMP.SG 1POS-windpipe 2A-break-**2FT.SG-DECL**
Careful! You might choke me to death.

- (250) **Gígíhda!** **Aruhobí** **ná[?]sahsiric.**
 hgígíhdi-**Ø** aru-hobí ná[?]-arasahsí-**ri-c**
 careful-IMP.SG REL-hole 2A-step.in-**2FT.SG-DECL**
Be careful! You might step in a hole!

- (251) **Ní[?]dawiri[?]iíhighe** **xagáheedha!** **Nábaaxuric!**
 ní[?]da-mirí-ii-híi-hgee xagáà-**hee-dhaa-Ø** ná-báàh[?]xu-**ri-c**
 2POS-water-INST-drink-3CAUS.INDIR move-3CAUS.DIR-NEG-IMP.SG 2A-spill-**2FT.SG-DECL**
Don't move your cup! You'll spill it!

6.5.3 Irrealis

In addition to the inflectional suffixes described in 6.5.2, the prefix **aru-** (and its allomorph **oo-** before **n-**initial stems) is used to refer to future or hypothetical events and situations.

Hidatsa and the distantly related Mandan are the only Siouan languages that employ two strategies to indicate the future tense and hypothetical situations by both suffixation and prefixation. Whereas the Mandan suffix, derived from the proto-Siouan **hta*, is not related to the Hidatsa set of inflectional suffixes, the prefix **o-** in Mandan and **aru-/oo-** in Hidatsa may be an areal feature of common origin.

Aru-/oo- has two main functions: (1) to indicate future events, and (2) to indicate hypothetical events.

When used to indicate the future, **aru-/oo-** is interchangeable with the inflectional future suffixes with little or no difference in meaning; that is, whenever any of the future suffixes are used in reference to future events, they can be replaced with **aru-**.

(252) **Dóhdaarus** **déèhic** / **arudéèc.**
 dóò-hdaa-rúhsaa **déè-hi-c** / **aru-déè-c**
 where-GOAL-COND.COND die-**3FT.SG-DECL** / **IRR-die-DECL**
He will die anyway.

(253) **Niiwahguhdiwic.** = **Ooriiwahguhdiç.**
 nii-maa-hguhdi-**wi-c** **aru-nii-maa-hguhdi-c**
 2B-1A-help-**1FT.SG-DECL** **IRR-2B-1A-help-DECL**
I will help you.

(254) **Nii'ééhgiwaawiha'c.** = **Oorii'ééhgiwaa'ac.**
 nii-ééhgee-hgiwaa-**wihi-[?]a-c** **aru-rii-ééhgee-hgiwaa-[?]a-c**
 2B-know-1CAUS.INDIR-**1FT.PL-PL-DECL** **IRR-2B-know-1CAUS.INDIR-PL-DECL**
We'll let you know.

Whenever **aru-** describes hypothetical events it is usually not interchangeable with the future suffixes without a change in meaning (verbs inflected for the future may have modal overtones, but they are not used to express hypothetical situations). The hypothetical **aru-** occurs regularly in conditional clauses (see 17.4.2.1), as well as in conjunction with the abilitative **hahgá** (see 6.6.1). Examples are (255)–(259).

(255) **Dóòhseehisaa ooráhee'?**
 dóòhsee.hisa **aru-ná-hiri-[?]**
 how **IRR-2A-do-INTER**
How would/do you do it?

(256) **Aru'a'ígubxi eewáhgeerug ooriiwahgiwé'c.**
 aru-a'ígubxi maa-ééhgee-rúg **aru-nii-maa-hgiwé'[?]-c**
 REL-answer 1A-know-COND **IRR-2B-1A-tell-DECL**
If I knew the answer I would tell you.

- (257) **Maadabéèrus** **aru[?]ééhgeedoores.**
 maa-dabéè-rúhsaa **aru-ééhgee-dóòres**
 INDEF-who-CONC.COND **IRR-know-ASSERT**
Anyone would know that. (i.e., That's common sense.)
- (258) **Óògci** **ruwaru** **maarihsí** **ma[?]íhaa[?]arug** **aruwaarihsá[?]c.**
 óògci nuwa-rú maa-nihsí ma[?]íhee-[?]a-rúg **aru-maa-nihsí-[?]a-c**
 evening some-TEMP INDEF-dance want-PL-COND **IRR-INDEF-dance-PL-DECL**
Some nights if they want to dance, they will dance.
- (259) **Díhsaa** **arumaacixihahgádhaac.**
 díisi-haa **aru-maa-cixí-hahgá-dhaa-c**
 far-ADV **IRR-1A-jump-ABIL-NEG-DECL**
I can't jump far.

6.6 Further modal categories

Although modality can be expressed through a variety of strategies, such as lexically with adverbs, several patterns have become grammaticalized in Hidatsa.

A universal modal suffix **hahgá** can express all three types of modality – epistemic, deontic, and dynamic.

The lexical verb **hirí** *to do something* participates as an auxiliary in at least three constructions: (1) the quasi-clausal auxiliary construction **-gug hirí** + *FT*, which is restricted to epistemic modality, describes a possible event; (2) the definite auxiliary construction **-s hirí** describes events that had a potential to happen in the past, and (3) the instrumental auxiliary construction **iihirí** adds an intensive meaning to the preceding verb.

Finally, there are six semantically related and mutually exclusive constructions that Jones (1992) subsumed under the label ‘approximatives.’ The approximatives express the ideas “almost,” “nearly,” or “kind of” (Jones 1992: 330). According to formal criteria, some of the approximatives could be subsumed more appropriately under derivational morphology, whereas others could be described more properly as auxiliary or serial verb constructions. However, here

they are treated together because comparison between different approximatives is helpful in clarifying finer distinctions in meaning.

6.6.1 *-hahgá* ‘abilitative’

Depending on the context, the abilitative modal suffix *-hahgá* may express any of the three modal families of meaning: it is interpreted (1) epistemically when the speaker communicates his doubts, certainties, or guesses; (2) deontically when the meanings have to do with obligation or permission; and (3) dynamically when the meaning is concerned with abilities and dispositions.

The abilitative verb stem occurs almost always with the irrealis marker *aru-*. The only regular exception to this rule is expressions of estimation and approximation of amount or size.

When *-hahgá* has a dynamic interpretation, it either describes an **ability** to do something, as in (260)–(263), or a disposition to do something, as in (264).

- (260) *Maabéhe aruwaaréèhahgadhaac.*
 maabí-hee aru-maa-néè-**hahgá**-dhaa-c
 day-this IRR-1A-go-ABIL-NEG-DECL
I can't go today.
- (261) *Aruragabadheehahgác.*
 aru-nagabadí-hee-**hahgá**-c
 IRR-start-3CAUS.DIR-ABIL-DECL
He knows how to start a song.
- (262) *Aruwiiráhguxdihahga??* -- *Éè, niwahguxdíwic.* *Dóòhse??*
 aru-mii-ná-hguxdí-**hahgá**-? -- *éè* nii-maa-hguxdí-wi-c *dóòhse*-?
 IRR-1B-2A-help-ABIL-INTER -- yes 2B-1A-help-1FT.SG-DECL be.the.matter-INTER
Can you help me? -- *Yes, I'll help you. What's wrong?*
- (263) *Oorágoosihahga??* -- *Éè, aruwaagóòsihahgac.*
 aru-ná-góòsi-**hahgá**-? -- *éè* aru-maa-góòsi-**hahgá**-c
 IRR-2A-whistle-ABIL-INTER -- yes IRR-1A-whistle-ABIL-DECL
Can you whistle? -- *Yes, I can whistle.*

- (264) **Náriidiʔ?** -- **Aruwaawuudihahgáhe.**
 n'-aríidi-ʔ -- aru-maa-m-nuudi-**hahgá**-he
 2A-hungry-INTER -- IRR-INDEF-2A-eat-**ABIL**-EMPH
Are you hungry? -- *I could eat.*

Interrogative speech-acts with **-hahgá** can be interpreted as polite requests, as in (265).

- (265) **Aruʔarágoogihahgaʔ?**
 aru-maa-ígoogi-**hahgá**-ʔ
 IRR-1A-hang-**ABIL**-INTER
Could you hang it up?

Expressions with **-hahgá** are also used to ask for tentative permission, as in (266)–(267).

- (266) **Magúù,** **ooriwaahgisihahgáʔ?**
 ma-igúù-ʔ aru-nii-maa-nahgisí-**hahgá**-ʔ
 1POS-grandmother-VOC IRR-2B-1A-lean.on-**ABIL**-INTER
Grandma, can I lean on you?

- (267) **Maaʔaruʔawáàgadihdaa** **aruwaaréèhahgaʔ?** -- **Éè, náà** **heʔsáwa!**
 maa-arú-awáàgi-adí-hdaa aru-maa-néè-**hahgá**-ʔ -- éè néè-Ø heʔsáwa
 INDEF-REL-sit.down-lodge-LOC IRR-1A-go-**ABIL**-INTER -- yes go-IMP.SG then
May I go to the toilet -- *Yes, go ahead!*

In the possibilitive sense, **-hahgá** is used to denote the **possibility** of a given proposition's being or becoming true. In this sense, the meaning of **-hahgá** can be translated as 'it is possible.'

Examples are (268)–(272).

- (268) **Aruseʔhahgác.**
 aru-séʔ-**hahgá**-c
 IRR-that-**ABIL**-DECL
It could be him.

- (269) **Aruʔágagiihahgac.**
 aru-ágagii-**hahgá**-c
 IRR-able.to-**ABIL**-DECL
He should be able to do it.

- (270) **Háchageegi seʔri díheec.** -- **Ooreesáàcic!** -- **Aruwaduhahgác!**
 háchageegi seʔ-rí déè-hee-c -- aru-neesá-aci-c -- aru-madú-**hahgá**-c
 hiccup that-ERG die-3CAUS.DIR-DECL -- IRR-not.exist-COMPR-DECL -- IRR-exist-**ABIL**-DECL
A hiccup killed that guy. -- *There is no such thing!* -- *Yes, it's possible!*

(271) **Hirí maa'ooruudihahgác.**
 hiri maa-arú-nuudí-**hahgá**-c
 this INDEF-IRR-eat-**ABIL**-DECL
This one is edible.

(272) **Maa'arugadé'cheehahgac.**
 maa-arú-hgi-adé'sa-hee-**hahgá**-c
 INDEF-IRR-GI-famous-3CAUS.DIR-**ABIL**-DECL
He / it is praiseworthy.

When **-hahgá** indicates an estimation or approximation, as in (273), the irrealis marker **aru-** does not co-occur with an abilitative stem. **Hahgá** in such constructions can be glossed as ‘about’ or ‘approximately’. The abilitative suffix also derives approximative adverbs by combining **-hahgá** and the adverbial suffix **-haa**, realized as **-hagháà**, which will be described in detail in 15.2.6.

(273) **Idawáàra axbí maduhahgac.**
 ida-máàraa axbí madú-hahgá-c
 3POS-winter remain exist-**ABIL**-DECL
He must be in his teens.

6.6.2 **-gug hirí(hi)** ‘possibilitive’

The possibilitive construction **-gug hirí(hi)** expresses epistemic possibility and may be glossed as ‘maybe’ or ‘might’. The construction is composed of an unaccented clause-final suffix **-gug** and the auxiliary verb **hirí** (lit. *to do sth*) that is inflected for person and number in the future tense (see 6.5.2).⁶⁸

⁶⁸ **Hirí** *to do sth, make sth* is an irregular verb. The present and past inflected forms are **hiríc** *he did it*, **mahéèc** *I did it*, and **náheec** *you did it*. Inflected future forms and their literal meanings are **hiríhic** *he will do it*, **mahéèwic** *I will do it*, and **náheeric** *you will do it*.

The suffix **-gug** functions syntactically as a clause-final subordinating suffix that is followed in the matrix clause by an inflected form of **hirí**; therefore the epistemic auxiliary construction can be analyzed alternatively as an independent clause. However, since the distribution of **-gug** is limited to a position before a single lexical verb that here clearly functions as a modal auxiliary without regard to its literal meaning, it is more appropriate to describe this construction here rather than in Chapter 17 that deals with clause types.

Expressions with **-gug hirí(hi)** describe situations and events that are considered likely or possible in the present or the future; references to possible events in the past are less common. Since the suffix **-gug** is unaccented and pronounced with low pitch, the inflected auxiliary with which it forms a phonological phrase normally loses its accent as well. Examples of possibilitive statements are given in (274).

- | | | | |
|-------|---|---|---|
| (274) | Hóbheehisagug hiríhic.
Ciríàgug hiríhic.
He'ságug hiríhic. | <i>It might get dark.</i>
<i>It's probably cold. / It might be cold.</i>
<i>It may be so. / Perhaps. / Maybe.</i> | < hóbheehisa dark
< ciríà cold
< he'sá be so |
|-------|---|---|---|

Both the auxiliary and the main verb are inflected for person, as exemplified in (275). However, only the auxiliary is inflected for number, as in (278d), and no plural morphemes are inserted between the stem and the possibilitive **-gug**. The only other clausal suffixes that block the insertion of plural morphemes are the coordinative **-g** (see 17.3) and ablaut-triggering contemporaneous morpheme (see 17.4.1.8).

- | | | | |
|-------|---|--|---|
| (275) | a. Guucígug hiríhic.
b. Mahguucígug mahéèwic.
c. Náhguucigug náheeric.
d. Guucígug hiríha'c. | <i>Maybe he took it back.</i>
<i>I might take it back.</i>
<i>You might take it back.</i>
<i>They might have taken it back.</i> | < guucí take sth back
< guucí take sth back
< guucí take sth back
< guucí take sth back, -a' PL |
|-------|---|--|---|

More examples of the possibilitive construction illustrating person agreement are given in (276)–(278). Example (276) is particularly interesting because *hirí to do sth* is used doubly, first as the main verb and then as an auxiliary.

(276) **Mahéègug maheewic.**
 maa-hirí-gug **maa-hirí-wi-c**
 1A-do-POSSIB 1A-do-1FT.SG-DECL
I might do it.

(277) **Náriidigug naheeric. Né?gure? hirá!**
 n'-aríidi-gug **ná-hirí-ri-c** n'-é?hgi-é? hirí-Ø
 2A-hungry-POSSIB 2A-do-2FT.SG-DECL 2POS-own-GI-own do-IMP.SG
*You might get hungry, make your lunch bag!*⁶⁹

(278) **Miigiwé?gug hirihic.**
 mii-giwé?-gug **hirí-hi-c**
 1B-tell-POSSIB do-3FT.SG-DECL
He might tell me.

Even though person agreement between the auxiliary verb and the main verb is the norm, as in (279a) and (280a), optionally the third person form *hiríhi* is used as default auxiliary for first and second persons as well, as in (279b) and (280b).

(279) a. **Mii?ághirigug mahéèwic.** *Maybe I'll get lucky. < mii- 1B, ághiri lucky*
 b. **Mii?ághirigug hirihic.** *Maybe I'll get lucky.*

(280) a. **Maawabaahígug mahéèwic.** *I might sing. < maa- INDEF, maa- 1A, báàhi sing sth*
 b. **Maawabaahígug hirihic.** *I might sing.*

Hidatsa morphology provides various strategies to indicate epistemic modality. In addition to the possibilitive auxiliary construction, the same meaning can also be conveyed by the irrealis prefix *aru-* and verbs inflected for the future tense. The near-synonymous use of

⁶⁹ The noun *e?guré? brown-bag* is subject to classificatory possession (see 6.3.3). It is formed by prefixing the possessive *é?*- to the stem *guré? to keep sth*, which itself is derived by prefixing *gur-*, an allomorph of *gi*, to the lexical verb *é? to own sth*.

irrealis, the future tense, and the possibilitive auxiliary construction is illustrated in (281) and the comparison of possibilitive and future tense constructions in (282a-b).

- (281) **Madabuusíhge íhcagi adígua mahgúc.**
 mada-buusí-hgee íhcagi adí-hgua mahgú-c
 1POS-spotted-DIM alone lodge-LOC stay-DECL

Hirigháà aruxéèwic / xéèwihic / xéèwigug hiríhic.
 hiri-gháà aru-xéèwi-c / xéèwi-hi-c / xéèwi-gug-hirí-hi-c
 this-ADV.TEMP IRR-lonely-DECL / lonely-3FT.SG-DECL / lonely-POSSIB-do-3FT.SG-DECL

My cat is home alone, by now it's probably lonely / must be lonely.

- (282) a. **Ciríàgug hiríhic. Níduuxihdia gurá?!**
 ciríà-gug hirí-hi-c n'-idúùxi-ihdià hgi-é[?]-Ø
 cold-POSSIB do-3FT.SG-DECL 2POS-shirt-big GI-own-IMP.SG
It's probably cold / might be cold, keep your jacket.

- b. **Adáàsi giciríàhic. Níduuxihdia gurá?!**
 adáàsi hgi-ciríà-hi-c n'-idúùxi-ihdià hgi-é[?]-Ø
 outside GI-cold-3SG.FT-DECL 2POS-shirt-big GI-own-IMP.SG
It's a little colder outside, keep your jacket.

6.6.3 -s hirí 'unrealized'

The past possibilitive construction is formed with the matrix clause-final definite suffix **-s** and the auxiliary verb **hirí** that is inflected for person and number. It is used in reference to unrealized past events that had a potential to become real. An analogous possibilitive construction with **-gug** **-hirí(hi)** describes possible events that have a potential to occur in the future (see 6.6.2).

- (283) **Aruwii'ígaaraci miidáhees hiríc.**
 aru-mii-ígaaraci mii-dáhee-s hirí-c
 REL-1B-look-COMPR 1B-kill-DEF do-DECL
The way he looked at me could have killed me.

- (284) **Hubá caga'íí / Mahgirada'íí iiwahgiraghîdis mahéèc.**
 hubá cagí-Ø-íí / maa-hgiradá-Ø-íí ii-maa-hgi-naghîidi-s maa-hirí-c
 soup good-CONT-INTENS / 1A-like-CONT-INTENS 1A-GI-squeeze.in-DEF 1A-do-DECL
The soup is so good / I like it so much that I almost jumped into it.

6.6.4 *iihirí* ‘intensive’

The intensive auxiliary-verb construction adds the meaning ‘very’, ‘too’, or ‘really’ to the preceding clause. It is formed by prefixing the instrumental *ii-* to the auxiliary verb *hirí*, which is inflected for person and number, to modify the preceding contemporaneous clause (see 17.4.1.8).

The inflected forms of the auxiliary verb *iihirí* are:

3SG *iihiríc*
 1SG *iimahéèc*
 2SG *iináheec*

Examples are in (285)–(289).⁷⁰

- (285) *Arî sagúba iihiríc.*
 arî sagúbi-Ø **ii-hirí-c**
 road crooked-CONT **INST-do-DECL**
The road is very crooked.
- (286) *Mará birábuura iihiric.*
 m-ará birábuuri-Ø **ii-hirí-c**
 1POS-hair thin-CONT **INST-do-DECL**
My hair is too thin.
- (287) *Maaráhcaadhaa iihiri?iic.*
 maa-náhcaa-dhaa-Ø **ii-hirí-îi-c**
 INDEF-careful-NEG-CONT **INST-do-HAB.SG-DECL**
He is always very careless.
- (288) *Miihabáà iiwahéèc.*
 mii-habáà-Ø **ii-maa-hirí-c**
 1B-cold-CONT **INST-1A-do-DECL**
I’m very cold.
- (289) *Dóòhseewa nii?isîà iiráhee??*
 dóòhseewa nii-isîà-Ø **ii-ná-hirí-?**
 why 2B-bad-CONT **INST-2A-do-INTER**
Why are you so bad?

⁷⁰ There are, of course, other ways to say ‘very’ in Hidatsa, the most common being the adverb *agihdàwa* and the instrumental applicative *iiragsibí*. The latter is not inflected for person regardless of superficial similarity to *iihirí*.

6.6.5 -aci/-raci ‘compromisive’

The compromisive suffix **-aci/-raci** is a suffixal hedge that calls into question the appropriateness of the verb concerned. It can be added to any predicate and is usually glossed as ‘kind of, sort of, rather’. The compromisive suffix has two allomorphs: the ablaut-triggering suffix **-aci** after short vowels and its non-ablaut causing allomorph **-raci** after long vowels (including diphthongs). The contrast between the allomorphs is illustrated in (290a-b) with the two free variants of the verb **bxígi~bxígee** *to be squat as a person, be short and stubby*:

- (290) a. **Bxígaacidoore.** *She is kind of short and squat.* < **bxígi** + **aci** + **doore** *ASSERT*
 b. **Bxígeeracidoore.** *She is kind of short and stubby.* < **bxígee** + **raci** + **doore** *ASSERT*

The excessive use of this downtoning suffix, which some speakers find distasteful, is particularly associated with the Independence dialect, but it is extremely common in other dialects as well.

Although compromisive expressions reach out towards the meaning encoded in the predicate, at the same time they reduce the force of it. The speaker does not deny the information conveyed by the predicate, but seems to do it in a deprecating and grudging way. Compromisive and neutral statements are contrasted in (291) and (292).

- (291) a. **Miihabáàc.** *I’m cold.* < **mii-** *1B*, **habáà** *cold*
 b. **Miihabáàracic.** *I’m kind of cold.* < **mii-** *1B*, **habáà** *cold* **-raci** *COMPR*
- (292) a. **lidá xíʔbic.** *His face is wrinkled.* < **iidá** *face*, **xíʔbi** *wrinkled*
 b. **lidá xíʔbaacic.** *His face is kind of wrinkly.* < **iidá** *face*, **xíʔbi** *wrinkled*, **-aci** *COMPR*

The exact interpretation of compromisive expressions depends on the context. In some cases the reading is unequivocally derogatory, as in (293). In many other expressions the interpretation is not necessarily deprecatory, but the force of the lexical meaning in a compromisive stem is certainly diminished, as in (294). The exact meaning of this overused

suffix is sometimes difficult to determine, as illustrated by the formulaic expression used by some narrators at the beginning of historical accounts in (295).

- (293) **Idhaacixáheeracag!**⁷¹
 idhaací-xáá-hee-**raci-g**
 trousers-drawn.up-CAUS.DIR-**COMPR-CRD**
Phew, she has highwaters on!
- (294) **Hiraacá aru'iró? gubídhaaraca?c.**
 hiraacá aru-iré²-²o gubí-dhaa-**raci**-²a-c
 Hidatsa REL-speak-PL smell-NEG-**COMPR-PL-DECL**
Their Hidatsa doesn't sound fluent. (lit. How they speak Hidatsa doesn't smell quite right.)
- (295) **Maa'aguwahgiwé?he maariireesáàciguac.**
 maa-agu-maa-hgiwé²-hee maa-nii-neesá-**aci**-hgua-c
 INDEF-REL-1A-tell-this INDEF-2B-exist.not-**COMPR-LOC-DECL**
What I'm going to tell you about happened way before you were born.

Some compromisive stems indicate that the activity described by the verb is characteristic of the subject. For example, the verb **gîxi** *to whine* in (296a) simply refers to a single episodic act of whining, whereas the compromisive stem **gîxaaci** in (296b) refers to someone's proclivity to whine or be whiny all the time.

- (296) a. **Maagarísda dóòhseewa gîxi??** b. **Maagarísda dóòhseewa gîxaaci??**
 maagarísda dóòhseewa gîxi-² maagarísda dóòhseewa gîxi-**aci**-²
 child why whine-INTER child why whine-**COMPR**- INTER
Why is the child whining? *Why is this child always whiny?*

6.6.6 hisa 'simulative'

The simulative suffix **-hisa** *like* is used in both noun and verb derivation (see 4.11.5 and 7.2.2.4).

As an approximative suffix, **-hisa** can be glossed as 'it looks like', 'it appears', or 'it seems'.

⁷¹ A small number of expressions in my database, all of which are derogatory exclamations, terminate with the coordinative suffix **-g**. This ending, however, has not been analyzed as a speech-act marker (see 5.1) because there is evidence that exclamations ending with **-g** are actually incomplete cosubordinate constructions (see 13.3.1.2).

When used approximatively, **-hisa** is often used in combination with the compromisive suffix **-aci**. Examples of various combinations of **heʔsá** *to be like this* with compomisive and simulative suffixes are given in (297).

- | | | | |
|-------|--------------------------|-----------------------------------|--|
| (297) | a. Heʔsác. | <i>It is so.</i> | |
| | b. Heʔsààcic. | <i>It's kind of like this.</i> | < -aci <i>COMPR</i> |
| | c. Heʔsáhisac. | <i>It seems that way.</i> | < -hisa <i>SIM</i> |
| | d. Heʔsáhisaacic. | <i>It kind of seems that way.</i> | < -hisa <i>SIM</i> , -aci <i>COMPR</i> |

6.6.7 **ii...hisa** 'simulative'

Clauses of similarity are formed by prefixing the instrumental **ii-** and suffixing the simulative **-hisa** to the clause. The simulative construction can be used to point to a literal similarity between two or multiple animate or inanimate objects, as in (298) and (299). Such constructions can be literally glossed as 'to be like X'.

- (298) **liimaadagiráàgahgeehisac.**
ii-maadagí-ráàga-hgee-hisa-c
 INST-glass-young.one-DIM-SIM-DECL
She [the little girl] is really cute. (lit. She is like a doll.)
- (299) **lirucgáhisaʔc.**
ii-nucgá-hisa-ʔa-c
 INST-twin-SIM-PL-DECL
They are like twins.

When used in reference to states, processes, or activities, as in (300)–(302), the simulative construction functions as a simile comparing a situation directly to some other situation.

- (300) **lirúcihchihisa** **néèc**
ii-núcihchi-hisa-Ø **néè-c**
 INST-trot-SIM-CONT go-DECL
She went as if she were trotting.

(301) **li'óghaciahisag** néèc.
ii-óghacia-hisa-g néè-c
 INST-swoop-SIM-CRD go-DECL
He went by as if he were gliding.

(302) **lihiráwigaraahisac.**
ii-hiráwi-garáà-hisa-c
 INST-sleep-flee-SIM-DECL
It's just like a nightmare.

The comparison in simulative constructions is typically made to the situation as a whole. Therefore the instrumental prefix always precedes the nominal argument. In (303), for example, the situation of water being spilled serves as a simile for rainy weather. The interpretation would be literal (“it’s like he spilled water”) if the instrumental prefix were added directly to the verb **báàhxu** *to spill something, dump*. Other examples are given in (304) and (305).

(303) **liwirí** **báàhxuhisac.**
ii-mirí **báàhxu-hisa-c**
 INST-water spill-SIM-DECL
It's pouring.

(304) **li'ará** **básgiahisac.**
ii-ará **básgia-hisa-c**
 INST-3POS.hair crumple-SIM-DECL
It's as if someone has crumpled his hair (of kinky hair).

(305) **liwa'eerí** **óhxaadihisac.**
ii-ma-eerí **óhxaadi-hisa-c**
 INST-1POS-belly white-SIM-DECL
(I'm so full that) my belly is as though it were white (from expansion).

The simulative suffix is optionally causativized, as in (306)–(308).

(306) **licidibíhisahgaa'ac.**
ii-cidibí-hisa-hgee-²a-c
 INST-collapse-SIM-3CAUS.INDIR-PL-DECL
Their dancing will bring the house down.

- (307) **liwii'óòcixaawihisahgeec.**
ii-mii-óòcixaawi-hisa-hgee-c
INST-1B-numb-SIM-3CAUS.INDIR-DECL
I went numb from the shock.
- (308) **Mààra aru'aré' iibácaadihisahgeec.**
m-ààra aru-aré' ii-bácaadi-hisa-hgee-c
1POS-arm REL-pain INST-stab-SIM-3CAUS.INDIR-DECL
I have a stabbing pain in my arm.

The meaning of some simulative constructions has become lexicalized. The literal translation of the Hidatsa sentence in (309) is 'it looks as if someone cut into the land,' but the idiomatic meaning of the expressions is 'it is a cliff.'

- (309) **Awaréèda iiragcagíhisac.**
awá-néèda ii-nagcagí-hisa-c
land-edge INST-chop.off-SIM-DECL
It's a cliff.

6.6.8 **-raa** 'approximative'

The approximative suffix **-raa** can be glossed as 'almost'. It indicates that something almost happened. Examples with **-raa** are presented in (310)–(313).

- (310) **Mighacúùdiraac.**
m-ihgi-hacúùdi-raa-c
1B-REFL-slit-APPROX-DECL
I almost cut myself.
- (311) **Mabsúdag miihxúàraac.**
ma-básudi-g mii-hxúà-raa-c
1A-slip-CRD 1B-fall-APPROX-DECL
My cane slipped and I just about fell.
- (312) **Miriwaarîri maaráàg miicibíraac.**
miri-maa-nîiri maa-néè-g mii-cibí-raa-c
water-1A-walk 1A-go-CRD 1B-drown-APPROX-DECL
I went swimming and almost drowned.

- (313) **Huci?ihdíàri miiraghábheeraac.**
 hucí-ihdíà-rí mii-nagháhibi-hee-**raa-c**
 wind-big-ERG 1B-blow.away-3CAUS.DIR-**APPROX-DECL**
The big wind just about blew me away.

The approximative suffix is not synonymous with the compromisive **-aci/-raci**, as evidenced by the change in meaning after substituting the compromisive suffix in (314a) with the approximative in (314b).

- | | |
|---|------------------------------------|
| (314) a. Aráxawaaracíc. | b. Aráxawaaraac. |
| aráxaa-waa- raci-c | aráxaa-waa- raa-c |
| burn-1CAUS.DIR- COMPR-DECL | burn-1CAUS.DIR- APPROX-DECL |
| <i>I kind of burnt it some. (an excuse)</i> | <i>I almost burnt it.</i> |

The approximative **-raa** is used in reference to events that have already taken place. For hypothetical events, the future suffixes (see 6.5.2) are used, as demonstrated by minimal pairs in (315) and (316).

- | | | |
|---------------------------------|---|----------------------|
| (315) a. Ídhibiraac. | <i>It almost collapsed on him.</i> | < -raa APPROX |
| b. Ídhibihic. | <i>It might collapse on him.</i> | < -hi 3FT.SG |
| (316) a. Níghacuudiraac. | <i>You almost cut yourself.</i> | < -raa APPROX |
| b. Níghacuudiric. | <i>You might cut yourself. (warning)</i> | < -ri 2FT.SG |

6.6.9 *rée* 'progressive'

The verb *née* *to go* has become grammaticalized as an auxiliary in progressive constructions.

The progressive enclitic may be preceded by both verbs and nouns and it expresses the idea that a process is underway towards a certain state. Progressive constructions are always agentless and they are not inflected for person. Since the progressive enclitic originates diachronically from a contemporaneous serial verb construction that has become grammaticalized, it triggers ablaut on the preceding verb. Progressive constructions are illustrated in (317)–(322).

- (317) **Áàda** **reec.**
 áàda-Ø **nèè-c**
 morning-CONT PROG-DECL
It's becoming daylight.
- (318) **Maa?arubhí** **gi?irúsuuga** **reec.**
 Maa-arubhí **hgi-i-núsuugi-Ø** **nèè-c**
 INDEF-REL-dig GI-STAT-wash-CONT **PROG-DECL**
The tattoo is getting faded.
- (319) **Niiguhgá** **réè'?** -- **Miiguhgá** **réèc.**
 nii-guhgá-Ø **nèè-?** -- mii-guhgá-Ø **réè-c**
 2B-ready-CONT **PROG-INTER** -- 1B-ready-CONT **PROG-DECL**
Are you getting ready? -- I'm almost ready.
- (320) **Sigáàga** **reec.**
 sigáàga-Ø **réè-c**
 young.man-CONT **PROG-DECL**
He is a teenager. (lit. He's becoming a young man.)
- (321) **Hirigháà** **ooráàwiis** **híá** **réèhicgi.**
 hiri-gháà **aru-náàwii-s** **híi-Ø** **réè-hi-cgíí**
 this-ADV.TEMP REL-three-DEF get.here-CONT **PROG-3FT.SG-PRES**
It must be getting to 3 o'clock by now.
- (322) **Mark** **híá** **réèhicgi** **Mirahaciwáàgus** **se?hgua.**
 Mark **híi-Ø** **réè-hi-cgíí** **mirahací-máàgu-s** **se?hgua**
 Mark get.here-CONT **PROG-3FT.SG-PRES** willow-high-DEF that-LOC
Mark should be arriving in Bismarck by now.

Although the auxiliary does not inflect for person, it is inflected for number, as demonstrated in (323b).

- (323) a. **Dáá réèc.**
 déè réè-c
 die PROG-DECL
He is dying.
- b. **Daá ráà'ac.**
 déè réè-²a-c
 die PROG-**PL**-DECL
They are dying.

The difference between a neutral statement, and the compromisive, approximative, and progressive forms based on it is illustrated in (324).

- (324) **déè.c** *he died*
déè.raci.c *he is about dead; it's pretty dead (as a boring party)*
déè.raa.c *he almost died*
daa.réè.c *he is dying*

The progressive form with **déè** *to die* is often used in serial constructions to indicate that one is “dying”, or really anxious, to do something, as in (325) and (326).

- (325) **Marîda** **maadá** **réèc.**
m-ariidi-Ø maa-dí-Ø **réè-c**
1A-hungry-CONT 1A-die-CONT **PROG-DECL**
I'm “dying” of hunger.
- (326) **Nída?iigi?rias** **nánguuci** **iiráda** **ree??**
nída-ii-gí?ria-s ná-hguuci ii-ná-di-Ø **néè-?**
2POS-INST-ride-DEF 2A-get.back INST-2A-die-CONT **PROG-INTER**
Are you “dying” to get your bike back?

6.6.10 **níhee** ‘imminent’

The lexical verb **níhee** *to put something somewhere* is used as an auxiliary in imminentive constructions. Imminentive auxiliary constructions convey the idea that something is about to happen or has almost reached a certain state. The auxiliary is inflected for person according to the direct causative pattern: 3SG **níheec**, 1SG **níwaac**, 2SG **níraac**. A verb that precedes the auxiliary is subject to ablaut as imminentive constructions are actually grammaticalized serial verb constructions. Examples of imminentive constructions are presented in (327)–(330).

- (327) **Hía** **níwaa?ac.**
híi-Ø **níwaa-?a-c**
get.here-CONT **1.IMM-PL-DECL**
We are almost there.
- (328) **Mirá?awaxaadhe** **cíá** **níheec.**
mirá?-awáxaadi-hee cíá-Ø **níheec-c**
fire-light-3CAUS.DIR go.out-CONT **3.IMM-DECL**
The light (a candle, kerosene lamp) is almost out.

- (329) **Míàgaasa ríheec.**
 míà-gaasa níhee-c
 woman-DIM 3.IMM-DECL
She is a teenager. (lit. She is almost a young woman.)
- (330) **Náàdi áchaa mú'sia níwaac. Maa'ooruudí hirá!**
 n`-adí ácha-haa m-ú'sia-Ø níwaa-c maa-aruu-ndí hirí-Ø
 2POS-lodge near-ADV 1A-arrive-CONT 1.IMM-DECL INDEF-REL-eat make-IMP.SG
- Mirisibísa ruwa gicawéhga!**
 mirí-sibísa nuwá hgi-cawéè-hgee-Ø
 water-black some GI-warm-3CAUS.INDIR-IMP.SG

I'm just about getting close to your house. Make food! Warm up some coffee!

Whereas the approximative suffix **-raa** almost always refers to past events that stopped short of completion, imminentive constructions with **níhee** typically refer to events in the present that are only a small degree away from completion. Examples (331a) and (332a) contrast sentences with **-raa** to imminentive auxiliary constructions in (331b) and (332b).

- (331) a. **Cirúdhaa mabahcágiraac.**
 cirúdhaa ma-báhcagi-raa-c
 through 1A-cut-APPROX-DECL
I almost cut it through.
- b. **Cirúdhaa mabahcága riwaac.**
 cirúdhaa ma-báhcagi níwaa-c
 through 1A-cut-CONT 1.IMM-DECL
I'm just about to cut it through.
- (332) a. **Miicibíraac.**
 mii-cibí-raa-c
 1B-drown-APPROX-DECL
I almost drowned.
- b. **Miicibá ríwaac.**
 mii-cibí-Ø níwaa-c
 1B-drown-CONT 1.IMM-DECL
I'm just about to drown.

Whereas progressive constructions with **-rée** simply express ongoing processes, as in (333a), auxiliary constructions with **níhee** indicate that the process is near completion, as in (333b).

- (333) a. **Úùca reec.**
 úùci-Ø nées-c
 dry-CONT PROG-DECL
It's getting dry.
- b. **Úùca ríheec.**
 úùci-Ø níhee-c
 dry-CONT 3.IMM-DECL
It's almost dry.

7 Noun derivation

The difference between nouns and verbs is not always straightforward in Hidatsa. Predicate nouns are inflected as stative verbs, in which case they are inflected with the B-set prefixes, as in (1).

- | | | | | | |
|-------|---------------------|--------------------|----|---------------------------|----|
| (300) | a. | Macéé-c. | b. | Mii-wacéé-ʔ? | c. |
| | Nii-wacéé-dhaa-c. | | | | |
| | man-DECL | 1B-man-INTER | | 2B-man-NEG-DECL | |
| | <i>He is a man.</i> | <i>Am I a man?</i> | | <i>You are not a man.</i> | |

Hidatsa verbs describe activities and states, whereas prototypical nouns are referential and designate physical objects and phenomena. What are perceived as activities and states on the one hand, and tangible objects and phenomena on the other, is not always predictable on semantic grounds. There are several formal criteria that help to distinguish nouns from verbs. For example, nouns, unlike verbs, do not undergo ablaut before the coordinative suffix **-g** or the compromissive suffix **-aci** (see 2.4.1.1). Unlike nouns, verbs have to be nominalized by prefixation or lexical compounding (see 7.2.3 and 7.2.4) before any determiners can be suffixed to them. However, no criterion alone applies consistently to all words, as there exists a small number of nouns, such as **áàba** *leaf*, which in isolation (i.e., when not compounded) always occurs with one of these affixes, as **aru'áàba** *a leaf of something*. In such cases other tests have to be applied. The case of **áàba** is disambiguated by attempting to causativize it – a test that nouns do not yield to, except under exceptional circumstances.

Hidatsa nouns can be divided into non-derived and derived. Non-derived nouns are monomorphemic roots that synchronically are not analyzable. The overwhelming majority of nominal roots can occur as words by themselves, but a small number of bound roots and/or lexical suffixes occur only in complex stems. As no clear distinction can be made between bound

roots, lexical affixes, and derivational affixes, bound roots and lexical affixes are treated together with derivational suffixes in this grammar.

There are three types of noun derivation in Hidatsa. The first type is conversion. The second type is derivation by suffixation and with bound roots. The third type is compounding. Compounding is an underlyingly syntactic process in Hidatsa. The subcategorization frames are quite rigid even for derived nouns in Hidatsa. Just as it is not possible to omit a subcategorized argument of a verb in Hidatsa, in compounds the argument slot for the subject of nominalized stative and intransitive verbs, and the object or agent of transitive verbs has to be filled either with a lexical noun or the indefinite prefix *maa-*. Inalienably possessed nouns subcategorize for the possessor, and alienably possessed nouns have no arguments. The whole process is recursive and a derived stem may serve as an argument in a more complex stem.

7.1 Non-derived nouns

Non-derived nouns are monomorphemic roots that synchronically are not further analyzable. The overwhelming majority of non-derived nominal roots can occur as words by themselves. All nominal roots are inherently accented.

The simplest non-derived nouns are monosyllabic. Nouns consisting of a single syllable contain an optional onset, a bimoraic nucleus if the syllable is open, and a monomoraic nucleus if the syllable is closed. Only the glottal stop may serve as a coda. Examples are in (2).

- (301) MONOSYLLABIC NOMINAL ROOTS
- | | |
|------------|--------------------------------|
| <i>áà</i> | <i>stem or body of a plant</i> |
| <i>íí</i> | <i>fur</i> |
| <i>mée</i> | <i>louse</i> |
| <i>míà</i> | <i>woman</i> |
| <i>éʔ</i> | <i>his food</i> |
| <i>míʔ</i> | <i>rock</i> |

Disyllabic and polysyllabic non-derived nouns may contain syllables with any internal structure as long as their combinations do not violate the phonotactic constraints of Hidatsa.

Most non-derived nouns contain two syllables, closely followed by trisyllables, as illustrated in (3) and (4).

(302) DISYLLABIC NOMINAL ROOTS

abá	<i>his nose</i>
céésa	<i>wolf</i>
mîraa	<i>goose</i>
méʔchi	<i>knife</i>
nagcúà	<i>mink</i>
dóhsga	<i>woodpecker species</i>

(303) TRISYLLABIC NOMINAL ROOTS

úùcica	<i>weasel</i>
abáàriʔ	<i>porcupine</i>
miráxa	<i>pot, kettle</i>
aróxba	<i>confluence</i>
naxbichí	<i>grizzly</i>
mííxaaga	<i>duck</i>

Non-derived nouns containing more than three syllables have not been documented.

7.2 Derived nouns

7.2.1 Conversion

It is possible to create new lexemes in Hidatsa by changing the category of an existing lexeme without the addition of any derivational affixes. Verb to noun conversion is not particularly common in Hidatsa. Most nouns derived by conversion are proper nouns or describe distinct varieties of animals and agricultural plants. Examples of nouns derived by conversion are given in (5).

(304)	adagí	<i>soft white (variety of corn)</i>	< adagí	<i>be white</i>
	adagicóógi	<i>hard white (variety of corn)</i>	< cóógi	<i>be hard</i>
	dóʔhi	<i>blue (variety of corn)</i>	< dóʔhi	<i>be blue</i>
	hisíséhbi	<i>dark red (variety of corn)</i>	< hisí	<i>be red, séhbi be dark</i>

xáhxis	<i>pinto horse; Pinto (horse name)</i>	< <i>xáhxi</i> <i>be spotted</i> , -s DEF
sibísas	<i>black horse; Blackie (horse name)</i>	< <i>sibísa</i> <i>be black</i> , -s DEF
Híhcis	<i>Pink (personal name)</i>	< <i>híhci</i> <i>be pink</i> , -s DEF
Cíʔris	<i>Yellow (personal name)</i>	< <i>cíʔri</i> <i>be yellow</i> , -s DEF
Magiʔaʔdiríʔas	<i>Milky Way (lit. they race e.o.)</i>	< <i>magi-</i> RECIP, <i>aʔ-</i> CONF, <i>diríà</i> run, -ʔa PL, -s DEF

7.2.2 Suffixal derivation

An elegant analysis of suffixal derivation in Hidatsa is complicated by a lack of unambiguous distinction between derivational and lexical suffixes on the one hand, and bound roots on the other. For lack of a better understanding about the status of individual suffixes and/or bound roots, any morpheme that can only occur in non-initial position in complex stems will be referred to as a suffix.

7.2.2.1 Diminutive -hgee

The diminutive -hgee is the most productive and common of all nominal affixes. It can be suffixed to virtually any noun with very little change in meaning. As the label implies, diminutive nouns convey a sense of smallness or slight degree. Examples are in (6).

(305)	<i>cagáàgahge</i>	<i>little bird</i>	< <i>cagáàga</i>	<i>bird</i>
	<i>adíhge</i>	<i>small house</i>	< <i>adí</i>	<i>house</i>
	<i>iidagsibíсахge</i>	<i>cottontail</i>	< <i>iidagsibísa</i>	<i>cottontail</i>

Just as in English, diminutives are often used to express intimacy or affection, as in (7) and (8). Diminutive nouns may also be interpreted in the derogatory sense as when trying to slight someone, as in (9).

(306)	<i>masúàgaasahgeewa</i>	<i>a little pup</i>	< <i>masúàgaasa</i>
	<i>idawasúgahge</i>	<i>her doggy</i>	< <i>idawasúga</i> <i>her dog</i>
	<i>iidáhge gháwuucaacidoore</i>	<i>the little pitiful dried face</i>	< <i>iidá</i> <i>his face</i>

- (307) **Macuugáhgee** náàwiic.
 ma-icuugá-hgee náàwii-c
 1POS-younger.borther-DIM three-DECL
I have three little brothers.

- (308) **macééhgees** *the little guy* < **macéé** *man*

The meaning of some diminutive nouns with **-hgee** has become lexicalized and no longer expresses attitude, as shown in (10).

- | | | | | |
|-------|------------------------|-----------------------------|--------------------------|--------------------------|
| (309) | é? | <i>his food</i> | > é'hge | <i>his snacks</i> |
| | sîba | <i>intestines; sausage</i> | > sîbahge | <i>hotdog</i> |
| | macidóò | <i>awl</i> | > macidóhge | <i>needle; syringe</i> |
| | aasí | <i>horn</i> | > aasíhge | <i>spoon, horn spoon</i> |
| | isdá | <i>his eye</i> | > isdáhge | <i>his eyeglasses</i> |
| | mirá? | <i>fire</i> | > mirá'hge | <i>match, lighter</i> |
| | maa'agucí'ri | <i>orange; wild mustard</i> | > maa'agucí'rihge | <i>mandarin</i> |
| | mirí oorúùwiiri | <i>whirlpool</i> | > mirí oorúùwiri | <i>eddy</i> |

The diminutive **-hgee** is extremely common in some speakers' speech and is often associated with the Independence dialect. Some speakers disapprove of the overuse of this suffix as the speaker may be perceived as having a belittling attitude. For instance, the usage of the diminutive in example (11) is clearly redundant since it is suffixed to a word that already means 'small'.

- | | | |
|-------|---|-------------------------------|
| (310) | Madawaabèè,
Madhéé | mirá? naagihga! |
| | mada-maabéè-` | hóbheehisarú |
| | 1POS-grandchild-VOC | madhéé |
| | mirá? naagí-hgee-Ø | hóbheehisa-rú |
| | fire sitting-3CAUS.INDIR-IMP.SG | already dark-TEMP |
| | nuxbáàga garísdahgaa'as nááhu'iiruuc. | |
| | nuxbáàga garísda- hgee -?a-s | nááhu-iiru-c |
| | people small-DIM-PL-DEF | come.PL-HAB.PL-DECL |

My grandchild, leave the light on! The little people⁷² always come out now that it is already dark.

7.2.2.2 Diminutive -gáàsa

The second Hidatsa diminutive, -gáàsa, is much less productive than -hgee. The basic meaning of -gáàsa is ‘little’ or ‘small’. Examples are in (12).

(311)	icigáàsa	<i>his little toe</i>	< icí	<i>his foot</i>
	sáàgigaasa	<i>his little finger</i>	< sáàgi	<i>his hand</i>
	miʔgáàsa	<i>pebble</i>	< míʔ	<i>rock</i>
	ahígaasa	<i>baby turnip</i>	< ahí	<i>wild turnip</i>
	máácugaasa	<i>a bird species</i>	< máácu	<i>berry</i>
	midéègaasa	<i>young buffalo (ca 6 years)</i>	< midéè	<i>buffalo</i>
	masúàgaasa	<i>puppy</i>	< masúga	<i>dog</i>
	míàgaasa	<i>young woman</i>	< míà	<i>woman</i>
	méʔchigaasa	<i>flint stone; arrowhead; small knife</i>	< méʔchi	<i>flint knife</i>

This diminutive does not add an overtone of affection or endearment to the derived word.

That effect is achieved by a suffixing -hgee to the derived stem, as in (13).

(312)	masúga <i>dog</i>	>	masúàgaasa <i>puppy</i>	>	masúàgaasahge <i>little pup</i>
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7.2.2.3 Diminutive -ráàga

The most common meaning of this diminutive is ‘offspring; little one of something.’ Examples can be seen (14).

(313)	iráàga	<i>his/her child</i>	< i- 3POS ⁷³
	buusiráàga	<i>fawn; kitten</i>	< buusíbe <i>varicolored</i>
	maabusiráàga	<i>fawn</i>	< maa- INDEF, buusí <i>varicolored</i>
	muaráàga	<i>minnows; roe</i>	< múá <i>fish</i>
	miráʔraaga	<i>spark</i>	< miráʔ <i>fire</i>

⁷² Little people here refers to supernatural beings who are active after daylight and may cause disfigurement in the face or body to the person who happens to see them.

⁷³ The inalienable possession of -ráàga suggests that it may be a compounded stem here.

ciicgaráàga *member (lit. child) of < ciicgá praire chicken
the Chicken Clan*

7.2.2.4 Simulative *-hisa*

The simulative *-hisa*, one of the most productive suffixes in Hidatsa, can be added to almost any noun or verb. Its basic meaning is ‘like’ or ‘similar to’. Nouns derived with *-hisa*, illustrated in (15), often have a lexicalized meaning that cannot be inferred from the meaning of the components,.

(314)	mideegihisa	<i>rice</i>	< mideegí	<i>worm, maggot</i>
	cagácgihisa	<i>flax</i>	< cagácgi	<i>flea</i>
	áchisa	<i>udder</i>	< ààcii	<i>her breast</i>
	xóòdahisa	<i>blue roan</i>	< xóòda	<i>be moldy gray</i>
	arásgiahisa	<i>chestnut horse</i>	< arásgia	<i>be smoke cured</i>
	maa’ahgúxihisa	<i>peyote</i>	< maa’ahgúxi	<i>an ear</i>

The creation of simulative constructions based on superficial similarity between a novel concept and a more familiar one is one of the most common strategies for lexical acculturation in Hidatsa. Examples are in (16).

(315)	maadagisîbahisa	<i>macaroni</i>	< maadagisîba	<i>hair-pipe beads (lit. glass intestines)</i>
	ciicgá arusîbahisa	<i>macaroni</i>	< ciicgá arusîba	<i>chicken intestines</i>
	ahí agu’îrihisa	<i>beetroot (lit. turnip that resembles blood)</i>	< ahí	<i>turnip, îri</i> <i>blood</i>
	maa’îrihisa	<i>ketchup, jam (lit. sth that resembles blood)</i>	< maa-	<i>ABS, îri</i> <i>blood</i>
	maa’agubóhorowi aru’íidhahisa	<i>peach (lit. hairy apple)</i>	< maa’agubóhorowi	<i>apple (lit. sth that is round), íidha</i> <i>to be hairy</i>

It is often difficult to decide whether one is dealing with a lexicalized simulative construction or an *ad hoc* descriptive construction, especially when a not-so-novel concept is described, as in (17).

(316)	awaxaawí arucúhgahisa	<i>plateau (lit. where the mountain looks flat)</i>
	awarèèda iiragcagíhisa	<i>cliff (lit. where the bank looks cut)</i>

The simulative is also used in toponyms based on the association of a landscape feature with a similarly shaped object, as in (18).

- (317) **Mua[?]irucgubhéehisas⁷⁴** *Like-A-Fishhook Village* < **múá**
fish + irúcgubi bent -hee CAUS
Mira[?]isbahxééhisas *Elbowoods* < **mirá** *wood + isbahxéé elbow*

In the spoken language, if **hisa** is preceded by **i**, then **h** is often elided, resulting in a long vowel, as in the examples in (19).

- (318) **mîxihisa** > **mîxiisa** *pancreas (of a bovine)* < **mîxi** ??
madádaxihisahge > **madáxiisahge** *padlock* < **madáxi** *turtle, -hgee DIM*
úùxiihisa > **úùxiisa** *buffalo grass* < **úùxi** *antelope + íí fur*

7.2.2.5 Veritive -gáádi

The veritive suffix **-gáádi** is extremely productive in Hidatsa and may be used with all word classes as an adverbial modifier. In combination with nouns it indicates that an object is true, genuine, real, or prototypical, as in (20).

- (319) **muagáádi** *catfish (lit. true fish)* < **múá** *fish*
midéègaadi *buffalo* < **midéè** *cow*
gagúwigaadi *squash* < **gagúwi** *squash*
Masîgaadi *French* < **masî** *whiteman*
Sahîgaadi *Chippewa, Cree* < **Sahî** *Métis*

It is also possible to treat **N+gáádi** derivation as compounding since **gáádi** may occur as an independent stem, as in (21a-b).

- (320) a. **Gáádic.** b. **maa[?]arugáádi**

⁷⁴ An alternate pitch pattern for this word is **Mua[?]irúcgubheehisas**. The village received its name from a fishhook-shaped bend in the Missouri. Proper names are usually used together with the definite suffix **-s**.

gáádi-c
true-DECL
It is true.

maa-aru-gáádi
INDEF-REL-true
the truth

7.2.2.6 Other derivational suffixes and bound roots

A large number of nonproductive derivational affixes (or bound roots) have a limited distribution.

Some of the most common ones are listed alphabetically in (22)–(29).

- (321) **-bugsa** *writhe, wriggle*
maabúgsa *snake; bug* < **maa-** INDEF
mirá'bugsa *embers, live coals* < **mirá'** fire
- (322) **-caawí** *ways*
maa'arucaawí *customs, ways, personality* < **maa-** INDEF, **aru-** PART
- (323) **-dhá**⁷⁵ ?
sààgidha *thumb* < **sààgi** his hand
icidhá *big toe* < **icí** his foot
- (324) **-dí** ?
icidí *tracks* < **icí** his feet
- (325) **-ga** *string*
huubagá *shoestring* < **huubá** shoe
eerihdága *harness strap* < **eerí** stomach, **-hdaa** LOC
aadhirúga *armband* < **aará** his arm, **hirú** bone
irúga *dried meat, jerky* < **irú** flesh
mirúhxaga *bowstring* < **mirúhxa** gun, bow

The suffix **-ga** is a grammaticalized form of the lexical noun ***agá** *string, cord* that is still distinct in the partitive compound in (27b) and recognizable as the initial element in the complex nominal stem in (27a).

- (326) a. **agààsa** *tendon* < **-asa** ?
b. **mirúhxa aru'agá** *bowstring* (also: **mirúhxaga**) < **mirúhxa** gun, bow
- (327) **-ihgee** *group; society*

⁷⁵ **-dha** is also used in verb derivation: **íidha** *to be furry* (< **íi** hair, fur).

naxbichi'ihge	Bear Society	< naxbichí grizzly
mîraa'ihge	Goose Society	< mîraa goose
gîrabi'ihge	Bull Society	< gîrabi bull
íixohgihge / íixohga'ihge	Fox Society	< íixohga kit fox
maa'iháàwia'ihge	Enemy Woman Society	< maa'iháà enemy, mîà woman

- (328) **-xbu** *claw*
sáàgixbu *finger nail; claw* < sáàgi his hand
icixbú *toenail; hoof; claw* < ici his foot

Drawing a line between bound roots and lexical suffixes seems impossible in Hidatsa. Many of the examples in the preceding sections seem to suggest the view that the distinction between lexical and grammatical suffixes forms a scale of continuous gradation, the exact nature of which requires further description and analysis.

7.2.3 Compounding

Compounding forms complex lexemes by combining two or more base lexemes. There are two types of compounds in Hidatsa. A morphological compound (see 7.2.3.1 and 7.2.3.2) is a complex stem that comprises a single phonological word. Syntactic compounds (see 7.2.4) are lexicalized phrases.

7.2.3.1 Noun-noun compounds

In Hidatsa, the head of the compound is the rightmost element if both components are nouns. Most noun-noun compounds denote a subset of what is denoted by the second component, or the head, of the compound. Less commonly, a noun-noun compound may be exocentric and have no semantic head. For instance, *xaree'idaaghá mushroom* is neither rain (*xaréé*) nor a bucket (*idaaghá*): it is spore-bearing fruiting body of a fungus. Some examples of noun-noun compounds are in (30).

(329)	ihgíhisi	<i>nest</i>	< ihgá egg + íhisi container
	úùwihsi	<i>paint bag</i>	< úùwi clay (for facial pain) + íhisi container
	mira'íhisi	<i>tree bark</i>	< mirá wood + íhisi container
	îwiri	<i>saliva</i>	< î his.mouth + mirí water
	mua'ísghi	<i>fish scale</i>	< múá fish + ísghi scale
	maabúcgagariidadi	<i>anthill</i>	< maabúcgagariidi ant + adí house
	maa'ooruudadí	<i>restaurant</i>	< maa'ooruudí food + adí house
	mira'úúwaca	<i>stove</i>	< mirá' fire + úúwaca metal
	ichúùba	<i>shin, shinbone</i>	< icí his.foot + húùba stem
	iihsúùdi	<i>gums</i>	< iihsá his.tooth + úùdi base; beside
	céésihsa	<i>canine teeth; fangs</i>	< céésa wolf + iihsá his.tooth

Most noun-noun compounds comprise two stems, but complex compounds consisting of more than two stems are also possible. However, even the complex compounds still have a binary-branching recursive structure so that at any given level there are just two stems being combined, either or both of which may in turn be compounds. For example, in (31a) the combination of **iidá** *face* and **íhisi** *container* results in a compound noun **iidíhisi** *feedbag; bridle*, and the combination of **ihgá** *egg* and **íhisi** *container* in (12b) yields **ihgíhisi** *nest*. It should be noted that **icúùwasga** *horse* is in (31a) a diachronic compound that is no longer analyzable (**icúù** ?, **masúga** *dog*).

- (330) a. **icúùwasgiidihisi** *bridle, halter* < **icúùwasga** *horse* + **iidá** *his face* + **íhisi** *container*
 b. **Dahu'ihgíhisi'aasis** *Clarks Creek* < **dahú** *thunder* + **ihgá** *egg* + **íhisi** *container* + **áàsi** *creek -s DEF* (lit. *Thunder Nest Creek*)

Inalienably possessed nouns (see 8.1.2), like verbs, are subcategorized for an argument, specifically the possessor argument. In noun-noun compounds where the second element is an inalienably possessed noun the possessor argument slot is filled either with the possessor noun, as in (32), or with some other noun that may narrow and modify the meaning of the inalienably

possessed noun in some other way, as in (33), where the first element identifies the material of the second.

In abstract compounds the argument slot is filled with the depossessivizing indefinite prefix *maa-* *something that is 'X'*, as in (34). The abstract (depossessivized) form of an inalienably possessed noun may have a lexicalized meaning that is quite different from the literal meaning of the derived word.

- (331) **naxbichaadí** *bear's den* < **naxbichí** *bear* + **aadí** *his house*
xaree'abhúhga *rainbow* < **xaréé** *rain* + **abhúhga** *his hat*
- (332) **naxbidúùxi** *leather jacket* < **naxbí** *skin* + **idúùxi** *his shirt*
maa'isu'abhúhga *war bonnet* < **maa'isú** *eagle feathers* + **abhúhga** *his hat*
- (333) **maa'abhúhgas** *Sanish, ND* < **abhúhga** *his hat -s DEF*
maa'ààrudaahgas *the president of the US, government* < **ààrudaagha** *his grandfather-s DEF*

Finally, members of a small set of nouns always occur either with the indefinite prefix, as in (35) and (36), or as compounds in which the slot normally occupied by the indefinite prefix is filled with another noun, as in (35) and (36).

- (334) a. **maa'íhgigua** *hook*
b. **mua'íhgigua** *fish hook* < **múá** *fish*
- (335) a. **maa'íhisi** *container*
b. **máácuu'ihisi** *berry bag* < **máácuu** *berries, cherries*

7.2.3.2 Noun-verb compounds

A second type of morphological compounds comprises a noun (head of the compound) and a verb in the attributive position. Many such compounds are exocentric as they refer to something that is not specified by the compound's parts.

Compounds of a noun and a stative verb are particularly numerous in Hidatsa. Examples of noun plus stative verb compounds are given in (37).

(336)	iidubáàbuusi	<i>bobcat</i>	< iidubáà <i>feline</i> + buusí <i>varicolored</i>
	iidubáàsibisa	<i>black panther</i>	< iidubáà <i>feline</i> + sibísa <i>black</i>
	iidubáà'ihdiá	<i>mountain lion</i>	< iidubáà <i>feline</i> + ihdiá <i>big</i>
	cîdhacgi	<i>mountain lion</i>	< cîda <i>tail</i> + hácgi <i>long</i>
	cîdabarúwi	<i>lynx</i>	< cîda <i>tail</i> + barúwi <i>short</i>
	cîdabuusi	<i>raccoon</i>	< cîda <i>tail</i> + buusí <i>varicolored</i>
	cîdcibisa	<i>mule deer</i>	< cîda <i>tail</i> + sibísa <i>black</i>
	cîdadagi	<i>white-tailed deer</i>	< cîda <i>tail</i> + adagí <i>white</i>
	abadabáà	<i>moose</i>	< abá <i>his.nose</i> + dabáà <i>soft</i>
	mighaahácgi	<i>slough grass</i>	< migháá <i>grass</i> + hácgi <i>long</i>
	xubáàriciria	<i>purple coneflower</i>	< xubáàrii <i>medicine</i> + ciríà <i>cold</i>
	abhúhgaxaabi	<i>scarf</i>	< abhúnga <i>head.cover</i> + xáàbi <i>thin</i>

A large number of compounds derived from stative verbs lack a specific lexical head. In such cases the argument slot of the subject that stative verbs subcategorize for is filled with the indefinite prefix **maa-** and the whole construction can be glossed as ‘something/someone that is x’.⁷⁶ The indefinite prefix can be attached to virtually any stative verb in order to create lexemes for novel concepts and entities. For example, **maacigída** *something sticky* could be used as an *ad hoc* reference to sticky candy. However, very often the meaning of **maa-** and a stative verb sequence has become lexicalized and is unpredictable, as in (38).

(337)	maacigúà	<i>sugar</i>	< cigúà <i>be sweet</i>
	maasibísa	<i>grapes</i>	< sibísa <i>be black</i>
	maahisí	<i>bullberries</i>	< hisí <i>be red</i>
	maahóhbi	<i>parfleche</i>	< hóhbi <i>be hollow</i>
	maa'ihdiá	<i>adult</i>	< ihdiá <i>be big</i>
	maagarísda	<i>child</i>	< garísda <i>be small</i>
	maa'irúbubi	<i>rubber</i>	< irúbubi <i>be elastic</i>

⁷⁶ In noun derivation the indefinite prefix **maa-** is best regarded as an abstract noun rather than a nominalizing prefix. **Maa-** functions as an incorporated abstract noun also in verb derivation where it derives intransitive verbs from transitives by filling the transitive object slot in the transitive stem (see 4.5.1).

maa [?] iháà	<i>enemy</i>	< iháà <i>be different</i>
maasiría	<i>canvas</i>	< siría <i>rustle</i>
maaxóòda	<i>prairie crocus</i>	< xóòda <i>be moldy color</i>
maaxaxáá	<i>cocklebur</i>	< xaxáá <i>be rough</i>
maa [?] abcá	<i>thorn, brier</i>	< abcá <i>be sharp</i>

A smaller number of noun-verb compounds contain verbs other than stative verbs.

Examples of compounds of a noun and an active intransitive verbs are given in (39).

(338)	máàhdiigire [?]	<i>airplane</i>	< máàhdii <i>vehicle</i> + gire [?] <i>fly</i>
	hiraaciré [?]	<i>Hidatsa language</i>	< hiraacá <i>Hidatsa</i> + iré [?] <i>speak</i>
	maceerîri	<i>warpath</i>	< macéé <i>man</i> + nîri <i>walk</i>

Again, the argument slot of the intransitive verb can be filled with the indefinite prefix **maa-** to create more abstract lexemes, as in (40).

(339)	maa [?] arîdi	<i>famine</i>	< arîdi <i>to be hungry</i>
	maa [?] iré [?]	<i>meeting, a court of law</i> ⁷⁷	< iré [?] <i>to speak</i>

Nouns derived by compounding a base noun with an uncausativized transitive verb or by prefixing the indefinite **maa-** to such a verb are not very common. (41) provides an example of the former type, and (42) illustrates examples of the latter. The compounded noun and the indefinite prefix fill the patient argument slot in this pattern.⁷⁸

(340)	isdahacúùdi	<i>Japanese, Oriental</i>	< isdá <i>his eye</i> + hacúùdi <i>to slit sth</i>
(341)	maagiragsí	<i>baby</i>	< giragsí <i>to wrap sth</i>
	maabáhci	<i>offering, ritual pledge</i>	< báhci <i>to set sth upright</i>
	maa [?] ágagahsi	<i>paper, book</i>	< ágagahsi <i>to write sth</i>

⁷⁷ Compare this to a syntactic compound **maa**[?]aru[?]iré[?] *a language (of somebody)*.

⁷⁸ Items in (41) and (42) should not be interpreted as derived by conversion from intransitive verbs (e.g., **maa-giragsí** *to wrap - unspecified things* > **maagiragsi** *baby*) since verbs that are detransitivized with **maa-** are non-referential and truly abstract. Derivation by compounding nouns with transitive verbs in (41) and (42) is supported by Hidatsa speakers' adamant claim that **maa-** in these items conjures to them images of specific objects.

maarúsgua	<i>witchcraft</i>	< núsgua <i>to use medicine against sb</i>
maa'òòsee	<i>crops</i>	< òòsee <i>to plant sth</i>

Causative verbs form a subclass of transitive verbs that participate more actively in noun derivation, especially with the indefinite **maa-** in the patient argument slot. Examples of causative verbs nominalized with a lexical noun are given in (43) and with an indefinite prefix in (44).

- (342) **ici'áàgade'he** *low-top moccasin* < **ici** *his foot* + **áàga** *top* + **ade'** *be exposed* -**hee** CAUS⁷⁹
- (343) **maaxagúbhe** *bustle* < **xagúbi** *be concave*, -**hee** CAUS
maa'awahúgahge *pie* < **awahúgaa** *inside*, -**hgee** CAUS
maarahábhe *incense, smudge* < **nagháhbi** *be blown away*, -**hee** CAUS
maa'arásgihe *smoke-cured hide; parched corn* < **arásgia** *be parched*, -**hee** CAUS
maa'ígooghihe *Christmas tree decorations* < **ígoogi** *be hanging*, -**hgee** CAUS
maa'ágiruhdabihge *sandwich* < **ági-** *between*, **núhdabi** *be tight*, -**hgee** CAUS

Compounding in Hidatsa is a recursive process. A derived nominal stem may serve as a base for further compounding, whether with nouns, as in (45), or with verbs, as in (46).

- (344) **isdahacúùdiwia** *Oriental woman* < **isdá-hacúùdi** *eyes-slit.sth* + **míà** *woman*
maaxubaawíà *Holy Women*⁸⁰ < **maa-xubáá** *INDEF-be.holy* + **míà** *woman*
maa'awáàgadi *toilet* < **maa-awáàgi** *INDEF-sit.down*, **adi** *house*
- (345) **maaxubaa'ihdíà** *god* < **maa-xubáá** *INDEF-holy* + **ihdíà** *be big*
maaxubaa'isíà *devil* < **maa-xubáá** *INDEF-holy* + **isíà** *be bad*
huubîsahacgi *high-top moccasin* < **huuba-îsa** *shoe-his.ankle* + **hácgi** *be high*
mááchiruwadu *chokecherry* < **máácuu-hirú** *berry-bone* + **madú** *exist*
maaxagáàwahgu *living creatures; animals* < **maa-xagáà** *INDEF-move* + **mahgú** *be at*
hucibarúwihdia *tornado* < **hucí-barúwi** *wind-short* (i.e., *whirlwind*) + **ihdíà** *be big*

⁷⁹ Transitive verbs (including causatives) do not undergo nominalization by zero conversion, therefore this example should not be regarded as such.

⁸⁰ The Holy Women are supernatural beings who live in the trees.

7.2.4 Syntactic compounds

Syntactic compounds are lexicalized relative, possessive, and instrumental clauses that may comprise more than one phonological word. The semantic role of the noun that serves as the head of the lower clause is subcategorized for by the predicate in the lower clause. In most cases the lexical head of the relativized clause can be substituted with the indefinite prefix *maa-*. The four prefixes that participate in syntactic compound derivation are given in (47).

- (346) *agu-* ‘specific / entitive relativizer’
aru- ‘partitive relativizer’
ida- ‘possessive prefix’
ii- ‘instrumental prefix’

Some differences between nouns derived by compounding are illustrated in (48) and (49).

- (347) *mirú?* *to fight*
aguwirú? *fighter, boxer*
aruwirú? *the fight (of)*
maawirú? *(a) fight*
- (348) *cóogi* *to be hard*
agucóogi *the hard **one***
arucóogi *the hard **part** of sth*
maacóogi ***sth** hard, hard things; a stingy person*
maa’iigicóoghee *lock (lit. something to harden something **with**)*

Many complex stems contain more than one of the prefixes listed above, as in (50).

- (349) *aguwaa’iigiguucgíhgee*
agu-maa-ii-hgiguucgí-hgee
REL-INDEF-INST-study-3CAUS.INDIR
teacher

7.2.4.1 Entitive compounds with *agu-/oo-*

The entitive, or specific, relativizer *agu-* is used to derive syntactic compounds that are actually lexicalized relative clauses. *Agu-* has an allomorph *oo-* before *g*-initial stems. The prefix itself is

a relative clause marker that may also be interpreted as a relative pronoun referring to the antecedent in the matrix clause (see 17.2.1). As a relativizer, **agu-** indicates that a specific entity is referred to (as opposed to partial entities or times/locations referred to by the partitive relativizer **aru-**). The basic meaning of an entitive compound can be glossed as ‘X that is sth’, ‘X that does sth to sth’ or ‘X that sth is done to’.

Relativized stative, intransitive, and existential verbs subcategorize for a Subject in the argument slot, as in (51), and the subject appears as the initial compounded element. The compounded subject is coreferential with the relativized constituent and hence with the referent of the whole compound (‘beetroot’ = ‘turnip that is red’, etc.).

(350)	ahí aguhisí	<i>beetroot</i>	< ahí turnip, hisí be red
	ahí agucí?ri	<i>carrot</i>	< ahí turnip, cí?ri be yellow
	ahí agu?ihdíà	<i>rutabaga</i>	< ahí turnip, ihdíà be big
	ahí agu?îrihisa	<i>beetroot</i>	< ahí turnip, îri blood, hisa SIM
	ihgaréèxi agucîdawadu	<i>meteor, comet</i>	< ihgaréèxi star, cîda tail, madú exist
	xuhdí aguraxbí	<i>leather gloves</i>	< xuhdí glove, naxbí leather

Relativized transitive verbs subcategorize for an Object in the argument slot, as in (52). The compounded object is usually not coreferential with the relativized constituent nor the referent of the whole compound (‘woodpecker’ = ‘Ø that knocks on wood’) although such compounds do exist (‘candy’ = ‘something sweet (i.e., sugar) that one twists’).

(351)	maacigúà agurúùwiiri	<i>candy</i>	< maacigúà sth.sweet, núùwiiri to twist sth
	mirá aguragadahxí	<i>woodpecker</i>	< mirá wood, nagadahxí to knock on sth
	maasibísa aguruudí	<i>waxwing</i>	< maasibísa grapes, nuudí to eat sth
	mighaadúà aguruudí	<i>blue racer</i>	< mighaadúà green grass, nuudí to eat sth

The Subject argument in nominalized entitive clauses may always be substituted with the indefinite prefix **maa-** with the approximate meaning ‘something that is V’. The third item,

‘criminal’, in (53) is internally complex: the lexicalized relative clause *maa-agu-isíà something that is bad* (i.e., *crime*) is treated as the object of *hirí-gsá-s the one who always does*.

- (352) **maa’agucí’ri** *orange; wild mustard* < *cí’ri to be yellow*
maa’agubóhorowi *apple* < *bóhorowi to be spherical*
maa’agu’isíà hirigsás *criminal* < *isíà to be bad, hirí to do sth, -gsá USI,-s DEF*

Many entitive compounds lack the head of the relative clause. The overwhelming majority of headless relative clauses that begin with *agu-* and have become lexicalized are derived from active verbs and refer to the semantic agent. Examples of nouns where *agu-* can be glossed as ‘one that vs’ are given in (54).

- (353) **agubáá** *village crier; announcer* < *báá holler*
aguwirú’ *boxer; fighter* < *mirú’ fight*
aguwaabhú *healer* < *maa- ABS, bhú doctor sb*
aguwaahirí *worker* < *maa- ABS, hirí do sth*
aguwaahagáci *butcher* < *maa- ABS, hagáci cut sth open*
aguwa’íihu *vendor* < *ma’íihu sell sth*
oogicibí *Mormon* < *gicibí dive*
oogicibíhge *mud hen* < *gicibí dive, -hgee DIM*
oogí’riahgua *cavalry; parade rider* < *gí’ria ride, -hgua LOC*

Headless relative clauses containing stative verbs that have become lexicalized are not common but possible. In some cases, as in (55), the head has become optional. In other cases, as in (56), the head may have been present historically, but is absent at present.

- (354) **agudirúá** (= **maacigúà agudirúá**) *syrup* < (*maacigúá sugar*), *dirúá viscous*
(355) **agudó’hi** *bead* < *dó’hi blue*

Syntactic compounds with *agu-* are sometimes reduced to a single phonological word in casual speech along with all concomitant phonological processes, such vowel deletion in complex stems (see 2.4.2) and pitch spreading (see 2.3.1). Examples are in (57).

- (356) **beerí agubáhda** > **beeragubáhda** *dung beetle* < **beerí** *dung*, **báhdaa** *to tip sth over*
múá agurúhci > **muagurúhci** *heron* < **múá** *fish*, **núhci** *to take sth*
míà aguwáaghisi > **míà'aguwaaghisi** *meadowlark* < **míà** *woman*, **máaghisi** *make fun of sb*
húùbaadi oogigéè > **húùbaadoogige** *cattail* < **húùbaadi** *ear of corn*, **gigéè** *to resemble sb*
nuxbáàga aguruudí > **nuxbáàgaguruudi** *cannibal* < **nuxbáàga** *people*, **nuudí** *to eat sth*

Entitive syntactic compounds are quite often reducible even further by omitting the relativizer **agu-** entirely and creating a morphological noun-verb compound, as shown in (58).

- (357) **mirí agudaarí** > **miridaarí** *ferry* < **mirí** *water*, **daarí** *to ford sth*
suwí agucí'ri > **suwicí'ri** *bacon* < **suwí** *fat*, **cí'ri** *to be yellow*
nuxbáàga agu'ihdíà > **nuxbáàgihdia** *giant* < **nuxbáàga** *people*, **ihdíà** *to be big*
hucibarúwi agu'ihdíà > **hucibarúwihdia** *tornado* < **hucibarúwi** *whirlwind*, **ihdíà** *to be big*
úùwaca agu'óhxaadi > **úùwacohxaadihge** *dime* < **úùwaca** *metal*, **óhxaadi** *to be white*,
-hgee *DIM*
miraxubáá agu'óghacaru > **miraxubaa'óghacaru** *ground cedar* < **miraxubáá** *cedar*,
óghacaru *to crawl*

Even though syntactic and morphological compounds are to a large extent interchangeable, it is not always possible to substitute a syntactic compound for a morphological one, or vice versa. For example, the Hidatsa word for ‘ocean’ in (59) is only acceptable as a syntactic compound whereas the word for ‘alcohol’ in (60) would literally mean ‘water that is white’ if it were substituted for a syntactic compound.

- (358) **mirí agihdíà** *ocean* < **mirí** *water*, **ihdíà** *to be big*
 (***miri'ihdíà**)
- (359) **miri'adagí** *alcohol, vodka* < **mirí** *water*, **adagí** *to be white*
 (***mirí agu'adagí**)

Syntactic compounds, just like morphological compounds, have a binary-branching recursive structure. The Hidatsa word for ‘peach’ in (61) translates literally as ‘something *that* is spherical (= ‘apple’) *that* looks hairy’.

- (360) **maa'agubóhorowi agu'íidhahisa** *peach* < **apple** + **íidha** *to by furry*, **hisa** *SIM*

7.2.4.2 Partitive compounds with *aru-/oo-*

The partitive prefix *aru-*, just like the entitive *agu-* in 7.2.4.1, is used to derive syntactic compounds that are actually lexicalized relative clauses (see 17.2.2). *Aru-* has an allomorph *oo-* before the liquid consonant *r*. *Aru-* has two primary functions in compounds: it indicates (1) whole-part relationships and (2) locative/temporal relationships. The partitive relationship should not be confused with the possessive relationship expressed by possessive compounds (see 7.2.4.3).

Compounds consisting of two nouns, the second of which is relativized by *aru-*, usually express part-whole relationship, as in (62).

(361)	<i>micgabáá aruwirí</i>	<i>tomato juice</i>	< <i>micgabáá</i> tomato, <i>mirí</i> water
	<i>îxi aruhúba</i>	<i>tripe soup</i>	< <i>îxi</i> tripe, <i>húba</i> soup
	<i>iidagí aru'íí</i>	<i>rabbit fur</i>	< <i>iidagí</i> rabbit, <i>íí</i> fur, hair
	<i>cagáàga aru'irú</i>	<i>chicken meat</i>	< <i>cagáàga</i> bird, <i>irú</i> flesh
	<i>maa'irigidooba aru'irigí</i>	<i>table leg</i>	< <i>maa'irigidoobá</i> table, <i>irigí</i> leg
	<i>ííxohisi ooraxbí</i>	<i>fox hide</i>	< <i>ííxohga</i> red fox, <i>naxbí</i> skin

In entitive compounds where *agu-* is prefixed to a stative verb the latter has an attributive function (as in the examples in (51) above). If *agu-* is replaced by *aru-* then the construction has a partitive meaning; consequently N + *aru-* Stative Verb constructions can be glossed literally as ‘the adjective part of X’. Examples are in (63).

(362)	<i>ahgúxi arudabáà</i>	<i>earlobe</i>	< <i>ahgúxi</i> his ear, <i>dabáà</i> be soft
	<i>áàba aruxagúbi</i>	<i>hollow of the throat</i>	< <i>áàba</i> his neck, <i>xagúbi</i> be concave
	<i>iidáàda arubáhxa</i>	<i>cheekbones</i>	< <i>iidáàda</i> his cheek, <i>báhxa</i> be a corner
	<i>isdá arubóhorowi</i>	<i>eyeball</i>	< <i>isdá</i> his eye, <i>bóhorowi</i> be circular

A compound has a locative or temporal meaning when *aru-* is prefixed to an active verb. Relativized active verbs subcategorize for a Subject or Object in the argument slot. Names of the months in (64) and national holidays in (65), which have a temporal meaning, translate as ‘when

V happens to N'. Compounds with the locative meaning in (66) have the literal meaning 'where V happens to N'.

- (363) **Awá Aru'óòsee Mirís** April < **awá** land, **óòsee** plant sth, **mirí** moon, -s DEF
Icúùwasga Arugibasgú Mirís May < **icúùwasga** horse, **hgibasgú** shed sth, **mirí** moon
- (364) **Ciicgihdià Ooruudís** Thanksgiving < **ciicgá** chicken, **ihdià** big, **nuudí** eat sth
Magià Arugoowíhees Armistice Day < **magià** fight, **goowíhee** finish sth
Ooragabagí Arugúáhees Memorial Day < **ooragabagí** flower, **gúáhee** place sth
- (365) **îri oorígí** pulse < **îri** blood, **nigí** hit sth
adí arubáhci construction site < **adí** house, **báhci** erect sth
mirí oorúhci well < **mirí** water, **núhci** take sth
Mirí Arugibaadágis Garrison Dam < **mirí** water, **gibaadági** block sth, -s DEF

The temporal meaning is common in expressions about clock time, as in (67). The most common Hidatsa word for 'hour' is **oorígí**, which is actually an abbreviated form of **mirí iigígísgí oorígí**, literally 'when the clock is hit'. The literal meaning of the instrumental compound (see 7.2.4.4) **mirí iigígísgí** clock is 'an instrument to examine the sun with'.

- (366) a. **Arudáàwis** **hîi'?** / **Oorigí** **dóòrus hîi'?**
aru-dáàwi-s **hîi-?** / **aru-nigí dóò-rú-s** **hîi-?**
REL-how.many-DEF get.here-INTER / REL-hit where-LOC-DEF get.here-INTER
What time is it?
- b. **Aru'axbirúùbas** **hîc** / **nigíc.**
aru-axbí-núùba-s **hî-c** / **nigí-c**
REL-remain-two-DEF get.here-DECL / hit-DECL
It's twelve o'clock.

Relativized stative verbs may also have a locative or temporal meaning, but they are less frequent than compounds with active verbs. For example, the place name Garrison in (68), which literally means 'place where there are many water snakes', is derived with the stative verb **ahú** to be many.

(367) **Íroosi Aru'ahús** *Garrison* < **íroosi** *water snake*, **ahú** *be many*

The Object argument of a relativized transitive verb may always be substituted with the indefinite prefix **maa-**. Lexical pairs with restricted and indefinite meanings are contrasted in (69).

- (368) a. **maaciwirá** *arugirusáà* *cupboard* < **maaciwirá** *dish*, **girusáà** *put sth away*
 b. **maa'arugirusáà** *cabinet*
- a. **mirí** *arugiruwí* *calendar* < **mirí** *month*, **giruwí** *count sth*
 b. **maa'arugiruwí** *numbers*
- a. **awa'aráxa** *arubhí* *coal mine* < **awá** *land*, **aráxa** *burn*, **bhí** *dig sth*
 b. **maa'arubhí** *mine*

Partitive compounds with **aru-** are sometimes reduced to a single phonological word in casual speech along with all concomitant phonological processes, such as vowel deletion in complex stems (see 2.4.2) and pitch spreading (see 2.3.1). Examples are in (70).

- (369) **isdá ooraxbí** > **isdooraxbí** *eyelid* < **isdá** *his. eye*,
naxbí *skin*
- iíhsá aru'ihdíà** > **iíhsarihdía** *molar* < **iíhsá** *his. tooth*, **ihdíà** *be big*
Dibíà Arugaréés > **Dibíàrugarees** *Parshall, ND* < **dibíà** *mud*, **garéé** *be gooey*
îxi arudachí > **îxarudachi** *part of bovine stomach* < **îxi** *tripe*, **dachí** *be thick*

Partitives, like other syntactic compounds, are often reducible to morphological compounds without any difference in meaning by deleting the relativizer **aru-**, as in (71).

- (370) **mirúhxa aru'agá** > **mirúhxaga** *bowstring* < **mirúhxa** *bow*, ***agá** *string*
áàciiwiri arucaráà > **áàciiwiricaraa** *cream* < **áàcii** *her. breast*, **mirí** *water*, **caráà** *grease*
ciicgá arusîbahisa > **ciicgasîbahisa** *macaroni* < **ciicgá** *chicken*, **sîba** *gut*, **-hisa** *SIM*
awa'aráxa arubhí > **awa'aráxabhi** *coal mine* < **awá** *land*, **aráxa** *burn*, **bhí** *dig sth*
mirá arîhxa > **mirîhxa** *driftwood* < **mirá** *wood*, **îhxaa** *drift*
sîba aru'irúhee > **sîbiruhee** *type of sausage* < **sîba** *gut*, **irúhee** *stuff sth*

However, not all partitive compounds have equivalent morphological compounds, and vice versa. For example, the morphological compound in (72a) is a common word for cow whereas the partitive compound in (72b) would only be used in order to distinguish female buffaloes from male ones.

- (371) a. **midéèwihga** *heifer, cow* < **midéè** *buffalo*, **mihga** *female*
 b. **midéè aruwihga** *female buffalo* (lit. *the buffalo that are female*)

Many partitive compounds have either been lexicalized or occur routinely without a lexical head. Examples of headless syntactic compounds with **aru-** prefixed to a noun are given in (73).

- (372) **aruwirí** *juice of sth* (**mirí** *water*)
aruʔíí *fur, hair of sth* (compare: **maaʔíí** *furry hide*)
aruhúùba *stem of sth; handle*
arucúúwi *pit, stone, seed (of a fruit)*
arucaráà arch: *bacon* (lit. *fat of sth* < **caráà** *lard, fat*)
aruʔáà *stem of (a plant)*
aruʔáàba *leaf of sth*
arubáhxaa *corner of sth*

Examples (74) and (75) illustrate headless partitive compounds with a part-whole meaning in context.

- (373) **Madahbaraxbí** **nuwa** **hirá** **múg, aruʔáàga**
 iisáhcaaraciruhxaa.
 mada-huubá-naxbí nuwá hirí-Ø mii-guʔ-g **aru-áàga** ii-sáhcaa-raci-rúhsaa
 IPOS-shoe-leather some make-CONT 1B-give-CRD **REL-top** INST-plain-COMPR-CONC.CND
Make me some moccasins, even if the top is only plain.

- (374) **Aruhirú** **básguga!**
aru-hirú básgu-ga
REL-bone dislodge-PREC
Take the bone out (as from a drumstick)!

A few partitive compounds in (76) truly lack the head of the partitive clause. Thus a ‘bullet’ is not a spherical part of some other object.

aru 'iríbi	<i>fatness</i>	< <i>iríbi to be fleshy</i>
aru 'asgòò	<i>limp, limping</i>	< <i>asgòò to limp, be lame</i>
aru súhga	<i>width</i>	< <i>súhga to be wide</i>
aru cagí	<i>goodness</i>	< <i>cagí to be good</i>

(378) **Arurasarásihdaa níha!**

aru-nasarási-hdaa níhee-Ø
REL-smooth-GOAL put-IMP.SG
Turn the smooth side (of the hide) out!

The combination of the indefinite **maa-** and the relativizing **aru-** derives abstract nouns from active transitive verbs. The indefinite prefix in the Object slot of the relativized transitive verb is necessary in order to meet the subcategorization requirement. Examples are in (80).

Abstract nouns derived from active bases are inflected for possession word-internally with A-set prefixes. Thus ‘my memory’ would be **maa**'aruwahgarawí, literally ‘things that I remember’.

(379) maa 'aruhirí	<i>work</i>	< <i>hirí to do sth</i>
maa 'aruguxdí	<i>assistance</i>	< <i>guxdí help sb</i>
maa 'arugirási	<i>love</i>	< <i>girási love sb</i>
maa 'arugiwé'	<i>news</i>	< <i>giwé' tell sth to sb</i>
maa 'arugarawí	<i>memory</i>	< <i>garawí remember sth</i>

Finally, there are many instances when **aru-** appears to have no other purpose than to relativize the verb. Future research may discover the semantic contribution of **aru-** in such constructions besides the simple syntactic function. The notion that in some constructions **aru-** simply functions as a generic relativizer is corroborated by variation in derivation. For example, the word for ‘apple’ occurs both as an entitive construction with **agu-** and partitive with **aru-**. Even though the entitive **maa**'agubóhorowihgee (“discreet little thing that is round”) is more common, the partitive **maa**'arubóhorowihgee (interpreted as “little thing that is round”, not “little round part of something”) is equally grammatical. In other cases only the form derived

the buffalo fish as the ‘fish of the Awadixaa villagers’, who, unlike the other Hidatsa, were reputed to have been particularly fond of eating fish. (85) identifies the origin of a corn variety among the Arikara Indians.

- | | | | |
|-------|----------------------------------|-------------------------|---|
| (382) | masî ida’ahí | <i>turnip, rutabaga</i> | < masî <i>white person,</i> |
| | ahí <i>prairie turnip</i> | | |
| | masí_idabhí | <i>bed bug</i> | < masî <i>white person,</i> bhí <i>louse</i> |
| | masî idacagáàga | <i>chicken</i> | < masî <i>white person,</i> cagáàga <i>bird</i> |
| | masí idagóòxaadi | <i>sweet corn</i> | < masî <i>white person,</i> góòxaadi <i>corn</i> |
| | masí idaraxbichí | <i>pig</i> | < masî <i>white person,</i> naxbichí <i>grizzly</i> |
| (383) | Awadixáa idawúá | <i>buffalo fish</i> | < Awadixáa <i>Awadixaa village,</i> |
| | múá <i>fish</i> | | |
| (384) | Aragaráhu idagóòxaadi | <i>Arikara corn</i> | < Aragaráhu <i>Arikara,</i> |
| | góòxaadi <i>corn</i> | | |

When the meaning of a recent cultural borrowing has usurped an older native meaning, the possessive compound may also point out that the unacculturated original meaning is meant by identifying it as ‘the Hidatsa N’. An example is the lexicalization of the word ‘potato’. Because of its superficial similarity to the tuber of the native artichoke plant (arch. **gaagsá**), the introduced potato was first referred to as **masî idagaagsá** *white man’s artichoke tuber*. In time the importance of potatoes grew in Hidatsa diet while the wild artichoke’s diminished. The cumbersome **masî idagaagsá** was shortened to **gaagsá** in the everyday language until the new meaning completely replaced the older one. When the present-day Hidatsa need to speak of wild artichoke tubers, they refer to them as the ‘native’, or ‘Hidatsa tubers’, as in (86).

- | | | | |
|-------|--------------------------|-----------------------|--|
| (385) | Hiraacá idagaagsá | <i>wild artichoke</i> | < Hiraacá <i>Hidatsa,</i> gaagsá |
| | potato | | |

The indefinite prefix **maa-** can be used if the possessor noun is present, as in (87).

However, indefinite possessive compounds are relatively rare in comparison to other types of indefinite compounds.

- (386) **maa?idabóòbaruwa** *beebalm* < **bóòbaruwa** ?
maa?idaróògci *umbrella, shade* < **nóògci** ?

Possessive compounds are sometimes reduced to a single phonological word in casual speech along with all concomitant phonological processes, such vowel deletion in complex stems (see 2.4.2) and pitch spreading (see 2.3.1). Examples are in (88).

- (387) **Hiraacá idawadí** > **Hiraacidawadí** *Hidatsa land*
 < **Hiraacá** *Hidatsa*, **awadí** *village*
naxbichí idawáácu > **naxbichidawáácu** *black haw* < **naxbichí** *grizzly*, **máácuu** *berry*

In some cases the contracted form has become lexicalized and the long form no longer sounds natural. Examples are in (89).

- (388) **xúhgidacagaaga** *bobolink* < **xúhgee** *skunk*, **cagáàga** *bird*
maabúgsidawirá? *firefly* < **maabúgsa** *bug*, **mirá?** *fire*
máàgaxbidawí? *hailstone* < **máàgaxba** *lizard*, **mí?** *rock*
awágooxidahsu *spider web* < **awágooxi** *spider*, **áhsu** *rope*

7.2.4.4 Instrumental compounds with *ii-*

The instrumental prefix **ii-** derives nouns from active verbs. In most cases, as first pointed out by Jones (1984), “the prefix **ii-** by itself is not a nominalizing element; rather, like **agu-** and **aru-**, **ii-** expresses the relationship of two elements, the first of which is nominal, and the second of which can be an underlying clause”. Although there are no instrumental clauses in Hidatsa, syntactic compounds derived with the instrumental prefix have an internal structure that closely resembles the structure of a nominalized transitive clauses.

The overwhelming majority of instrumental compounds are derived from active transitive verbs. The Object of the transitive verb is indicated by a specific lexical noun, as in (90), or the indefinite prefix *maa-*, as in (91).⁸¹ The “instrumentalized” verb subcategorizes for an Object in the argument slot and the whole compound can be glossed as ‘instrument that one Vs the N with’.

- | | | | |
|-------|-----------------------------|------------------------------|---|
| (389) | <i>mirá iihabádi</i> | <i>wood saw</i> | < <i>mirá tree, habádi saw sth</i> |
| | <i>carààciiri iixagáhe</i> | <i>butter churn</i> | < <i>carààciiri cream, xagáhe move sth</i> |
| | <i>maa’abá iibágisi</i> | <i>nose wipe, tissue</i> | < <i>maa’abá a nose, bágisi wipe sth</i> |
| | <i>mirí iihíhge</i> | <i>cup</i> | < <i>mirí water, híhgee make sb drink</i> |
| | <i>maa’ihsá iigibadáhxi</i> | <i>toothpick</i> | < <i>maa’ihsá a tooth, badáhxi pick at sth</i> |
| | <i>maaciwirá iigibágisi</i> | <i>dish towel</i> | < <i>maaciwirá dish, gibágisi wipe sth</i> |
| | <i>maagarísda iigí’</i> | <i>cradleboard</i> | < <i>maagarísda child, gí’ pack on the back</i> |
| | <i>máàhbuusi iidíhe</i> | <i>fly swatter</i> | < <i>máàhbuusi fly, díhee kill sb</i> |
| | <i>maahúá iibhú</i> | <i>cough medicine</i> | < <i>maahúá cough, bhú doctor sth</i> |
| | <i>mirí iibhí</i> | <i>water pump</i> | < <i>mirí water, bhí dig sth out</i> |
| | <i>mirí iigiruwí</i> | <i>calender</i> | < <i>mirí day, giruwí count sth</i> |
| | <i>maa’áàbaci iirúhci</i> | <i>voice recorder; tape</i> | < <i>maa’áàbaci a voice, núhci take sth</i> |
| | | | |
| (390) | <i>maa’ii’ágsi</i> | <i>handle, door knob</i> | < <i>ágsia grab sth, hold</i> |
| | <i>maa’iibààhíhge</i> | <i>musical instrument</i> | < <i>bààhi-hgee sing.sth-CAUS</i> |
| | <i>maa’iibácaadi</i> | <i>fork</i> | < <i>bácaadi poke sth</i> |
| | <i>maa’iidaadhé</i> | <i>ferryboat</i> | < <i>daarí-héé ford.sth-CAUS</i> |
| | <i>maa’iihirí</i> | <i>tool</i> | < <i>hirí do sth, make</i> |
| | <i>maa’ii’ígoogi</i> | <i>clothes hook</i> | < <i>ígoogi hang sth</i> |
| | <i>maa’iirúdaadi</i> | <i>trigger</i> | < <i>núdaadi apply pressure on sth</i> |
| | <i>maa’iisibíhe</i> | <i>black dye, shoepolish</i> | < <i>sibí-hee black-CAUS</i> |

The derivation of instrumental nouns is extremely productive in Hidatsa. *Ad hoc* indefinite instrumentals can be created from almost any transitive verb when occasion requires. Indefinite and specific instrumental nouns derived from the same transitive verb are illustrated in (92).

⁸¹ Interestingly, in Crow the instrumental prefix always precedes the lexical object and the indefinite prefix. Instead of the Hidatsa N +*ii*-V and *maa’ii*-V, Crow incorporates the object and has *ii*-N-V and *ii-waa*-V. (c.f., Graczyk 2007:49)

- (391) a. **maa**[?]**iibácada** *masher* < **bácadaa** *to squash sth*
 gaagsá **iibácada** *potato masher* < **gaagsá** *potato*
- b. **maa**[?]**iibáxisi**⁸² *shovel* < **báxisi** *to shovel sth*
 awá **iibáxisi** *shovel* < **awá** *earth*
- c. **maa**[?]**iisarééhe** *mixer, blender* < **sarééhee** *to mix sth gooey*
 dibíà **iisarééhe** *cement mixer* < **dibíà** *mud*
- d. **maa**[?]**ii'óòsee** *dipper; container for liquids* < **óòsee** *to pour sth into sth*
 mirí **ii'óòse** *water dipper; water container* < **mirí** *water*
 awá **ii'óòse** *planter, seeder* < **awá** *earth*
 arugadí **ii'óòse** *planter* < **arugadí** *garden*

The instrumental prefix may also be preceded by the partitive **aru-** if the object is seen as part of a large entity, as seen in (93).

- (392) **aru**[?]**iirúdaadi** *trigger*

Instrumental nouns derived from intransitive active verbs, although not common, are nevertheless possible, as demonstrated in (94). Since the verb is intransitive, it does not subcategorize for the Object argument, and the derived word begins with the instrumental prefix.

- (393) **iiraghúci** *swing, hammock* < **naghúci** *swing*
 iiréè *buffalo fall / trap* < **néè** *go*
 ii'ágoosi *whistle* < **ágoosi** *whistle using an instrument*

If the indefinite prefix **maa-** is added to an instrumental noun that is derived with a stative verb, it fills the Subject slot of the verb. However, since native speakers gloss such compounds agentively as ‘something with which one Vs’, it appears that the stative verb becomes transitive.

⁸² Whereas instrumental nouns with a specific referent are always syntactic phrases in which each component has its own pitch pattern, there are a few irregularities to this pattern. For example, the instrumentalized verb stem in **máá**[?]**iibaxisi** *snow plow* forms a single phonological word with the object noun **máá** *snow* and is pronounced with the low pitch to differentiate it from a minimally different indefinite lexeme **maa**[?]**iibáxisi** *shovel*.

Examples of instrumental compounds that are derived from stative bases but may have a transitive internal structure are given in (95).

- (394) **maa'iidawúá** *bell* (lit. *something with which one / that rings*) < **dawúá** *ring like a bell*
maa'iixawúá *rattle* (lit. *something with which one / that rattles*) < **xawúá** *rattle*

Instrumental compounds are sometimes reduced to a single phonological word in casual speech along with all concomitant phonological processes, such vowel deletion in complex stems (see 2.4.2) and pitch spreading (see 2.3.1). Examples are in (96).

- (395) **migháá iibácaadi** > **mighiibácaadi** *pitchfork* < **migháá** *grass*, **bácaadi** *poke sth*
migháá iiracgiidí > **mighiicgiidí** *lawn mower* < **migháá** *grass*, **nacgiidí** *clip sth*
mirába iigigúà > **mirábiigigua** *beaver trap* < **mirába** *beaver*, **gigúà** *trap sth*
maagarísda iigigawará > **maagarísdiigawara** *schoolbus* < **maagarísda** *child*,
gigawará *haul sth*

The order of indefinite and instrumental prefixes is not fixed in some instrumental compounds; the specific order depends on semantic scope and the order of derivation. In example (97), the transitive stem **bháàhgee** *to signal something* is preceded by the most frequently encountered sequence whereby **maa-** precedes **ii-**. In example (98), however, the prefix order is reversed, possibly because **bháàhgee** was first detransitivized with the indefinite prefix **maa-** (**maabháàhgee** *to be signaling*) and only then was the instrumental prefix **ii-** added to the derived intransitive stem.

- (396) **maa'iibháàhge** *turn signal* < **bháàhgee** *to signal sth*

- (397) **iiwaabháàhge** *turn signal* < **maabháàhge** *to be signaling*

Instrumental compounds, just like all Hidatsa compounds, are inherently recursive. The literal translation of the Hidatsa word for ‘cement’ in (99) is ‘something with which to mix [the mass] with which one smears the house’.

- (398) **adí iiʔibgidi iiʔíhasahe** *mortar, cement* < **adí** *house*, **ibgidi** *smear sth at sth*,
íhasahee *mix sth with sth*

7.3 Proper nouns

Whereas common nouns refer to any member of a class of animate or inanimate beings, proper nouns refer to uniquely identifiable members of these classes. Prototypical proper nouns include personal names, place names, and names of any other unique entities. Proper nouns may be derived from words belonging to any lexical category; they may occur as individual words, compounds, or phrases. What sets proper names apart from other types of nominals is that, being uniquely identifiable in most contexts, they usually occur with the definite determiner *-s* unless the name is used predicatively or as a vocative. Examples of personal names are seen in (100), place names in (101), and other types of names in (102).

- (399) **Híhsuas** *Mint* < **híhsua** *wild mint*
Maaciwirás *Dish* < **maaciwirá** *dish*
Áàbaci *His Voice* < **áàbaci** *his voice*
Cagáàgacagis *Good Bird* < **cagáàga-cagí** *bird-good*
Cagáàgawias *Bird Woman* < **cagáàga-mià** *bird-woman*
Maaxîriwias *Buffalo Bird Woman* < **maa-xîri-mià** *INDEF-brown-woman*
Idahbasibásas *Black Moccasin* < **ida-huubá-sibísa** *3POS-shoe,black*
Beericgarúúbas *Two Crows* < **beericgá-núùba** *raven-two*
Céésa Núcaruas *Drags Wolf* < **céésa** *wolf*, **núcarua** *drag sth on surface*
Beericgá Máàguhdaa Néès *Crow Flies High* < **beericgá** *raven*, **máàgu-hdaa** *high-GOAL*,
néè *go*
Awá Igúbahgidaa Nuwís *Walks Back To Be With Her Land* < **awá** *land*,
igúba-hgidaa *together-GOAL.VERT*, **nuwí** *to walk*
- (400) **Awáàdhis** *Missouri River* < **awáàdhi** *river*
Ààsiʔihdias *Cannonball River* < **ààsi-ihdià** *creek-big*
Méʔcharuʔaasis *Knife River* < **méʔchi-aru-ààsi** *knife-REL-creek*

Máàgadaa'aasis	Minot	< máàgadaa-àasi plum-creek
Awa'ihbusáhsas	Saddle Butte	< awá-ihbú-sáhsa land-tip-forked
Awadáàhees	Independence	< awá-dáàhee land-separated, i.e., island
Mí'hisís	Pipestone	< mí'-hisí rock-red
Céésidawiidihbus	Wolf Point, MT	< céésa-ida-mîdihbu wolf-3POS-summit
Awarahxáhxihisas	Buffalo Hump Butte	< awá-nahxáhxí-hisa earth-hump-SIM
Úùgadagaasis	White Earth River	< úùga-adagí-àasi clay-white-creek
Mirigóòsis	Lake Metigoshe, ND	< mirí-góòsi water-whistle
Mua'irúcgubheehisas	Like-A-Fishhook-Village	< mua'irúcgubhee-hisa fishhook-SIM
Agucîsi Maa'oorúúsas	Old Scout Cemetery	< agucîsi scout, maa'oorúúsa cemetery
Mííxaagaraaga Ooragabhís	Watford City	< mííxaaga-raaga duck-ling, aru- nagabhí REL-pick sth up

(401) Behbéés	Shaggy (horse name)	< behbéé shaggy
Úùxihdis	Bobtail (dog name)	< úùxihdi bobtailed
Íicigawaahirís	First Maker	< íicigwa-maa-hirí first-INDEF-make
Áàrahacgis	Orion	< áàra-hácgi his.arm-long
Ihgasáhbua's	Big Dipper	< ihgá-sáhbua-'a star-seven-PL
Ihgaxagáàdhaas	North Star	< ihgá-xagáà-dhaa star-move-NEG
Ciicgihdià Ooruudís	Thanksgiving	< ciicgihdià turkey, aru-nuudí REL-eat.sth
Máácu Aru'óòdiwirís	July	< máácuu berries, aru-óòdi-mirí REL-ripe-month

8 Possession

For the most part, possession in Hidatsa follows the typical Siouan pattern that distinguishes **alienable** and **inalienable** possession. The membership of each class is determined largely on semantic grounds. Nouns denoting inalienably possessed entities form a closed class of words, primarily comprising body parts, kinship terms, bodily secretions, and clothing items; in short, things that the owner cannot be easily dispossessed of. Items that are perceived as being transferable to other possessors belong to the open class of alienably possessed nouns.

Uniquely for a Siouan language, Hidatsa has developed a third class of nouns whose membership is based on **classificatory** possession. Membership in this class is based on semantic grounds. Only a relatively small number of traditional food products are classificatorily possessed.

The three types of possession are morphologically marked by distinctive sets of possessive prefixes, presented in TABLE 8.1 and described in the sections that follow.

TABLE 8.1. POSSESSIVE PREFIXES

PERSON	ALIENABLE	INALIENABLE	CLASSIFICATORY	GLOSS
3	<i>ida-</i>	\emptyset ; <i>i-</i>	<i>e²-</i>	<i>his, her, its, their</i>
1	<i>mada-</i>	<i>ma- / m- ; mii-</i>	<i>me²-</i>	<i>my, our</i>
2	<i>nída-</i>	<i>ní- / n'-; nii-</i>	<i>né²-</i>	<i>your, y'all's</i>

A few nouns can be possessed according to all three patterns. An example illustrating the main differences between the three types of possession is given in (1).

- (1) Alienable: **madasîba** *my intestine (that I am holding in my hand)*
 Inalienable: **miisîba** *my intestine (inside my body)*
 Classificatory: **me²sîba** *my intestine / my sausage (that I am eating)*

Possessed nouns are inflected for person and number. Person marking by prefixation is identical for singular and plural forms. Since number marking by suffixation is always predictable (see plural formation in section 4.2.), only first, second, and third person singular forms will be presented in the sample paradigms below. However, as possessed nouns inflected in the plural have three possible readings (plurality of possessor, plurality of possessum, or plurality of both), an example of a full paradigm is given in TABLE 8.2. The exact reading of the plural form depends either on real world knowledge or grammatical cues (such as agreement) elsewhere in the utterance. Oftentimes only one interpretation is possible, the others being nonsensical or contrived, such as when discussing body parts. Plural marking on the possessed noun is often not obligatory⁸³ if plurality is indicated by the context or is simply common sense.

TABLE 8.2. POSSESSIVE PARADIGM

PERSON	SINGULAR	GLOSS	PLURAL	GLOSS
3P	aadí	<i>his house</i>	aadó'	1. <i>their house</i> 2. <i>their houses</i> 3. <i>his houses</i>
1P	maadí	<i>my house</i>	maadó'	1. <i>our house</i> 2. <i>our houses</i> 3. <i>my houses</i>
2P	náadi	<i>your house</i>	náado'	1. <i>y'all's house</i> 2. <i>y'all's houses</i> 3. <i>your houses</i>

unpossessed stem: **adí** *house*⁸⁴

Whereas alienable nouns make up an open class of words that can be enriched by each and every process of nominal derivation, the only strategy to add novel lexemes to the closed class of inalienable nouns is morphological compounding. The alienability or inalienability of the resulting compound is lexically conditioned. If the first element in the compound is an inalienable noun, as **iíhsá** *teeth* in (2), then the new lexeme is possessed inalienably as well.

⁸³ The exact conditions of obligatory plural marking remain to be determined.

⁸⁴ Whereas most inalienably possessed nouns are “depossessivized” by prefixing the indefinite article **maa-** to the third person form, the unpossessed form of ‘house’ is derived irregularly by shortening the stem vowel. See 8.1.2.5. and 8.1.2.6. for details.

However, if the first element in a compound is an alienable noun, such as *céésá* *wolf* in (3), then the new lexeme is alienably possessed regardless of semantics.

- (2) *iihsá* *his teeth* + *úùdi* *base* > N.INAL *iihsúùdi* *his gums* (*miihsúùdi* *my gums*)
- (3) *céésá* *wolf* + *iihsá* *his teeth* > N.AL *céésiihsa* *cuspid*s (*madacéésiihsa* *my cuspid*s)

8.1.1 Alienable possession

With a few exceptions, nouns that belong to the class of inalienably possessed nouns refer to real-world entities whose ownership is transferable. An inalienably possessed noun unmarked by possessive prefixes is understood to be a generic noun or a referential noun whose referent neither has a permanent owner nor a temporary possessor. A sample paradigm is given in TABLE 8.3.

TABLE 8.3. ALIENABLE POSSESSION

PERSON	SINGULAR	GLOSS	PLURAL	GLOSS
3P	<i>idawasúga</i>	<i>his dog</i>	<i>idawasúgoʔ</i>	<i>his dogs, their dog(s)</i>
1P	<i>madawasúga</i>	<i>my dog</i>	<i>madawasugoʔ</i>	<i>my dogs, our dog(s)</i>
2P	<i>nídaswasuga</i>	<i>your dog</i>	<i>nídaswasugoʔ</i>	<i>your dog, y'all's dog(s)</i>

unpossessed stem: *masúga* *dog*

In fast speech, the alienable possessive prefixes lose their final vowel before long vowel-initial stems, as in TABLE 8.4.

TABLE 8.4. ALIENABLE POSSESSION WITH LONG VOWEL-INITIAL STEMS

PERSON	CAREFUL SPEECH		FAST SPEECH	GLOSS
3P	<i>idaʔúùwaca</i>	→	<i>idúùwaca</i>	<i>his money</i>
1P	<i>madaʔúùwaca</i>	→	<i>madúùwaca</i>	<i>my money</i>
2P	<i>nídaʔuuwaca</i>	→	<i>níduuwaca</i>	<i>your money</i>

unpossessed stem: *úùwaca* *metal, money*

8.1.2 Inalienable possession

Inalienably possessed nouns refer to entities that are deemed to be intimately and naturally “attached” to the possessor, as well as irrevocable relationships, such as kinship ties. The fact that the natural state of such entities and relationships is being “owned”, or “possessed”, is also reflected in morphology as the underived citation form is in fact the morphologically unmarked third person possessed form. Whereas the non-derived form of alienable nouns is the non-possessed form, the absolutive (or non-possessed) form of inalienable nouns, with the exception of a small number of statively possessed nouns (see 8.1.2.4), is always the result of morphological derivation.

The third person form of inalienably possessed nouns is unmarked; it is used in compounding and other non-possessed contexts. Statively possessed nouns are an exception (see 8.1.2.4); it is the unmodified absolutive form that is unmarked.

Inalienable possession follows several inflectional patterns, each of which is described below. The examples include mostly body parts, clothing items, and culturally significant items. Kinship terms, which, with a few exceptions, for the most part follow these patterns, are dealt with separately in section 8.1.4.

8.1.2.1 Initial *VV* and initial *aC*

Inalienably possessed nouns with an initial long vowel or short *a* mark the first person with *m-* and second person with an accented *n´-*. The third person is unmarked. Note that sequences of short vowel and glottal stop, as in *éʔ food* and *óʔgee head ornament*, are diachronically reduced

long vowels (see 2.1.2).⁸⁵ Pitch pattern in the inflected forms does not change except for the regular change caused by the accented second person prefix. Sample paradigms are given in

TABLE 8.6.

TABLE 8.6. INALIENABLY POSSESSED NOUNS WITH INITIAL *VV* OR *aC*

3 <i>his / her</i>	1 <i>my</i>	2 <i>your</i>	GLOSS
áàba	máàba	náàba	<i>neck</i>
áàci	máàci	náàci	<i>breasts</i>
áàra	máàra	náàra	<i>arm</i>
áàbeʔ	máàbeʔ	náàbeʔ	<i>necklace; collar</i>
aahdú	maahdú	náàhdú	<i>head</i>
aasí	maasí	náàsí	<i>horn (part of a costume)</i>
îi	mîi	nîi	<i>mouth</i>
îihga	mîihga	nîihga	<i>chin</i>
îisa	mîisa	nîisa	<i>ankle</i>
îiwagi	mîiwagi	nîiwagi	<i>chest (thorax)</i>
iidá	miidá	nîida	<i>face</i>
iihsá	miihsá	nîihsa	<i>teeth</i>
iihxí	miihxí	nîihxi	<i>forehead</i>
iicagí	miicagí	nîicagi	<i>cane</i>
éʔ	méʔ	néʔ	<i>food</i>
óʔge	móʔge	nóʔge	<i>head ornament</i>
úùhsi	múùhsi	núùhsi	<i>buttocks</i>
abá	mabá	nába	<i>nose</i>
ará	mará	nára	<i>hair</i>
ahbá	mahbá	náhba	<i>ear (animal); external ear</i>
ahgúxi	mahgúxi	náhguxi	<i>ear (human)</i>
abhúhga	mabhúhga	nábhuhga	<i>hat, cap</i>
ahbóògsa	mahbóògsa	náhboogsa	<i>earring</i>

There is one exception to this rule. Nouns with an initial long *ee-* prefix *ma-* to the first person form and *ná-* to the second person. There are only two such nouns in Hidatsa, as well as a number of compounds based on them. Simple *ee-*initial nouns are given in TABLE 8.7.

⁸⁵ Aside from a few words that begin with a short vowel and glottal stop sequence there are no inalienably possessed nouns with an initial short *e*, *o*, or *u* (short *i*-initial nouns follow a different pattern and are dealt with in section 8.1.2.2).

TABLE 8.7. INALIENABLY POSSESSED NOUNS WITH INITIAL *ee*

3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
eerí	ma [?] eerí	ná [?] eeri	<i>abdomen, stomach; excrement</i>
eexí	ma [?] eexí	ná [?] eexi	<i>urine</i>

8.1.2.2 Initial *iC*

Sample paradigms of inalienably possessed nouns with stem-initial *iC* are given in TABLE 8.8.

First and second person forms are produced with first person pronominal prefix *ma-* and second person prefix *ní-* that replace the stem-initial *i*. Two nouns, *isdá* *eye* and *ixbá* *wing*, have alternative first person forms.

TABLE 8.8. INALIENABLY POSSESSED NOUNS WITH INITIAL *iC*

3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
icí	mací	níci	<i>foot</i>
irí	marí	níri	<i>penis</i>
isdá	masdá / misdá	nísda	<i>eye</i>
ixbá	maxbá / mixbá	níxba	<i>wing</i>
idáá	madáá	nídaa	<i>arrow</i>
idúú	madúú	níduu	<i>song</i>
ixúá	maxúá	níxua	<i>body</i>
irigí	marigí	nírigi	<i>leg</i>
icidí	macidí	nícidí	<i>tracks</i>
idagí	madagí	nídagi	<i>pack, bundle on the back</i>
idaaghá	madaaghá	nídaagha	<i>kettle</i>
idhaací	madhaací	nídhaaci	<i>pants</i>
ibîdi	mabîdi	níbiidi	<i>lower back; rump, rear end</i>
idúùxi	madúùxi	níduuxi	<i>shirt</i>
iráàxi	maráàxi	níraaxi	<i>spirit</i>
iráàxixi	maráàxixi	níraaxixi	<i>shadow (of sth.); reflection</i>
isída	masída	nísida	<i>back</i>
irásba (?*isbá)	marásba (?*masbá)	nírasba (?*nísba)	<i>shoulder</i>
isdáhge	masdáhge	nísdahge	<i>eyeglasses</i>

An alternative analysis to the stem vowel change in the first person forms is to treat the initial *i* as the third person prefix.⁸⁶ The strongest argument against this hypothesis is the fact that the depossessivizing indefinite *maa-* is prefixed to the stem without changing or deleting the initial *i*. Examples of the third person and absolute forms of two *iC* initial stems are given in (6) and (7). Graczyk (2007: 54) also points out for Crow cognates that deleting the *i* would in some cases leave us with stems that have initial consonant clusters. Neither Crow nor Hidatsa allow word-initial consonant clusters on the surface level (e.g., (i-) **sdá* (*his*) *eye*).

(6) *isdá* *his eye* > *maa'isdá* *an eye*

(7) *idhaací* *his pants* > *maa'idhaací* *pants*

8.1.2.3 Initial *n*

First person and second person prefixes for consonant-initial stems are *ma-* and *ní-*, respectively. This pattern is associated with various changes in pitch-accent and vowel length.

In most cases the last syllable of the first person form becomes accented regardless of which syllable bears the accent in the third person, or citation, form. However, speaker variation exists for several words for which accent shift is not obligatory. For a few words I was only able to elicit first person forms with no accent shift. It is possible that future fieldwork will yield variant forms for these nouns as well.

In many first and second person forms the long stem vowel becomes short for no apparent reason.

Finally, the words *náàsi* *name* and *néèsi* *tongue* inflect identically for the first and second person but the vowel quality is different in the third person form.

⁸⁶ Both Jones (1984) and Boyle (2007) adopt this analysis.

A selection of inalienably possessed nouns with initial *C* are given in TABLE 8.9.

TABLE 8.9. INALIENABLY POSSESSED NOUNS WITH INITIAL *C*

3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
naxbí	maraxbí	níraxbi	<i>thigh (outside side)</i>
naadá	maradá	nírada	<i>heart</i>
náàca	maracá	níraca	<i>calf</i>
náàru	maraarú	níraaru	<i>crotch, inner thigh</i>
náàsi	marasí	nírasi	<i>name</i>
néèsi	marasí	nírasi	<i>tongue</i>
nóòrooba	marooroobá	níroorooba	<i>jaw</i>
nóhci	maróhci / marohcí	nírohci	<i>armpit</i>
núùri	marúùri / maruurí	níruuri	<i>upper back</i>
nóòdi	maróòdi / ?	níroodi	<i>side of throat, windpipe</i>
nóhsi	maróhsi / ?	nírohsi	<i>chewed food</i>

Several *C*-initial inalienable nouns have variant *i*-initial citation forms (the citation form is identical to the third person form). The variant *i*-initial forms are less frequent than the *C*-initial ones, but they are by no means rare. It is possible that a diachronic study of these forms will shed some light on the nature of pitch-accent and vowel-length changes in TABLE 8.9 and TABLE 8.10. Inalienable nouns with variant stems are presented in TABLE 8.10, with dialectal forms given in parentheses.

TABLE 8.10. INALIENABLY POSSESSED NOUNS WITH STEM VARIATION

3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
sará / isará / isá	masá	nísa	<i>vulva</i>
náàxu / iráàxu	maraxú	níraxu	<i>lung</i>
sáàgi / isagí / isáàgi	masagí	nísagi	<i>hand</i>
náhsi / iráhsi (náhsa)	maráhsi (marahsá)	nírahsi (nírahsa)	<i>biceps</i>

8.1.2.4 Stative possession

A small number of nouns mark the possessor with B-set prefixes, as in TABLE 8.11. Most of such words refer to internal body parts. Whereas typical inalienably possessed nouns are depossessivized by prefixing *maa-* to them (see section 8.1.2.5.), the non-possessed forms of the words described here are identical to their third person (or citation) form.

TABLE 8.11. INALIENABLY POSSESSED NOUNS WITH B-SET PREFIXES

UNPOSSESSED FORM	GLOSS	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>
<i>agáàsa</i>	<i>tendon; gristle; cord</i>	<i>agáàsa</i>	<i>mii'agáàsa</i>	<i>nii'agáàsa</i>
<i>cîda</i>	<i>tail</i>	<i>cîda</i>	<i>miicîda</i>	<i>niicîda</i>
<i>sîba</i>	<i>guts</i>	<i>sîba</i>	<i>miisîba</i>	<i>niisîba</i>
<i>núùda</i>	<i>ribs</i>	<i>núùda</i>	<i>miirúùda</i>	<i>niirúùda</i>

A number of possessed nouns that refer to body parts are partitive constructions. Forms inflected for possession indicate the possessor with a combination of B-set prefixes and the relativizer *aru-/oo-* (see 7.2.4.2). Examples of body parts inflected according to this paradigm are listed in TABLE 8.12.

TABLE 8.12. INALIENABLE POSSESSION WITH THE RELATIVIZER *aru* AND B-SET PREFIXES

UNPOSSESSED FORM	GLOSS	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>
<i>hirú</i>	<i>bone</i>	<i>aruhirú</i>	<i>mii'aruhirú</i>	<i>nii'aruhirú</i>
<i>naxbí</i>	<i>skin</i>	<i>ooraxbí</i>	<i>mii'ooraxbí</i>	<i>nii'ooraxbí</i>
<i>xáàga</i>	<i>sore</i>	<i>aruxáàga</i>	<i>mii'aruxáàga</i>	<i>nii'aruxáàga</i>

In a few inalienably possessed nouns that are inflected with B-set prefixes (TABLE 8.13), the pronominal prefix may precede or follow *aru-*, as before *adá* *sore*. The unpossessed form of ‘brain’ occurs both with and without the indefinite *maa-*. The possessed forms of ‘brain’ are inflected by prefixing the first and second person B-set prefixes directly to the stem or to the partitive stem with *aru-*. The third person form of *cúáda* is inflected with an enigmatic prefix *ii-*

(instrumental? C-set prefix?) or with the partitive **aru-**; but an uninflected third person form was also accepted by a few speakers.

TABLE 8.13. INALIENABLE POSSESSION WITH PREFIX VARIATION

UNPOSSESSED FORM	GLOSS	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>
cúáda maacúáda	<i>brain</i>	? cúáda iicúáda arucúáda	miicúáda mii'arucúáda	niicúáda nii'arucúáda
adá	<i>sore</i>	aru'adá	mii'aru'adá aruwii'adá	nii'aru'adá oorii'adá

Examples of sentences with body parts variously inflected for possession are given in (8)-(10).

- (8) **Maahiigsáwa** **arucúáda** **gireesác.**
 maa-hii-gsá-wa **aru-cúáda** hgi-neesá-c
 INDEF-drink-USI-SIMULT **REL-brain** GI-not.exist-DECL
She's got no brain left because of her drinking.
- (9) **Nábhuhga** **iiríraadhaarug** **niicúáda** **aruwirídic.** **Cawéèc** **agihdiàwa.**
 n'-abhúhga ii-ní-raa-dhaa-rúg **nii-cúáda** aru-mirídi-c **cawéè-c** agihdiàwa
 2POS-hat INST-put-2CAUS.DIR-NEG-COND **2B-brain** IRR-fry-DECL hot-DECL very
If you don't put your hat on, your brains will be fried. It's very hot!
- (10) **Mii'aruhirú** **aré'c.** = **Miihirú** **aré'c.**
mii-aru-hirú **aré'c** **mii-hirú** **aré'c**
1B-REL-bone ache-DECL **1B-bone** ache-DECL
My bones ache. My bones ache.

Finally, B-set prefixes are used to mark the possessor of deverbal abstract nouns that are derived by prefixing **aru-** to stative verbs (see 7.2.4.2).. Prefix order is flexible, but the preferred order is **aru-** plus B-set prefix.

TABLE 8.14. INALIENABLE POSSESSION WITH DEVERBAL ABSTRACT NOUNS

VERB	GLOSS	ABSTRACT NOUN	GLOSS	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>
nagciá	<i>be heavy</i>	→ ooragciá	<i>weight</i>	ooragciá	aruwiiragciá mii'ooragciá	ooriiragciá nii'ooragciá
súwaa	<i>be slow</i>	→ arusúwaa	<i>slowness</i>	arusúwaa	aruwiisúwaa	ooriisúwaa

8.1.2.5 Depossessivizing indefinite prefix *maa-*

Inalienably possessed nouns that refer to real-world entities without an apparent owner or a temporary possessor, such as a shirt in the store window or a detached body part, as well as abstract nouns, are depossessivized by prefixing the indefinite *maa-* to the third person form, as in (11). The unpossessed form of statively owned nouns is the bare stem.

- | | | | | | |
|------|------------------------|------------------------------|---|----------------------------|-----------------------------------|
| (11) | <i>iráàxi</i> | <i>his spirit</i> | > | <i>maaʔiráàxi</i> | <i>a spirit</i> |
| | <i>náàsi</i> | <i>his name</i> | > | <i>maaráàsi</i> | <i>a name</i> |
| | <i>idúùʔas</i> | <i>his sisters-in-law</i> | > | <i>maaʔidúùʔas</i> | <i>the sisters-in-law</i> |
| | <i>áàrudaahgas</i> | <i>his grandfather</i> | > | <i>maaʔáàrudaahgas</i> | <i>U.S. president; government</i> |
| | <i>ará aguracgiidí</i> | <i>one who cuts his hair</i> | > | <i>maaʔará aguracgiidí</i> | <i>a barber</i> |

Examples (12) and (13) are sentences with depossessivized, or absolutive, nouns.

- (12) **Maaʔidúùxihe** **maawáàheec.** **Aruwaruhcíc.**
maa-idúùxi-hee **maa-maʔihee-c** **aru-ma-nuhcí-c**
INDEF-3shirt-this **1A-want-DECL** **IRR-1A-take-DECL**
I want this jacket. I'm going to buy it.

- (13) **Maaʔaahdúúwa** **óòrabaʔc.**
maa-aahdúú-wa **óòrabi-ʔa-c**
INDEF-3head-INDEF **find-PL-DECL**
They found a (detached) head.

Depossessivized nouns can be repossessivized by prefixing *ida-/mada-/nída-* to the absolutive noun. In (14), members of the Waterbuster Clan want to get back two sacred skulls from a sacred bundle that had been sold to the Museum of the American Indian. Since the skulls have been clearly “alienated” from their original owners, first person alienable possessive *mada-* is prefixed to the depossessivizing indefinite prefix *maa-*.

- (14) **Máàra** **iibaragáàci** **éèrahaaru** **Miribaadí** **madawaaʔaahdúúʔas**
máàraa **ii-biragá-aci** **éè-nahaa-rú** **mirí-baadí** **mada-maa-aahdúù-ʔa-s**
winter **INST-ten-COMPR** **that-go-TEMP** **water-Bust** **1POS-INDEF-3POS.head-PL-DEF**

mahguucí maawáàhaa'ac.
 maa-hguucí maa-ma'íihee-'a-c
 1A-get.back 1A-want-PL-DECL

About ten years ago we wanted to get back our Waterbuster clan skulls. (Harris and Voegelin 1939: 233)

There are two lexicalized strategies to possessivize abstract instrumental nouns (see 7.2.4.4). The more common pattern is to simply add the instrumental prefix to the sequence of the indefinite *maa-* and instrumental *ii-*, as in (15).

(15)	<i>maa'ii</i> girá'hge	<i>a kite</i>	<i>madawaa'ii</i> girá'hge	<i>my kite</i>
	<i>maa'ii</i> gáàgi'	<i>a sewing machine</i>	<i>idawaa'ii</i> gáàgi'	<i>her sewing machine</i>
	<i>maa'ii</i> rúsgu	<i>potion, medicine</i>	<i>idawaa'ii</i> rúsgu	<i>his potion</i>
	<i>maa'ii</i> bháàhge	<i>turn signal</i>	<i>nídawaa'ii</i> bhaaghe	<i>your turn signal</i>
	<i>maa'ii</i> 'íhasahe	<i>spice</i>	<i>nídawaa'ii</i> 'ihasahe	<i>your spices</i>

According to the second pattern, the possessive prefix replaces the indefinite prefix *maa-*, as in (16). Whether the difference between the two patterns depends on semantic criteria or something else remains to be determined.

(16)	<i>maa'ii</i> ragcárughe	<i>skates</i>	<i>mada'ii</i> ragcáruhge	<i>my skates</i>
	<i>maa'ii</i> raghí	<i>driver's license</i>	<i>mada'ii</i> raghí	<i>my driver's license</i>
	<i>maa'ii</i> gí'ria	<i>a ride</i>	<i>nída'ii</i> gí'ria	<i>your ride (bike, horse)</i>

Certain instrumental compounds, which have an overt noun in the object slot instead of the indefinite *maa-*, have their initial member replaced by the possessive prefix. In (17), *icúùwasga* *horse* is replaced by the first person alienable possessive prefix *mada-*. *li-* is the instrumental prefix and the indirect causative verb *diríáhgee* means 'to make sth/sb run'.

(17)	<i>icúùwasga</i> <i>ii</i> diríáhge	<i>a racing horse</i>	<i>mada'ii</i> diríáhge	<i>my racing horse</i>
------	-------------------------------------	-----------------------	-------------------------	------------------------

A few instrumental nouns, such as ‘girdle’ in (18), as well as a large number of abstract nouns, such as ‘tradition’ in (19), inflect according to the stative possessive pattern. Again, the possessive prefix replaces the indefinite prefix.

- (18) **maa’iirúðhabhe** *a girdle* **mii’iirúðhabhe** *my girdle*
- (19) **maa’arucaawí** *ways, lore, tradition* **mii’arucaawó’** *our traditions, ways*

Finally, the indefinite prefix **maa-** can also be replaced by inalienable possessive prefixes, as by the first person prefix **mada-** in the partitive noun **maa’aruxabí** *bed* in (20).

- (20) **Maa’aruxabíhgidaa** / **Mada’aruxabíhgidaa** **maaréèc**.
maa-aru-xabí-hgidaa / **mada-aru-xabí-hgidaa** **maa-nèè-c**
INDEF-REL-lie-GOAL.VERT / **1POS-REL-lie-GOAL.VERT** **1A-go-DECL**
I am going back to bed / my bed.

8.1.2.6 Suppletive possessed nouns

A few inalienably possessed nouns in TABLE 8.15 have suppletive possessed forms.

TABLE 8.15. INALIENABLY POSSESSED NOUNS WITH SUPPLETIVE ABSOLUTIVE FORMS

ABSOLUTIVE	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
adí	aadí	maadí	náàdi	<i>house</i>
ahdúù / maa’aahdúù	aahdúù	maahdúù	náàhduu	<i>head</i>
mirúhxaa	idarúhxaa	madarúhxaa	nídaruhxaa	<i>gun; bow</i>
huubá	idahbá	madahbá	nídahba	<i>shoe</i>
icúùwasga / icúàsga	idaasugá	madaasugá	nídaasuga	<i>horse</i>
masí	idaasí	madaasí	nídaasi	<i>robe; blanket, quilt</i>

The first-syllable long vowel in the possessed forms of ‘house’ and ‘head’ is short in the absolutive, or unpossessed, forms, which are formed without the indefinite prefix. The absolutive form of ‘head’ has an alternative form that follows the regular pattern by which the indefinite

maa- is prefixed to the third person possessed form. The words for ‘gun’ and ‘shoe’ have idiosyncratic absolutive forms.

The word **icúùwasga** *horse* is a diachronic derivation from the word **masúga** *dog*.⁸⁷ The etymology of **icúù-** remains uncertain. As the economic importance of the dog was superseded by that of the horse sometime in the 18th or 19th centuries, the inalienably inflected possessive forms for ‘dog’ started to be used only in reference to horses and **masúga** *dog* itself became an alienably possessed noun (the possessed forms are 3P **idawasúga**, 1P **madawasúga**, 2P **nídashuga**).⁸⁸

The first syllable in the (now) alienable noun **masúga** *dog* and inalienable **masí** *robe* may be a contracted indefinite prefix **maa-**. This is further corroborated by the fact that the first syllable fills (at least historically in the case of ‘dog’) the same slot with possessive prefixes. In contemporary Hidatsa ‘robe’ has developed a parallel absolutive form **maa’idaasí** that unambiguously follows the inalienable possessive pattern as the indefinite prefix is added to the third person possessed form.

It is possible that the prefixes **idaa-/madaa-/nídaa-** may have their historical origin in alienable possession. A number of inalienably possessed nouns in TABLE 8.16 that follow this pattern have irregular absolutive forms. Most commonly, they either lack the indefinite prefix, or it is optional.

⁸⁷ In the vocabularies recorded in the 19th and early 20th centuries, ‘horse’ was still written as **icúùwasuga**, that later became contracted to **icúùwasga**, and in the speech of many contemporary speakers has become **icúàsga**. The derivation of the word ‘horse’ from ‘dog’ is common in other Plains languages as well.

⁸⁸ In Crow the non-possessed form for horse, **iichíili**, is the original term for ‘elk’, which is now referred to by the term **iichíili-kaashi**, or ‘real elk’ (Graczyk 2007:57). The word for ‘dog’, **bishká**, is still possessed according to the inalienable pattern: **isaashkakaáshi** *his dog*.

TABLE 8.16. INALIENABLY POSSESSED NOUNS WITH *idaa-/madaa-/nídaa*

ABSOLUTIVE	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
héèrabi	idaahéèrabi	madaahéèrabi	nídaaheerabi	<i>waist</i>
idaaghá	idaaghá	madaaghá	nídaagha	<i>kettle</i>
idaahcú / maa'idaahcú	idaahcú	madaahcú	nídaahcu	<i>half</i>
maa'idáá	idáá	madáá	nídaa	<i>arrow</i> ⁸⁹

8.1.2.7 Irregular paradigms

A few nouns that are semantically inalienable follow irregular paradigms. The possessed forms of *îri* *blood* in (21) are formed by compounding the citation form with possessed forms of another inalienable noun *ixùà* *body*. *îri* itself is the absolutive (unpossessed) form.

- (21)
- | | |
|-------------------|---|
| <i>îri</i> | <i>blood</i> |
| <i>ixua'îri</i> | <i>his blood</i> |
| <i>maxua'îri</i> | <i>my blood</i> (* <i>mîri</i> , * <i>mada'îri</i>) |
| <i>níxua'iiri</i> | <i>your blood</i> (* <i>nîri</i> , * <i>nída'iiri</i>) |

The paradigms of **náxohga* *diaper* and **maabísa* *grandchild* in (22) seem to follow the alienable pattern. However, the bare stems do not occur without possessive prefixes and the indefinite *maa-* is prefixed to the possessed third person form.

- (22)
- | | | | |
|-----------------------|--------------------|-----------------------|------------------------|
| <i>madaráxohga</i> | <i>my diaper</i> | <i>madawaabísa</i> | <i>my grandchild</i> |
| <i>nídaraxohga</i> | <i>your diaper</i> | <i>nídawaabísa</i> | <i>your grandchild</i> |
| <i>idaráxohga</i> | <i>his diaper</i> | <i>idawaabísa</i> | <i>his grandchild</i> |
| <i>maa'idaráxohga</i> | <i>a diaper</i> | <i>maa'idawaabísa</i> | <i>a grandchild</i> |
| * <i>náxohga</i> | * <i>a diaper</i> | * <i>maabísa</i> | * <i>a grandchild</i> |

⁸⁹ The word for 'arrow' *idáá* is probably a historical derivation from the word *àà* *stem, stalk* and the possessive prefix that seems to have followed the alienable pattern. However, in contemporary Hidatsa, 'arrow' is treated as an inalienable noun and the absolutive form requires the prefix *maa-*.

The word for ‘collar bone’, **maawáchiru**, seems to begin with the indefinite prefix that has fused with the rest of the stem and is no longer analyzable (**hirú** means ‘bone’). Possessed forms of the reanalyzed word follow the alienable pattern, as illustrated by the form with the third person possessor in (23).

- (23) **Idawaawáchiru** **irúxuheec.**
ida-maa-wac?-hirú i-núxuxhi-hee-c
3POS-INDEF-??-bone STAT-break-3CAUS.DIR-DECL
He broke his collar bone.

Finally, the word for ‘belt’ in (24), **maa’iibáhsaagi**, appears to have an instrumental absolutive form, but the accented second person form indicates that the possessed forms are inflected with C-set prefixes. No other nouns that are inflected with middle prefixes have been identified.

- (24) **maa’iibáhsaagi** *a belt*
iibáhsaagi *his belt*
miibáhsaagi *my belt*
nībahsaagi *your belt*

8.1.3 Classificatory possession

In addition to alienable and inalienable possession, Hidatsa has uniquely developed a classificatory system of nominal possession. Nouns whose inflection falls under this system denote mostly traditional food items. The classificatory possessive prefixes have been grammaticalized from the lexical verb **é’** *to own something*. It is also an inalienably possessed noun that means *food* (see 8.1.2.1). Sample paradigms of classificatory possession are given in TABLE 8.17.

TABLE 8.17. CLASSIFICATORILY POSSESSED NOUNS

UNPOSSESSED NOUN	3P <i>his / her</i>	1P <i>my</i>	2P <i>your</i>	GLOSS
<i>fiixdi</i>	<i>eʔfiixdi</i>	<i>meʔfiixdi</i>	<i>néʔiixdi</i>	<i>pemmican</i>
<i>sîiba</i>	<i>eʔsîiba</i>	<i>meʔsîiba</i>	<i>néʔsiiba</i>	<i>sausage</i>
<i>maabhí</i>	<i>eʔwaabhí</i>	<i>meʔwaabhí</i>	<i>néʔwaabhi</i>	<i>cornball</i>

8.1.4 Kinship terms

Most kinship terms (TABLE 8.18) belong to the class of inalienably possessed nouns. However, some of the terms seem to be based on alienable morphology and a few are compounds. A question mark (?) indicates probable word forms that are likely to exist but were not elicited. Dash indicates paradigmatic gaps. Kinship terms that are not used predicatively are most often used with the definite *-s*, and less frequently, with the indefinite *-wa*. With the exception of *idawíà* and *idaʔaruwíà*, suffixless word-final long vowels lose their second mora in normal speech (see 2.4.3).

TABLE 8.18. KINSHIP TERMS

3SG	1SG	2SG	VOCATIVE	GLOSS
<i>aadigudá</i>	<i>maadigudá</i>	<i>náàdiguda</i>	—	<i>family, family members</i>
<i>ihgá</i>	<i>mahgá</i>	<i>níhga</i>	<i>mahgáà!</i>	<i>daughter (reciprocal with áàdu, ihúù, and isáàwi)</i>
<i>irisá</i>	<i>marisá</i>	<i>nírisa</i>	<i>marisáà!</i>	<i>son (reciprocal with áàdu, ihúù, and isáàwi)</i>
<i>iraagá</i>	<i>maraagá</i>	<i>níraaga</i>	? <i>madawaabéè!</i>	<i>child, children; clan child, clan children</i>
<i>áàdu</i>	<i>máàdu / daadís</i>	<i>náàdu</i>	<i>daadéè!</i>	<i>father, father's brothers; clan father, father's clan brothers</i>
<i>ihúù</i>	<i>mahúù / ihgá</i>	<i>níhuu</i>	<i>ihgáà!</i>	<i>mother; mother's sisters</i>
<i>isáàwi</i>	<i>masáàwi</i>	<i>nísaawi</i>	<i>masaawí!</i>	<i>father's sister</i>
<i>áàrudaahga</i>	<i>máàrudaahga</i>	<i>náàrudaahga</i>	<i>daahgáà!</i> <i>idaahgáà!</i>	<i>grandfather (either one); isáàwi's husband; woman's father-in-law</i>
<i>igúù</i>	<i>magúù</i>	<i>níguu</i>	<i>magúù!</i>	<i>grandmother; woman's mother-in-law</i>
<i>idawaabísa</i>	<i>madawaabísa</i>	<i>nídawaabisa</i>	<i>madawaabisáà!</i>	<i>grandchild</i>

				madawaabéè!
idúdi	madúdi	nídudi	?	<i>son-in-law (daughter's husband)</i>
idhúùga	madhúùga	nídhuuga	idhuugáà!	<i>daughter-in-law</i>
idudágha	madudágha	nídudagha	—	<i>man's mother-in-law</i>
ida'idáàhga	mada'idáàhga	nída'idaahga	?	<i>man's father-in-law</i>
idaagú	madaagú	nídaagu	madaagúù!	<i>woman's younger sister</i>
irúù	marúù	níruu	marúù!	<i>woman's older sister</i>
idahgîisa	madahgîisa	nídahgiisa	?	<i>man's younger sister</i>
idawíà	madawíà	nídawia	madawíà!	<i>man's older sister</i>
icuugá	macuugá	nícuuga	macuugáà!	<i>his or her younger brother</i>
idaarú	madaarú	nídaaru	madaarúù!	<i>woman's older brother; woman's mother's brother</i>
i'agá	mi'agá	ní'aga	mia'gáà!	<i>man's older brother; man's</i>
ia'gá	mia'gá	níà'ga		<i>mother's brother</i>
idawácha	madawácha	nídawacha	haacídha!	<i>sibling</i>
idúù	madúù	níduu	madúù!	<i>woman's sister-in-law (e.g., brother's wife, husband's sister)</i>
úàga	múàga	núàga	muagáà!	<i>man's sister-in-law (e.g., wife's sister, brother's wife, mother's brother's wife)</i>
iráàdi	maráàdi	níraadi	maraahdí! ⁹⁰	<i>man's brother-in-law (sister's husband; wife's brother)</i>
isígisa (isigisá)	masígisa (masigisá)	nísigisa	masigisáà!	<i>woman's brother-in-law (sister's husband, husband's brother – teasing relative)</i>
iragúà	maragúà	níragua	maragúà!	<i>male friend of a man (women sometimes use this word in jest)</i>
igó'xba	magó'xba	nígo'xba	mago'xbáà!	<i>female friend of a woman</i>
idadáàhga	madadáàhga	nídadaahga	madadaahgáà!	<i>woman's "old man" (i.e., husband, used by older women), sister's husband. Usage: only possessed forms are used.</i>
giráà	maagiráà	nágiraa	?	<i>husband</i>
ida'aruwíà	mada'aruwíà	nída'aruwia	?	<i>wife</i>
idadáàba	madadáàba	nídadaaba	?	<i>relative</i>

Vocatives (see 14.4) are formed by adding a mora to the final syllable of the first person possessed form of the word, if short, and then shifting the accent to the ensuing final long syllable. Accent on the final long syllable has a falling pitch. The final syllable does not change

⁹⁰ Note the epenthetic *h* in the onset of the last syllable. The exact process remains unclear.

if it already contains an accented long vowel (as in **magúù** *my grandmother*) or a diphthong (as in **madawíà** *my older sister*). **Haacídha!** *my sibling!* is the only irregular vocative form since it does not undergo accent shift or final vowel lengthening.

In comparison to the Crow kinship system that contains at least five suppletive vocative forms (Graczyk 2007: 59), Hidatsa has three. (TABLE 8.19). ‘Mother’ and ‘father’ have also optional suppletive forms that are used for reference from the first person perspective and the vocative forms are based on these forms. ‘Grandchild’ has a regular vocative form and an irregular form that is formed after the final syllable in **madawaabísa** has been deleted.

TABLE 8.19. SUPPLETIVE AND IRREGULAR KINSHIP TERMS

SUPPLETIVE FORM	GLOSS	TYPE
mahúù	<i>my mother</i>	reference
ihgá	<i>my mother</i>	reference
ihgáà!	<i>mother!</i>	vocative
máàdu	<i>my father</i>	reference
daadís	<i>my father</i>	reference (occurs only with the definite -s)
daadéè!	<i>father!</i>	vocative
madawácha	<i>my sibling</i>	reference
haacídha!	<i>sibling!</i>	vocative
madawaabísa	<i>my grandchild</i>	reference
madawaabisáà!	<i>grandchild!</i>	vocative
madawaabéè!	<i>grandchild!</i>	vocative

The irregular vocative form **madawaabéè!** *my grandchild* is usually used instead of the regularly inflected **madawaabisáà!**. However, this term is strictly generational in the Western sense, and in the Hidatsa kinship system, where a ten year old may be a “grandparent” to a sixty year old, **madawaabéè!** is limited to addressing someone who is about two generations younger.

This word conveys a strong feeling of intimacy and endearment, and is also often loosely used by someone in one's grandparents' generation with the meaning 'my dear', or 'my dear child'.

Speakers deem vocative forms for woman's father-in-law and man's mother-in-law unacceptable since these affinal relationships require avoidance.

Most of the words in TABLE 8.18 above belong to the morphological class of inalienably possessed nouns, but a few, repeated in TABLE 8.20, are inflected with alienable possessive prefixes.

TABLE 8.20. ALIENABLY POSSESSED KINSHIP TERMS

3SG	1SG	2SG	VOCATIVE	GLOSS
idawaabísa	madawaabísa	nídawaabisa	madawaabisáà! madawaabéè!	<i>grandchild</i>
idawácha	madawácha	nídawacha	haacídha!	<i>sibling</i>
ida'idáàhga	mada'idáàhga	nída'idaahga	?	<i>man's father-in-law</i>
idawíà	madawíà	nídawia	madawíà!	<i>man's older sister</i>
ida'aruwíà	mada'aruwíà	nída'aruwia	?	<i>wife</i>
idadáàba	madadáàba	nídadaaba	?	<i>relative</i>

In general, alienably possessed nouns may freely drop the possessive prefixes and the remaining nominal stem has a non-possessed meaning. In the case of kinship terms there are two ways in which words that otherwise seem to follow the pattern of inalienable possession deviate from this rule. First, the roots **maabísa* *grandchild* and **wácha* *sibling* never occur without alienable possessive prefixes. Second, four kin terms are formed from ordinary nouns with non-kin senses, but take on special lexicalized kinship meaning when possessed. The meanings of the basic, unpossessed stems of *idawíà* *his older sister*, *ida'aruwíà* *his wife*, *ida'idáàhga* *his father-in-law*, and *idadáàba* *relative*, are, respectively, *míà* *woman*, *aruwíà* *one who is a woman*, *idáàhga* *old man*, and *dáàba* *something*. Thus, regardless of their alienable possessive

morphology, all of these words have to be listed as separate lexemes (conventionally under *ida-*) in the dictionary.

A few more words (TABLE 8.21.) have been introduced into the kinship system by analogy with alienably possessed kin terms. For instance, another term for ‘husband’ has been coined by analogy from *macéé* *man* > *aruwacéé* *one who is a man* > *ida’aruwacéé* *her man*, interpreted as *her husband*. This development is a clear analogy from *ida’aruwíà* *his wife*. Similar development has yielded *idagáàru* *his old lady*, from *gáàru* *old woman*, interpreted as *his wife*. However, the kinship meaning of these two lexemes in possessed forms is still somewhat ambiguous and has not become completely lexicalized.

TABLE 8.21. KINSHIP TERMS FORMED BY ANALOGY

3SG	1SG	2SG	VOCATIVE	GLOSS
<i>ida’aruwacéé</i>	<i>mada’aruwacéé</i>	<i>nída’aruwacee</i>	—	<i>one’s man (i.e., husband)</i>
<i>idagáàru</i>	<i>madagáàru</i>	<i>nídagaaru</i>	<i>madagaarúù!</i>	<i>one’s old lady (an older married woman)</i>

Kinship terms offer an insight into how alienable possession may become inalienable. For example, *idáàhga* *old man* is possessed in both ways with distinct lexicalized meanings. Thus, ‘man’s father-in-law’ is a clear example of alienable possession. In ‘woman’s old man’ the alienable possessive prefix has merged with the stem and the unpossessed form is not possible anymore, as in TABLE 8.22.

TABLE 8.22. ALIENABLE AND INALIENABLE POSSESSION OF *idáàhga* ‘OLD MAN’

3SG	1SG	2SG	VOCATIVE	GLOSS
<i>ida’idáàhga</i>	<i>mada’idáàhga</i>	<i>nída’idaahga</i>	?	<i>man’s father-in-law</i>
<i>idadáàhga</i>	<i>madadáàhga</i>	<i>nídadaahga</i>	<i>madadaahgáà!</i>	<i>woman’s “old man” (i.e., husband, used by older women), sister’s husband.</i>

Other kinship terms that may have developed from alienable morphology are presented in

TABLE 8.23.

TABLE 8.23. OTHER ALIENABLY POSSESSED KINSHIP TERMS

3SG	1SG	2SG	VOCATIVE	GLOSS
idhùùga	madhùùga	nídhuga	idhuugáà!	<i>daughter-in-law</i>
idaagú	madaagú	nídaagu	madaagúù!	<i>woman's younger sister</i>
idahgîsa	madahgîsa	nídahgiisa	?	<i>man's younger sister</i>
idaarú	madaarú	nídaaru	madaarúù!	<i>woman's older brother; woman's mother's brother</i>

It is possible that the distribution of alienable and inalienable prefixes among kinship terms may be telling of their order of grammaticalization and their invested meaning in cultural context. Most important kin terms, such as the terms for parents and children, belong to the class of unequivocally inalienably possessed nouns.

Finally, the word for ‘husband’ is inflected with active verb prefixes, as demonstrated in TABLE 8.24, but the word itself is used as a nominal, usually modified with the definite *-s* or other nominal modifiers, as in the examples in (25).

TABLE 8.24 ACTIVE INFLECTION OF KINSHIP TERMS

3SG	1SG	2SG	VOCATIVE	GLOSS
giráà	maagiráà	nágiraa	?	<i>husband</i>

- (25) a. **Nágiraahgeeracis** **doo'?**
 na-giráà-hgee-raci-s dóò-?
 2A-husband-DIM-COMPR-DEF where-INTER
 Where's that man you call your husband? (derogative)
- b. **Maagiráà'as** **gífc.**
 maa-giráà-²a-s gíí-c
 1A-husband-PL-DEF be.back-DECL
 Our husband is back. (one sister to another of her husband)

- c. **Náàrudaahgas** **nísaawis** **giráàs.**
 n-áàrudaahga-s ní-isáàwi-s giráà-s
 2POS-grandfather-DEF 2POS-aunt-DEF husband-DEF
Your grandfather is your aunt's husband. (i.e., father's sisters are one's **isáàwi**, their husbands are one's grandfathers)

Inalienably possessed kinship terms, just like other inalienably possessed nouns, can be depossessivized by prefixing the indefinite **maa-** to the third person (or citation) form of the word. Absolute forms of kinship terms are used to express abstract concepts or to speak about kin relations in general. Examples of depossessivized kinship terms are given in (26).

- (26) **maa'áàdu** *a father*
maa'ihú neesa *to be an orphan* (but: **lhúù neesac.** *He is an orphan.*)
Maa'ihúù Idawaabí *Mother's Day* (lit: *a-mother her-day*)
maa'áàrudaahgas *U.S. president; government*

9 Articles, case marking, and argument disambiguation

There are two articles, the definite *-s* and indefinite *-wa*, and one case marker, the ergative *-rí* / *-hirí* / *-hurí*. Unlike Crow (see Graczyk 2007:226), Hidatsa does not distinguish between specific and nonspecific indefinite articles. The indefinite *-wa* is specific and the absence of article indicates nonspecific NPs. The indefinite article has a homophone *-wa* that is used as a focus marker. In addition to specifying the definiteness of the noun phrase, articles, along with the ergative case marker, disambiguate transitive arguments by ranking them on the agentivity scale. Both articles, the focus marker, and the ergative case marker are suffixed to the noun phrase.

Articles and attributive demonstratives (see 10.2) occur in complementary distribution; however, the ergative case suffix may follow a demonstrative. The ergative suffix may be followed by the focus marker.

A single overt core argument may occur as a bare stem, or be marked with either the indefinite article *-wa*, definite article *-s*, ergative case marker *-rí*, or one of the attributive demonstratives (see 10.2). The ergative suffix *-rí* can be combined with any of the articles or attributive demonstratives. Each of these determiners is described in the sections that follow.

9.1 Zero article

Articles are omitted if the noun is generic or non-referential. Indefinite plural and mass nouns also occur without articles. Examples of noun phrases with zero article in existential clauses are (1)–(3).

- (1) *Irúgsidi neesác.*
irúgsidi neesá-c
meat not.exist-decl
There is no meat.

- (2) Maa'iráàxi madúc.
 maa-iráàxi madú-c
 INDEF-spirit exist-DECL
There are spirits.
- (3) Ma'íhadihdaa aruwaaréèc.
 ma'íihu-adí-hdaa aru-maa-néè-c.
 sell-lodge-GOAL IRR-1A-go-DECL

Madúùwaca gireecháág aruwaaghúc.
 mada-úùwaca hgi-neesá-hee-g aru-maa-gúú-c
 1POS-metal GI-not.exist-3CAUS.DIR-CRD IRR-1A-return-DECL

I'm going to town. I'll come back broke.

The difference between a generic and a referential noun is illustrated in (4). Whereas the example in (4a) makes a statement about bears in general, the example in (4b) refers to a unique, specific bear, which is identified as such by the definite article *-s*.

- (4) a. Naxbichí ihaadíc.
 naxbichí ihaadí-c
 bear growl-DECL
Bears growl.
- b. Naxbichís ihaadíc.
 naxbichí-s ihaadí-c
 bear-DEF growl-DECL
***The** bear growled.*

The generic meaning of a noun may sometimes denote a wider concept than that of a definite or indefinite noun, as illustrated by the word maa'idúú *song*, which without an article in (5a) refers to songs or music in general, but with the article in (5b) refers to specific songs.

- (5) a. Maa'idú miigigúà maaragíc. b. Maa'idúú'as garawídháa'ac.
 maa-idúú mi-iiigigúà maa-naagí-c maa-idúú-'a-s hgi-arawí-dhaa-'a-c
 INDEF-song 1C-listen 1A-sit-DECL INDEF-song-PL-DEF GI-notice-NEG-PL-DECL
I'm listening to music. *They don't remember **the** songs.*

In addition to generic and non-referential nouns, articles are not used in certain set phrases, as with maabí *day* in (6) and máà *snow* in (7).

- (6) **Maabí** (*-s / *-wa) **cagíc.**
 maabí (*-s / *-wa) cagí-c
 day (*-DEF / *-INDEF) good-DECL
It is good weather. / It's a good day.
- (7) **Máà** (*-s / *-wa) **dachíc.**
 máà (*-s / *-wa) dachí-c
 snow (*-DEF / *-INDEF) thick-DECL
The snow is thick.

9.2 Definite article -s

The definite article **-s** indicates that the head of the noun phrase is considered sufficient in the given context to identify the referent, either because it has been previously mentioned, it is otherwise previously known to the addressee, or it refers to a uniquely identifiable entity.

In example (8), the verb **gíí** *to return to the original location* implies that the subject of the sentence is known to the addressee. The definite article **-s** that is added to **macéé** *man* further strengthens this implication. Similarly, the dog in (9) is uniquely identifiable to the addressee and must be marked with the definite **-s**.

- (8) **Gíí** **macéés.**
 gíí-c macéé-s
 get.back-DECL man-DEF
The man is back.
- (9) **Masúgas adáàsigua** **núdha!**
 masúga-s adáàsi-hgua núdhi-Ø
 dog-DEF outdoors-LOC tie-IMP.SG
Tie the dog up outside!

The definite article is almost always used with proper nouns (see 7.3), except when a name is used predicatively or in a vocative construction (see 14.4). Even non-native vowel-final proper nouns that have not been translated into Hidatsa may occasionally occur with **-s**. The

definite article is also common with kinship terms (see 8.1.4), unless they are used vocatively (see 14.4).

The use of articles with possessed nouns other than kinship terms requires further analysis. It appears that possessed nouns may sometimes occur with or without an article, as for emphasis in (10), but the article is ungrammatical in other constructions for no apparent reason, as in (11).

(10) **Madawirí(s)** **dóò'?**
 mada-mirí-(s) dóò-'
 1pos-water-(DEF) where-INTER
Where is my water?

(11) **Nídhaaci(*s)** **irúbucic.**
 n'-idhaaci-(*s) i-núbuci-c
 2POS-pants-(*DEF) STAT-tear-DECL
Your pants are torn at the seam.

9.3 Indefinite article *-wa*

The indefinite article has two basic meanings. It either refers to a specific thing, but it is not assumed that the speaker or the hearer has previous knowledge about it, as in (12) and (13); or it refers to no particular thing and simply marks a non-specific member of the class described by the noun phrase, as in (14).

(12) **Awagáàwa** (*awagáàs) **awágaac.**
 awagáà-wa (*awagáà-s) maa-ígaac
 badger-INDEF (*badger-DEF) 1A-see-DECL
*I saw **a** badger.*

(13) **Íí nuxbáàga iháàwa** **ú'siac.**
 íí nuxbáàga iháà-wa ú'siac-c
 ohperson different-INDEF arrive-DECL
*Oh, **a** stranger came.*

- (14) **Míàgaasa agucó³hiwa igúba néèc.**
 míà-gaasa agu-có³hi-**wa** igúba néè-c
 woman-DIM REL-thin-**INDEF** together go-DECL
*He is dating **a** slender girl.*

The indefinite article is used in existential expressions of the type ‘there is an N’ if the referent is specific and singular, as in (15) and (16).

- (15) **Maahdúúhga méèwa nahgúc.**
 ma-ahdúú-hгаа méè-**wa** nahgúc-c
 1POS-head-LOC louse-**INDEF** be.sitting-DECL
*There’s **a** louse on my head.*

- (16) **Masúga éèhgu hirúwa áàbacigua naagíc.**
 masúga éèhgua hirú-**wa** áàbaci-hgua naagí-c
 dog that bone-**INDEF** throat-LOC sit-DECL
*That dog has **a** bone in the throat.*

Graczyk (2007:230) identifies a secondary indefinite nonspecific determiner in Crow that is homophonous with the conditional and temporal suffix *-dak* (the equivalent of Hidatsa *-rúg*). According to his analysis there is no contrast between *-dak* and the main indefinite nonspecific determiner *-eem* (the equivalent of Hidatsa *-wa*). Graczyk provides a few examples but concludes nevertheless that since *-dak* occurs rarely as a determiner it is best treated as an irrealis marker that functions both as a determiner and as a complementizer. (Graczyk 2007:230-231)

The conditional irrealis marker *-rúg* and the indefinite article *-wa* are certainly contrastive in Hidatsa. Although the suffix *-rúg* marks mostly conditional clauses, it may on occasion also follow nouns. However, in such cases the noun is best treated as a predicate that functions like a stative verb in an irrealis conditional clause. This happens mostly when the verb in the matrix clause is preceded by the irrealis marker *aru-* / *oo-* (see 6.5.3) that refers to unrealized or hypothetical events, as in (17a). The suffix *-rúg* is incompatible with realis events, in which case the noun phrase is marked either with the definite or the indefinite article, as in (17b).

- (17) a. **Hiraacawîàrug** **aruwúáwaac.**⁹¹
 hiraacá-mià-rúg aru-m-úá-waa-c
 Hidatsa-woman-COND IRR-1-marry-1CAUS.DIR-DECL
I'm going to marry a Hidatsa woman. (lit. If she is a Hidatsa woman I will marry her.)
- b. **Hiraacawîàwa** **múáwaac.**
 hiraacá-mià-wa m-úá-waa-c
 Hidatsa-woman-INDEF 1-marry-1CAUS.DIR-DECL
I married a Hidatsa woman.

9.4 Focus particle *-wa*

The focus particle *-wa* derives D-words and it is used emphatically with pronominal and demonstrative stems.

When *-wa* is suffixed to the pronominal stem *î* or the demonstrative pronouns *hirí*, *gúá*, and *se?*, it emphasizes the main argument of the verb (see 11.2.2). The emphasized argument is usually the intransitive subject or the transitive object, but the ergative agent is also occasionally emphasized, especially if the first person pronoun is followed by a transitive verb agentively inflected for first person (with A-set or causative pronominal affixes) or the second person pronoun is followed by a transitive verb similarly inflected for second person. Third person pronouns and the demonstratives that represent the ergative agent are usually followed by the ergative suffix *-rí* because the emphatic form with *-wa* would be too ambiguous and could be interpreted as the object of the transitive verb.

⁹¹ *Úáhee to marry somebody* is one of the few verbs in Hidatsa that is doubly inflected for subject. As a rule, such stems are causative verbs. The inflected stem is preceded by a possessive pronominal prefix and the suffix is inflected as a direct causative. The verb here, *úáhee*, is derived by causativizing the inalienably possessed kinship term *úà his wife* (*múà my wife*, *núà your wife*). Whereas Carl Voegelin's slip files indicate that the double inflection was still well and around in the nineteen thirties, most modern speakers are reluctant to approve forms inflected with the possessive prefixes, having reanalyzed such stems as pure causatives. However, when not prompted and outside elicitation sessions, forms inflected both for possession and causation are still occasionally used.

Since the pronoun *nîwa* *you* in (18a) agrees with the ergative verb *naghìa* *to drive something (as a car, cattle)*, it is unambiguously interpreted as the ergative agent. Replacing *nîwa* with the overt ergative pronoun *niirahèèri* would only further emphasize the focused pronoun. On the other hand, the ergative demonstrative *guarí* in (18b) is preferred over the ambiguous *gúáwa* because the latter could also be interpreted as the grammatical object of the transitive verb.

- (18) a. **Nîwa** / **niirahèèri** *nààghiac!* b. (**Gúáwa** /) **Guarí** *naghìac.*
n-î-wa / **n-iirahèèri** *ná-naghìa-c* (**gúá-wa** /) **gúá-rí** *naghìa-c*
2-PRO-FOC / **2-PRO.ERG** *2A-drive-DECL* (**that-FOC** /) **that-ERG** *drive-DECL*
You, you are driving (it)! *That one is driving (it).*

Arguments are focused for emphasis. Since the argument structure is encoded by pronominal affixes in the verb stem, the use of overt pronouns is usually redundant. They are often used in commands and directives, as in ‘*you* drive today’, or for suggestions, as in ‘*I* will be the driver today’, especially if the person thus singled out is an unexpected candidate for the task.

Focused arguments are different from contrastive arguments which are formed with *ihgii* (see 11.2.3). As the label implies, such arguments are contrasted with each other, as in ‘*I* will drive; *he* will cook, but *she* will sew’.⁹²

The focus particle *-wa* is homophonous with but distinct from the indefinite article *-wa*. In addition to the simple fact that the focusing *-wa* can follow a demonstrative or a personal pronoun the main argument in support of distinguishing the two morphemes comes from

⁹² The function of focus and contrast markers in Hidatsa is very similar to the use of subject particles *-i/-ga* and contrastive particles *-eun/-neun* in Korean. Although Korean verbs do not mark subject agreement, the use of pronouns marked with *-i/-ga* is largely restricted to emphatic constructions. As in Hidatsa, pronouns marked contrastively are used to mark contrast or the sentence topic.

instead of ergative D-words if the argument structure of the clause is disambiguated by other means, such as by marking the first or second person transitive object with the B-set pronominal prefixes on the stem (see 5.1). The derivation of absolutive (S or O) and ergative (A) interrogative pronouns is given in TABLE 9.1.

TABLE 9.1. DERIVATION OF ABSOLUTIVE AND ERGATIVE INTERROGATIVE PRONOUNS

GLOSS	STATIVE BASE	S OR O ARGUMENT	A ARGUMENT
<i>who</i>	dabéè	dabéèwa	dabéèri
<i>what</i>	dáàba	dáàbawa	dáàbari
<i>which one</i>	agudóò	agudóòwa	agudóòri

It should be noted that one more D-word, **dóòhseewa** *why, how come*, is derived with **-wa** from the verb **dóòhsee** *to be the matter*. Since it is used in adverbial interrogative clauses, it has no ergative counterpart.

The focus particle **-wa** may follow the ergative suffix **-rí** even in interrogative pronouns, as in (23). Examples are rare in the corpus, but they are nevertheless possible.

- (23) **Dabéèriwa** hiríʔ?
dabéè-**rí-wa** hirí-ʔ
who-**ERG-FOC** do-**INTER**
Who did it?

In morphophonological terms it is not clear whether **-wa** is an affix or clitic. It derives interrogative D-words and could therefore be considered a derivational suffix. On the other hand, the plural suffix **-ʔa**, which is otherwise always the last element in the stem, is inserted (infixed?) between the root and **-wa**, as illustrated in (24) and (25). The final position of **-wa** in plural D-words indicates that it may be an enclitic.

- (24) **Dabíàʔwa** agirárahúʔ?
dabéè-ʔ**a-wa** agi-nára-húù-ʔ
who-**PL-FOC** COM-2A-come-**INTER**
Who did you come with?

- (25) **Dabííʔawa** **maarígubag** **áàrahguoʔʔ**
dabéè-ʔ**a-wa** maa-n´-igúba-g ná-áhgu-ʔo-ʔ
who-**PL-FOC** 3OBJ.PL-2POS-together-CRD 2A-dwell.PL-PL-INTER
Who are are staying with?

9.5 Ergativity

The ranking of grammatical relations between the matrix verb and its syntactic arguments is represented through the syntactic encoding of participant roles. Whereas the Hidatsa verbal system follows the split-intransitive alignment (see 5.1), its nominal system follows the ergative-absolutive alignment, whereby the A-argument (agent) of a transitive verb can be marked with an ergative case, while the S-argument (subject) of an intransitive verb and the O-argument (object) of a transitive verb are left unmarked for the absolutive case. In other words, ergative alignment, which is marked by case marking on noun phrases, categorizes all intransitive S-arguments like transitive O-arguments of transitive verbs – both are left unmarked. The A-argument of transitive verbs is specified by the ergative case suffix *-rí*.

The ergative suffix has three allomorphs. When suffixed to a word-final light syllable (CV) whose onset is the stop *g* or the fricative *c*, it occurs as *-hirí* if preceded by a front vowel *a* or *i*, as in (26). The ergative suffix occurs as *-hurí* if it is added to an obstruent-initial syllable whose nucleus is the short back vowel *u*, as in (27). The short vowel before *-hirí/-hurí* is deleted.

- (26) **masúga** *dog* → **masúghiri**
éèca *all* → **éèchiri**
míhcagi *myself* → **míhcaghiri**
- (27) **áàdu** *his father* → **áàdhuri**

The ergative suffix occurs as *-rí* if the onset consonant in a light syllable is not an obstruent, if a light syllable begins with a consonant cluster, or if the syllable is heavy (CVV). Examples are in (28).

(28)	<i>hirí</i>	<i>this</i>	→	<i>hirirí</i>
	<i>maaru<u>wá</u></i>	<i>something</i>	→	<i>maaruwarí</i>
	<i>nóh<u>si</u></i>	<i>chewed food</i>	→	<i>nóhsiri</i>
	<i>g<u>ú</u>á</i>	<i>that one</i>	→	<i>guarí</i>
	<i>mac<u>é</u>é</i>	<i>man</i>	→	<i>maceerí</i>
	<i>garíh<u>gaa</u></i>	<i>lightning</i>	→	<i>garíhgaari</i>

In Hidatsa, the nominal clausal arguments A, S, and O are regularly left unspecified if they are recoverable from the pragmatic context, preceding text, or from grammatical concord. Transitive clauses with both core arguments realized as independent NPs are rare. A single overt core argument may occur as a bare stem, or marked with either the indefinite article *-wa*, definite article *-s*, the ergative suffix *-ri*, or one of the attributive demonstratives (see 10.2). The ergative suffix *-ri* may also occur in conjunction with any of the articles or attributive demonstratives.

Case marking in Hidatsa is not based on the properties of the agent/subject alone, but depends on the context.

In a transitive clause where both the agent and object are inflected for third person, a single overt nominal argument is interpreted as the object unless it is marked with the ergative suffix. In example (29a), the ergative suffix *-hiri* identifies the word *icúùwasga* *horse* as the agent. The absolutive form (unmarked) in (29b) is grammatical, but pragmatically unacceptable.

(29)	a. AGENT		b. OBJECT
	<i>icúùwasghiri</i>	<i>badhíheec.</i>	* <i>icúùwasga</i> <i>badhíheec.</i>
	<i>icúùwasga-hiri</i>	<i>badhí-hee-c</i>	<i>icúùwasga</i> <i>badhí-hee-c</i>
	<i>horse-ERG</i>	<i>fall.off-3CAUS.DIR-DECL</i>	<i>horse-ERG</i> <i>fall.off-3CAUS.DIR-DECL</i>
	<i>The horse bucked him off.</i>		* <i>He bucked the horse off.</i>

It is possible to add articles to an agentive (ergative) noun. In such cases the anaphoric demonstrative *seʔ* is marked with the ergative suffix and used in apposition with the noun which may be marked with definite, indefinite, or zero articles, as in (30).

- (30) *Icúùwasga* (-s / -wa) *seʔri* *badhíheec*.
icúùwasga (-s / -wa) *séʔ-rí* *badhí-hee-c*
 horse (-DEF/ -INDEF) **that-ERG** fall.off-3CAUS.DIR-DECL
The / A horse bucked him off.

The agent may occur without the ergative suffix when the first or second person objects are marked with B-set pronominal prefixes on the verb, in which case the lexical noun clearly fulfills the role of an agent and the ergative suffix is optional, as in (31).

- (31) *Marilyn* (*seʔri*) *mii girásic*.
Marilyn (*séʔ-rí*) *mii-girási-c*
Marilyn (**that-ERG**) 1B-love-DECL
Marilyn loves me.

The ergative agent (a horse) in example (32a) is identified as such by the ergative suffix. However, the ergative suffix on the noun can be replaced by an article or a demonstrative, as in (32b-d), since the object ('I') is encoded within the complex verb stem with absolutive-marking first person pronominal prefix *mii-* that the overtly expressed nominal argument 'horse' does not agree with.

- (32) a. *Icúùwasghiri* *miiʔaʔhgaráàc*. *A / the horse took off with me.*
icúùwasga-rí *mii-aʔg-garáà-c*
 horse-ERG 1B-PORT-run.away-DECL
- b. *Icúùwasgas* *miiʔaʔhgaráàc*. *The horse took off with me.*
icúùwasga-s *mii-aʔg-garáà-c*
 horse-DEF 1B-PORT-run.away-DECL
- c. *Icúùwasgawa* *miiʔaʔhgaráàc*. *A horse took off with me.*
icúùwasga-wa *mii-aʔg-garáà-c*
 horse-INDEF 1B-PORT-run.away-DECL

- d. **Icúùwasgahee** **miiʔaʔhgaráàc.** *This horse took off with me.*
 icúùwasga-**hee** **mii**-aʔg-garáà-c
 horse-**this** **1B**-PORT-run.away-DECL

Overt arguments of intransitive clauses cannot be marked ergatively. In (33), **buusihgee** *cat* is the S-argument of the intransitive active verb **îwíac** *to cry*⁹³. It may occur with either one of the articles, any attributive demonstratives, or as a bare stem, but not with the ergative suffix.

- (33) **Buusihgee** (-s / -wa / -he / *-ri) **îwíac.**
 buusí-hgee (-s / -wa / -hee / *-rí) **îwíac**-c
 spotted-DIM (-DEF / -INDEF / this / *-ERG) cry-DECL
The cat miaowed.

The valency of intransitive verbs can be expanded by causativizing the verb. In (34a), the monovalent intransitive stative verb **nagsí** *to choke* takes only one argument – the absolutive unmarked Subject. In (34b) its valency has been expanded through causativization and the newly formed transitive stem subcategorizes for an additional ergative A-argument; the S-argument is demoted to the role of the absolutive O-argument.

- | | | | | |
|------|-----------------------|--|----|---|
| (34) | S | | A | O |
| a. | Miiragsíc. | | b. | Irúgsidiri miiragsíheec. |
| | mii -nagsí-c | | | irúgsidi- rí mii -nagsí-hee-c |
| | 1B -choke-DECL | | | meat- ERG 1B -choke-3CAUS.DIR-DECL |
| | <i>I choked.</i> | | | <i>I choked on a piece of meat.</i> |

The ergative-absolutive relationship does not hold if the reciprocal **magi-** (see 4.9) is prefixed to the transitive stem. In reciprocal constructions, each of the participants occupies both the role of A and O with respect to each other. (35) contrasts ergative and absolutive arguments with the reciprocal argument.

⁹³ **îwíac** *to cry* is a vowel-initial active intransitive verb (see 3.1.2) which is inflected with the A-set pronominal prefixes that are truncated to the initial nasal consonant: 3SG **îwíac** *he cried*, 1 SG **mîwíac** *I cried*, 2 SG **nîwíac** *you cried*.

- (35) ERGATIVE AGENT ABSOLUTIVE OBJECT RECIPROCAL PARTICIPANTS
- a. **Ahbihdíàrí** arabééc. b. **Ahbihdíàs** arabééc. c. **Ahbihdíàs** **magi'**arabíà'c.
ahbá-ihdíà-**rí** arabéé-c ahbá-ihddíà-**s** arabéé-c ahbá-ihdíà-s **magi**-arabéé-ʔa-c
ear-big-ERG kick-DECL ear-big-DEF kick-DECL ear-big-DEF **RECIP**-kick-PL-DECL
The mule kicked him. *He kicked the mule.* *The mules kicked each other.*

Most descriptive linguists who have worked on Hidatsa have been unsure of the exact nature of the ergative morpheme **-rí**. For example, Robinett (1955) and Matthews (1965) considered it a demonstrative, whereas Jones (unpublished field notes) and Boyle (2007) hypothesized that it was either a focus marker or an emphatic marker.

Ergative case marking must have developed in Hidatsa and Crow before the two groups separated. Graczyk (2007) mentions on several occasions the agentive suffix *-n* in Crow and once even calls it an “agent case-marker” (2007: 222) but does not describe it any detail. He correctly recognizes that the agent-marker *-n* in Crow may be related to the Hidatsa **-rí**, which he calls a “topic marker” (2007: 222, n.5).

The fact that **-rí** is only used to identify an agent of a transitive clause has never been recognized in Hidatsa. This is probably because Hidatsa is a prototypical split-intransitive (or an active-stative) type language and ergativity has thus far not been recognized in such languages. However, since split-intransitivity is a classification system of verbs, while ergativity is a function of noun phrases, there really is no conflict between the two systems. The co-existence of both of these features in Hidatsa is yet another example that the popular tripartite division of languages into accusative, ergative, and active types does not always work.

9.6 Argument disambiguation

In Hidatsa, the nominal clause arguments Agent, Subject, and Object are regularly omitted if they are recoverable from the pragmatic context, preceding text, or from grammatical concord,

therefore transitive constructions where both nominal arguments (Agent and Object) are overtly realized are not common. New participants are often introduced as subjects of intransitive clauses (e.g., “and then *N* came”) or objects of transitive clauses (e.g., ‘and then he saw *N*’). After the new participant has been introduced, it seldom occurs as an overt noun phrase, unless the participant structure needs to be refreshed after some other participant intervenes.

(36) is a passage from a traditional trickster story, told by Anna Wicker and recorded by A. Wesley Jones in 1977. In the first sentence, the first participant, the mythical First Maker, is introduced with an overt noun phrase which is not repeated again in the passage. In the second sentence he sees two men, who are again introduced with an overt noun phrase. The two men are referred to explicitly again in the third sentence when the focus shifts from the First Maker to the men.

- (36) **ícihgawaahiris** asá ruwí wareesgi. Maa’aság
 ícihga-maa-hirí-s así-Ø nuwí waree-sgíí maa-así-g
 first-INDEF-do-DEF roam-CONT go.around EVID-MIT INDEF-roam-CRD
- awáàdhireedhaag** aság maa’awá gigua’hdáàhgaag
 awáàdhi-néèda-haa-g así-g maa-awá hgi-ua’hdáá-hgee-g
 river-edge-GOAL-CRD roam-CRD INDEF-land GI-scrutinize-3CAUS.INDIR-CRD
- he’sáà** ruwa **macéé ruuba** múá gígúà gaa’a wareec
 he’séè-Ø nuwí-Ø macéé núuba múá hgigúà gáá-’a waree-c
 do.this-CONT roam-CONT man two fish catch sit.PL-PL EVID-DECL
- awáàdhigua.** Harúg maa’ígaag maagigísgia g he’sáà
 awáàdhi-hgua harúg maa-ígaag maa-hgigísgia-g he’séè-Ø
 river-LOC and 3OBJ.PL-watch-CRD 3OBJ.PL-examine-crd do.this-CONT
- raharía** hiróo **mací’as** magiwaagiwá’ áàghihsa
 naharéé-Ø hiróo macéé-’a-s magi-maa-hgiwé’-Ø áàghi-hsaa
 stand-CONT here man-PL-DEF RECIP-INDEF-tell-CONT sound.EVID.PL-CONC
- maagigíridhaa’a** wareec.
 maa-hgi-gíiri-dhaa-’a waree-c
 INDEF-GI-search-NEG-PL EVID-DECL

The First Maker was travelling along (they say). He was roaming around, traveling along the riverbank and scrutinizing the landscape; he was doing that, going around, and there were two men sitting there, catching fish at the river (they say). Standing here he watched them and he examined them and one could hear the men talking to each other, but they were not looking around (they say). (Jones 1978: 5)

If a transitive clause has two overtly expressed arguments outside the verb stem, they need to be disambiguated from each other. The need for disambiguation becomes even more pronounced in light of the relatively flexible word order that Hidatsa has. The unmarked constituent order in transitive clauses is AOV, but this may be scrambled for pragmatic reasons. The order of A and B-set agreement prefixes on a transitive stem, which, with a few exceptions, always follows the order O-A (B-set prefix followed by a A-set prefix), is never affected by the pragmatic constituent order outside the stem.

Besides word order, Hidatsa relies on two strategies to disambiguate overtly expressed clausal arguments. The first strategy relies on the relative ranking on the animacy scale (see 9.6.1) and the second one on the relative ranking on the agentivity scale (see 9.6.2) .

9.6.1 Animacy scale

The use of articles and the ergative case marker *-rí* in a transitive clause is optional if one of the arguments is animate and the other inanimate. Argument roles are disambiguated by the relative ranking of the two arguments on the animacy scale, which dictates that the animate entity is the grammatical agent and the inanimate entity the grammatical object. The principle of animacy hierarchy, which encodes the relative agentivity of arguments, is presented in (37).

(37) **animate N > inanimate N**

The animate agent *masúga* *dog* clearly outranks the inanimate object *hirú* *bone* in (38) and is left unmarked. Some speakers still insist that the agent, regardless of its higher ranking on

the animacy scale, should be somehow more marked, either with an article or the ergative case marker, even if the ambiguity between the animate agent and inanimate object is resolved by the pragmatic context.

- (38) Masúga (-hiri / -s / -wa) hirú náàsia nahgúc.
 masúga (-hirí / -s / -wa) hirú náàsia-Ø nahgú-c
 dog (-ERG / -DEF / -INDEF) bone gnaw-CONT be.sitting-DECL
The / A dog is gnawing on the bone.

9.6.2 Agentivity scale

Definiteness and case marking have an important role to play in disambiguating argument roles in transitive clauses when (1) both outside arguments are animate, (2) both are inanimate, or (3) the inanimate argument is the ergative agent and the animate argument the absolutive object.

The grammatical agent can be disambiguated in three ways: (1) it is marked with the ergative case marker *-rí*; (2) the A-argument is marked with the definite article or an attributive demonstrative (see 10.2) if the O-argument is indefinite or has no article; or, (3) the A-argument is marked with the indefinite article if the O-argument is unmarked for definiteness.

The relative agentive values on the scale are presented in (39). Note that the attributive demonstratives (e.g., *-hee*, *èèhgu*, *èèraga*, etc.) are ranked equally with the definite article *-s*.

- (39) *-rí* *ERG* > *-s* *DEF / DEM* > *-wa* *INDEF* > Ø

The order of outside arguments in a transitive clause is not important since the A-argument is always disambiguated by its higher ranking on the agentivity scale relative to the O-argument. Thus ‘the cat’ in (40a) and (40b), marked with the definite *-s*, is always recognized as the Agent regardless of its relative position in the clause since it outranks the unmarked O-argument ‘mouse’.

- (40) a. **Buusíhgees** **îdahu ágsiac.** b. **îdahu ágsiac** **buusíhgees.**
 buusí-hgee-s îdahu ágsia-c îdahu ágsia-c buusí-hgee-s
 spotted-DIM-DEF mouse catch-DECL mouse catch-DECL spotted-DIM-DEF
The cat caught a mouse. *The cat caught a mouse.*

If both arguments share an identical degree of definiteness, as ‘the woman’ and ‘baby’ in (41), or the O-argument is more definite than the A-argument, as the ‘dog’ in (42), then the A-argument is disambiguated by the anaphoric pronominal demonstrative **se’** that follows the agentive noun phrase and is marked with the ergative case suffix **-rí**.

- (41) **Miàs** **se’rí** **maagiragsís** **hirábheec.**
 mià-s se’-rí maa-hgiragsí-s hiráwi-hee-c
 woman-DEF **that-ERG** INDEF-bundle-DEF sleep-3CAUS.DIR-DECL
The woman put the baby to sleep.

- (42) **Masúgawa** **se’rí** **icúùwasgás** **náhcic.**
 masúga-wa **se’-rí** icúùwasga-s náhci-c
 dog-INDEF **that-ERG** horse-DEF bite-DECL
A dog there bit the horse.

The combination of the anaphoric demonstrative **se’** and the ergative **-rí** can also be used when the object is clearly less definite than the agent, unless the ergative marker is suffixed directly to the noun. All possible combinations of the definite article **-s**, indefinite article **-wa**, zero article, and the ergative case marker **-rí** / **-hirí** on overtly expressed arguments in a transitive clause are presented in (43).

- | (43) | ERGATIVE AGENT | ABSOLUTE OBJECT | TRANSITIVE VERB |
|------|--------------------------------|----------------------------|-----------------|
| | Masúghiri | icúùwasga (-wa, -s) | náhcic. |
| | Masúga (-wa / -s) se’rí | icúùwasga (-wa, -s) | náhcic. |
| | Masúgas | icúùwasga (-wa) | náhcic. |
| | Masúgawa | icúùwasga | náhcic. |

The dog / A dog bit the horse / a horse.

The ergative suffix is added directly to both suffixal and independent demonstratives, as in (44) and (45).

Core arguments can be added through causativization. In (45), the agent is marked with the ergative suffix, the direct object with a B-set pronominal prefix on the verb, and the indirect object is left unmarked.

(44) [Masúgaheeri](#) [miiráhci](#).
masúga-**hee-rí** mii-náhci-c
dog-**this-ERG** 1B-bite-DECL
This dog bit me.

(45) [Macéé](#) [éèhguari](#) [macéé](#) [éèhgu](#) [miigirugíhgeec](#).
macéé **éèhgua-rí** macéé éèhgua mii-hgi-gí[?]-hgee-c
man **that-ERG** man that 1B-GI-pack.on.back-3CAUS.INDIR-DECL
That man asked me to carry that (other) man.

10 Demonstratives

Demonstratives are words that indicate the position of something in relation to the speaker and/or hearer. Some demonstratives always modify nouns, whereas others occur mostly or exclusively as pronouns and occupy the place of a whole noun phrase. Although one demonstrative is a postnominal suffix, the majority are independent words.

Demonstratives, similar to personal pronouns and the definite article *-s*, have a definite meaning and their reference depends on the context. Most are used to “point” to items in the real world. They are sometimes accompanied by a pointing gesture when used for situational reference. Whereas the majority of demonstratives are used for spatial reference, there is one, *séʔ*, that is used primarily for anaphoric reference to an earlier part of the discourse and cataphoric reference to a later part of the discourse. A subclass of attributive demonstratives are used as positional classifiers since they make explicit reference to the posture or position of the referent.

Demonstrative roots are also used to derive other deictic stems, such as locative adverbs and demonstrative verbs.

TABLE 10.1 lists the most common Hidatsa demonstratives.

TABLE 10.1. HIDATSA DEMONSTRATIVES

EQUATIVE (PREDICATIVE) DEMONSTRATIVES		
hirí	<i>this</i>	proximal
gúá	<i>that</i>	mesiodistal
haríà	<i>that over there</i>	distal
séʔ	<i>that</i>	anaphoric
ATTRIBUTIVE DEMONSTRATIVES		
-hee	<i>this</i>	proximal
éèhgua	<i>that</i>	mesiodistal
íàhgua	<i>that</i>	distal
POSITIONAL DEMONSTRATIVES		
éèwagi	<i>that one lying</i>	mesiodistal
éèraga	<i>that one sitting</i>	mesiodistal
éèrahgu	<i>that one sitting or unspecified position</i>	mesiodistal
éèruwa	<i>that one walking</i>	mesiodistal
éèraha	<i>that one standing</i>	mesiodistal
éèraha	<i>that one leaving / going</i>	mesiodistal
íàraha	<i>that one leaving / going</i>	mesiodistal
LOCATIVE DEMONSTRATIVES		
hir-	<i>here</i>	proximal
gu(a)-	<i>there</i>	mesiodistal
íà-	<i>over there</i>	distal
harí(à)-	<i>over there</i>	distal
óó-	<i>over there</i>	distal
DEMONSTRATIVE VERBAL PREFIXES		
heʔ-	<i>this</i>	proximal
gua-	<i>that</i>	mesiodistal
seʔ-	<i>that</i>	anaphoric

10.1 Pronominal demonstratives

The inventory of Hidatsa pronominal demonstratives is listed in (1).

- (1)
- | | | |
|-------|-----------------|------------------------|
| hirí | / hiróʔ | <i>this / these</i> |
| gúá | / gúáʔo (gúúʔo) | <i>that / those</i> |
| séʔ | / síʔo | <i>that / those</i> |
| haríà | | <i>that over there</i> |

Three of the independent demonstratives, *hirí*, *gúá*, and *séʔ*, and their plural forms are regularly used to substitute for third person pronouns, especially in the singular.

10.1.1 *hirí* ‘proximal pronominal demonstrative’

The proximal demonstrative pronoun *hirí* *this* refers to something that is close spatially or emotionally to the speaker. It can be used in front of the predicate to substitute for a noun phrase, as in (2a), and predicatively, as in (2b). The predicative use of *hirí* in (2b) is indicated by the declarative speech-act marker *-c* as speech-act markers can only be suffixed to predicates.

- (2) a. *Hirí arubóhorowic.* b. *Hiríc arubóhorowi.*
hirí aru-bóhorowi-c *hirí-c aru-bóhorowi*
this REL-spherical-DECL *this-DECL REL-spherical*
This is a bullet. *A bullet is this one.*

The plural form of *hirí* is *hiróʔ*. The plural ending has become fossilized and does not undergo the *-ʔo > -ʔa* substitution before suffixes or enclitics, as postulated in section 4.2.1. In example (3) below, *hiróʔ* is immediately followed by the ergative suffix *-rí* and the declarative marker *-c* but remains unchanged.

- (3) *Hiróʔric / Hiróʔc aguwiíʔágcixaʔs.*
hiróʔ-ri-c / hiróʔ-c agu-mii-ág-cixí-ʔa-s
these-ERG-DECL / these-DECL REL-1B-LOC-jump-PL-DEF
These are the ones who attacked me.

The proximal demonstrative *hirí* is often used in equative constructions (e.g., ‘this is X’, or ‘X is this’), as in (4)–(6).

- (4) *Hirí áàciiwiric.*
hirí áàcii-mirí-c
this breast-water-DECL
This is milk.

- (5) **Hiróʔ** awagáàʔac.
hiróʔ awagáà-ʔa-c
these badger-PL-DECL
These are badgers.
- (6) **Hiríc** maaʔaguseewáàracis.
hirí-c maa-agu-see-wáà-raci-s
this-DECL INDEF-REL-say-1CAUS.DIR-COMPR-DEF
This is the thing I told you about.

In the most minimal form an equative construction consists only of the pronominal demonstrative **hirí** and one of the speech-act markers, such as the declarative marker **-c** in (7) and (8), that identify the demonstrative as a predicate.

- (7) **Hiríc.** *This is the one. / Here it is.*
- (8) **Hiróʔc.** *These are the ones. / Here they are.*

An important function of **hirí** is to substitute for third person pronouns, as in (9)–(14). In the pronominal function **hirí** still retains its demonstrative properties and is often translated directly as *this one*. It is used emphatically in (13) and has the form **hiríwa** (see 11.2.2 for emphatic pronouns); in (14) it is used contrastively and has the shape **hiríʔihgii** (see 11.2.3 for contrastive pronouns).

- (9) **Dóòhseewa hirí gíixiʔ?**
dóòhseewa **hirí** gíixi-ʔ
why **this** whine-INTER
Why is this one whining?
- (10) **Hirirí miigiwéʔc.**
hirí-rí mii-giwéʔ-c
this-ERG 1B-tell-DECL
This one here told me.
- (11) **Isá nááwaʔc hiróʔ!**
isá náàwi-ʔa-c **hiróʔ**
Again come.around-PL-DECL **these**
Here they come again!

- (12) **Hirí** gicugáàcag néèc madhahéé.
hirí hgi-cugí-aci-g néè-c madhahéé
this GI-melt-COMPR-CRD go-DECL already
This one has just “melted” away (as someone stooped over in an armchair).
- (13) **Hiríwa** mahguri’áàg aruwaaréèc.
hiríwa maa-hgi-i’èè-g aru-maa-néè-c
this 1A-GI-cover.wear-CRD IRR-1A-go-DECL
I’ll wear this one.
- (14) **Hirí’ihgi** idúùxi icgídhaa’iic.
hirí.ihgii idúùxi icgí-dhaa-ii-c
this shirt fit-NEG-HAB.SG-DECL
This one’s clothes never fit.

Finally, **hirí** is used attributively as a demonstrative affix in a small number of expressions, as exemplified in (15).

- (15) **awahirí** *this year* < **awá** year; land, **hirí** *this*

10.1.2 **gúá** ‘mesiodistal pronominal demonstrative’

The mesiodistal demonstrative pronoun **gúá** *that* is used to reference entities that are not in close proximity to the speaker. When used for situational reference, **gúá** is usually accompanied by a pointing gesture with the lips.

In most cases **gúá** is used both as a medial and a distal (i.e., mesiodistal) demonstrative that contrasts only with the proximal demonstrative **hirí** *this*. However, the referent of **gúá** is deemed closer to the speaker than the referent of the rather rare distal demonstrative **haríà** *that over there*; therefore, when contrasted with **haríà**, it is perceived as a medial demonstrative. The difference between the three demonstrative pronouns is illustrated in (16). The final **á** in **gúá** is deleted (and often replaced with a puff of air perceived as a phonetic **h**) when not followed by suffixes or enclitics.

- (16) a. **Hirí** dáàbaʔ? *What is this (here)?* proximal
 b. **Gú** dáàbaʔ? *What is that (there)?* medial or distal
 c. **Haríà** dáàbaʔ? *What is that (over there)?* distal

The mesiodistal demonstrative **gúá**, just like the proximal **hirí**, is often used in equative constructions (e.g., ‘that is X’, or ‘X is that’), as in (17a) and (17b).

- (17) a. **Gú** agu’iháàgac. b. **Gúác** agu’háàga.
 gúá agu-iháàga-c gúá-c agu-iháàga
 that REL-last-DECL that-DECL REL-last
 That is the last one. *The last one is that.*

The plural form of **gúá** in isolation and before the interrogative speech-act marker **-ʔ** is usually **gúú’o** in some speakers’ speech, and **gúá’o** in others’. Examples are (18)–(21). Unlike the plural proximal form **hiróʔ**, both variants undergo the **-ʔo > -ʔa** substitution before suffixes or enclitics, as illustrated in (21).

- (18) **Gúá’o** ahíc.
 gúá-ʔo ahí-c
 that-PL turnip-DECL
 Those are turnips.
- (19) **Gúá’o** maawahgiguucgáʔc.
 gúá-ʔo maa-maa-hgiguucgí-ʔa-c
 that-PL 3OBJ.PL-1A-learn-PL-DECL
 We learned about them.
- (20) **Gúú’o** marígu maawáàheec.
 gúá-ʔo ma-ní-gúʔ maa-ma’íihee-c
 that-PL 1A-2B-give 1A-want-DECL
 I wanted to give those to you.
- (21) **Gúá’ac** (**Gúú’ac**) aguwaabhú.
 gúá-ʔa-c agu-maa-bhú
 that-PL-DECL REL-INDEF-heal
 Those ones are healers.

Gúá, like its proximal counterpart **hirí**, is used to substitute for third person pronouns but still retains its demonstrative properties. In recognition of its demonstrative properties speakers usually translate it as *that one*, as illustrated in (22)–(25). In (24) and (25) it is used to substitute for an emphatic demonstrative pronoun and has the form **gúáwa** (see 11.2.2 for emphatic pronouns).

- (22) **Mîraac** **gúh.**
 mîraa-c **gúá**
 goose-DECL **that**
That one is a goose.
- (23) **Guarí** **íbcaada** **migúc** .
gúá-rí íbcaadi-Ø mi-gú[?]-c
that-ERG thread-CONT 1B-give-DECL
That one threaded my needle.
- (24) **Gúáwa** **néèhi[?]?**
gúá-wa néè-hi-[?]
that-FOC go-3FT.INTER-INTER
Will that one go?
- (25) **Gúáwa** **mabahcága** **magúc.**
gúá-wa maa-báhcagi-Ø ma-gú[?]-c
that-FOC 1A-cut-CONT 1A-give-DECL
I cut it for that one.

There are a few examples of demonstrative doubling in my corpus. In (26), the noun **icúùwasga** *horse* is attributively modified first by the pronominal **gúá** *that* and then postnominally by **-hee** *this*. Interestingly, the same attributive use of **gúá** was deemed ungrammatical by speakers when the demonstrative suffix **-hee** was replaced by the ergative suffix **-rí**. However, the otherwise pronominal demonstrative **gúá** can still be used attributively when it *follows* the noun and has the ergative **-rí** suffixed to it. The attributive use of pronominal

demonstratives (see also (15) above) clearly seems to be allowed, albeit under restricted circumstances. At this time, the exact conditions have not been determined.

- (26) a) gú icúùwasgahe *this horse*
 b) * gú icúùwasgari
 c) icúùwasga guarí *that one their horse (did it)*

10.1.3 *haríà* ‘distal pronominal demonstrative’

Since the distal demonstrative *haríà* *that over there* has identical distribution with the predicative demonstratives *hirí*, *gúá*, and *sé?*, it is likely that *haríà* can also be used predicatively (*i.e.*, in combination with illocutionary markers). However, as of now I have no such examples in my corpus. The distal demonstrative is uncommon in contemporary language and many speakers are unsure about its precise semantic connotations. Several speakers have spontaneously glossed *haríà* in various expressions, in reference to both animate and inanimate objects, as *that one standing over there*. The plural form of *haríà* is not attested.

- (27) **Haríà** *dáàba??*
haríà *dáàba-?*
that.there what-INTER
What is that over there?
- (28) **Haríà** *dabéè??*
haríà *dabéè-?*
that.there who-INTER
Who's that standing over there?
- (29) **Haríà** *mahgirada?îs* *gigoowáàcic.*
haríà *maa-hgiradá-îi-s* *hgi-goowí-àci-c*
that.there 1A-like-HAB.SG-DEF GI-finish-COMPR-DECL
I used to like that one there [but] it's all finished (I don't like him any more).

10.1.4 sé' 'anaphoric pronominal demonstrative'

The anaphoric demonstrative *sé'* *that* gets its interpretation from an antecedent that usually precedes it in the text. Both *hirí* *this* and *gúá* *that* can also be used anaphorically, especially if the referent is in the visual range, but the default demonstrative used to indicate anaphoric relations, especially if the referent is not present, is *sé'*. The antecedent of *sé'* may be either a noun phrase or any larger segment of discourse.

For example, the antecedent of the anaphoric *sé'* in the second sentence in (30) is the grandfather, identified as Strikes Enemy in the preceding sentence. The passage originates from an oral account of a family history describing individuals who are not present, therefore neither *hirí* *this* nor *gúá* *that* would sound as felicitous as *sé'* in this context.

- (30) *Hawá i'áá ààrudaahga náàsi Strikes Enemy héè wareec Aragaráhu-c sé'.*
hawá i'áá ààrudaahga náàsi Strikes Enemy héè waree-c aragaráhu-c sé'
and uh his.grandfather his.name Strikes Enemy called EVID-DECL Arikara-DECL that
And then, uh, his grandfather's name was Strikes Enemy. He was an Arikara Indian.

The predicative use of *sé'* in equative constructions is illustrated in (31) and (32).

- (31) *Gú dabéè'?* -- *Skyler sé'c.*
gúá dabéè-? -- *Skyler sé'-c*
that who-INTER -- *Skyler that-DECL*
Who is that? -- *That's Skyler.*

- (32) *Indrek sé' gígéèc.*
Indrek sé' gígéè-c
Indrek that OPIN-DECL
I think that's Indrek.

The anaphoric demonstrative *sé'* in conjunction with the coordinative suffix *-g* (see 17.3) is used as a coordinator *sé'g* *and* to link two or more noun phrases of equal importance. Often they are proper names, as in the following examples.

(33) Dora sé'g Jon dúàhgarug ooráággaa'oo'ʔ
 Dora sé'g Jon dúàhga-rúg aru-náággaa-ʔo-ʔ
 Dora **that-CRD** Jon when-COND IRR-go.home-PL-INTER
When are Dora and Jon going home?

(34) Náàso' John se'g Mary haa'ac.
 náàsi-ʔo John sé'g Mary héè-ʔa-c
 name-PL John **that-CRD** Mary say-PL-DECL
Their names are John and Mary.

(35) Grace sé'g madawagiwácha'c.
 Grace sé'g mada-magi-mácha-ʔa-c
 Grace **that-CRD** 1POS-RECIP-sibling-PL-DECL
Grace and I are siblings.

The plural forms of sé' are sí'ʔo, if no other morphemes follow (except the interrogative suffix -ʔ), as in (36), and sí'ʔa_ before suffixes and enclitics, as in (37).

(36) Híí sé' Bull idawaagarísda iidáawa'rug sí'ʔo
 híí sé' Bull ida-maagarísda ii-dáawi-ʔa-rúg se'ʔo
 and that Bull 3POS-child INST-how.many-PL-COND **that-PL**
 isá maarídaruxbaagagaada'c.
 isá maa-nída-nuxbáàga-gáádi-ʔa-c
 again 3OBJ.PL-2POS-people-VER-PL-DECL

And however many children that Bull has, they are also your true (blood) relatives.

(37) John sé'g Mary sí'ʔa'c.
 John sé'g Mary se'ʔa-c
 John that-CRD Mary **that-PL-DECL**
That was John and Mary.

Hidatsa proper nouns, such as personal and place names, are preferably used with the definite article -s. Noun phrases ending with an article (both definite and indefinite) cannot be used predicatively and no other suffixes or enclitics can be added directly to the article. Should the need arise to modify a definite noun phrase with suffixes (e.g., to mark location or ergative subject) or use it predicatively, the appropriate operations are performed on the anaphoric

demonstrative that follows the noun phrase. The same generalization applies to borrowed words and proper nouns ending with a consonant.

Example (38) illustrates the use of the anaphoric demonstrative in combination with the locative suffix *-hdaa* *towards* after a place name which ends with the definite article. In (39) the anaphoric demonstrative is combined with the ergative suffix *-rí* in reference to a person called Bird Woman. (40)–(42) are examples of definite noun phrases followed by *sé?* and locative affixes that do not involve proper nouns.

- (38) **Báàhis** **se?hdáá** **maaréèc.**
 báàhi-s **se?-hdaa** maa-néè-c
 singing-DEF **that-LOC** 1A-go-DECL
I am going to the Killdeer Mountains.
- (39) **Cagáàgawias** **se?ri** **sééc.**
 cagáàga-mià-s **se?-rí** séé-c
 bird-woman-DEF **that-ERG** say-DECL
Bird Woman said that.
- (40) **Céésa mááhguwiris** **se?hdáá** **múá** **naaghíc.**
 céésa mááhgu-miri-s **se?-hdaa** múà naaghí-c
 wolf night.orb-DEF **that-LOC** howl sit.EVID-DECL
A wolf is howling at the moon.
- (41) **Mada?iiwadú** **arugíí** **maabiirúùbas** **se?rúc.**
 mada-ii-madú aru-hgi-híi maabí-ii-núùba-s **se?-rú-c**
 1POS-INST-exist REL-GI-get.here day-INST-two-DEF **that-LOC-DECL**
My birthday is on Tuesday.
- (42) **Dúàhgasiru** **nú?sia??** -- **Oorigí** **núùbas** **se?ru** **mú?siac.**
 dúàhga-si-rú n-ú?sia-? -- aru-nigí núùba-s **se?-rú** m-ú?sia-c
 when-PAST-TEMP 2A-arrive-INTER -- REL-hit two-DEF **that-LOC** 1A-arrive-DECL
When did you get here? -- I got here at two o'clock.

Just like the proper demonstratives *hirí* and *gúá*, *sé?* is used to substitute for a third person pronoun. It has the form *sé?wa* when used for focus or emphasis, as in (44)–(46), and *sé?ihgii* when used for contrast, as in (47). Unlike the other two demonstratives whose referent is usually

found in the ambient physical environment, **sé'** refers to an antecedent elsewhere in the discourse, as in (43)–(44) and (47) (the preceding text containing the antecedents not included), or is in apposition to the antecedent, as in (45) and (46).

- (43) **Sé'** máásdaa' maadadágua.
sé' máá-sdaa' maadadágua
that 1say-DEF long.time.ago
I said that a long time ago.

- (44) He'sáwa **sé'wa** míàgaasagua i'aa.
He'sáwa **sé'-wa** míà-gaasa-hgua i'aa
so **that-FOC** woman-small-LOC uh

ú'sia'a wareec Lewis and Clark héèraca'wa.
ú'sia-[?]a waree-c Lewis and Clark héè-raci-[?]a-wa
arrive-PL EVID-DECL Lewis and Clark named-COMPR-INDEF

So, when she was a young girl, uh, the ones called Lewis and Clark arrived.

- (45) Ní'agas **se'wa** húùc.
n'-i'agá-s **sé'-wa** húù-c
2POS-older.brother **that-FOC** come-DECL
That older brother of your's is coming.

- (46) Marisás **se'wa** awásgaa maaragíc.
ma-irisá-s **sé'-wa** maa-ísgee-Ø maa-naagí-c
1POS-son-DEF **that-FOC** 1A-think.of-CONT 1A-sit-DECL
I'm thinking about that son of mine.

- (47) Madhahée **sé'ihgii** néèc Awadihiráás se'hdáá.
madhahée **sé'-ihgii** néè-c awadí-hiráá-s se'-hdaa
already **that-PRO** go-DECL village-new-DEF that-LOC
As for that one, she already went to New Town.

10.2 Attributive demonstratives

Attributive demonstratives always follow the noun. The proximal attributive demonstrative **-hee** is a suffix. Mesiodistal and distal attributive demonstratives are independent words that follow the noun phrase they follow. The infrequent distal attributive demonstrative **íàhgua** *that over*

there will not be described because of the lack of reliable data; its existence, however, is acknowledged.

10.2.1 *-hee* ‘proximal attributive demonstrative’

The proximal attributive demonstrative *-hee* *this* is the only demonstrative suffix in Hidatsa. It occurs in complementary distribution with the definite article *-s* and the indefinite article *-wa*.

The final vowel of *-hee* becomes short if no other suffixes or enclitics follow.

In reference to spatial proximity, *-hee* refers to objects that are closest to the speaker. It is not inflected for number; instead, it is added to the plural form of the noun phrase at the word boundary. Examples are in (48)–(50).

- (48) SG: **maadagíhe**
 maadagí-**hee**
 glass-**this**
this glass
- PL: **maadagá’he**
 maadagí-’a-**hee**
 glass-PL-**this**
these glasses
- (49) SG: **macééhe**
 macéé-**hee**
 man-**this**
this man
- PL: **macià’he**
 macéé-’a-**hee**
 man-PL-**this**
these men
- (50) SG: **Maagarísdahe** Hiraacác.
 maagarísda-**hee** Hiraacá-c
 child-this Hidatsa-DECL
This child is Hidatsa.
- PL: **Maagarísda’he** iiwaabúàhisa’c.
 maagarísda-’a-**hee** ii-maa-búà-hisa-’a-c
 child-PL-**this** INST-INDEF-swollen/rotten-SIM-PL-DECL
 idiom: *These children are spoiled rotten.*

In most constructions the proximal demonstrative suffix is the last morpheme in the stem and as a consequence of the final long vowel reduction rule, it loses its second vowel. Its long

vowel remains unchanged if another morpheme, such as the ergative *-rí* in (51) or the limitive *-hcági* in (52), is added to the demonstrative suffix.

- (51) **Masúgaheeri miiráhci.**
 masúga-**hee**-rí mii-náhci-c
 dog-**this**-ERG 1B-bite-DECL
This dog bit me.

- (52) **Noogaré'heehcagi eewáhgee(dhaa)c.**
 noogaré'**hee**-hcági maa-ééhgee-(dhaa)-c
 word-**this**-LIM 1A-know-(NEG)-DECL
This is the only word I (don't) know.

The proximal suffix may modify the entire relativized noun phrase, as in (53).

- (53) **Miri'iihíhge** _____ **agu'garísdahe** **nídawaa'e'?**
 mirí-ii-híi-hgee agu-garísda-**hee** nída-maa-é'-'?
 water-INST-drink-CAUS.INDIR REL-small-**this** 2POS-INDEF-possess-INTER
Is this small cup yours?

Pronominal and attributive demonstratives can also be used for stylistic purposes. In the first sentence in (54), a new discourse participant is introduced with a pronominal demonstrative that functions as a demonstrative pronoun. After the new participant has been introduced it is backgrounded and henceforward the attributive demonstrative is used.

- (54) **Hirí naxbichíc. Naxbichíhe sibísac. Naxbichí agusibísahe ihdiàc.**
hirí naxbichí-c naxbichí-**hee** sibísa-c naxbichí agu-sibísa-**hee** ihdià-c
this bear-DECL bear-**this** black-DECL bear REL-black-**this** big-DECL
This is a bear. This bear is black. This black bear is big.

Typically, the independent proximal is used to substitute for the whole noun phrase and the bound proximal if the noun is overt, as in (55). However, it is also possible to use the independent proximal demonstrative *hirí this* and the bound proximal *-he this* in the same noun phrase, as in (56) and (57), although such examples, as is the case with demonstrative doubling in general, are rare.

- (55) **Hirí** / **Maa?idúùxihe** maawáàheec. Arumaruhcíc.
hirí / maa-idúùxi-**hee** maawáàhee-c aru-maa-núhci-c
this / INDEF-shirt-**this** 1.like-DECL IRR-1A-buy-DECL
I like this one / this jacket. I'm going to buy it.
- (56) **Hirí** **adihe** áàga hisíc.
hirí adí-**hee** áàгаа hisí-c
this house-this top red-DECL
This house has a red roof.
- (57) **hiró?** **madáá?he**
hirí-?o ma-idáá-²a-**hee**
this-PL 1POS-arrow-PL-**this**
these arrows of mine

Spatial reference of proximity can be extended to the more abstract sphere of time. When used for temporal reference, **-hee** implies that the time unit referred to is happening right now and has not passed yet. Example of idiomatic expressions are given in (58) and a sample sentence in (59).

- (58) **giraagudhééhe** *this morning (now)*
óhbaahe *this evening (now)*
awa?arèèhe *this summer (now)*
maabéhe *today*
- (59) **Mààraahe** **maagigúà** **maaréèwic.**
máàraa-hee maa-gigúà maa-néè-wi-c
winter-**this** INDEF-trap 1A-go-1SG.FT-DECL
I'll go trapping this winter.

The temporal future suffix **-rúg** (see 17.4.1.2) is used instead of the demonstrative **-hee** in reference to time units that have yet to happen. The sentence in (60) is spoken during the evening (**óhbaahee**) that is being referred to. The sentence in (60) is used in reference to the evening (**óhbaarug**) that will begin later today (**maabéhe**).

- (60) a. **Awúáʔdi** **aruwiriwaaraʔc** **óhbaahe.**
awúáʔdi aru-miriwaari-ʔa-c óhbaa-**hee**
sweat.lodge IRR-1enter-PL-DECL evening-**this**
We're going into a sweat tonight.
- b. **Awúáʔdi** **aruwiriwaaraʔc** **óhbaarug** **maabéhe.**
awúáʔdi aru-miriwaari-ʔa-c óhbaa-**rúg** maabí-**he**
sweat.lodge IRR-1enter-PL-DECL evening-**COND** day-**this**
We're going into a sweat in the evening (later) today.

10.2.2 *éèhgu(a)* 'mesiodistal attributive demonstrative'

The mesiodistal attributive demonstrative *éèhgu* *that* is an independent word that follows the noun phrase it modifies. It indicates that the referent is removed in space from the speaker. The final vowel of *éèhgu* is deleted unless a suffix or an enclitic follows.

The mesiodistal demonstrative is derived by prefixing the bound demonstrative root **éè* *that* to the locative suffix *-(h)gua*.⁹⁴ *Éèhgu(a)* has an uncommon variant form *óòhgu(a)* that sometimes also occurs with a short initial vowel as *éhgu(a)*.⁹⁵

Although *éèhgu* is an independent word, its effect on the preceding noun phrase is identical to the attributive proximal demonstrative *-hee* that is a suffix: both occupy the same slot that would otherwise be reserved for articles and both can be directly suffixed with the ergative *-ri*, as in *macéé éèhguari* *that man (did it)*. Examples of the attributive distal demonstrative in context are given in (61)–(63).

⁹⁴ Jones (1979) suggests that locative *-(h)gua* and the pronominal demonstrative *gúá* are instances of the same morphological “constellation” whose semantically closely related members are in effect instances of a single morpheme in different morpho-syntactic contexts.

⁹⁵ The short form conforms to the sound rule that shortens long vowels before pre-aspirated stops and fricatives. It is unclear why the irregular form *éèhgu* with the long vowel is more frequent than the “regularized” short form *éhgu*.

(61) **Maaʔirigidoobá éèhgu awahcágić.**
 maa-irigí-doobá **éèhgua** awá-hcági-c
 INDEF-leg-four **that** ground-LIM-DECL
That table is dusty.

(62) **Íga macéé maaráhxabaa éèhgu!**
 ígaa-Ø macéé maaráhxabaa **éèhgua**
 look-IMP.SG man crazy **that**
Look at that crazy man!

(63) **Agusibísa éèhgu madawaaʔéʔc.**
 agu-sibísa **éèhgua** mada-maa-éʔ-c
 REL-black **that** 1POS-INDEF-own-DECL
That black one is mine.

The plural form of **éèhgu** is **ìàʔhgu** *those*, as in (64). A seldom-heard dialectal variant of the plural form is **òòhgua**, as in (65).

(64) **Míàgaasoʔ ìàʔhgu nááhaʔrug arucagíwa.**
 míà-gaasa-ʔo **ìàʔhgua** nááhi-ʔa-rúg aru-cagí-wa
 woman-small-PL **those** go.PL-PL-COND IRR-good-EXCL
I wish those girls would go.

(65) **maciàʔ oohgu**
 macéé-ʔa **òòhgua**
 man-PL **those**
those men

Demonstrative doubling with **éèhgu** is possible, but not common. In (66), ‘son-in-law’ is attributively modified first by the pronominal demonstrative **gúá** and then again postnominally by **éèhgua**.

(66) **Gú madúdi éèhgu, miiguhbáheʔiic.**
gúá ma-idúdi **éèhgua** mii-guhbáhe-ìi-c
that 1POS-son.in.law **that** 1B-bother-HAB.SG-DECL
*There, he’s my son-in-law, he’s always teasing me.*⁹⁶

⁹⁶ In Hidatsa culture, parents-in-law and children-in-law belonging to the opposite sex adhere to an avoidance relationship. The person referred to in this example is the female speaker’s maternal uncle, classified as a brother in the Hidatsa kinship system, who married the speaker’s clan niece, classified as her daughter. Even though the

10.2.3 Positional demonstratives

Mesiodistal and distal demonstrative roots **éè* and **fà* in combination with positional verbs derive positional demonstratives that specify the position of a noun (i.e., whether it is sitting, standing, lying, or moving about). Their morphosyntactic properties are identical to the most common attributive demonstrative *éèhgu* *that* (see 10.2.2) whose referent’s position is unspecified. The list in (67) contains all the positional demonstratives in my corpus.

(67)	<i>éèraha</i>	<i>that one (standing over there)</i>	< <i>nahí</i> <i>be standing</i>
	<i>éèrahaa</i>	<i>that one (who just left / is going)</i>	< <i>nahaa</i> ?
	<i>éèwagi</i>	<i>that one (lying over there)</i>	< <i>maagí</i> <i>be lying</i>
	<i>éèraga</i>	<i>that one (sitting over there)</i>	< <i>naagí</i> <i>be sitting</i>
	<i>éèrahgu</i>	<i>that one over there</i>	< <i>nahgú</i> <i>do sth while sitting</i>
	<i>éèruwa</i>	<i>that one (walking around over there)</i>	< <i>nuwí</i> <i>walk</i>
	<i>jàrahaa</i>	<i>that one (who just left / is going)</i>	< <i>nahaa</i> ?

Certain real world entities, such as natural phenomena, are always referred to with specific positional demonstratives and such combinations are memorized as collocations. For example, the sun and the moon are idiomatically referred to with the demonstrative *éèraga* that indicates the sitting position:

(68)	<i>mirí éèraga</i>	<i>îwaxbidhahaa</i>
	<i>mirí éè-naagí-Ø</i>	<i>îwaxbi-dhaa-háa</i>
	<i>sun that-sit-CONT</i>	<i>go.down-NEG-ADV</i>
	<i>before the sun sets</i>	

More examples with positional attributive demonstratives are seen in (69)–(75).

original kinship relationship is expected to prevail in a situation like this, it is possible to conceive of the restructured relationship as one between a mother-in-law and her son-in-law – two people who are not supposed to speak to each other, let alone tease. The female speaker uttered this sentence in jest to the indignation of her “son-in-law,” who responded with a very annoyed *Dhéè, agihdíàwa niĩsírAAC. Niiwadahgîsac. Pshaw, you are really wrong! You are my little sister.*

- (69) **macéé éèrahgu**
 macéé éè-nahgú-Ø
 man that-be.sitting-CONT
that man over there
- (70) **aguwaagahé éèraha**
 agu-maa-gahéè éèraha-Ø
 REL-INDEF-give.to.a.group that-CONT
the former Indian agent
- (71) **Maaru[?]isiàc éèraha.**
 maa-arú-isià-c éè-nááhi-Ø
 INDEF-REL-bad-DECL that-go.PL-CONT
That fellow is bad.
- (72) **Nuxbáàga cagíc éèraha.**
 nuxbáàga cagí-c éè-nahí-Ø
 person good-DECL that-stand-CONT
That one is a good person.
- (73) **Oorigí nuwáca éèrahaaciru mú[?]siac.**
 aru-nigí nuwáca éè-nááhi-aci-rú m-ú[?]sia-c
 REL-hit one that-go.PL-COMPR-TEMP 1A-arrive-DECL
I arrived about one hour ago.
- (74) **Éèwagi madáác.**
 éè-maagí ma-idáá-c
 that-lie 1POS-arrow-DECL
That one lying over there is my arrow.
- (75) **Misdáàbusag ma[?]xirúhdiwiha[?]c**
 m-isdáà.busi-g m-a[?]xirúhdi-wihi-[?]a-c
 1POS-eye.close-CRD 1-CONF-gallop-1PL.FT-PL-DECL
- xiché éèraga mú[?]sia[?]rug héè wareec.**
 xichee éè-naagí-Ø m-ú[?]sia-[?]a-rúg héè waree-c
 stone.marker that-sit-CONT 1A-arrive-COND say EVID

We close our eyes and we'll run at full speed until we get to that pile of stones, he said.

The only token of a plural positional demonstrative in my corpus is **ìà[?]raha** *the ones who just left*. It is the plural form of either **éèraha** or **ìàraha**. Pluralization of positional demonstratives requires further documentation.

10.3 Deictic adverbs

Demonstrative roots *hirí*, *gúá*, *haríà*, *séʔ*, **éè*, **íà*, and **óó* are used to derive a large number of deictic adverbs that have a locative or temporal meaning. Most of the suffixes that are used for adverbial derivation are described in section 16.1.

Examples of locative and temporal adverbials derived from *hirí* *this* are listed in (76).

(76)	<i>hiróó</i>	<i>here</i>
	<i>hirugáá</i>	<i>on this side</i>
	<i>hirughirí</i>	<i>over here, right here</i>
	<i>hirihdáá</i>	<i>this way; with this</i>
	<i>hiráá</i>	<i>just now; next</i>
	<i>hirigháà</i>	<i>by now</i>
	<i>hirihgaahgá</i>	<i>about the same time</i>
	<i>hirighéèraca</i>	<i>until now</i>

When the plural suffix *-ʔa* and the definite article *-s* are added to the locative adverb *hirihdáá* *this way*, the resulting form *hirihdááʔas* has a lexicalized meaning ‘the others’.

Examples of locative and temporal adverbials derived from *gúá*, *haríà*, *séʔ*, **éè*, **íà*, and **óó* are listed in (77).

(77)	<i>gugáá</i>	<i>there</i>
	<i>guurú</i>	<i>there</i>
	<i>harígaa</i>	<i>over there</i>
	<i>seʔhgúá</i>	<i>there</i>
	<i>siaʔgháà (siaʔhgáà)</i>	<i>until then</i>
	<i>siaʔhgágua</i>	<i>long ago</i>
	<i>siaʔhgarú (siʔahgarú)</i>	<i>around that time</i>
	<i>éèhgua (éhgua)</i>	<i>there</i>
	<i>éèhgugaa (éhgugaa)</i>	<i>thee</i>
	<i>íàhgua</i>	<i>over there</i>
	<i>óógaa</i>	<i>over there</i>

10.4 Deictic verbs

A small number of verbs are inherently deictic. Most deictic stems are combinations of a demonstrative morpheme (**he**[?]- *this*, **hiri**- *this*, or **gua**- *that*), the anaphoric demonstrative **se**[?]- *that*, and a following dependent verb root.

10.4.1 Deictic verbs with -sá

The first pattern involves the demonstrative verbal root **-sá** *to be like DEM*. In (78) are listed examples of different deictic combinations of **-sá** with the demonstrative morpheme underlined and the verbal root in boldface.

- (78) He[?]**sá**. *That's it.*
Guasá**c**. *That's that. (That's it, you got it!)*
Se[?]**sá****c**. *That's that.*
Hirisá**c**. *It's (like) this.*

Examples of deictic verbs in discourse are given in (79)–(83).

- (79) **He**[?]**sá** wareec. / **He**[?]**sá** waree[?]?
he[?]**sá** waree-c / **he**[?]**sá** waree-[?]
like.this EVID-DECL / **like.this** EVID-INTER
*Is that so! / Really!*⁹⁷
- (80) **Maa**[?]arucaawí **guasá****c**.
maa[?]arucaawí **guasá**-c
custom **like.that**-DECL
That's the way it is. / It is customary.
- (81) **Awacugcuga**[?]? -- **É**è, **se**[?]**sá****c**.
awacúgcuga-[?] -- éè, **se**[?]**sa**-c
dentalium -- yes **like.that**-DECL
Is it dentalium shell? -- Yes, that's what it is.

⁹⁷ This is a common phrasal backchannel used to acknowledge a speaker's communication, much like Really! and Wow! are used in English. It can also be used mockingly to indicate disbelief.

- (82) **Maase'sá** maghíc.
 maa-se'sá maa-ghí-c
 INDEF-like.that 1A-mean-DECL
I mean things like that.
- (83) **Niihirisá** agu'ódhaadhaac.
nii-hirisá agu-ódhaa-dhaa-c
2B-like.this REL-wear-NEG-DECL
*You don't deserve to wear it.*⁹⁸

10.4.2 Deictic adverbials with *-sáwa*

Adverbials **he'sáwa** *because of this; then* and the less common **guasáwa** *because of that* are derived by adding the simultaneous suffix *-wa*, which indicates concurrent events (see 17.4.1.3) or causal reasons (see 17.4.3.2), to the deictic stem.⁹⁹ Both are used to provide reasons, and **he'sáwa** is also used as a common temporal adverbial *then*. Example are in (84) and (85).

- (84) **Aré'raa'?** -- **Éè, aré'waac.**
 aré'-raa-? -- éè aré'waa-c
 ache-2CAUS.DIR-INTER -- yes ache-1CAUS.DIR-DECL
- **Hawá eerág** **garagíd** **he'sáwa!**
 -- hawá eerí-g hgi-aragídi-Ø **he'sáwa**
 -- then defecate-CRD GI-step.in-IMP.SG **then**

Did you get mad? -- Yes, I got mad. -- Well, then poop and step in it!

- (85) **Guasáwa** idagóòxaadi **girusáac.**
guasáwa ida-góòxaadi hgi-núùusaa-c
because.of.that 3POS-corn GI-bury-DECL
That's why she buried her corn.

⁹⁸ Said in reference to traditional clothing symbolizing morally upright character, such as a white buckskin dress.

⁹⁹ According to an alternative analysis, this may be the case of the focus particle *-wa*, described in section 9.4.

10.4.3 Deictic verbs with -sèè

Two other common deictic verbs are **he'sèè** *to do this* and **gu'sasèè** *to do that*. There is no equivalent verb with **sé'**- (**se'sèè*). **Hirisèè** is synonymous with **he'sèè**, and **jàsee** with **guasèè**; however, the former are less common than the latter. Inflectional paradigms of these irregularly causativized verbs are presented in TABLE 10.2.

TABLE 10.2. INFLECTION OF DEICTIC VERBS 'TO DO THIS/THAT'

	he'sèè	/ hirisèè	<i>to do this</i>	guasèè	/ jàsee	<i>to do that</i>
1SG	he'sèèc	/ hirisèèc	<i>he did this</i>	guasèèc	/ jàseec	<i>he did that</i>
2SG	he'sáwaac	/ hirisáwaac	<i>I did this</i>	guasáwaac	/ jàsawaac	<i>I did that</i>
3SG	he'sáraac	/ hirisáraac	<i>you did this</i>	guasáraac	/ jàsaraac	<i>you did that</i>
IMP.SG	he'sá!	/ hirisá!	<i>do this!</i>	guasá!	/ jàsa!	<i>do that!</i>
IMP.PL	he'sààra!	/ hirisààra!	<i>do this!</i>	guasààra!	/ jàsaara!	<i>do that!</i>

Examples of **he'sèè**, **jàsee**, and **guasèè** are given in (86)–(89).

- (86) **Dóòhseewa he'sèèdoog?**
 dóòhseewa **he'sèè-dóòg**
 why **do.this-SPEC**
I wonder why he is doing that.
- (87) **Maawiiigigúádhaawa mî-wa he'sáwaawa he'sác.**
 maa-mi-iigigúá-dhaa-wa m-î-wa **he'séè-waa-wa** he'sá-c
 INDEF-1C-listen-NEG-SIMULT 1-PRO-FOC **do.this-1CAUS-SIMULT** be.this-DECL
Because I didn't listen I did it to myself (i.e., it is my own fault)
- (88) **Maawuudíwic jàsaag héè wareec.**
 maa-nuudí-wi-c **jàsee-g** héè waree-c
 1A-eat-1SG.FT-DECL do.that-CRD say EVID-DECL
"I will eat like that," he said.
- (89) **Nídawaa'u'sio? ahúc. Guasèèdhaara! Girahààra!**
 nída-maa-ú'sia-^o ahúc-c **guasèè-dhaa-ara** hgi-nahí-ara
 2POS-INDEF-arrive-PL many-DECL **do.that-NEG-IMP.PL** GI-stand-IMP.PL
- Maa'ooráhoo? ahúc.**
 maa-arú-ná-hee-^o ahúc-c
 INDEF-REL-2A-do-PL many-DECL

*You have many visitors! Don't be doing that (i.e., don't be sleeping)! Y'all get up! You have lots of things to do.*¹⁰⁰

10.4.4 Other deictic verbs

Other deictic verbs in Hidatsa include **hirihgá** (reduplicated form **hirihgaahgá**) *to be this size*, **si'ahgá** *be that time/place*, **si'awí** *to be that many/much*, and a few others.¹⁰¹ Examples are given in (90)–(93).

(90) **Múá hirihgaahgác.**
 múá **hirihgá-ahgá-c**
 fish **this.size-REDUPL-DECL**
The fish was about this size.

(91) **Hirihgaahgáhisarug** **aru'ú'siac** **áàdarug.**
hirihgá-ahgá-hisa-rúg aru-ú'sia-c áàda-rúg
this.amount-REDUPL-SIM-COND IRR-arrive-DECL morning-COND
He'll be here about the same time tomorrow.

(92) **Miisi'awá'c.**
 mii-**si'awí-'a-c**
 1B-**that.many-PL-DECL**
There are that many of us.

(93) **Si'awí** **áxbic.**
si'awí áxbi-c
that.much remain-DECL
There is that much left.

¹⁰⁰ This is a typical way traditional village criers used to call out at the powwow grounds between 5 and 6 AM in the morning in order to wake up the campers.

¹⁰¹ Deictic verbs have not been systematically elicited.

11 Independent personal pronouns

Hidatsa pronominals can be divided into bound pronominal prefixes that are obligatory and optional free pronouns.¹⁰²

11.1 Pronominal prefixes

Bound pronominals comprise three sets of prefixes that express the core arguments of the verb: (1) the A-set marks the subject of intransitive and transitive active verbs, (2) the B-set marks the subject of stative verbs, predicative nouns and quantifiers, and direct objects, and (3) the C-set prefixes are used when an action is performed by the subject for his or her own benefit or in which the subject affects itself. The pronominal prefixes are treated in Chapter 3, and the combinations of them in Chapter 5.

11.2 Independent pronouns

There are at least a dozen independent pronouns, some of which are also used predicatively, and one that is used only predicatively (i.e., as a verb). All independent pronouns are inflected for person and most for number by infixing the plural pronominal morpheme *-roʔ* between the basic pronominal root *î-* and the rest of the stem.¹⁰³

Predicative demonstrative pronouns *hirí* *this* and *gúá* *that*, and the predicative anaphoric pronoun *séʔ* *that* (see Chapter 10), as well as various demonstrative and anaphoric pronominal forms based on them, are often used instead of the “pure” pronoun in the third person.

¹⁰² Interrogative-indefinite pronouns (D-words) are discussed in Chapter 12.

¹⁰³ The inventory of pronouns presented in this chapter may not be exhaustive. The existence of two locative pronouns (*ihdaa* in 8.2.9 and *ihgidaa* in 8.2.9.1) suggests that other combinations of the pronominal root *î* and other adpositional enclitics are also possible.

11.2.1 Basic pronoun *î*

The basic predicative pronoun *î* *to be the one* is used only for identification (e.g., ‘I am John’), and not for description or classification by associating the subject with a class of similar people or things (e.g., ‘I am a teacher’). It also serves as the base for deriving non-predicative pronouns. The basic pronoun is never used for emphasis or contrastively. Third person forms of this paradigm, especially in the singular, are seldom used. Instead, demonstrative and anaphoric pronouns *hirí*, *gúá*, and *sé* (plural *hiró*, *gúú’o*, and *sí’o*) are used to indicate third person. The inflectional paradigm of the predicative pronoun is presented in TABLE 11.1.

TABLE 11.1. *î*- ‘TO BE THE ONE’

3SG	<i>îc</i>	3PL	<i>îro’c</i>
1SG	<i>mîc</i>	1PL	<i>mîro’c</i>
2SG	<i>nîc</i>	2PL	<i>nîro’c</i>

Examples of sentences with the predicative pronoun are presented in (1)–(3).

- (1) *Niidabée’?* / *Nii’agudóò’?* -- *Mîc* *Gúá* *Háàwis.*
nii-dabée-’ / *nii-agudóò-’* -- *m-î-c* *gúú-Ø* *háàwi-s*
 2B-who-INTER / 2B-which.one-INTER -- **1-PRO-DECL** come.back-CONT come.EVID-DEF
Who / which one are you? -- *It’s me, Coming Home.*
- (2) *Agu’agháàgagsaacis* *mîhe.*
agu-agháàga-gsá-aci-s *m-î-hee*
 REL-late-USI-COMPR-DEF **1-PRO-EMPH**
I’m the one who’s always late.
- (3) *Nî* *gigeec.*
n-î *gigéè-c*
2-PRO OPIN-DECL
*I think it’s you.*¹⁰⁴

¹⁰⁴ Not to be confused with *niigigéèc* *he looks like you do* which has a different pitch pattern.
nii-gigéè-c
 2B-resemble-DECL

Another important function of the predicative pronoun *î* is to coordinate pronominal phrases, as in (4)–(6). The quasi-pronominal demonstrative *gúá* is used for the third person (6).

- (4) **Nîg** **mîg** **mááhiwihaʼc.**
n-î-g **m-î-g** **mááhi-wihi-ʼa-c**
2-PRO-CRD **1-PRO-CRD** **we.go-1PL.FT-PL-DECL**
You and I should go.
- (5) **Nîg** **Bob (nígubag)** **nábahcagoʼʼ?**
n-î-g **Bob (n´-igúba-g)** **ná-báh-cagi-ʼo-ʼ?**
2-PRO-CRD **Bob (2POS-together-CRD)** **2A-cut-PL-INTER**
Did you and Bob cut it?
- (6) **Gúág** **(hii)** **mîg** **mááhaʼc.**
gua-g **(hii)** **m-î-g** **mááhi-ʼa-c**
that-CRD **(and)** **1-PRO-CRD** **we.go-PL-DECL**
He and I went.

All other pronouns, most of which are seldom or never used predicatively, express mainly contrast and emphasis, as well as various adverbial notions. They occur in apposition to the bound pronominal argument of the verb, which is realized as a pronominal affix (\emptyset for third person), except in a few speech-act types that do not license pronominal prefixes on the verb (*i.e.*, commands and interjections).

11.2.2 Emphatic pronoun *îwa*

The emphatic pronoun *îwa*, derived by combining the pronominal *î* with the focus marker *-wa*, and its inflected forms (TABLE 11.2.) are used to emphasize the person who is the main argument of the verb, whether it is the ergative agent, the intransitive subject, or the transitive object. The third person singular form *îwa* does not occur commonly; instead, the demonstrative pronouns *hiríwa*, *gúáwa*, and *séʼwa* are usually used.

TABLE 11.2. *îwa* ‘EMPHATIC PRONOUN’

3SG	<i>îwa</i>	3PL	<i>îro’wa</i>
1SG	<i>mîwa</i>	1PL	<i>mîro’wa</i>
2SG	<i>nîwa</i>	2PL	<i>nîro’wa</i>

Examples of sentences with the emphatic pronoun are presented in (7)–(14).

- (7) **Sé’wa** aráгаа’?
se’-wa ná-íгаа-’
that-FOC 2A-see-INTER
Did you see him?
- (8) **îwa** he’séèwa he’sác.
î-wa he’-séè-wa he’-sá-c
PRO-FOC this-do-SIMULT this-be.like-DECL
It’s his own fault. (lit. Because he himself did it, it is like this.)
- (9) **Mîwa,** miirúcaruhga!
m-î-wa mii-núcarua-hgee-Ø
1-PRO-FOC 1B-drag-3CAUS.INDIR-IMP.SG
Me, let me drag it!
- (10) **Nîwa** náàghiac!
n-î-wa ná-naghíà-c
2-PRO-FOC 2A-drive-DECL
You, you are driving!
- (11) **Nîwa** niiwahgirásic.
n-î-wa nii-maa-hgirási-c
2-PRO-FOC 2B-1A-love-DECL
You, I love only you.
- (12) **Mîwa** maaréè maawáàheec Máàgadaa’aashihdaa.
m-î-wa maa-néè maa-ma’ihee-c máàgadaa-àasi-hdaa
1-PRO-FOC 1A-go 1A-want-DECL plum-creek-GOAL
Me, I want to go to Minot.
- (13) **Se’gáádi** **nîwa** hirá. Mihàara’rug arucagíc.
se’-gáádi **n-î-wa** hirí-Ø m-ihàari-’a-rúg aru-cagí-c
that-VER **2-PRO-FOC** do-IMP.SG 1C-finish-PL-COND IRR-good-DECL
It’s important that you do it. It would be good if we finish it.

- (17) **Miihxbáda?ii** **ma?èèrìhdiahisac.**
 m-iihxbádi-ii ma-eerí-ihdià-hisa-c
 1A-sated-INTENS 1POS-belly-big-SIM-DECL
I'm so full I'm like pregnant.

-- **Míhgi** **ma?eerí** **iigagíxa** **maaragíc.**
 -- **m-ñ-hgi** ma-eerí ii-gagíxi-Ø maa-naagí-c
 -- **1-PRO-GI** 1POS-belly INST-round-CONT 1A-sit-DECL
 -- *Me, I'm just sitting here with a round belly.*

- (18) **Harúg** **níg / níhgi(i)?**
 harúg **n-ñ-hgi**
 and.then **2-PRO-GI**
*How about you?*¹⁰⁵

- (19) **Hawá** **níhgi** **niicagí** **agáraa??**
 hawá **n-ñhgi** nii-cagí agá.hee-raa-?
 then **2-PRO-GI** 2B-good think-2CAUS-INTER

Nába **có?hag** **nísda** **magi?áchaag** **nii?isíàc.**
 n'-abá có?hi-g n'-isdá magi-áchaag-g nii-isíà-c
 2POS-nose pointed-CRD 2POS-eye RECIP-near-CRD 2B-bad-DECL

And yourself, do you think you are good (looking)? Your nose is pointed, your eyes are too close, you're bad.

- (20) **Madhahéé** **sé?ihgii** **néèc** **Awadihiráás** **se?hdáá.**
 madhahéé **se?-ñ-hgi** néè-c awadí-hiráá-s se?-hdaa
 already **that-PRO-GI** go-DECL village-new-DEF that-GOAL
As for that one, she already went to New Town.

In many situations the emphatic and contrastive pronouns are interchangeable with little or no change in meaning, as in (21) and (22).

- (21) **Níhgi** / **Níwa** **maa?ààgahsi** **nasbá!**
n-ñ-hgi / **n-ñwa** maa-ààgahsi nasbí-Ø
2-PRO-GI / **2-PRO** INDEF-write finish-IMP.SG
As for you / You, finish school!

¹⁰⁵ Notice the absence of the interrogative speech-act marker -? in this construction.

- (22) **Míhgi** / **Mîiwa**, aruwaaréèc maa'îhadihdaa.
m-î-hgi / **m-îiwa** aru-maa-néè-c maa.îihu-adí-hdaa
1-PRO-GI / **1-PRO** IRR-1A-go-DECL sell-house-DIR
As for me / Me, I'm going to town.

11.2.4 Additive pronoun *îhgi'isa*

The additive pronoun *îhgi'isa* 'PRO' too is derived by compounding the contrastive pronoun *îhgi* / *íg* with the additive subjunct *isá* too, also. The epenthetic phonetic glottal stop between *îhgi* and *isá* is subject to elision in casual speech, resulting in a long vowel: *îhgi'isa* > *îhgiisa* you too. The additive pronoun has a short variant *ígisa* that occurs in casual speech. The initial long *î* is shortened through a regular phonological process of long vowel reduction before aspirated stops; there is no phonological explanation for the short vowel in the short forms. The paradigm of the additive pronoun is given in both long and short forms in TABLE 11.4.

TABLE 11.4. *îhgi'isa* / *ígisa* 'ADDITIVE PRONOUN'

3SG	<i>îhgi'isa</i> / <i>ígisa</i>	3PL	<i>îiro'hgi'isa</i> / <i>îiro'gisa</i>
1SG	<i>mîhgi'isa</i> / <i>mígisa</i>	1PL	<i>mîiro'hgi'isa</i> / <i>mîiro'gisa</i>
2SG	<i>nîhgi'isa</i> / <i>nígisa</i>	2PL	<i>nîiro'hgi'isa</i> / <i>nîiro'gisa</i>

The additive pronoun expresses the idea that PRO is subject to the same conditions that affect somebody mentioned earlier; examples are (23)–(25).

- (23) **Miihuaragabadíc.** -- **Mígisa** (miihuaragabadíc).
 mii-húá-nagabadí-c -- **m-î-hgi-isá** (mii-húá-nagabadí-c
 1B-cough-contract-DECL -- **1-PRO-GI-also** (1B-cough-contract-DECL)
I caught a cold. -- *Me too, (I caught a cold).*
- (24) **Nîiro'gisa** he'sáraa'o'?' -- **Éè, mîiro'gisa** he'sáwaa'ac.
n-îiro-hgi-isá he'-sée-raa-'o-?' -- **éè m-îiro'-hgi-isá** he'sée-waa-'a-c
2-PRO.PL-GI-also this-do-2CAUS-PL-INTER -- **yes 1-PRO.PL-GI-also** do.this-1CAUS-PL-DECL
Did you guys do it, too? -- *Yes, we did it, too.*

- (25) **Miháàwidhaac** **óògciásiru.** -- **Míhgiisa!**
 mi-hiráwi-dhaa-c óògci-a-si-rú -- **m-î-hgi-isá**
 1C-sleep-NEG-DECL night-PAST-TEMP -- **1-PRO-GI-also**
I couldn't sleep last night. -- *Me too!*

11.2.5 Ergative pronoun *iirahéèri*

Hidatsa has developed a paradigm of ergative pronouns that are used to emphasize or contrast the ergative agent in transitive clauses. The ergative pronoun *iirahéèri* is also used in response to questions to identify the agent. Ergative demonstratives *hirírí*, *guarí*, and *seʔrí* (plural *hiróʔri*, *gúúʔari*, and *sííʔari*) are often used instead of the third person pronoun. The paradigm of the ergative pronoun *iirahéèri* *to be the one who does sth* is given in TABLE 11.5.

TABLE 11.5. *iirahéèri* ‘ERGATIVE PRONOUN’

3SG	iirahéèri	3PL	îiroʔraheeri (sííʔari)
1SG	miirahéèri	1PL	mîiroʔraheeri
2SG	niirahéèri	2PL	nîiroʔraheeri

An example of the ergative pronoun used for identification of the agent is given in (26).

- (26) **Dabéèri hiríʔʔ** -- **Miirahéèri.** / **Miirahéèridhaac.**
 dabéè-rí hirí-ʔ -- **m-iirahéèri** / **m-iirahéèri-dhaa-c**
 who-ERG do-INTER -- **1-PRO.ERG** / **1-PRO.ERG-NEG-DECL**
Who did it? -- *I was the one (who did it).* / *I wasn't the one (who did it).*

The ergative pronoun is also used for emphasis and to assign contrastive focus to a specific referent in order to differentiate it from other possible referents. In emphatic and contrastive clauses the presence of the ergative pronoun indicates that, although the agent is easily identifiable, its particular referent rather than some other is being singled out. In English the equivalent effect is achieved by stressing the appropriate pronoun or by the clefted phrase.

- (27) **Ihdihbú niirahéèri aracaád!**
 ihdihbú n-iirahéèri aracaadí-Ø
 hill 2-PRO.ERG climb-IMP.SG
You climb the hill!
- (28) **Miirahéèri maʔiàʔgaagis maagaxúhxic.**
1-iirahéèri maʔiàʔgaagi-s maa-nagaxúhxi-c
1-PRO.ERG chair-DEF 1A-break-DECL
I broke the chair.
- (29) **Niirahéèri nábsaaʔ?** -- **Éè, miirahéèri mabsáàc.**
n-iirahéèri ná-báhsaa-ʔ -- **éè m-iirahéèri** maa-báhsaa-c
2-PRO.ERG 2A-stab-INTER -- **yes 1-PRO.ERG** 1A-stab-DECL
Did you stab him? -- Yes, I stabbed him.

11.2.6 Intensive pronouns

11.2.6.1 Intensive pronoun *îrahsaa*

The intensive pronoun *îrahsaa* by ‘PRO’ *self* indicates that the activity is carried out by oneself without assistance from anybody else. Singular and plural forms appear to be identical. In casual speech this pronoun occurs also in the short form *îras* with the adverbial suffix *-háà* deleted.

TABLE 11.6. *îrahsaa* / *îras* ‘INTENSIVE PRONOUN’

3	<i>îrahsaa</i> / <i>îras</i>
1	<i>mîrahsaa</i> / <i>mîras</i>
2	<i>nîrahsaa</i> / <i>nîras</i>

- (30) **îrahsaa ihgarabééc.**
îrahsaa ihgi-arabéé-c
PRO REFL-kick-DECL
He himself kicked himself.
- (31) **Nîras hirá!**
n-îrahsaa hirí-Ø
2-PRO do-IMP.SG
Do it (by) yourself!

- (32) **Maadí** **mîrahsaa** mabahcíc.
 ma-adí **m-îrahsaa** maa-báhci-c
 1POS-house **1-PRO** 1A-erect-DECL
I built my house (by) myself.
- (33) **Mîrahsaa** guasáwaac he?séè maawáahaag se?éguhaa.
m-îrahsaa gua-séè-waa-c he?-séè maa-ma?ihee-g se?guhaa
1-PRO that-do-1CAUS-DECL this-do 1A-want-CRD that's.why
I did it myself. I wanted to do it, that's why.

11.2.6.2 Intensive pronoun *îhaghaa*

There is another intensive pronoun *îhaghaa* by 'PRO' self whose meaning is identical to the more common intensive *îrahsaa*. The inflectional paradigm is presented in TABLE 11.7 and a sample sentence in (34).

TABLE 11.7. *îhaghaa* 'INTENSIVE PRONOUN'

3SG	<i>îhaghaa</i>	3PL	<i>îro'haghaa</i>
1SG	<i>mîhaghaa</i>	1PL	<i>mîro'haghaa</i>
2SG	<i>nîhaghaa</i>	2PL	<i>nîro'haghaa</i>

- (34) **îhaghaa** hiríc.
îhaghaa hirí-c
PRO do-DECL
He did it by himself.

11.2.6.3 Intensive pronoun *iiguuháá*

Finally, there is an archaic intensive pronoun *iiguuháá* with the same meaning as *îrahsaa* and *îhaghaa*.¹⁰⁶

TABLE 11.8. *iiguuháá* 'INTENSIVE PRONOUN'

3SG	<i>iiguuháá</i>
1SG	<i>miiguuháá</i>
2SG	<i>niiguuháá</i>

¹⁰⁶ I have not been able to document any plural forms of this pronoun yet.

Examples of the archaic intensive are presented in (35) and (36).

- (35) **liguuháá** iháàric.
iiguuháá iháàri-c
PRO finish-DECL
He finished by himself.
- (36) **Aruwiiguuháá** dóòsag miháàric.
aru-m-iiguuháá dóòsa-g m-iháàri-c
REL-1-PRO how-CRD 1C-finish-DECL < **dóòsag** *somehow, barely*
I barely finished it by myself (without help).

11.2.7 Prioritive pronoun *îcihga*

The enumerative pronoun *îcihga* / *iicihga* ‘*PRO*’ *first* has two pitch patterns in the singular that are deemed equally valid by speakers.¹⁰⁷ The paradigm of the enumerative pronoun is given in TABLE 11.9. and examples in (37)–(40).

TABLE 11.9. *îcihga* ‘ENUMERATIVE PRONOUN’

3SG	<i>iicihga</i> / <i>îcihga</i>	3PL	<i>îro’cihga</i>
1SG	<i>miicihga</i> / <i>mîcihga</i>	1PL	<i>mîro’cihga</i>
2SG	<i>niicihga</i> / <i>nîcihga</i>	2PL	<i>nîro’cihga</i>

- (37) **Mîcihga** mú’*siac*.
m-îcihga m-ú’*siac*-c
1-PRO 1A-arrive-DECL
I arrived first.
- (38) **Mîro’cihiri** maháà’*ac*.
m-îro’cihga-rí ma-hiri’*a-c*
1-PRO.PL-ERG 1A-do-PL-DECL
We did it first.
- (39) **licihga** néhga!
iicihga nèè-hgee-Ø
PRO go-3CAUS.INDIR-IMP.SG
Let him go first!

¹⁰⁷ Curiously, only one pitch pattern with accent on the first syllable is deemed grammatical in several proper nouns, such as *îcihgawaahiris* *First Maker*, the first creator and trickster in traditional stories.

- (40) **Nîcihiri** miiráadhagiwa míhgi ooriwaadhagíc.
n-iícihga-rí mii-ná-nadhagí-wa m-ií-hgi aru-nii-maa-nadhagí-c
2-PRO-ERG 1B-2A-hurt-SIMULT 1-PRO-GI IRR-2B-1A-hurt-DECL
Since you hurt me first I am going to hurt you!

The enumerative pronoun can also be used predicatively, as in (41) and (42).

- (41) **Nîcihgac.** (**Niicihgac.**)
n-iícihga-c
2-PRO-DECL
You are the first one.

- (42) **Miicihgadoores.** (**Mîcihgadoores.**)
m-iícihga-doores
1-PRO-ASSERT
I was the first one.

The enumerative pronoun can also derive adverbs, as exemplified in (43).

- (43) **aru'iicihgágua**
aru-iícihga-gua
REL-first-LOC
the first time

11.2.8 Limitive pronoun *ihcagi*

The inflectional paradigm of the limitive (also called isolative) pronoun *ihcagi* *alone, by 'PRO' self* appears in TABLE 11.10. The pronoun is composed of the basic pronominal root *î* plus the limitive suffix *-hcági*. The initial short *i* in the singular is the result of the phonological process that shortens long vowels before pre-aspirated stops and affricates. The limitive pronoun has a variant form *ihcagihdaa* that has the instrumental-locative suffix *-hdaa* added to the limitive

stem.¹⁰⁸ Some speakers pronounce this word with a long *ii* between the limitive and instrumental suffixes, as in *ihcagiihda*.

TABLE 11.10. *ihcagi* / *ihcagihdaa* ‘LIMITIVE PRONOUN’

3SG	<i>ihcagi</i> / <i>ihcagihdaa</i>	3PL	<i>îiro[?]hcagi</i> / <i>îiro[?]hcagihdaa</i>
1SG	<i>míhcagi</i> / <i>míhcagihdaa</i>	1PL	<i>mîiro[?]hcagi</i> / <i>mîiro[?]hcagihdaa</i>
2SG	<i>níhcagi</i> / <i>níhcagihdaa</i>	2PL	<i>nîiro[?]hcagi</i> / <i>nîiro[?]hcagihdaa</i>

The limitive pronoun has two basic meanings. The first indicates that the subject is alone or by himself, as in (44)–(46).

- (44) *li[?]èèca* *dáá[?]ac.* **Míhcagi** *mii[?]ira* *maaháhguç.*
ii-éèca *déé-[?]a-c* **m-îi-hcági** *mii-iri-Ø* *maa-háhgu-c*
 INST-all die-PL-DECL **1-PRO-LIM** 1B-alive-CONT 1A-be.around-DECL
They all died. Only I am alive.
- (45) **Nîiro[?]hcagihdaa** *áàrahgu[?]o[?]?*
n-îiro[?]-hcági-hdaa *ná-áhgu-[?]o-[?]*
2-PRO.PL-LIM-INST 2A-be.at.PL-PL-INTER
Are you guys by yourselves / alone?
- (46) **Mihcagi(i)hdaa** *awawáàga* *maaragic.*
m-îi-hcági-hdaa *maa-awáàgi-Ø* *maa-naagí-c*
1-PRO-LIM-INST 1A-sit.down-CONT 1A-sit-DECL
I'm sitting by myself.

The second meaning of the limitive pronoun indicates that the person referred to accomplishes an action by oneself or alone. The meaning of *ihcagi(hdaa)* in this sense is almost synonymous with intensive pronouns in 11.2.6. An example is (47).

¹⁰⁸ The primary function of the instrumental suffix *-hdaa* is to introduce oblique objects. The instrumental suffix indicates that a noun is the instrument or means by or with which an action is accomplished, as in *Mé[?]chihdaa báhsaac*. *He stabbed him with a knife.* < *mé[?]chi* knife. The secondary function is adverbial and means ‘only, alone’, as in *Nuwácahdaa núhca!* *Take only one!* < *nuwáca* one.

- (47) **Níhcagihdaa** náheeʔ? -- **Míchaghiri** éèca mahéèc.
n-î-hcagihdaa ná-hirí-ʔ -- **m-î-hcági-rí** éèca maa-hirí-c
2-PRO-LIM-INST 2A-do-INTER -- **1-PRO-LIM-ERG** all 1A-do-DECL
Did you do it by yourself? -- *I did everything myself.*¹⁰⁹

The limitive pronoun can also be used predicatively, as in (48) and (49).

- (48) **Nîroʔhcagiʔ?**
n-î-roʔ-hcági-ʔ
2-PRO-PL-LIM-INTER
Are you guys alone?

- (49) **Dáàbawa mirúáaraaʔ** **mîroʔhcagaʔwaʔ**
dáàba-wa mirúáhee-raa-ʔ **m-î-roʔ-hcági-ʔa-wa**
what-FOC boil-2CAUS-INTER **1-PRO-PL-LIM-PL-SIMULT**
What are you boiling [so much]. There are only [two of] us.

11.2.9 Directional pronoun *ihdaa*

The directional pronoun *ihdaa* toward ‘PRO’, to ‘PRO’ is composed of the basic pronominal root *î* plus the goal suffix *-hdaa* towards. The initial long *î* is shortened in the singular through a regular phonological process of long vowel reduction before pre-aspirated stops and affricates. Third person forms of the directional pronoun are often substituted for demonstratives, of which *seʔhdáá* (plural *síʔahdaa*) is most common.

TABLE 11.11. *ihdaa* ‘DIRECTIONAL PRONOUN’

3SG	<i>ihdaa</i>	3PL	<i>îroʔhdaa</i>
1SG	<i>míhdaa</i>	1PL	<i>mîroʔhdaa</i>
2SG	<i>níhdaa</i>	2PL	<i>nîroʔhdaa</i>

Examples of the directional pronoun are given below.

- (50) **Míhdaa** húh!
m-î-hdaa húù-Ø
1-PRO-GOAL come-IMP.SG
Come to me!

¹⁰⁹ Some speakers say *míhcaghiri* by myself.

- (51) **Maʔúúdabi ihbúàc míhdaa.**
 maʔúúdabi ihbúà-c **m-î-hdaa**
 ball toss-DECL **1-PRO-GOAL**
He tossed the ball to me.

- (52) **Míhdaa garáàg húùc.**
m-î-hdaa garáà-g húù-c
1-PRO-GOAL flee-CRD come-DECL
He came running towards me.

11.2.9.1 Vertitive pronoun *ihgidaa*

The vertitive paradigm in TABLE 11.12 is based on the directional paradigm. It is derived by inserting the GI-morpheme *hgi-* between the pronominal root *î* and the directional suffix *-hdaa* *towards*. The combined meaning of these morphemes is *back toward* ‘PRO’.

TABLE 11.12. *ihgidaa* ‘VERTITIVE PRONOUN’

3SG	<i>ihgidaa</i>	3PL	<i>îroʔhgidaa</i>
1SG	<i>míhgidaa</i>	1PL	<i>mîroʔhgidaa</i>
2SG	<i>níhgidaa</i>	2PL	<i>nîroʔhgidaa</i>

An example with the vertitive pronoun is seen in (53).

- (53) **Míhgidaa gúúç.**
m-î-hgi-hdaa gúú-c
1-PRO-GI-GOAL come.back-DECL
It came back to me (e.g. something I said).

12 D-words

A group of heterogeneous **d**-initial words (henceforward D-words) that belong to various lexical classes nevertheless have enough properties in common to justify their description in a separate chapter.

D-words are divided into two categories: pronominal D-words, which are described in 12.1, and proadverbial D-words, which are described in 12.2. Most basic D-words are verbs and all D-words may function as interrogative and indefinite pro-forms, usually after undergoing suffixation. D-words also introduce subordinate clauses.

12.1 Pronominal D-words

Three D- words, **dabéè** *to be who*, **dáàba** *to be what*, and **agudóò** *to be which one* are stative verbs that in a matrix clause occur mostly, but not exclusively, in questions. They are also extremely common in the dependent conditional and concessive clauses, in which case they function as nonassertive indefinite pronouns.

Two types of interrogative pronouns are derived from pronominal D-words by suffixation. When either **dabéè**, **dáàba**, or **agudóò** substitutes for a noun that is an absolutive clausal argument (i.e., an Object in a transitive or a Subject in an intransitive clause), it is followed by the focus marker **-wa** (see 9.4).¹¹⁰ When any of the three pronoun substitutes for a noun that is an ergative argument (i.e., an Agent in a transitive clause), it is usually followed by the ergative

¹¹⁰ I am hesitant to call **-wa** an absolutive case marker although this is clearly the main function of this suffix when it follows any of the interrogative pronouns. The same suffix can also be used emphatically with pronouns (see 11.2.2) that can substitute for any argument of the verb, although the unambiguously ergative pronoun **iirahéèri** is by far more common than **íwa** in the emphatic agentive argument role. The focus suffix **-wa** is also found in **dóòhseewa** *why* where it is clearly not an absolutive case marker.

suffix *-rí*, unless the argument structure is disambiguated by other means, such as the relative ranking of the two arguments on the animacy and agentivity scales (see 9.6.1 and 9.6.2). The derivation of ergative and absolutive interrogative pronouns is given in TABLE 12.1.

TABLE 12.1. INTERROGATIVE PRONOUN DERIVATION

GLOSS	STATIVE VERB	S AND O ARGUMENT	A ARGUMENT
<i>who</i>	<i>dabéè</i>	<i>dabéèwa</i>	<i>dabéèri</i>
<i>what</i>	<i>dáàba</i>	<i>dáàbawa</i>	<i>dáàbari</i>
<i>which one</i>	<i>agudóò</i>	<i>agudóòwa</i>	<i>agudóòri</i>

An absolutive pronoun may also be used instead of the ergative pronoun if the argument structure is disambiguated by the presence of the first or second person object prefixes in a transitive stem (see 9.5 for details), as in (1). The ergative suffix, however, may never replace the focus particle when the latter indicates absolutive case, as shown in (2).

- (1) *Dabéèri* / *Dabéèwa* *niigiguucgíhgee*?
dabéè-rí / *dabéè-wa* *nii-hgiguucgí-hgee*-?
 who-ERG / who-FOC 2B-learn-3CAUS.DIR-INTER
Who teaches you?

- (2) *Dabéèwa* / **Dabéèri* *haxbhí*?
dabéè-wa / **dabéè-rí* *haxbhí*-?
 who-FOC / *who-ERG sneeze-INTER
Who sneezed?

The definite interrogative *agudóò* can be used instead of the indefinite interrogatives *dabéè* and *dáàba*. Unlike the latter two, *agudóò* *to be which one* implies that the choice is made from a limited number of alternatives.

When the reference of any of the stative verbs or interrogative pronouns in TABLE 12.1 is plural, the respective form has to be marked so. In the case of indefinite pronouns, the plural marker *-²a* is inserted between the stative stem and the focus suffix *-wa* or the ergative suffix *-rí*.

Two forms of the absolutive pronoun **dabéèwa** *who* with singular and plural reference are contrasted in (3a-b). The plurality of absolutive reference can also be expressed by the distributive suffix (see 16.1.5) that replaces the focus suffix. This alternative distributive strategy, illustrated in (3c) is not common.

- (3) a. SINGULAR
Dabéèwa *ú?sia??*
dabéè-wa *ú?sia-?*
who-FOC arrive-INTER
Who arrived?
- b. PLURAL
Dabí?awa / **dabià?wa** *ú?sia?oo??*
dabéè-?a-wa / **dabéè-?a-wa** *ú?sia-?o-?*
who-PL-FOC / **who-PL-FOC** arrive-PL-INTER
Who arrived?
- c. DISTRIBUTIVE
Dabéècisee *ú?sia?oo??*
dabéè-cisee *ú?sia-?o-?*
who-DIST arrive-PL-INTER
Who arrived?

Just like the plural suffix **-?a**, all other suffixes, such as the diminutive suffix **-hgee** in (4), also have to precede **-wa** and **-rí** in the interrogative pronominal stem.

- (4) **Dáàbahgeewa** *é??* -- **Míahgeec.**
dáàba-hgee-wa *é?-?* -- **míà-hgee-c**
what-DIM-INDEF possess-INTER -- **woman-DIM-DECL**
What did she have? -- *It's a baby girl.*

When D-words occur in conditional or concessive clauses or with postpositional suffixes, they function as nonassertive indefinite pro-forms (for assertive pro-forms see 15.2.5). The conditional or concessive suffix is in most cases added directly to the D-word and for all practical purposes such forms will be henceforward referred to as pronouns (and pro-adverbs in section 12.2). Many relevant examples are provided for each D-word in their respective subsections in this chapter. However, the discontinuous forms of **dabéè-rug** *who-ever* and

agudòò-rug *which-ever* in (5), where they appear as *wh*-determiners, indicate that the non-assertive pro-forms are actually clauses.

- (5) **Dabéè** míà nuumagiwiruag áhguaca[?]**rug**
dabéè míà nuwa-magi-mirú[?]-g áhgu-ací-[?]a-**rúg**
who woman some-RECIP-fight-CRD be.PL-COMPR-PL-COND
- oogirahxúàraci** **agudòò** **awáhdahgeeraca[?]rug**
agu-hgi-nahxúá-raci **agudòò** awá-hdaa-hgee-raci-[?]a-**rúg**
REL-GI-knock.over-COMPR **which.one** gound-GOAL-3CAUS.INDIR-COMP-PL-COND
- agugirahxíàracis** **guxdi[?]î** **wareec.**
agu-hgi-nahxíà-raci-s hguxdí-î waree-c
REL-GI-??-COMPR-DEF help-HAB.SG EVID-DECL

Whoever women were fighting with each other, the one who was knocked down,
whichever one was knocked to the ground, she always helped the underdog.

12.1.1 *dabéè* ‘who’

Dabéè *to be who* is a stative verb that refers to humans. It is inflected with B-set pronominal prefixes and is used to determine someone’s identity, as shown in (6) and (7).

- (6) **Gú dabéè[?]?** -- **Dabéèdhaac.** / **Eewáhgeedhaac arudabé.**
gúá **dabéè-[?]** -- **dabéè-dhaa-c** / maa-ééhgee-dhaa-c aru-**dabéè**
that **who-INTER** -- **who-NEG-DECL** / 1A-know-NEG REL-**who**
Who is he? -- *He is nobody (just ignore him). / I don’t know who he is.*
- (7) **Niidabéè[?]?** -- **Mîc** -- **Miidabéè[?]?** -- **Mîc, John.**
nii-**dabéè-[?]** -- m-îi-c -- mii-**dabéè-[?]** -- m-îi-c John
2B-**who-INTER** -- 1-PRO-DECL -- 1B-**who-INTER** -- 1-PRO-DECL John
Who are you? -- *It’s me.* -- *Me who?* -- *Me, John.*

When **dabéè**, sometimes preceded by the indefinite prefix **maa-**, occurs in conditional clauses with **-rúg** and concessive conditional clauses with **-rúhsaa**, it functions as a nonassertive indefinite pronoun. In conditional clauses it is usually glossed as ‘whoever’ and in concessive clauses as ‘anyone’. Examples are (8)–(11).

- (8) **Dabéèrug** Beericgarúùba haaʼac.
dabéè-rúg beericgá-núùba héè-ʼa-c
who-COND raven-two say-PL-DECL
Whoever he was, they called him Two Ravens.
- (9) **Dabéèrus** aruʼigúbareʼc.
dabéè-rús aru-igúba-iréʼ-c
who-CONC.COND IRR-together-speak-DECL
He would talk to anyone.
- (10) **Maadabéèrus** arágaadhaaʼ? -- **Dabéèracirus** awágaadhaac.
maa-dabéè-rúhsaa ná-ígaa-dhaa-ʼ -- **dabéè-raci-rús** maa-ígaa-dhaa-c
INDEF-who-CONC.COND 2A-see-NEG-INTER -- **who-COMPR-CONC.COND** 1A-see-NEG-DECL
Did you see anybody? -- I didn't see anyone.
- (11) **Maadabéèrus** aruʼééhgeedoores. Dóòhseewa eeráhgeedhaaʼ?
maa-dabéè-rús aru-ééhgee-dóòres dóòshee.wa ná-ééhgee-dhaa-ʼ
INDEF-who-CONC.COND IRR-know-ASSERT how.come 2A-know-NEG-INTER
Anyone would know that. (i.e., That's common sense.) How come you don't know it?

The interrogative pronoun **dabéèwa** *who, whom* substitutes for the non-ergative arguments S and O. The stative verb **dabéè** *to be who* is ungrammatical in the argument position, as shown in (12). **Dabéèwa** indicates S in (13) and O in (14).

- (12) ***Dabéè** / **dabéèwa** hîʼ?
 ***dabéè** / **dabéè-wa** híʼ-ʼ
 ***who** / **who-FOC** get.here-INTER
Who's here?
- (13) **Dabéèwa** arîidiʼ? -- **Mîihe** aguʼarîidi.
dabéè-wa arîidi-ʼ -- **m-îi-hee** agu-arîidi
who-FOC hungry-INTER -- **1-PRO-EMPH** REL-hungry
Who is hungry? -- I'm the one who is hungry.
- (14) **Dabéèwa** aráàguxdiʼ? -- **Maagiráás** awáàguxdic isáh.
dabéè-wa ná-ààguxdi-ʼ -- **maa-giráà-s** ma-ààguxdi-c isá
who-FOC 2A-wait-INTER -- **1A-husband-DEF** 1A-wait-DECL again
Who are you waiting for? -- I'm waiting for my husband again.

The ergative argument A of a transitive verb is indicated by the ergative pronoun *dabéèri* *who*. Examples are (15) and (16).

- (15) **Dabéèri** *nii'óòwia'?* -- **Miraxubaawíàs** *se'ri* (*mii'óòwíac*).
dabéè-rí *nii-óòwia-'* -- *mirá-xubáà-míà-s* *se'-rí* (*mii-óòwia-c*)
who-ERG 2B-point-INTER -- *tree-holy-woman-DEF* *that-ERG* (1B-point-DECL)
Who teaches you? -- *Cedar Woman (teaches me).*
- (16) **Híí dabéèri** *úà'hdihi* *nààsigaaadaacihe*.
híí dabéè-rí *úà'hdi-hi* *nààsi-gáádi-aci-hee*
and who-ERG *ridicule-3FT.SG* *name-VER-COMPR-EMPH*
And who would laugh at it since it is his real name.

In some cases *dabéè* *to be who* and the interrogative pronouns derived from it can be freely substituted with *agudóò* *to be which one* and the related pronominal forms without any change in meaning, as (17) and (18) demonstrate.

- (17) **Niidabéè'?** = **Nii'agudóò'?**
nii-dabéè-' *nii-agudóò-'*
2B-**be.who**-INTER 2B-**be.which**-INTER
Who are you? *Which one are you?*
- (18) **Dabéèwa haxbhí'?** = **Agudóòwa haxbhí'?**
dabéèwa *haxbhí-'* **agudóòwa** *haxbhí-'*
who *sneeze-INTER* **which** *sneeze-INTER*
Who sneezed? *Which one sneezed?*

Finally, when used in isolation and without any speech-act markers, *dabéè!?* *Who is there!?* is used as an exclamatory query (see 14.2) as when someone is knocking at the door.

12.1.2 *dáàba* 'what'

Dáàba *to be what* is a stative verb that is used to ask questions and make statements about the identity of non-human referents, as in (19) and (20).

- (19) **Dáàba**?? / **Dáàbahi**?? / **Dáàbadoog**? -- **Dáàbadhaac**.
dáàba-? / **dáàba-hi**-? / **dáàba-dóòg** -- **dáàba-dhaa-c**
what-INTER / **what-3FT.INTER-INTER** / **what-SPEC** -- **what-NEG-DECL**
*What is it? / What could it be? / What could it be? -- It's nothing.*¹¹¹
- (20) **Hirí maaráàgi dáàba**??
 hirí maaráàgi **dáàba**-?
 this color **what-INTER**
What color is this one?

In content questions and indefinite statements, an absolutive S argument of an intransitive clause or an O argument of a transitive clause is indicated by the interrogative pronoun **dáàbawa**, as in (21). **Dáàbari** is used for ergative A arguments in transitive clauses, as in (22). The focus element of **dáàbawa** and **dáàbari** is always non-human.

- (21) **Dáàbawa náhgiwahxu**??
dáàba-wa ná-hgiwáhxu-?
what-FOC 2A-ask-INTER
What did you ask?
- (22) **Dáàbari nii'irídihee**??
dáàba-rí nii-irídee-hee-?
what-ERG 2B-frightened-3CAUS.DIR-INTER
*What (supernatural thing) scared you?*¹¹²

When **dáàba** occurs in conditional clauses with **-rúg** or concessive clauses with **-rús**, it functions as a nonassertive indefinite pronoun. In conditional clauses it is usually glossed as 'whatever' and in concessive clauses as 'anything'. Examples are (23) and (24).

- (23) **Dáàbarug "sáàgabarashda" haa**?ac.
dáàba-rúg sáàgabarashda héè-?a-c
what-COND shaagabarashda say-PL-DECL
Whatever it was, they called it "saagabarashda" (in reference to a seismographer).

¹¹¹ **Dáàbadhaac** *it is nothing* can also mean 'you are welcome'.

¹¹² Since all supernatural phenomena, including spirits, are non-human, they are referred to with **dáàba** *what*. The use of the ergative **dabéèri** in this example would imply that agent who did the scaring is a living person.

- (24) **Dáàbaacirus** mahéèrug aruwihabíc.
dáàba-aci-rúhsaa maa-hiri-rúg aru-m-ihabí-c
what-COMPR-CONC.COND 1A-do-COND IRR-1C-happy-DECL
*As long as I have **anything** to do, I'll be happy.*

Although the principal D-word referring to locations is **dóò** *to be where* (see 12.2.9), **dáàba** may also serve as a locative adverb when it is followed by one of the locative suffixes (see 16.1), as by **-hgua** in (25).

- (25) **Dóòhгаа** níwaarug eewágheedhaahe. **Dáàbaacigua** maagíhicgi.
dóò-hгаа ní-waa-rúg maa-ééhgee-dhaa-hee **dáàba-aci-hgua** maagí-hi-cgíí
where-LOC put-1CAUS.DIR-COND 1A-know-NEG-EMPH **what-COMPR-LOC** lie-IRR-PRES
I don't know where I put it (a book). It could be anywhere.

Several other verbs and nouns are derived from **dáàba**. The reflexive stem **dáàbaria** *to try to be somebody* in (26) is an example of verb derivation (for the reflexive **-ria** see 4.6.2).

- (26) **Miidáàbaria** íhgiwaadhaac.
mii-**dáàba-ria** íhgi-waa-dhaa-c
1B-what-REFL REFL-1CAUS.DIR-NEG-DECL
I'm not trying to be somebody.

Dáàba expresses indeterminate kinship when it is preceded by an alienable possessive prefix (see 8.1.1), as in (27) and (28).

- (27) **Magi'idadáàba'c.**
magi-ida-dáàba-'a-c
RECIP-3POS-what-PL-DECL
*They are related to each other.*¹¹³
- (28) **Niiwadadáàbac.**
nii-mada-dáàba-c
2B-1POS-what-DECL
You are my relative. (lit. You are my something.)

¹¹³ Another way to say this is **Magi'idaruxbáàga'c.** *They are each other people. (nuxbáàga people)*

Finally, when used in isolation and without any speech-act markers, **dáà!?** *What!?* is used as an exclamation (see 14.2) in response to someone’s attempt to get attention.

12.1.3 *agudóò* ‘which one’

The D-word *agudóò* *to be which one* is apparently derived by combining the relativizing prefix *agu-* with the locative D-word *dóò* *where*. In most contexts *agudóò* is freely interchangeable with *dabéè* *who* and *dáàba* *what*. However, while *dabéè* and *dáàba* have indefinite reference, the reference of *agudóò* *to be which one* is definite and implies that the choice is made from a limited number of explicit or implicit alternatives.

Agudóò is a stative verb that ascertains the referent’s identity, as in (29) and (30). An ergative argument in (31) is disambiguated with *agudóòri* and an absolutive argument in (32) with *agudóòwa*.

- (29) **Nii?agudóò??**
 nii-**agudóò**-?
 2B-**which.one**-INTER
Who are you?
- (30) **Mirá?? Híí mirabúú?? Agudóò??**
 mirá-? híí mirabúú-? **agudóò**-?
 tree-INTER or bush-INTER **which.one**-INTER
Is it a tree or a bush? Which one is it?
- (31) **Agudóòri Rose agu?a?ghúù??**
agu.dóò-rí Rose agu-a?g-húù-?
which.one-ERG Rose **REL-PORT-come**-INTER
Which one (of you) will bring Rose?
- (32) **Agudóòwa diríá??**
agudóò-wa diríá-?
which.one-FOC run-INTER
Which one is running?

In concessive conditional clauses with *-rúhsaa* and conditional clauses with *-rúg*, *agudóò* functions as an indefinite pronoun, glossed as ‘whichever one’. An examples is (33).

- (33) **Agudóòracirus** *núhca,* *dóʔhig hisí.*
agudóò-raci-rúhsaa *núhci-Ø* *dóʔhi-g- hisí*
 which.one-COMPR-CONC.COND take-IMP.SG blue-CRD red
Pick either one, blue or red.

Agudóò can be modified with postpositional suffixes, as in (34).

- (34) **Masagí** **agudóòru** *naagíʔ?*
ma-sààgi **agudóò-rú** *naagí-ʔ*
 1POS-hand **which.one-LOC** sit-INTER
Which hand do I have it in?

12.1.4 Incorporation of interrogative pronouns

Unlike other D-words, the interrogative pronouns *dáàbawa* *what*, *dabéèwa* *who*, and *agudóòwa* *which one* can be incorporated into the verb stem. The focus particle *-wa* is deleted in the incorporated form and the truncated pronominal stem and the verb form a single phonological word. The incorporation of interrogative pronouns is illustrated in (35)–(37).

- (35) **Dáàbeewahgeewa!**
dáàba-maa-ééhgee-wa
what-1A-know-EXCL
What do I know!
- (36) **Miiʔigúba** **iráʔaacihsa** **arudáàbaghi** **eewáhgeedhaac.**
mii-igúba *iréʔ-aci-hsaa* *aru-dáàba-ghí* *maa-ééhgee-dhaa-c*
 1B-together speak-COMPR-CONC REL-**what**-mean 1A-know-NEG-DECL
He’s talking to me but I don’t know what he is saying.
- (37) **Dabéèraghiʔ?** / **Agudóòraghiʔ?** -- **Macéé seʔwa** **maghíc.**
dabéè-ná-ghí-ʔ / **agudóò-ná-ghí-ʔ** -- *macéé seʔwa* *maa-ghí-c*
who-2A-mean-INTER / **which.one-2A-mean-INTER** -- *man* *that-FOC* *1A-mean-DECL*
Who do you mean? / *Which one do you mean?* -- *I mean that man.*

12.2 Proadverbial D-words

12.2.1 *dusáàci* ‘what kind’

Dusáàci *to be some way, be some kind* is a stative verb that is mostly used in questions. Examples are seen in (38)–(40). An indefinite interrogative pronoun, marked with the distributive suffix, is in (41).

- (38) *Maabí dusáàci*?
maabí **dusáàci**-[?]
day **what.kind**-INTER
How is the weather?
- (39) *Máàhdi dusáàci*?
máàhdii **dusáàci**-[?]
vehicle **what.kind**-INTER
What kind of car is it?
- (40) *Arumaaráàgi dusáàci*?
aru-maaráàgi **dusáàci**-[?]
REL-design **what.kind**-INTER
How is the color?
- (41) *Dusáàcisee né*?
dusáàci-sée n-é[?]-[?]
what.kind-DIST 2-possess-INTER
What kinds do you have?

12.2.2 *dáàwi* ‘how many’

Dáàwi *how many, how much* is a stative verb that refers to the number of both animate and inanimate entities. Examples are (42) and (43).

- (42) *Náàdiguda dáàwi*?
n'-aadigudá **dáàwi**-[?]
2POS-family.member **how.many**-INTER
How many people are there in your family?

- (43) **Idawàara dáàwi?** gireesáhgeewa?
 ida-máàraa **dáàwi-?** hgi-neesá-hgee-wa
 3POS-winter **how.many**-INTER GI-exist.not-3CAUS.INDIR-SIMULT
How old was he when he died?

The interrogative pro-adverb ‘how many, how much’ is derived from the stative verb **dáàwi** by conversion; i.e., without affixation. Interrogative-indefinite pro-adverbs in (44)–(46), like other quantifiers that are derived from stative verbs, function syntactically as noun phrase modifiers.

- (44) **Awaráàhxu dáàwi né??**
 awá-náàhxu **dáàwi** n’-é?-?
 land-acre **how.many** 2POS-possess-INTER
How many acres of land do you have?

- (45) **máàraa daawi éèrahaaru / éèrahahgua / éèrahahgugaa**
 máàraa **dáàwi** éè-nahaa-rú / éè-nahí-hgua / éè-nahí-hgua-hgaa
 winter **how.many** that-?-LOC / that-stand-LOC / that-stand-LOC-LOC
many years ago...

- (46) **Niidáàwi nárahuo??**
 nii-**dáàwi** nára-húù-²o-?
 2B-**how.many** 2A-come-PL-INTER
How many of you came?

In response to the question **iidáàwi??** *how many are there?* one answers with the appropriate ordinal number that is usually preceded by the instrumental prefix **ii-**, especially if the numeral is pluralized to emphasize that the group consists of individuals (see 4.2.2). The difference between **dáàwi** and **iidáàwi** requires further description, but the latter seems to be reserved for existential questions of the type ‘how many are there’. The difference between simple and instrumentalized cardinal numbers is described in more detail in section 13.1; an example of a question and answer with **iidáàwi** is given in (47).

- (47) **Aru?iidáàwi??** -- **Aru?iigihxúà?c.**
 aru-**ii**-dáàwi-[?] -- aru-**ii**-gihxú-[?]a-c
 IRR-INST-how.many-INTER -- IRR-INST-five-PL-DECL
How many will there be? -- *There will be five. (*They will be five.)*

Dáàwi *how many, how much* is homophonous with the stative verb **dáàwi** *to be deaf*. The latter occurs usually in a set phrase **ahgúxi dáàwi** that literally means ‘to have deaf ears’. The humorous exchange in (48) illustrates an attempt to deflect criticism by pretending not to understand what is meant.

- (48) **Náhuxi daawi??** -- **Núùbac. Hahsáá maa?iigigúàdhaa?iiruc.**
 n’-ahgúxi **dáàwi**-[?] -- núùba-c hahsáá maa-iigigúà-dhaa-íru-c
 2POS-ear **deaf / how.many-INTER** -- two-DECL but INDEF-hear-NEG-HAB.PL-DECL
Are you deaf? / How many ears do you have? -- *I have two but they don’t hear.*

12.2.3 *dahawíá* ‘how many times’

The interrogative-indefinite pro-adverb **dahawíá** *how many times* is an irregular multiplicative (see 13.2) form of **dáàwi** *how much, how many*. The only other word that follows a similar derivational pattern is **náàwii** *three* → **nahawíá** *three times*. Examples of usage are (49)–(52).

- (49) **Dahawíá** **arágaa??**
dahawíá ná-íгаа-[?]
how.many.times 2A-see-INTER
How many times did you see him?

- (50) **Dahawíá** **aradhî??** -- **Nuhbáá / nuhbáhaa awadhîc.**
dahawíá ná-adhî-[?] -- nuhbáá / nuhbáhaa maa-adhî-c
how.many.times 2A-camp-INTER -- twice / twice 1A-camp-DECL
How many times did you camp? -- *I camped twice.*

- (51) **Dahawíá** **eexí** **maaréèwihí** **eewáhgeedhaac.**
dahawíá eexí maa-néè-wihí maa-ééhgee-dhaa-c
how.many.times urinate 1A-go-1FT.INTER 1A-know-NEG-DECL
I don’t know how many times I have to go to pee!

- (52) **Dahawiahahgáà** **maaréèc.**
dahawíá hahgá-haa maa-néè-c
how.many.times-ABIL-ADV 1A-go-DECL
I went several times.

12.2.4 dóòsa ‘be how’

The stative verb **dóòsa** *to be how* is mostly used in formulaic greetings and other appropriate situations to inquire about someone’s health or general well being, as in (53) and (54). **Dóòsa**, like all other D-words that are stative verbs, is inflected with the B-set pronominal prefixes.

- (53) **Niidóòsa’?** -- **Cagíc.** / **Miiwaaruwádhaac.** / **Gíí maawahgúàcihe.**
nii-dóòsa-’ -- **cagi-c** / **mii-maa-nuwá-dhaa-c** / **gíí maa-mahgú-aci-he**
2B-how-INTER -- **good-DECL** / **1A-INDEF-some-NEG-DECL** / **oh 1A-be.at-COMPR-EMPH**
How are you? -- Good. / I am alright. / Oh, I’m somehow still hanging in there.

- (54) **Níraguas** **dóòsa’?** -- **Ixúà’re’c** **hahsá**
ní-iragúà-s **dóòsa-’** -- **ixúá-aré’-c** **hahsáá**
2POS-friend-DEF how-INTER -- **body-ache-DECL** **but**

giruuwaaruwádhaahisaacic.
hgi-nuwá-maa-nuwá-dhaa-hisa-aci-c
GI-some-INDEF-some-NEG-SIM-COMPR-DECL

How is your friend? -- He is sick but he is feeling kind of better.

Dóòsa functions as a manner adverb in coordinate clauses with **-g** and conditional concessive clauses with **-rúhsaa**. In the first case, in (55), it is translated as ‘somehow, barely’ and in the second case in, in (56), as ‘later’. **Dóòharus** *later, whenever* in (57) is either a variant or a close synonym of **dóòsarus**.

- (55) **Dóòsag** **mahgirahíc** **giraagudhééhe.**
dóòsa-g **maa-hgi-nahí-c** **giraagudhéé-hee**
how-CRD 1A-GI-get.up-DECL **morning-this**
I barely got up this morning.

- (56) **Dóòsaruhśaa** aruwaaréèc.
dóòsa-rúhśaa aru-maa-néè-c
 how-CONC.COND IRR-1A-go-DECL
I will go later.
- (57) **Dóòharus** aruwiréèrag gúúç.
dóòharus aru-miréèri-g gúú-c
whenever IRR-enter-CRD come.back-DECL
He will come back in sometime later.

12.2.5 *dóòhsee* ‘be the matter’

The stative verb *dóòhsee* *to be the matter* is used only in the third person singular. An example is (58).

- (58) **Dóòhsee**?? Nii’áhgageexiria’? -- Garíísdhaa!
dóòhsee-? nii-hgi-ààg-eexí-ria-? -- garísdhaa
matter-INTER 2B-GI-LOC-urinate-REFL-INTER -- little
What the matter? Did you pee on yourself? -- Just a little (jokingly).

12.2.6 *dóòhśaa*, *dóòhśahaa*, *dóòhseehisa* ‘how’

Dóòhśaa, *dóòhśahaa*, and *dóòhseehisa* are adverbial D-words that mean ‘how’. They occur mostly as interrogative pro-adverbs, as in (59)–(61), although they may also introduce nominal relative clauses, as in (62).

- (59) **Dóòhseehisa** / **Dóòhśahaa** náhee’? -- Íàśaa.
dóòhseehisa / **dóòhśahaa** ná-hirí-? -- íà.saa
how / **how** 2A-do-INTER -- like.that
How did you do it? -- Like that.
- (60) **Náàhdu** **dóòhśahaa** írighiraa’?
 ná-ahdúù **dóòhśahaa** írigi-hiraa-?
 2POS-head **how**-ADV hit.by.throwing -2CAUS.DIR-INTER
How did you bump your head?
- (61) **Nuxbààga**?he **dóòhśaa** maawahàà maaghéèwihí’?
 nuxbààga-²a-hee **dóòhśaa** maa-maa-hirí-Ø maa-gahéè-wihí-?
 people-PL-this **how** 1A-do-CONT 1A-give.to.group-1FT.INTER-INTER
What shall I do for these people?

- (62) **Madadáàbac. Dóòhseehisa aruwadadáàba eewáhgeedhaac.**
 mada-dáàba-c **Dóòhsee-hisá** aru-mada-dáàba maa-ééhgee-dhaa-c
 1POS-what-DECL **how-SIM** REL-1POS-what 1A-know-NEG-DECL
He is my something. I don't know how he is related to me.

12.2.6.1 *dóòhsee* 'do what' and *dóòhsahee* 'do how'

The verb *dóòhsee* *to do what* is derived by combining direct causative suffixes with the stative stem *dóòhsee* *to be the matter*. The third person form is derivationally irregular (**dóòhsee*).

Another verb, *dóòhsahee* *to do how*, is derived in the same manner from the *dóòhsaa* *how*.

Inflectional paradigms of the two causative stem are given in TABLE 12.2 and examples are (63)–(66).

TABLE 12.2. INFLECTION OF *dóòhsee* 'TO DO WHAT' AND *dóòhsahee* 'TO DO HOW'

	<i>dóòhsee</i> <i>to do what</i>	<i>dóòhsahee</i> <i>to do how</i>
3SG	<i>dóòhsee</i> [?]	<i>dóòhsahee</i> [?]
1SG	<i>dóòhsewaa</i> [?]	<i>dóòhsawaa</i> [?]
2SG	<i>dóòhseraa</i> [?]	<i>dóòhsaraa</i> [?]

- (63) **Harúg níhgii, arudóòhseraa[?]?**
 harúg n-íhgii **aru-dóòhsee-raa-[?]**
 and 2-PRO IRR-do.what-2CAUS.DIR-INTER
And you, what will you do?

- (64) **Dóòhsawaawihoo[?]?**
dóòhsee-waa-wihi-[?]o-[?]
do.how-1CAUS.DIR-1FT.INTER-PL-INTER
How shall we do it?

- (65) **Áàdarug dóòhsaheerus aruwaahúhe.**
 áàda-rúg **dóòhsahee-rúhsaa** aru-maa-húù-hee
 daylight-COND **do.how-CONC.COND** IRR-1A-come-EMPH
I will come tomorrow no matter what.

- (66) **Madawáàhdi dahdahsíhgeec dóòhseerug.**
 mada-máàhdii dahdahsí-hgee-c **dóòhsee-rúg**
 1POS-vehicle slap.REDUP-3CAUS.INDIR-DECL **do.what-COND**
For some reason my car is making a slapping sound.

12.2.7 *dóòhseewa* ‘why’

Dóòhseewa *why, how come* is an interrogative pro-adverb. It is derived by adding the focus particle *-wa* to the stative D-word *dóòhsee* *to be the matter* (see 12.2.5). *Dóòhseewa* is used in *wh*-questions where the focus element of question is the reason, as in the questions in (67) and (68). It can also introduce a nominal relative clause, as in the answer to the question in (68).

- (67) *Dóòhseewa* *níreʔdhaaʔ?* -- *Mîi* *areʔc.*
dóòhsee.wa *nʼ-iréʔ-dhaa-ʔ* -- *m-îi* *aréʔ-c*
why 2POS-speak-NEG-INTER -- 1POS-mouth ache-DECL
Why are you not speaking? -- *I have a toothache.*
- (68) *Dóòhseewa* *miirárigiʔ?* -- *Dóòhseewa* *ooriiwaarigi* *eeráhgeec.*
dóòhsee.wa *mii-ná-nigi-ʔ* -- *dóòhsee.wa* *aru-nii-maa-nigi* *ná-ééhgee-c*
why 1B-2A-hit-INTER -- *why* REL-2B-1A-hit 2A-know-DECL
Why did you hit me? -- *You know why I hit you.*

12.2.8 **dúàhga* ‘when’

**Dúàhga* *when* is a bound root that occurs only with clause-final and adverbial suffixes.

Like other Siouan languages, Hidatsa has distinct forms of ‘when’ that distinguish between realized (or realis) past events and unrealized (or irrealis) future and hypothetical events.

Questions about the future and unrealized or hypothetical events are formed by combining **dúàhga* *when* with the irrealis conditional suffix *-rúg* (see 17.4.1.2), as in (69)–(71). The main verb has to be marked with the irrealis prefix *aru-* / *oo-* (see 6.5.3) or one of the future tense suffixes (see 6.5.2). The same irrealis prefixes or future suffixes are used in the answer. If the answer is a verbless sentence, it is marked for irrealis by other means, such as with the abilitative suffix *-hahgá* in (70) or the conditional suffix *-rúg* in (71).

- (69) **Dúàhgarug** oorúusaa'oo'??
dúàhga-rúg aru-núusaa-²o-²
when-COND IRR-abandon-PL-INTER
When will he be buried?
- (70) **Dúàhgarug** ooráraghi'?? -- **Maabí** nuubahaghaa.
dúàhga-rúg aru-nára-gíi-² -- maabí núùba-hahgá-háà
when-COND IRR-2A-get.back-INTER -- day two-ABIL-ADV
When will you get back? -- In about two days.
- (71) **Dúàhgarug** ooráree'?? -- **Máàraarug** sia'gháà.
dúàhga-rúg aru-ná-néè-² -- máàraa-rúg se'²gháà
when-COND IRR-2A-go-INTER -- winter-COND that-ADV.TEMP
When will you go? -- Not until winter.

Past (realis) events are referred to by combining ***dúàhga** *when* with the past suffix **-si** and the temporal-locative suffix **-rú** (see 17.4.1.1). Questions with **dúàhgasiru** *when* are in (72) and (73).

- (72) **Dúàhgasiru** náraghi'??
dúàhga-si-rú nára-gíi-²
when-PAST-TEMP 2A-get.back-INTER
When did you get back?
- (73) **Dúàhgasiru** nú'sia'?? -- **Oorigí** núùbas se'²ru mú'siac.
dúàhga-si-rú n-ú'sia-² -- aru-nígí núùba-s se'²rú m-ú'sia-c
when-PAST-TEMP 2A-arrive-INTER -- REL-hit two-DEF that-LOC 1A-arrive-DECL
When did you get here? -- I got here at two o'clock.

When ***dúàhga** forms a concessive clause with **-rúhsaa**, as in (74) and (75), it functions as an indefinite temporal pro-adverb that can be glossed as ‘anytime’. The same is true of the conditional clauses that are followed by the adverbial **sia'gháà** *not until then*, as in (76), where the indefinite pro-adverb translates as ‘sometime’.

- (74) **Dúàhgarug** aruhîi'?? -- **Dúàhgarus** aruhîc.
dúàhga-rúg aru-hîi-² -- **dúàhga-rú-hsaa** aru-hîi-c
when-COND IRR-get.here-INTER -- **when-TEMP-CONC** IRR-get.here-DECL
When will he be here? -- He will be here anytime.

(75) **Maadúàghaacirus** náàsi hirag ooraagí aru?iraagháá?ac.
 maa-**dúàhga-háà-aci-rú-hsaa** náàsi hirí-g aru-naagí aru-iraagá-héé-?a-c
 INDEF-**when**-ADV-COMPR-TEMP-CONC name-make-CRDREL-clan IRR-child-CAUS.DIR-PL-DECL
Later on they will name him and the clan will adopt him.

(76) **Dúàhgarug** sia?gháà.
dúàhga-rúg se?gháà
when-COND that-ADV.TEMP
Not until sometime later.

The time adverb **dúàghaa** *whenever*, which is derived with the adverbial suffix **-háà** (see 15.2.1), is an initial marker of subordination in conditional clauses that are formed with **-rúg** (see 17.4.1.2) and generic temporal clauses with **-rú** (see 17.4.1.1). Examples are in (77)–(79).

(77) **Dúàghaa** náwaaheerug húj!
dúàhga-háà ná-wa?íihee-**rúg** húù-Ø
when-ADV 2A-want-**COND** come-IMP.SG
Come whenever you want to!

(78) **Dúàghaa** miháàrirug aruwaaghúc.
dúàhga-háà m-iháàri-**rúg** aru-maa-gúú-c
when-ADV 1C-finish-**COND** IRR-1A-come.back-DECL
Whenever I have finished, I will be back.

(79) **Masúàgaasas** iicixá háhgu?iic
 masúga-gáàsa-DEF ii-cih-cixí-Ø háhgu-íi-c
 dog-DIM INST-REDUP-jump-CONT be.around-HAB.SG-DECL

daadís **dúàghaa** giirú.
 daadí-s **dúàhga-háà** gíi-rú
 dad-DEF **when-ADV** return-TEMP

The puppy is always hopping whenever dad comes home.

12.2.9 **dóò** ‘where’

Dóò *where* refers to location. It may occur as an independent word or in combination with postpositional suffixes (see 16.1). A representative list of the most commonly encountered

combinations of **dóò** with postpositional suffixes is given in (80). Note that only the location suffix **-hguá** is not used with **dóò** and vowel deletion before **-hguá** is optional.

(80)	dóò	<i>where</i>	
	dóòru	<i>where</i>	< - rú LOC
	dóòhguá / dóhguá	<i>where</i>	< - hguá LOC
	dóòhguáru / dóhguáru	<i>where</i>	< - hguá LOC, - rú LOC
	dóhdaa	<i>where to</i>	< - hdaa GOAL
	dóòhghahaag	<i>where from</i>	< - hghahaag SOURCE
	dóòruhaag	<i>where from</i>	< - rúhaag SOURCE
	dóòruhaa	<i>which way, where</i>	< - rú LOC, - haa PATH
	dóhghahaa	<i>which way, where</i>	< - hguá LOC, - haa PATH
	dóòrusee	<i>which places</i>	< - rú LOC, - séè DIST
	dóhgaasee	<i>which places</i>	< - hguá LOC, - séè DIST

Dóò is a stative verb and occurs without locative suffixes when it is immediately followed by the interrogative speech act marker **-ʔ**, as in (81a). Postpositional suffixes are obligatory when **dóò** is an interrogative pro-adverb, as in (81b).

(81)	a.	Madahbíisahacgaʔs	dóòʔʔ	
		ma-huubá-íisa-hacgí-ʔa-s	dóò-ʔ	
		1POS-shoe-ankle-long-PL-DEF	where-INTER	
		<i>Where are my high-top moccasins?</i>		
	b.	Maciʔàgadeʔhaaʔas	dóòru	gaa(ʔa)ʔʔ
		ma-icí-ààga-adéʔ-hee-ʔa-s	dóò-rú	gáá(-ʔa)-ʔ
		1POS-foot-top-appear-3CAUS.DIR-PL-DEF	where-LOC	lie.PL(-PL)-INTER
		<i>Where are my low-top moccasins?</i>		

Like other D-words, **dóò** (in combination with postpositional suffixes) may introduce subordinate clauses, as in (82) and (83).

(82)	Dóòruhaa	néerus	awáàbasic.
	dóò-rú-haa	néè-rúhsaa	maa-ààb-así-c
	where-LOC-PATH	go-CONC.COND	1A-COM-travel-DECL
	<i>Wherever he went I followed.</i>		

- (83) **Dóòhgaá** háhgurug eewáhgeedhaac.
dóò-hgaá háhgu-rúg maa-ééhgee-dhaa-c
where-LOC be.around-COND 1A-know-NEG-DECL
I don't know where he is.

Finally, **dóò** serves as the base for deriving various clausal adverbials, such as the concessive (**maa**)**dóhdaarus** *anyway, in any old way* in (84) and (85). The set phrase **maadóòrus hirí** in (86) means ‘to be reckless’ and **dóò’icghaa** in (87) is a derivationally unusual adverb that means ‘in any direction’.

- (84) **Dóhdaarus** déèhic.
dóò-hdaa-rúhsaa déè-hi-c
where-GOAL-CONC.COND die-3FT.SG-DECL
He will die anyway.
- (85) **Maa’ooruudí** **dóhdaarus** hiríc.
maa-arú-nuudí **dóò-hdaa-rúhsaa** hirí-c
INDEF-REL-eat **where-GOAL-CONC.COND** make-DECL
He cooked food in any old way.
- (86) **Maadóòrus** hiríc.
maa-dóò-rúhsaa hirí-c
indef-where-CONC.COND do-DECL
He is reckless (i.e., he would do anything crazy).
- (87) **Tuffy** **dóò’icghaa** diria’fíc.
Tuffy **dóò-icgí-haa** diría-îi-c
Tuffy **where-fit-PATH** run-HAB.SG-DECL
Tuffy always runs in any direction / runs amok.

13 Numerals

The Hidatsa numeral system is based on a decimal system. When used predicatively, numerals are inflected as stative verbs whereby the first and second person are indicated with the B-set pronominal prefixes.

13.1 Cardinal numbers

Hidatsa numerals from ‘one’ to ‘seven’ and ‘ten’ are monomorphemic stems. Two basic numerals, *núùbahbi* *eight* and *nuwácahbi* *nine*, are derived by suffixing *-hbi* to ‘two’ and ‘one’, respectively. Although *-hbi* has no known synchronic meaning, its diachronic meaning in *núùbahbi* and *nuwácahbi* is probably ‘less’, as in ‘less two’ and ‘less one’ (from ten), respectively.¹¹⁴

The cardinal numbers from ‘one’ to ‘ten’ are listed in TABLE 13.1.

TABLE 13.1. CARDINAL NUMBERS ‘ONE’ TO ‘TEN’

<i>nuwáca</i>	<i>one</i>
<i>núùba</i>	<i>two</i>
<i>náàwii</i>	<i>three</i>
<i>doobá</i>	<i>four</i>
<i>gihxú</i>	<i>five</i>
<i>agaawá</i>	<i>six</i>
<i>sáhbua</i>	<i>seven</i>
<i>núùbahbi</i>	<i>eight</i>
<i>nuwácahbi</i>	<i>nine</i>
<i>biragá</i>	<i>ten</i>

¹¹⁴ In the contemporary language, *-hbi* is an abstract instrumental root whose basic meaning is ‘to chip something off’. Combinations of *-hbi* with instrumental prefixes include *núhbi* / *báhbí* / *nahbí* *to chip sth off*, *náhbí* *to bite sth off*, and *arahbí* *to knock sth off with the foot*.

The suffix *-hbi* is also found in several fossilized verb and noun stems: *mirihbí* *to bathe* (*mirí* *water*), *dibíhbi* *swamp* (*dibíà* *mud*), *máàhbi* *to snow* (*máà* *snow*), *isúhbi* *to molt* (*isú* *feather*), *hiirahbí* *to be slow* (*hiirá* *to be difficult*), and *cihdáhbi* *dusk* (*cihdá* ?). The word *isdáhbi* *eyebrow, eyelash* is actually a compound of *isdá* *eye* and *abí* *corn tassel*.

Cardinal numbers from ‘eleven’ to ‘nineteen’ comprise the verbal stem *axbí* *to be left over, remain* and one of the cardinal numbers from one to nine. In normal rate of speech the second syllable of *axbí* is accented and the following numeral is pronounced with low pitch. However, in slow, enunciated speech, neither of the two syllables in *axbí* is accented and the pitch becomes low after the first accented mora in the numeral component of the compound. In the numeral *áxbagaawa* *sixteen* the final vowel of *axbí* is deleted and the accent shifted to the first syllable. The pitch-accent pattern of *áxbagaawa* *sixteen* does not vary in slow and normal speech.

The cardinal numbers from ‘eleven’ to ‘nineteen’ are listed in TABLE 13.2.

TABLE 13.2. CARDINAL NUMBERS ‘ELEVEN’ TO ‘NINETEEN’

NORMAL RATE OF SPEECH	ENUNCIATED SPEECH	
<i>axbíruwaca</i>	<i>axbiruwáca</i>	<i>eleven</i>
<i>axbíruuba</i>	<i>axbirúuba</i>	<i>twelve</i>
<i>axbíraawi</i>	<i>axbiráàwi</i>	<i>thirteen</i>
<i>axbídooba</i>	<i>axbidoobá</i>	<i>fourteen</i>
<i>axbíghxu</i>	<i>axbigihxú</i>	<i>fifteen</i>
<i>áxbagaawa</i>	<i>áxbagaawa</i>	<i>sixteen</i>
<i>axbíahbua</i>	<i>axbisáhdua</i>	<i>seventeen</i>
<i>axbíruubahbi</i>	<i>axbirúubahbi</i>	<i>eighteen</i>
<i>axbíruwacahbi</i>	<i>axbiruwácahbi</i>	<i>nineteen</i>

Numerals often occur as quantifiers in noun phrases after the head noun, as in (1). They may also occur in headless noun phrases, in which case they function as pronouns, as in (2).

- (1) *Miricigúà nuwáca móg!*
mirí-cigúà nuwáca m-gú²-Ø
 water-sweet **one** 1B-give-IMP.SG
Give me a soda!
- (2) *Nuwáchiri nuuhdáha!*
nuwáca-rí nuudí-‘hi-Ø
one-ERG eat-MOM-IMP.SG
Someone eat it up!

When used predicatively, numerals are inflected like stative verbs. The predicative use is illustrated in (3) with a simple sentence and in (4) with two coordinated clauses.

- (3) **Masagí arucaawí biragác.**
 ma-sáàgi aru-caawí **biragá-c**
 1POS-hand REL-branch **ten-DECL**
I have ten fingers.
- (4) **Madawíà nuwácag macuugá nuwácac.**
 mada-míà **nuwáca-g** ma-icuugá **nuwáca-c**
 1POS-woman **one-CRD** 1POS-younger.brother **one-DECL**
I have an older sister and a younger brother.

In response to the question *iidáàwi?* 'how many are there?' (see 12.2.2), one answers with the appropriate cardinal number that is usually preceded by the instrumental prefix *ii-*, especially if the numeral is pluralized to stress that the group consists of individuals (see 4.2.2). Two cardinal numbers, *núùba* 'two' and *náàwii* 'three', have irregular forms when combined with the instrumental prefix: *iirúba* 'two' and *iiráwi* 'three'. Examples are given in (5).

Example (6), which comprises instrumentalized numerals, is an answer to a question "How many siblings do you have?" Contrast this with the lack of instrumental prefixes in (4), which is an answer to a question "Who do you have in your family?"

- (5) **iidáàwi?** -- **iiráwa?c.** -- **ii?agaawá?c.** -- **iirúùbahbic.**
ii-dáàwi-? -- **ii-náàwii-?a-c** -- **ii-agaawá-?a-c** -- **ii-núùbahbi-c**
INST-how.many-INTER -- **INST-three-PL-DECL** -- **INST-six-PL-DECL** -- **INST-eight-DECL**
How many are there? -- *There are three.* -- *There are six.* -- *There are eight.*
- (6) **Macuugá iirúba?c. Madaagú iigihxúà?c.**
 ma-icuugá **ii-núùba-?a-c** ma-idaagú **ii-gihxú-?a-c**
 1POS-younger.brother **INST-two-PL-DECL** 1POS-older.sister **INST-five-PL-DECL**
I have two younger brothers. I have five younger sisters.

The instrumental prefix *ii-* seems to be used mostly for existential statements of the type ‘there are’. Contrast, for example, a simple predicative numeral in (7a) with the same numeral in (7b), where it is preceded by the instrumental prefix *ii-*, that forms an existential statement.

- (7) a. *Gihxúàʔc.* *They are five.*
 b. *liihxúàʔc.* *There are five.*

The instrumental prefix can also precede demonstratives of quantity, as demonstrated in examples (8) and (9).

- (8) *lisiʔawáʔc.*
ii-siʔawí-ʔa-c
 INST-that.many-PL-DECL
There are that many! (speaker indicating the number by using his fingers)
- (9) *lisiʔawí* *nááhaʔʔ*
ii-siʔawí *nááhi-ʔa-ʔ*
 INST-that.many 3go.PL-PL-INTER
Is that how many went?

13.2 Multiplicative and decimal numbers

Multiplicative numbers, which indicate how many times an action occurs, are formed by adding the adverbial suffix *-haa* to the cardinal number. The derivation of multiplicatives from one to four is irregular and the multiplicative of ‘three’ suppletive. The second mora in heavy syllables is deleted before the adverbial suffix.

The succeeding decades of cardinal numbers are formed by combining multiplicatives, listed in TABLE 13.3, with *biragá* *ten*. The literal meaning of the derived form is ‘X times ten’. The derivation of ‘twenty’ and ‘thirty’ is accompanied by accent shift to the first syllable. Note that every decade number from ‘twenty’ to ‘ninety’ comprises a single phonological word and

two grammatical words. They are written as a single orthographic word to indicate a prosodic domain with only one surface accent.

TABLE 13.3. MULTIPLICATIVE NUMBERS AND DECIMALS

MULTIPLICATIVE NUMBERS		DECIMAL NUMBERS	
<i>nuwahcáà / nuwahcáhaa</i>	<i>once</i>		
<i>nuhbáà / nuhbáhaa</i>	<i>twice</i>	<i>núhbaabiraga</i>	<i>twenty</i>
<i>nahawíá</i>	<i>three times</i>	<i>náhawiabiraga</i>	<i>thirty</i>
<i>dohbáà, doobáhaa</i>	<i>four times</i>	<i>dohbáàbiraga / dohbáhaabiraga</i>	<i>forty</i>
<i>gihxúhaa</i>	<i>five times</i>	<i>gihxúhaabiraga</i>	<i>fifty</i>
<i>agaawáhaa</i>	<i>six times</i>	<i>agaawáhaabiraga</i>	<i>sixty</i>
<i>sáhbuhaa</i>	<i>seven times</i>	<i>sáhbuhaaabiraga</i>	<i>seventy</i>
<i>núùbahbihaa</i>	<i>eight times</i>	<i>núùbahbihaabiraga</i>	<i>eighty</i>
<i>nuwácahbihaa</i>	<i>nine times</i>	<i>nuwácahbihaabiraga</i>	<i>ninety</i>
<i>biragáhaa</i>	<i>ten times</i>		

An example with multiplicative numbers is in (10), and decimal cardinal numbers in (11) and (12).

- (10) *Dahawíá náreeʔʔ -- Nahawíá / biragáhaa maaréèc.*
dahawíá ná-néè-ʔ -- nahawíá / biragá-haa maa-néè-c
how.many.times 2A-go-INTER -- three.times / ten-ADV 1A-go-DECL
How many times did you go? -- I went three times / ten times.

- (11) *Awaráàhxu núùbahbihaabiraga méʔc.*
awá-náàhxu núùbahbi-haa-biragá m-éʔ-c
land-acre two-ADV-ten 1A-own-DECL
I have 80 acres of land.

- (12) *Madawáàra náhawiabiraga maagsihbáhic.*
mada-máàraa náhawia-biragá maa-nagsibí-ʔhi-c
1POS-winter thrice-ten 1A-pass-MOM-DECL
I'm a little over 30 years old.

13.3 Ordinal numbers

Ordinal numbers, given in TABLE 13.4, are formed with the instrumental prefix *ii-*. The derivation of ordinals from one to four is irregular and the form ‘first’ suppletive.

TABLE 13.4. ORDINAL NUMBERS ‘FIRST’ TO ‘TENTH’

îcihga / iicîhga	<i>first</i>
iiruhbàà	<i>second</i>
iirahawíá	<i>third</i>
iidojbáà	<i>fourth</i>
iigihxú	<i>fifth</i>
ii?agaawá	<i>sixth</i>
iisáhbua	<i>seventh</i>
iirúùbahbi	<i>eighth</i>
iiruwácahbi	<i>ninth</i>
iibiragá	<i>tenth</i>

Ordinal decimal numbers are formed by prefixing the instrumental *ii-* to the stem, as in (13).

- (13) **Maabí iirúhbaabiragac.**
 maabí **ii-nuhbáà-biragá-c**
 day INST-twice-ten-DECL
It's the 20th.

When inflected for person, the pronominal prefix follows the instrumental prefix *ii-*:

- (14) **liwiisáhbua.**
ii-mii-sáhbua-c
 INST-1A-seven-DECL
I'm the seventh one.

13.4 Complex and large numbers

Numbers between decimals are formed by adding the coordinative suffix *-g and* to the decimal and the desired cardinal number from one to nine. Examples are given in (15) and (16).

- (15) **núhbaabiragag núùba** 22 (lit. *twenty and two*)
náhawiabiragag nuwáca 31 (lit. *thirty and one*)
nuwácahbihaabiragag náàwi 93 (lit. *ninety and three*)
- (16) **Madawáàra gihxúhaabiragag sáhbua.**
 mada-máàraa **gihxúhaa-biragá-g sáhbua-c**
 1POS-winter **five-ADV-ten-CRD seven-DECL**
I'm 57 years (winters) old.

The word for ‘hundred’ is *biragihdíà* (*biragá ten + ihdíà big*) and ‘thousand’ *áhgagoori* (*ág- LOC, hgi- GI, óòri be complete*). *Biragihdíà* and *áhgagoori* precede other numerals without the coordinative suffix *-g* in complex numerals.

Multiples of hundreds and thousands are formed with cardinal numbers from ‘one’ to ‘nine’ that directly follow ‘hundred’ and ‘thousand’. The absence of the coordinative suffix *-g* suggests that perhaps it is better to consider large numerals compounds; however, the bond between ‘hundred’ and ‘thousand’ and what follows seems to vary freely. Compounding appears to be optional and in many cases the cardinal numbers that follow these two words retain their own accent (and are therefore independent phonological words in apposition to ‘hundred’ and ‘thousand’). This free variation is reflected in the examples in (17) and (18), where some forms are compounds (identified by the single accent) and others are phrases of independent words.

(17)	<i>biragihdíà</i>	<i>a hundred</i>
	<i>biragihdíà nuwáca</i>	<i>100</i>
	<i>biragihdíà núùba</i>	<i>200</i>
	<i>biragihdíàruuba</i>	<i>200</i>
	<i>biragihdíàdooba</i>	<i>400</i>
	<i>biragihdíà nuwácag dohbáàbiragag gihxú</i>	<i>145</i>
	<i>biragihdíàraawiig agaawáhaabiragag núùbahbi</i>	<i>368</i>
(18)	<i>áhgagoori</i>	<i>a thousand</i>
	<i>áhgagoori nuwáca</i>	<i>1,000</i>
	<i>áhgagoori núùba</i>	<i>2,000</i>
	<i>áhgagoorigihxu</i>	<i>5,000</i>
	<i>áhgagoori biragá</i>	<i>10,000</i>
	<i>áhgagooribiraga</i>	<i>10,000</i>
	<i>áhgagoori náhawiabiraga</i>	<i>30,000</i>
	<i>áhgagoori biragihdíà</i>	<i>100,000</i>
	<i>áhgagoori biragihdíàruwaca</i>	<i>100,000</i>

An example with a large number is in (19).

- (19) **Íhsi biragihdià gihxúhaabiraga mahguucíc.**
 íhsi **biragá-ihdià gihxúhaa-biragá** maa-hguuci-c
 bag **ten-big five-ADV-ten** 1A-get.back-DECL
I got back a hundred fifty bags (of wheat, after the planting).

13.5 Other quantifiers

Quantifiers other than numerals form a morphologically heterogeneous class of words and affixes. All non-affixal quantifiers, including numerals, are inflected with B-set prefixes as stative verbs. Some of the most common Hidatsa quantifiers are listed in (20).

- | | | |
|------|--------------------|-------------------|
| (20) | ahú | <i>many, much</i> |
| | goʔsdá | <i>a few</i> |
| | siʔawí | <i>that many</i> |
| | garísdhaa | <i>a little</i> |
| | -ca | <i>all, every</i> |
| | éèca | <i>all, every</i> |
| | nuwa / nuu- | <i>some</i> |
| | -hcági | <i>only</i> |
| | -hdaa | <i>only</i> |

The first three quantifiers are derived by zero derivation from the stative verbs **ahú** *to be many, much*, **goʔsdá** *to be a few, a little*, and **siʔawí** *to be that many, that much*. **Garísdhaa** *a little* is only attested as an adverb. **Éèca** *all, every* is a frequently used free pronoun whereas the synonymous suffix **-ca** is encountered relatively seldom. **Nuwa / nuu-** *some* occurs both as a prefix and a suffix (see 15.2.5 for details). The limitive suffix **-hcági**, which also derives denominal stative verbs (see 4.11.3), and the instrumental-goal suffix **-hdaa** (see 16.1.2.1) can be used as restrictive quantifiers that are usually glossed as ‘only’.

Quantifiers always follow the noun phrases they modify, as illustrated with sentences (21)–(24).

- (21) **Mú'siawa** **masî'adi** **ahú** awágaac.
 m-ú'sia-wa masî-adí **ahú** maa-ígaac-c
 1A-arrive-SIMULT white.man-lodge **many** 1A-see-DECL
When I arrived I saw a lot of houses.
- (22) **Húba go'sdá** mahéèc.
 húba **go'sdá** maa-hirí-c
 soup **few** 1A-make-DECL
I made a little soup.
- (23) **Maa'ooruudí èèca** gihhénga!
 maa-arú-nuudí **èèca** hgi-bhéè-hgee-Ø
 INDEF-REL-eat **all** GI-eat.up-3CAUS.INDIR-IMP.SG
Make him eat up all the food!
- (24) **Masîhcaghaa** **iré'c.**
 masî-**hcági**-haa iré'-c
 white.man-LIM-ADV speak-DECL
He speaks only English.

Most independent quantifiers may also occur in headless noun phrases, in which case they function as pronouns. Pronouns of quantity can optionally be rendered indefinite with the prefix *maa-*, as in (25).

- (25) **Maa'éèca** ééhgeeriahgee'iic.
maa-èèca ééhgee-ria-hgee-îi-c
INDEF-all know-REFL-3CAUS.INDIR-HAB.SG-DECL
He pretends to know everything.

14 Exclamations

In Hidatsa, exclamations are defined as the only category of speech events that, with a few exceptions, are not marked with illocutionary suffixes (see 6.1). Exclamations should not be confused with the exclamative speech-act, described in 6.1.1.4.

There are five types of exclamations in Hidatsa: interjections (14.1), exclamatory phrases (14.2), exclamatory statements (14.3), vocatives (14.4), and onomatopoeias (14.5). Exclamatory statements are the only type of exclamations that are marked with illocutionary suffixes, which usually identify them as statements, but whose meaning is always exclamatory. Many exclamations occur both as exclamatory phrases and exclamatory statements.

Most exclamations occur as isolated utterances that may be followed by clarifying speech events.

The combinatory power of exclamations in morpho-syntactic constructions varies, but is usually extremely limited. The only complex environment that allows interjections and onomatopoeic expressions is quoted speech. Vocative forms of kin terms are usually inalienably possessed and vocative nicknames may also occur as noun phrases. Exclamatory phrases and statements may be marked with pronominal prefixes.

Although discourse markers, such as *hawaʔiʔáá* *well, hmm...* and *harúg* *and then*, are also relatively independent of syntax, as indicated by the absence of illocutionary suffixes, their main function is to shift attention to another topic and therefore do not belong to the domain of exclamations.

14.1 Interjections

Interjections are exclamations that are used to express a speaker's emotional reaction, such as surprise and disgust, or to attract some other person's attention. Some interjections have phonological features that otherwise do not occur in Hidatsa, such as high-low-high pitch contour in a single phonological word.

Several interjections offer examples of otherwise uncommon gendered speech in Hidatsa; however, speakers do not always agree whether a particular interjection is used mostly by men or women. Variation in gendered usage is also influenced by other factors, such as playfulness or role shifting.

There are two classes of types of interjections. The first type comprises expressive interjections, or vocal gestures that are indicative of the speaker's mental state with respect to the emotions or sensations at a particular moment (Ameka 1999: 214). Typical members of this class include expressions that are uttered in reaction to physical stimuli.

The following interjections are used to express pain:

- **áàgsu!** *ouch!* (exclamation of pain used by women)¹¹⁵
- **háuu!** *ouch!* (exclamation of pain used by men)

The following interjections are used to express disgust or contempt:

- **síh!** *gee!* (derogative exclamation)
- **dhéè!** [dhææ] *darn!* (used mostly by men)
- **héè!** [hææ] *darn!* (used mostly by men)

- (1) **Síh!** Masîgaadic.
sii masî-gáádi-c
gee white.person-VER-DECL
Gee, he's a real whiteman!

¹¹⁵ **Áàgsu** is homophonous with the singular imperative form of **áàgsua** *to spit on sth.* A common humorous response to somebody saying **Áàgsu!** *Ouch!* (or *Spit on it!*) is **Dóòru awáàgsua??** *Where shall I spit?*

- (2) **Dhée / Héè! He[?]sáwaree[?].**
dhée / héè he[?]sá-waree-[?]
darn be.SO-EVID-INTER
Oh, that's what / how it is. [(d)hææ he[?]sawarææ]

The following interjections are used to express emphatic feelings:

- **î!** *oh!*
- **gî!** *oh!*
- **éè!** *oh!*
- **hî!** *oh!* (used by women)
- **xî!** *oh!* (used by men)

- (3) **î, maa[?]ooreesá!**
î maa-arú-neesá
oh INDEF-REL-exist.not
Oh, no way!

- (4) **Ee, miihacúùdiria wareec.**
ee mii-hacúùdi-ria waree-c
oh 1B-slit-REFL EVID-DECL
Oh, my! I've got cut somehow!

- (5) **Híí maagihdíà! Arudóòhswaa[?]oo[?]!**
hî maa-agu-ihdíà aru-dóòhsee-waa-[?]o-[?]
oh INDEF-REL-big IRR-how-1CAUS.DIR-PL-INTER
Oh my god, what are we going to do!

The following interjection is used to express relief:

- **huhsáà!** *oh dear! oh, my!*
- (6) **Huhsáà, miicagháhic.**
huhsáà mii-cagí-'hi-c
oh.my 1B-good-MOM-DECL
Whew! I feel better.
- (7) **Huhsáà, masúgaadiguhaag maahúc.**
huhsáà masúga-aadí-hgua-haag maa-húù-c
oh.dear dog-3POS.lodge-LOC-SOURCE 1A-come-DECL
Oh dear, I'm dog-tired (as when coming from work in the fields).

The following are interjections used to express dismay:

- **idáà!** *oh no! oh my! oh my god!* (used by women)
 - **híí?idaa!** same as **idáà** (used by women)
 - **xíí?idaa!** same as **idáà** (used by men)
 - **hóòhia!** [hóòhja] same as **idáà** (used by men)
 - **èéé** expression of dismayed realization, with rising intonation
- (8) **Idáá** / **Hóòhia** masagí óbxaghiwaa wareec.
idáà / **hóòhia** ma-sààgi óbxagi-hiwaa warèè-c
oh.my / **oh.my** 1POS-hand sliver-1CAUS.DIR EVID-DECL
Oh my, I got a sliver in my hand.
- (9) **Idáá,** nuwariixagààriaara!
idáà nuwa-nii-xagàà-ria-ara
oh.my some-2B-move-REFL-IMP.PL
Oh my, get up and move some!
- (10) **Idáá** hiró? magigaríxaba?doog?
idáà hirí-o? magi-garíxabi-?a-dóòg
oh.my this-PL RECIP-attach-PL-SPEC
My god, are those two just stuck to each other?!
- (11) **Èéé,** mada?úùwaca mahgaraaxisác!
èé mada-úùwaca maa-hgaraaxisá-c
INTERJ 1POS-metal 1A-forget-DECL
On no, did I forget my money!?

The following interjections are used to express disapproval or disagreement:

- **déésga!** [dææsga] *oh, darn it! oh, how absurd!*
 - **déésgag!** [dææsgag] same as **déésga!**
 - **néésga!** same as **déésga!** (used by men)
 - **néésgag!** same as **néésga!** (used by men)
 - **hii?réésgag!** same as **néésgag!** (used by men)
 - **iráà!** *oh, shoot! oh, darn it! Whatever!* (used by women)
 - **híí?iraa!** same as **iráà!** (used by women)
 - **gíídee!** *now, see! I told you!*
- (12) **Idáà! Déésga!** liwaagsihbáha maareec.
idáà déésga ii-maa-nagsibí-'hi-haa maa-nèè-c
oh darn INST-1A-pass-MOM-ADV 1A-go-DECL
Oh, darn! I just passed it!

(13) **Déésga!** Dáàbadoores aguseewá!
déésga dáàba-doores agu-seewáà
darn what-ASSERT REL-I.say
Darn it! What was I just saying now?

(14) **Gíídee** cagág mahgúc.
gíídee cagí-g mahcú-c
INTERJ good-CRD be.at-DECL
Now look at her! / She's just tame! (said of an old person who used to be wild)

The second type of interjections comprises conative and phatic interjections, both of which are directed at an auditor. Conative interjections are aimed at getting someone's attention, or they demand an action or response from someone, whereas phatic interjections are used to establish and maintain communicative contact (Ameka 1999: 214-15). Typical phatic interjections convey a speaker's mental attitude toward the discourse.

The following interjections are used to attract someone's attention:

- **héh!** *hey!* (exclamation used to attract someone's attention)
- **háre!** *hey!* (exclamation used by a woman to get the attention of her husband, boyfriend, brother-in-law, or grandson; men say **Híre!**)
- **híre!** *hey!* (exclamation used by a man to get the attention of his wife, girlfriend, sister-in-law, or granddaughter; women say **Háre!**)
- **ihe** *alright, OK*
- **ááhàhé** [NAME] **hahéè!** honoring formula used at public events (**ááhàhé** and **hahéè** may also be used in alone with the name or in isolation)
- **hóhgahe!** / **hohgahéè!** *ready?! let's do it!* (exclamation to start a joint effort; also used by warriors to introduce a new story about bravery)¹¹⁶

¹¹⁶ To the consternation of traditional Hidatsa speakers, the Sioux **hókahé** (as opposed to Hidatsa **hóhgahe**) has become universal as an honoring formula at powwows and other public events. Most modern professional powwow announcers have no or only rudimentary knowledge of Hidatsa and are considerably influenced by intertribal powwow culture. Intertribalism has profoundly influenced other ceremonial functions as well. For example, songs that are sung at sun dances and in sweat lodges are performed almost always in Sioux, even by fluent Hidatsa speakers. Clan songs and prayers, however, have resisted change and are still performed in Hidatsa.

- (15) **Héh!** Niiguhgáʔ?
 hee nii-guhgá-ʔ
 hey 2B-ready-INTER
Hey! Are you ready?
- (16) **Híre!** Mááhooʔ maʔîhadihdaa!
híre m-nááhi-ʔo-ʔ maʔîhadi-hdaa
hey 1A-go.PL-PL-INTER store-LOC
Hey! Let's go to town / the store!
- (17) **Cará** giwáʔhsihga! -- **lhe,** giwáʔhsiwaac.
 caráà hgi-máʔhsi-hgee-Ø -- **ihe** hgi-máʔhsi-waa-c
 oil GI-full-CAUS.INDIR-IMP.SG -- **alright** GI-full-1CAUS.DIR-DECL
Fill it up with gas! -- Ok, I filled it.
- (18) **Ááhàhé** Miraxubaawíà **hahéè!**
ááhàhé mirá-xubáà-míà **hahéè**
 INTERJ wood-holy-woman INTERJ
Praise to Cedar Woman!
- (19) **Hóhgahe** mááhooʔ!
hóhgahe m-nááhi-ʔo-ʔ
 INTERJ 1A-go.PL-PL-INTER
Are you ready!? Let's go!

The following interjections are used to signal agreement or approval, or as reaction

signals:

- **éè** *yes*
- **hóò** *yes, all right*
- **éèè** used by members of the audience while listening to a story to indicate that they are paying attention, more drawn out than **éè** *yes*

- (20) **Éè,** mîc.
éè mîi-c
yes 1.be.one-DECL
Yes, it's me.
- (21) **Éè** heerug arucagíc.
éè héè-rúg aru-cagí-c
yes say-COND IRR-good-DECL
It will be good if he says, "Yes."

(22) **liheʔsáʔ?** -- **Hóò**, **heʔsá** **wareec.**
 ii-heʔsá-ʔ -- **hóò** heʔsá waree-c
 INST-like.this-INTER -- **yes** like.this EVID-DECL
Is this what happened? -- *Yes, that's it.*

(23) **Ééè** **ha!**
éèè héè-Ø
eee say-IMP.SG
Say, "Ééè!" (as a story teller soliciting acknowledgement from the audience)

The following expressions are used to express gratitude:

- **hahóò!** *thanks!* (exclamation of gratitude or delight addressed to another person or people; in contemporary Hidatsa, largely restricted to speaking in public and ceremonial occasions after having become replaced by **Maacagíraac**. *Thank you.* [lit. *you have done a good thing*] in most other situations).

(24) **Nuxbaagaʔó**, **hahóó** **niiwaaʔac.**
 nuxbáàga-ʔo-ʔ **hahóò** nii-maa-ʔa-c
 people-PL-VOC **thanks** 2B-I.say-PL-DECL
I say, "Thank you to you all!"

The negative counterpart of the affirmative interjection **éè** *yes*, which cannot be used predicatively, is **neehá** *no*. **Neehá** is actually a stative verb that means 'to not be something'.

When used as a response, the word may occur as both an interjection (**neehá** *no*) and a verb (**neehác** *it is not so*).

The negative existential verb **neesá** *to not exist* can also be used as a response word. In this function it can also occur both as an interjection (**neesá** *no*) and a verb (**neesác** *there is no such thing*). The positive existential counterpart of **neesá** is **madú** *to exist*. It can only be used as a verb (**madúc** *there is such a thing*) and never as an interjection (**madú yes*).

Although the inventory of examples presented in this chapter comprises the most common Hidatsa interjections, it is far from exhaustive. In addition to everyday interjections, there are numerous interjections whose use is restricted to ceremonial occasions and have, with a

few exceptions, completely disappeared from usage. For example, each of the four coups counted on an enemy seems to have been accompanied by specific vocalizations, as indicated by a single example, *aache* ‘cry uttered by the first and second coup strikers’, in Jones’s lexical slip files. In his field notes, Gilbert Wilson, too, refers to various vocalizations that were uttered by specific groups of people on specific occasions. One of the few examples that he actually recorded is *hiráá èèeee!*, which, according to his informants, was “a word that boys of our tribe used to cry out in old times when meat was brought home from the hunt.”

14.2 Exclamatory phrases

Exclamatory phrases are nonsentences formed with lexemes that have an independent semantic value. They are classified as exclamations because they always occur without illocutionary markers (see 6.1) and do not enter into syntactic relations. A question mark in (25), for instance, suggests an interrogative speech-act, but the absence of the interrogative speech-act marker -ʔ indicates that the utterance is actually an exclamation.

- (25) *Harúg níg / níhgi(i)?*
harúg n-ihgii
 and.then 2-PRO
How about you?!

The communicative value of exclamatory phrases is identical to interjections, i.e., they express emotions and have a conventionalized emotive value when used as exclamations. However, because of the inherent lexical meaning encoded in them, they do not belong to the lexical category of semantically empty interjections.

The following are examples of exclamatory phrases:

- **girasáàci!** *poor thing!* < **girasáàci** *be pitiful*
- **gaadhééraca!** *really!?* < **gáádi** *VER*, **héè** *say*, **-raci** *COMPR*
- **maa’agihdià!** *that’s too much!* < **maa-** *INDEF*, **agihdià** *plenty*
- **maa’ooréèxabi!** *it’s unbelievable!* < **maa-** *INDEF*, **aru-** *REL*, **néèxabi** *amaze*
- **maradagááadihseera!** *oh my true heart!* < **maradá** *my heart*, **gáádi** *VER*, **-hseeraa** ?
- **maaxubááhseeraa!** *oh my god!* < **maaxubáà** *god*, **-hseeraa** ?
- **maaxubaagááada’sseeraa!** *by the gods!* < **maaxubáà** *god*, **gáádi** *VER*, **-’a** *PL*, **-hseeraa** ?
- **ii’agu’íhgiiraci!** *for heaven’s sake!* < **ii-** *INST*, **agu-** *REL*, **íhgii** *PRO*, **-raci** *COMPR*
- **maa’ooresá!** *no way!* < **maa-** *INDEF*, **aru-** *REL*, **neesá** *not exist*
- **maa’ooresagihdià!** *it’s absurd!* < **maa-** *INDEF*, **aru-** *REL*, **neesá** *not exist*, **agihdià** *much*

(26) **Girasáàci!** **Giwaahirídhaac.**
girasáàci hgi-maa-hirí-dhaa-c
poor.thing GI-INDEF-do-NEG-DECL
Poor thing, he’s unemployed.

(27) **Híí** **maagihdià!** **Arudóòhsewa’oo’!**
híí **maa-agihdià** aru-dóòhsee-waa-’o-’
 INTERJ **INDEF-plenty** IRR-how-1CAUS.DIR-PL-INTER
Oh my gosh! What are we going to do!

At least two D-words (see Chapter 12) are used as exclamatory phrases. Neither one ever occurs with the interrogative speech-act marker **-’**. Whereas the **dabéè!** *what!?* is identical to the D-word ‘to be who’, **dáà!** *what!?* is formed by dropping the final syllable from the D-word **dáàba** *to be what*.

- **dáà!** *what!?* (used in response to someone bothering another person)
- **dabéè!** *who!?* (used in response to someone knocking at the door)

(28) **Héh!** -- **Dáà!?**
 hee -- dáà
 hey -- what
 Hey! -- What!?

14.3 Exclamatory statements

Exclamatory statements, unlike exclamatory phrases, terminate with illocutionary markers or other clause final suffixes. Although most of the illocutionary suffixes mark them as various types of statements (see 6.1.1), they are actually interjection-type exclamations that allow for little or no change in their form. For example, the derogatory expression **cagág!** / **cagís!** / **cagísdaa'!** *good for him!* has a regular clause structure whereby the verb **cagí** *to be good* is followed by either the same-subject suffix **-g**, or the definite speech-act markers **-s** and **-sdaa'**. However, the exclamation is formulaic and idiomatic in that most other speech-act types do not have the same derogatory overtones, although some leave room for interpretation. For instance, the combination of **cagí** *good* and the exclamative speech-act marker **-wa** (**cagíwa!**) can be interpreted either as a neutral exclamatory speech act ‘it is / would be good!’ or as a derogatory exclamation ‘good for him!’

Many exclamations, such as **maa'ooreesá!** / **maa'ooreesác!** *no way! there is no such thing!*, occur both as exclamatory phrases and exclamatory statements.

The following are examples of exclamatory statements:

- **cagág!** *derog. good for him!* < **cagí** *be good*, **-g** *SS*¹¹⁷
- **cagís!** *derog. the heck with him!* < **cagí** *be good*, **-s** *DEF*
- **cagísdaa'!** same as **cagís!** < **cagí** *be good*, **-sdaa'** *DEF*
- **iiragsibíc!** *too much!* < **ii-** *INST*, **nagsibí** *pass*, **-c** *DECL*
- **ooreesagáádic!** *impossible! no way!* < **aru-** *IRR*, **neesá** *not exist*, **gáádi** *VER*, **-c** *DECL*

¹¹⁷ It is hypothetically possible that the unusual ending of the exclamation **cagág!** (**cagí** *good*, **-g** *SS*?) is derived from a phrase like **cagág mahgúc** *he is doing fine*, which may be interpreted derogatorily as ‘good for him!’. However, there is no explanation for the same ending in the semantically empty interjection **néésgag!** *darn it!*, which is one of the variant forms of the more common interjection **néésga!**.

14.4 Vocatives

Vocatives are used to address or call the attention of a person and are formed of nouns identifying the person being addressed. Vocatives are expressions of direct address, wherein the identity of the party spoken to is singled out from others in an audience or group. Although most vocatives are standard appellatives, such as personal names or kinship terms, any noun phrase denoting the person(s) to whom the sentence is addressed may serve as the vocative element. Vocative forms of inalienably possessed kinship nouns are always marked by first person possession, although several kinship terms have special vocative forms (see 8.1.4).

Singular vocatives are formed by shifting the accent to the final syllable. Short syllables are lengthened and the accented final syllable has a falling pitch. If the final syllable contains a short *i* it is sometimes lowered to *éè*.¹¹⁸ The final syllable remains unchanged if it already has a falling pitch on a lexically accented long vowel or a diphthong (as in *magúù* *my grandmother* and *madawíà* *my older sister*).

In Hidatsa discourse, personal names are typically avoided when one person addresses another. Instead, kinship terms, non-kin terms of friendship, or other types of monikers are used. If a personal name is nevertheless used, it always occurs without the definite suffix *-s* and the final syllable is subject to the regular processes that mark the word as a vocative.

Like other types of interjections, vocative expressions do not enter into constructions with other word classes; therefore vocative marking by accent shifting and final vowel lengthening is not classified as an illocutionary marker to designate yet another speech-act type (see 6.1).

Examples of singular vocative utterances are given in (29)–(32).

¹¹⁸ The exact conditions that cause short *i* lowering remain to be determined.

- (29) **Maa'eehgeedháà!** **Húùga!**
 maa-ééhgee-dhaa-[^] húù-ga
 INDEF-know-NEG-VOC come-PREC
*Idiot! Come here!*¹¹⁹
- (30) **Ahguxî!** -- **Dáà!?**
 ahgúxi-[^] -- dáà
 ear-VOC -- what
You! -- *What!?*¹²⁰
- (31) **Xihdée,** **húh!**
 xíhdi-[^] húù-Ø
 shaggy-VOC come-IMP.PL
Messy! Come here!
- (32) **Oxdaarée,** **giraháh!** **Míà'aguwaaghisi** **niiwáàgha** **áàgha'c.**
 óxdaŋre-[^] hgi-nahí-Ø míà-agu-máàghi-si nii-máàghi-Ø áàghi-²a-c
 Cedar-VOC GI-stand-IMP.SG woman-REL-call.names-? 2B-call.names-CONT sound.PL-PL-DECL
*Cedar, get up! Meadowlarks are making fun of you.*¹²¹

Although the stereotypical function of vocatives is to address, exceptionally vocative forms of nicknames, but not of regular personal names, can also be used referentially:

- (33) **Badhág** **Dáá** **Maagée**
 badhí-g déè-Ø maagí-[^]
 fall.off-CRD die-CONT lie-VOC
Falls Off And Lying Dead (nickname for a drunk)

¹¹⁹ The literal meaning of **maa'eehgeedhaa** is 'to not know things, be ignorant', but the idiomatic meaning is 'to be stupid'.

¹²⁰ A person, especially a child, who is disobedient is often described as **ahgúxi neesác**, which literally means 'he has no ears'. When such a person is addressed directly, he is called **Ahguxî! Ears!** In other contexts **ahgúxi neesá** can also mean 'to be deaf'.

¹²¹ **Óxdaŋre** is a Mandan word for 'cedar'. In this example, an otherwise Hidatsa-speaking Mandan grandmother uses the Mandan word to address her granddaughter, whose Hidatsa name is **Miraxubaawíà Cedar Woman**.

The Hidatsa word for Western Meadowlark is **míà aguwaàghisi**, which literally means 'one who makes fun of women', or 'one who calls women names'. The Hidatsa say that meadowlarks make fun of women who are lazy and sleep late in the morning.

In addressing more than one person the plural form of the noun is used and the accent is shifted to the lengthened plural suffix *-ʔo*. Under normal circumstances the plural suffix always replaces the stem-final short *a* and *i*, as in *maagarísda* *child* → *maagarísdoʔ* *children*, but in vocative usage it immediately follows all stem-final short vowels, as in *maagarísdaʔóò!* *children!* An example is in (34).

- (34) *Maagarísdaʔóò,* *níhgiboʔseʔriara!*¹²²
 maa-garísda-ʔo-[^] níhgi-bóʔsi-ria-ara
 INDEF-small-PL-VOC 2REFL-bundle-REFL-IMP.PL
Children, bundle up!

Vocatives, just like other types of exclamations, are subject to occasional phonological anomalies. Although stress accent is not part of the Hidatsa suprasegmental system, the plural suffix can be optionally shortened and *stressed* when used vocatively, as in (35).

- (35) *Maagarísdaʔó,* *óòcihgaara!*
 maa-garísda-ʔo-[^] óòcihgee-ara
 INDEF-small-PL-VOC rest-IMP.PL
Children, rest!

14.5 Onomatopoeia

Onomatopoeic words imitate or suggest the sounds that they describe. Ideophonic values that are onomatopoeic are also found in sound symbolism (see 2.5) and reduplication (see 4.10). However, most onomatopoeic expressions are imitations of natural sounds. Although onomatopoeias in many languages are grammatical words, their incompatibility with

¹²² The transitive verb *bóʔsi* *to bundle sth* has an irregular reflexive derivation: the stem-final short *i* is lowered to *e* before the reflexive suffix *-ria*.

illocutionary suffixes classifies them as exclamations in Hidatsa. A small sample of onomatopoeic interjections is given in (36).

- (36) bááá-bag-bag-bag-bag *sound of a prairie chicken*
gháàa gháàa gháàa *sound of a crow*
uʔuʔúʔuu *sound of a rooster*
muu *sound of a cow*

In addition to sound-symbolic verbs and onomatopoeic exclamations, a few nouns are derived from onomatopoeias. The names of several birds, for example, reflect the sounds their referents make, as in (37).

- (37) digirî *killdeer*
icígíigii / icigíigî *chickadee*

15 Adverbs

Hidatsa adverbials can be divided into two groups: (1) independent words and (2) adverbial affixes. Adverbs form a heterogeneous class of words that can be classified according to their semantic, derivational, or syntactic properties. The syntactic scope and semantic categorization of Hidatsa adverbs lie beyond the scope of this grammar; the description in the present chapter is limited to a brief survey of the most common independent adverbials (section 15.1), followed by the description of those aspects of affixal adverb derivation that are not mentioned elsewhere in the grammar (section 15.2).

15.1 Independent adverbs

The number of nonderived adverbs is not large. Although most of the nonderived adverbs are synchronically unanalyzable, many of them are diachronic derivations.

There are several types of nonderived adverbs. The first type comprises adverbs that have a conjunctive meaning. Although they indicate relations between clauses, as adjuncts they are outside the clause structure and are often used primarily as discourse-initial items. Conjunctive adverbs, or conjuncts, should not be confused with conjunctions or coordinators: there are no free coordinative conjunctions in Hidatsa; instead, coordination is indicated by clause-final suffixes (see 17.3). A representative list of the most common Hidatsa conjunctive adverbs is given in (1).

- | | | |
|-----|---------------------------|-----------------------------|
| (1) | <i>íí / híí</i> | <i>and, so; or</i> |
| | <i>hawá</i> | <i>well; then, and then</i> |
| | <i>hawahíí (hawá híí)</i> | <i>and then, and so</i> |
| | <i>harúg</i> | <i>and then</i> |

háruhawa	<i>of course</i> ¹²³
harúghii	<i>therefore; and then</i>
isá	<i>again, once more</i>
hahsáá / há	<i>but</i>
iʔaa	<i>uh, er, um (filler sound)</i>
heʔsáwa / heʔsá	<i>then</i>

An adverb may also function as a modifier of a verb. An example of an adverb as a modifier of a stative verb is (2) and as a modifier of an active verb in (3).

- (2) **Agihdíawa** cagíc / cagaʔíí.
agihdíawa cagí-c / cagí-Ø-íí
very good-DECL / good-CONT-INTENS
*It's **very** good!*

- (3) **larás** déèraac.
iarás déè-raa-c
almost die-APPROX-DECL
*He **almost** died.*

A small number of dependent adverbial roots with a locative meaning always occur with postpositional suffixes (see 16.1). Unlike postpositions (see 16.2), a locative adverb thus derived does not take a complement such as a noun phrase. Two locative adverbs in (4) are contrasted with postpositions that have a similar meaning,.

- | | | | | |
|-----|---------------|--------------|---------------|------------------------|
| (4) | ADVERB | | POSTPOSITION | |
| | *háàgu | <i>back</i> | ibîdi | <i>behind sth</i> |
| | *iidú | <i>front</i> | isóògi | <i>in front of sth</i> |

Examples of ***háàgu** *back* and ***iidú** *front* in combination with various postpositional suffixes (in the bold) are presented in (5) and (6).

¹²³ A related bound form was documented in expressions **marîdirughawa** *of course I am hungry* and **miixósgarughawa** *that's because I am a Xosga*. Whether the bound form **-rughawa** is an adverbial or a clause-final suffix requires further analysis.

- (5) Háàgugaa naghîdaara! *Get in the back (of the car)!*
Háàgugahaag húùc. *He came from behind / from the back.*
Mààhdiihe háàguhdaa nîrihgeec. *This car is backing up. (lit. going to the back)*
Háàguhgidaa maaréèc. *I'm returning to the back.*
Aguháàgugaagaadic. *He is the very last one in the back.*
- (6) lidúgaa nuwíc. *He goes in the front.*
lidúgahaa náahaʔc. *They went through the front.*
lidúxahaa náà! *Move further up!*
lidúhdaa maagiwéʔc. *He foretold it. (lit. he told it to the front)*

Not all dependent roots with a locative meaning have equivalent counterparts that are independent postpositions. (7)–(9) are examples of three such roots and the various locative adverbs that are derived by combining them with postpositional suffixes.

- (7) *agú *further*
agúxaa *further away (-xaa GOAL)*
agúhdaa *the other way (-hdaa GOAL)*
- (8) *núùhci *elsewhere, out of the way; off track*
núùhcigua *elsewhere, out of the way (-hgua LOC)*
núùhcihdaa *out of the way (-hdaa GOAL)*
- (9) *noodá *this side*
noodágua *over here (-hgua LOC)*
noodarú *on this side(-rú LOC)*
noodáhdaa *this way, hither (-hdaa GOAL)*
noodáguhaag *from this side (-guhaag SOURCE)*
noodasèè *by way of here (-sèè DIST)*
nóòdhaa *through this way (-haa PATH)*
noodáguhaa *through this way (-hgua LOC + -haa PATH)*
noodarúhaa *through this way (-rú LOC + -haa PATH)*
noodáxaa *nearer this side (-xaa GOAL)*
noodáxaaru *nearer this side (-xaa GOAL + -rú LOC)*
noodáxaahgua *nearer this side (-xaa GOAL + -hgua LOC)*

Some locative adverbs are derived by compounding an inalienably possessed noun for a body part with a dependent adverbial root. For example, the combination of *iidá* *face* and the locative adverbial root **háàgu* *back* in (10) yields a complex adverbial stem **iidháàgu* *backwards*. Compound adverbs are inflected for person according to the inalienable possessive paradigm (see 8.1.2), as in (11).

- (10) *Níduuxi iidháàguhdaa (*nîidhaaguhdaa) níraac.*
*n'-idúuxi iidá-háàgu-hdaa (*n'-iidá-háàgu-hdaa) ní-raa-c*
 2POS-shirt face-back-GOAL (*2POS-face-back-GOAL) put-2CAUS.DIR-DECL
You wear your shirt back side front.
- (11) *Miidháàguhdaa miihxúàc.*
m-iidá-háàgu-hdaa mii-hxúà-c
 1POS-face-back-GOAL 1C-fall-DECL
I fell backwards.

Another type of locative adverb derivation, whereby demonstrative stems are combined with postpositional suffixes, is described in section 10.3.

Finally, some adverbs are formed through zero derivation from verbs. Besides a few quantifiers that are a product of conversion (see 13.5), several temporal adverbs, such as *dadá* *early*; *soon* and *díà* *late*, are derived through functional shift from stative verbs. An example is (12).

- (12) *Maarihsá's dadá goowíhaa'ac.*
maa-nihsí-²a-s dadá goowí-hee-²a-c
 INDEF-dance-PL-DEF **early** finish-3CAUS.DIR-PL-DECL
The dancers quit early (in reference to a powwow that ended early).

15.2 Adverbial affixes

The overwhelming majority of adverbs are derived from other lexical classes by means of affixation and the number of such adverbs is huge. Among the affixes that derive adverbials are

postpositional suffixes (see 16.1) and clause-final suffixes (see Chapter 17); however, the description of adverbial derivation in this section is limited to affixes that are not discussed elsewhere in the grammar.

15.2.1 *-haa* ‘adverb’

The suffix *-haa* derives manner adverbs from verbs. Hidatsa manner adverbs typically answer questions ‘how’ or ‘in what way’. In addition to prototypical manner adverbs, *-haa* also derives multiplicative numerals, described separately in section 13.2.

With a few exceptions, the derivation of adverbs with *-haa* is subject to the same phonological rules as the derivation of direct causative verbs with the causative suffix *-hee* (see 4.7.1) and locative adverbs with the path suffix *-haa* (see 16.1.4).

In most cases the final short vowel of the verbal base is deleted before the adverbial suffix, as illustrated in (13). If the deleted short vowel is accented, the high pitch associated with the deleted segment is left floating and imposed on the adverbial suffix, which acquires level high pitch, as shown in (14). However, in a few lexically determined stems, such as *cagí* *to be good* in (15), the final accented short vowel is never deleted and the adverbial suffix is added to the unaltered stem.

(13)	<i>háàgá</i>	<i>be the last one</i>	→	<i>háàghaa</i>	<i>later</i>
	<i>garísda</i>	<i>be small</i>	→	<i>garísdhaa</i>	<i>a little</i>
	<i>xadádagí</i>	<i>be fast</i>	→	<i>xadádaghaa</i>	<i>quickly</i>
	<i>cacúgí</i>	<i>be firm, stiff</i>	→	<i>cacúghaa</i>	<i>firmly</i>
	<i>óòragí</i>	<i>trace sth</i>	→	<i>óòraghaa</i>	<i>following</i>
(14)	<i>midabá</i>	<i>lie</i>	→	<i>midabháá</i>	<i>slyly</i>
	<i>nagsibí</i>	<i>pass sth</i>	→	<i>nagsibháá</i>	<i>past</i>
	<i>icgí</i>	<i>fit</i>	→	<i>icgháá</i>	<i>accurately, right on; toward</i>

(15) *cagí* *be good* → *cagíhaa* *well*

In Hidatsa clusters, *h* can either precede or follow a stop, but not both. Because of this restriction, an *h* that precedes a stop in the stem is deleted when *-haa* is suffixed to the stem-final stop (after the deletion of the final short vowel), as in (16).

(16) *cawúhci* *be straight* → *cawúchaa* *straight*

The sonorants *w* and *r* and the alveopalatal fricative *s* undergo fortition (see 2.4.4) before the adverbial suffix, as shown in (17).

(17) *cahcoorí* *be tight* → *cahcoodháá* *tightly, tight*
**hoowí* *be slow* → *hóóbhaa* *slowly*¹²⁴
neesá *not exist* → *neecháá* *without*
araaxisá *be ignorant* → *araaxicháá* *by surprise*

Long vowels and diphthongs are reduced to their first mora before the adverbial suffix unless their second mora is accented. Again, the same rule applies to causative derivation (see 4.7.1) and the effects caused by the homophonous postpositional path suffix *-haa* (see 16.1.4). An example of an adverb derived by suffixing *-haa* to a base with an unaccented second mora in the final long vowel is in (18b). As expected, the long vowel has shortened. An example of an adverb derived by suffixing *-haa* to a base with an accented second mora in the final long vowel is in (19b). Because the second mora in *migáá* *to be low* is accented, it is not deleted.

¹²⁴ Stative verb **hoowí* *to be slow* is unattested. It occurs only as a derivational base for more complex stems, such as the causatives *hoowíhgee* *to lull somebody to sleep* and *hóóbhehgee* *to slow sth down*, and the adverb *hóóbhaa* *slowly*. Although in two of these forms the final accented short vowel is deleted, for an unknown reason the stranded high pitch is not transposed on the added derivational suffix.

- (18) a. **Céèceéc.**
 céèceé-c
 hang-DECL
It is hanging.
- b. **Céècehaa mahguréʔc.**
 céèceé-**haa** maa-hgi-éʔ-c
 hang-ADV 1A-GI-keep-DECL
I held it by the handle.
- (19) a. **Migáác.**
 migáá-c
 low-DECL
It is low.
- b. **Migááhaa néèc.**
 migáá-**háa** néè-c
 low-ADV go-decl
It flew low.

Some verbs have irregular forms. For example, the regular manner adverb ‘slowly’ in (20b), derived from **súwaa** *to be slow*, has two equally frequent irregular parallel forms that are given in (20c-d). Another common irregular form is the adverb **sabíhsaa** *in a hurry* in (21c). Possible regular forms in (21b) are unattested.

- (20) a. **súwaa** *to be slow* → b. **súwaha** *slowly* c. **suwááhsaa** *slowly* d. **suwááchaa** *slowly*
- (21) a. **sabí** *to be in a hurry* → b. ***sabíhaa** / ***sabháá** c. **sabíhsaa** *in a hurry*

The phonological similarity between the manner suffix **-haa**, path suffix **-haa**, and the direct causative suffix **-hee** has already been mentioned several times; a close semantic relationship between the manner suffix **-haa** and the homonymous postpositional path suffix **-haa** should be pointed out as well. The main reason why the two are distinguished is that no other postpositional suffix can be used with (non-nominalized) verbs, and the classification of the path suffix **-haa** as a nominal suffix is confirmed by its position in the matrix of postpositional suffixes (see TABLE 16.1) where it can be both preceded and followed by other such suffixes.

In other words, the formal distinction between the manner and path suffixes depends on the lexical category of the stem to which they are attached: when **-haa** is suffixed to a verb, it derives a manner adverb, as in (22a); and when suffixed to a noun, as to the nominalized stem

aru-cawúhci a place that is straight in (22b), it derives a locative adverb expressing the path of the action.

- (22) a. **Cawúchaa** náà!
 cawúhci-**haa** nées-Ø
 straight-ADV go-IMP.SG
Go straight!
- b. **Arucawúchaasee** náà!
 aru-cawúhci-**haa**-sée nées-Ø
 REL-straight-PATH-DIST go-IMP.SG
Go (along) the straight way!

Although the two suffixes **-haa** are formally separate, in many constructions their similarity in meaning is more than superficial. For example, **-haa** in (23b) is attached to a verb stem and is therefore an adverbial suffix indicating manner, but the action of making something like candy hard or brittle could also be conceived as taking a path “through” cooking it.

- (23) a. **Maawirídíc.**
 maa-mirídi-c
 INDEF-fry-DECL
He is frying something.
- b. **Maawirídhaa** iigicóóghiwaac.
 maa-mirídi-**haa** ii-hgi-cóógi-hiwaa-c
 INDEF-fry-ADV INST-GI-hard-1CAUS.DIR-DECL
I made it hard / brittle by / through cooking it.

At this point an alternative analysis of the derivation of manner and locative adverbs deserves attention. According to this analysis, there is no adverbial or locative suffix **-haa** in Hidatsa. Instead, forms hitherto analyzed as adverbs are actually stems causativized with the direct causative suffix **-hee** (see 4.7.1) and followed by the phonetically empty clause-final continuative suffix (see 17.5.1), the presence of which is attested by the ablaut it triggers in the preceding syllable. The two competing analyses are presented for comparison in (24a-b) and (25a-b).

- (24) a. **Adí núùwiidhaa** maaréèc.
 adí núùwiiri-**haa** maa-nées-c
 lodge circle-ADV 1A-go-DECL
I went / circled around the house.
- b. **Adí núùwiidhaa** maaréèc.
 adí núùwiiri-**hee**-Ø maa-nées-c
 lodge circle-3CAUS.DIR-CONT 1A-go-DECL
I went / circled around the house.

- (25) a. **Cacúghaa marudhábic.**
cacúgi-**haa** maa-núdhabi-c
firm-ADV 1A-squeeze-DECL
I squeezed in firmly.
- b. **Cacúghaa marudhábic.**
cacúgi-**hee-Ø** maa-núdhabi-c
firm-3CAUS.DIR-CONT 1A-squeeze-DECL
I squeezed it firmly.

Let's look at both examples individually. Since the verb **núùwiiri** *to circle around* in (24) occurs almost always in the causativized form **núùwiidhee** *to circle around*, the alternative analysis in (24b) appears as plausible as the “correct” analysis in (25a). However, the first hint that **núùwiidhaa** is indeed an adverb and not a clause comes from the fact the causative stem is not inflected for first person. If **núùwiidhaa** were a continuative clause, one would expect to find person agreement there. The same argument can be made for example (25) even though **cacúgi** *to be stiff* and its causativized form **cacúghee** *to stiffen something* are equally common. According to the description of contemporaneous clauses (see 17.5.1), both clauses are coindexed for the same subject.

Examples (26a) and (26b) shed further light on the question. If **Hiraaciré'haa** in (26b) were a causative verb in a contemporaneous clause it would mean ‘to make sb speak Hidatsa’. According to the causative analysis the correct interpretation that the second person is commanded to say something *in* Hidatsa would be impossible. Also, if ‘to speak Hidatsa’ were a clause, the two clauses would have to be coindexed for the subject and ‘to speak’ would be inflected for person; compare it, for example, to the coordinative clause in (26a) where the agreement requirement is met. In the final analysis (26a) consists of two clauses, which literally mean “speak in Hidatsa and say it”, whereas (26b) is a single clause (imperative of ‘to say sth’) accompanied by an adverbial adjunct “in Hidatsa”.

- (26) a. **Hiraacaríra'g séh!**
hiraacá-**n'**-iré'-**g** séé-Ø
Hidatsa-2POS-speak-CRD say-IMP.SG
Say it in Hidatsa!
- b. **Hiraaciré'haa séh!**
hiraacá-iré'-**haa** séé-Ø
Hidatsa-speak-ADV say-IMP.SG
Say it in Hidatsa!

The final argument against the interpretation that the hitherto described adverbials are causativized continuative stems (stems causativized with **-hee** and followed by the phonologically empty yet ablaut triggering clause final morpheme \emptyset *CONT*) is provided by a few irregular verb stems that have clearly separate adverbial and causative forms. For example, **sagásghi** *to be crooked* in (27a) is adverbialized irregularly by suffixing **-haa** to the final short vowel that remains undeleted, as shown in (27b). The direct causative form of **sagásghi** is formed regularly by deleting the final short vowel and suffixing the direct causative marker **-hee** to the preceding stem, as shown in (27c).

- (27) a. **sagásghi** *be crooked* b. **sagásghihaa** *in a zigzag* c. **gisagásghee** *become crooked*

15.2.2 **-hcii** ‘X by X’

This suffix indicates that the action occurs in discrete stages. This suffix is not common and the semantics and derivation require further documentation. The basic meaning of **-hcii** is illustrated in (28) and (29). It appears that **-hcii** means either ‘X by X’, as in ‘little by little’ in (28), or ‘X of Y’, as in ‘little of everything’ in (29).

- (28) **Go’sdáhcii hîc.**
 go’sdá-**hcii** hîi-c
 little-ADV drink-DECL
He’s drinking a little at a time. / He’s sipping.
- (29) **Go’sdáhcii múg!**
 go’sdá-**hcii** m-gú²-Ø
 little-ADV 1B-give-IMP.SG
Give me a little bit of everything (referring to food)!

In one construction, another suffix, **-hca**, was volunteered by speakers as synonymous with **-hcii**. The only example with **-hca** is given in (30).

15.2.3 -gáádi ‘real’

The veritive suffix **-gáádi** occurs both as a derivational affix (see 7.2.2.5) and an adverbial suffix.

In the latter case it is glossed as ‘really’, ‘very’, or ‘to an extreme degree’. Examples are (33) and (34).

- (33) **Hucí ihdíàgáadic.**
 hucí ihdíà-**gáádi-c**
 wind big-**VER-DECL**
It is really windy.

- (34) **Nídhiruwaca mahgiradagáadic.**
 n’-idhirú-ùuwaca maa-hgiradá-**gáádi-c**
 2POS-forearm.bone-metal 1A-like-**VER-DECL**
*I really like your bracelet.*¹²⁶

When the veritive suffix is used adverbially, it may optionally bear dominant accent that neutralizes all preceding accents (see 2.3.1.1). In (35), the accent on the first mora in the final long syllable of **maruhdáà** *I perked them (the ears) up* is overridden by the dominant accent in **-gáádi**.

- (35) **Mahgúxi maruhdaagáadic. Hás maawiigigúàdhaac / maawiigigú isíàc.**
 m-ahgúxi maa-núhdaa-**gáádi-c** hahsáa maa-mi-iigigúà-dhaa-c / maa-mi-iigigúà isíà-c
 1POS-ear 1A-perk.up-**VER-DECL** but INDEF-1C-hear-NEG-DECL/ INDEF-1C-hear bad-DECL
I really tried to listen hard but my hearing is bad.

The veritive suffix is also used with locative adverbs to indicate an extreme degree.

Examples are in (36).

- (36) **adháhgagaadi** *the very end of sth* < **adháhga** *end*
héèragaadi *the very midst of sth* < **héèra** *middle*

¹²⁶ Complements of the type ‘I (really) like your X’ are generally avoided in Hidatsa. The person who makes such a comment usually expects to receive the object of his admiration as a gift. Appreciative comments of the type ‘Your X is really pretty’ are perceived as neutral and one does not feel compelled to make a gift of his possession.

hiroogáádi	<i>right here, exactly here</i>	< hiróó	<i>here</i>
ihbugáádi	<i>the very top of sth</i>	< ihbú	<i>tip</i>
iidúgaagaadi	<i>the very front of sth</i>	< *iidú	<i>front</i>

15.2.3.1 Comparative construction

Although Hidatsa lacks a prototypical comparative construction whereby two participants are being compared, it has developed other strategies to express similar notions. The equivalent of the superlative degree is often expressed by relativizing the verb with the entitive prefix **agu-** (see 17.2.1) and then adding the vertitive suffix **-gáádi**, as in (37). Although this is the most common strategy, there are others as well, such as using lexical means, as in (38).

- (37) **Agu[?]isíàgaadi** **hiríc.**
agu-isíà-gáádi **hirí-c**
REL-bad-VER this-DECL
This one is the worst one. (lit. This is the one who is really bad.)

- (38) **Agu[?]isíà** **maaragsibíc.**
agu-isíà **maa-nagsibíc**
REL-bad 3OBJ.PL-exceed-DECL
He's the worst one of them all.

The Hidatsa equivalent of the comparative degree can be expressed with the momentaneous suffix **-'hi** (see 4.11.1), as in (39).

- (39) **Hirí** **isiaháhic.**
hirí **isíà-'hi-c**
this bad-MOM-DECL
This one is worse.

15.2.4 **garu-** 'limitive

The meaning of the limitive prefix **garu-** depends on whether it is used with pronouns or demonstratives. The meaning of several stems derived with **garu-** has become lexicalized.

When used with pronouns and a few demonstrative stems, **garu-** indicates that the subject is either alone or the only one in the given context. Examples are (40)–(44).

- (40) **Garugúác.**
garu-gúá-c
 LIM-that-DECL
Only that one.
- (41) **Garumîraci gigeעה.**
garu-m-îi-raci gige-he
 LIM-1-PRO-COMPR OPIN-EMPH
I guess I'm about the only one. / I guess it's up to me.
- (42) **Garuríhcagi náwahgu'ii'?**
garu-n'-îi-hcági ná-mahgú-îi-'
 LIM-2-PRO-LIM 2A-dwell-HAB.SG-INTER
Do you live all alone? / Do you live by yourself?
- (43) **Garuwii'iisáhcaaraci maaháhguc.**
garu-mii-iisáhcaa-raci maa-háhgu-c
 LIM-1B-bare-COMPR 1A-be.around-DECL
I am just as I am (i.e., I am destitute and have no property or family).
- (44) **Íiwasi dáàwi'?** -- **Gihxúhaabiragac.** -- **Garusi'awíhdaa.**
 îiwasi dáàwi-? -- gihxú-haa-biragá-c -- **garu-si'awí-hdaa**
 price how.much-INTER -- five-ADV-ten-DECL -- LIM-that.much-LIM
How much did it cost? -- It was fifty. -- Only that much!?

The second limitive meaning of **garu-** can be glossed as 'same'. In this sense it is used only with demonstrative stems, as in (45) and (46).

- (45) **Mii'ixua'îiri garusé'c.**
 mii-ixúá-îiri **garu-sé'c**
 1B-body-blood LIM-DECL
We have the same blood. or We are inbred.

- (46) **Garuse[?]ru** mahgadhî[?]ac.¹²⁷
garu-se[?]-ru maa-hgi-adhî-[?]a-c
 LIM-that-LOC 1A-GI-camp-PL-DECL
We camped in the same place.

When used in the second sense, expressions with **garu-** are occasionally translated as ‘again’, as in (47). Also, an independent adverb **garuháàgaru** *again and again* is derived with **garu-**.

- (47) **Garuhe[?]séèc.**
garu-he[?]séè-c
 LIM-do.this-DECL
He did it again.

Finally, the stem **garusia[?]hgá** *to be only that much* in (48a) has a secondary, idiomatic, meaning ‘to be quick tempered, easily angered’. Usually the direct and indirect causative forms of the same verb are used to indicate that someone is angry or short tempered, as in (48b-c).

- (48) a. **ligarusia[?]hgác.**
 ii-**garu-sia[?]hgá-c**
 INST-LIM-that.much-DECL
That’s it! / No more!
He is quick tempered.
- b. **ligarusia[?]ghééc.**
 ii-**garu-sia[?]hgá-hee-c**
 INST-LIM-that.much-3CAUS.DIR-DECL
It made him angry.
- c. **ligarusia[?]hgáhgeec.**
 ii-**garusia[?]hgá-ghee-c**
 INST-LIM-that.much-3CAUS.INDIR-DECL
He is short tempered.

¹²⁷ **Adhî** *to camp* is probably derived by compounding **adí** *lodge* with **hî** *to get or arrive somewhere*. The GI-form of **adhî – gadhî** – means ‘to camp where one has camped before, camp in the same place’.

15.2.5 nuwa / nuu- ‘some’

Nuwa *some* is a quantifier that can also be used as a downtoner or softener to indicate degree. It has an allomorph **nuu-** that occurs before **w-**initial stems, as in (49b). However, in the deliberate and careful speech the unmarked allomorph **nuwa-** may be used even before **w-**initial stems, as in (50).

- (49) a. **Ooruwahîc.**
 aru-**nuwa**-hîi-c
 IRR-**some**-drink-DECL
He’s going to drink some.
- b. **Ooruuwáác.**
 aru-**nuwa**-máác-c
 IRR-**some**-1.drink-DECL
I’m going to drink some.
- (50) **Nuwamaa’éehgiraarug**
nuwa-maa-éehgée-raa-rúg
some-3OBJ.PL-know-2CAUS.DIR-COND
It would be good if you could notify them.
- arucagíc.**
 aru-cagí-c
 IRR-good-DECL

Nuwa is an inherently accentless morpheme. When it precedes a word, as in (51a), it is pronounced with high pitch due to the Pitch Spreading Rule, described in 2.3.1. It is always pronounced with low pitch when it follows a word, as in (51b).

- (51) a. **Nuwa’awóseec.**
nuwa-maa-óòsee-c
some-1A-pour-DECL
I poured some.
- b. **Miríruwa awóseec.**
 mirí-**nuwa** maa-óòsee-c
 water-**some** 1A-pour-DECL
I poured some water.

When **nuwa** *some* is used in its primary function as a quantifier, it appears after the noun it modifies, as in (52a). It can also be used pronominally to substitute for a noun, as in (52b), in which case it is prefixed to the verb.

- (52) a. **Irúgsidiruwa nááhag núhcaara!**
 irúgsidi-**nuwa** nááhi-g núhci-ara
meat-**some** go.PL-CRD take-IMP.PL
 Go and take **some** meat!
- b. **Nááhag nuwarúhcaara!**
 nááhi-g **nuwa**-núhci-ara
 go.PL-CRD **some**-take-IMP.PL
 Go and take **some**!

However, the allomorph **nuu** of **nuwa** is prefixed to the verb even when the noun is present, if that verb begins with **m/w**, as in the answer in (53).

- (53) **Óòbiruwa** náhgure?? -- **Óòbi** **nuuwahguré?c**.
 óòbi-**nuwa** ná-hgi-é?-? -- óòbi **nuwa-maa**-hgi-é?-c
 tobacco-**some** 2A-GI-possess-INTER -- tobacco **some**-1A-GI-possess-DECL
Do you have any tobacco? -- *I have some tobacco.*

The secondary function of **nuwa** is to serve as an adverbial downtoner / softener. In this function it is always prefixed to the verb it modifies. In the downtoning function it is particularly common with, but not limited to, commands and prohibitions to soften the imperative speech act, as in (54)–(56).

- (54) **Nuwarícha!** **Niisáb!**¹²⁸ **Níci** **núùcaruadha!**
nuwa-n'-ichéè-Ø **nii-sabí-Ø** **n'-icí** **núcarua-dhaa-Ø**
some-2C-wake.up-IMP.SG **2B-hurry-IMP.SG** **2POS-foot** **drag-NEG-IMP.SG**
Wake up! *Hurry!* *Quit dragging your feet!*
- (55) **Nuuwiirigíhga!**
nuwa-mii-nigí-hgee-Ø
some-1B-hit-3CAUS.INDIR-IMP.SG
Call me sometime!
- (56) **Masigá násdaag nuwaríre?dha!**
 masigá násdaa-g **nuwa-n'-iré?-dhaa-Ø**
 resin chew-CRD **some-2POS-speak-NEG-IMP.SG**
Chew the gum and don't talk!

Nuwa may precede the noun if it serves as a sentential modifier, especially if the noun is incorporated, as **iidá face** in (57).

¹²⁸ Although **sabí** *to hurry* is not a middle verb, it is exceptionally marked with the second person pronominal prefix in the imperative form. It is the only stative verb in my corpus that can be used in the imperative without undergoing causativization.

- (57) **Nuwarîdʔadeʔha!**
nuwa-n'-iidá-adéʔ-hee-Ø
some-2POS-face-appear-3CAUS.DIR-IMP.SG
At least (go and) show your face!

Finally, **nuwa** is used as a base to derive various definite and indefinite adverbs and pronouns that have an assertive meaning. Derivation is accomplished by adding postpositional suffixes (see 16.1) or the ergative **-rí** (see 9.5) to the base. The derived stem is rendered indefinite by prefixing **maa-** to it, as in (58) and (59).

- (58) **nuwahdáá** *to somewhere (definite)*
maaruwahdáá *to somewhere (indefinite)*
- (59) **maaruwarí** *someone (indefinite)*¹²⁹

As mentioned earlier in 2.3.1, **nuwa**, just like the demonstratives **hiri**, **gua**, and **seʔ**, is an accentless morpheme, therefore the whole derived stem is pronounced with high pitch even if the derivational suffixes are inherently accentless, as is the case with the goal suffix **-hdaa** in (58) and the location suffix **-hgua** in (60). Both of these examples resemble superficially the form in (61) that is derived by suffixing the accented locative suffix **-rú** to the base, but the double acute accent over **-hdáá** and **-gúá** in this case is only an orthographic convention that has nothing to do with phonemic accent. The scope of pitch-accent over the derived word resumes its expected properties once an inherently accented morpheme is used in stem formation, as in (62) where the accentless path suffix **-haa** is pronounced with low pitch after the accented **-rú**.

- (60) **nuwagúá** *someplace*

¹²⁹ **Maaruwarí** *someone* is an indefinite ergative pronoun that is formed with the indefinite prefix **maa-** and the ergative suffix **-rí**. It should not be confused with the definite ergative pronoun **nuwáchiri** *someone* that is formed with the numeral **nuwáca** *one* and the allomorph **-hirí** of the ergative suffix **-rí**.

- (61) **nuwarú** *sometimes*
 (62) **nuwarúhaa** *to somewhere*

Examples of sentences with **nuwagua** *someplace* and **maaruwahdaa** *(to) anywhere* are given in (63) and (64).

- (63) **Nuwagúá** háhguhic.
nuwa-hgua háhgu-hi-c
some-LOC be.around-3FT.SG-DECL
He must be someplace.
- (64) **Seʳú** mahgú! **Maaruwahdáá** néèdha!
 seʳ-rú mahgú-Ø **maa-nuwa-hdaa** néè-dhaa-Ø
 that-LOC stay-IMP.SG **INDEF-some-GOAL** go-NEG-IMP.SG

Maaghurúg ooriiwahguucíc.
 maa-gúú-rúg aru-nii-maa-hguucí-c
 1A-return-COND IRR-2B-1A-retrieve-DECL

Stay there! Don't go anywhere! When I come back I'll pick you up.

The morphophonemic status of **nuwa** remains somewhat unclear. It forms a phonological word with the following verb when it is used as a downtoner or a pronoun. It forms a phonological word with the preceding noun when it is used as a quantifier, unless the following verb begins with **m**, in which case the allomorph **nuu** of **nuwa** again forms a phonological word with the verb. The affix-like properties of **nuwa** are confirmed by the fact that although it usually precedes the GI-morpheme and pronominal affixes in the prefix template, as in (65a), it may also follow them, as in (65b).

- (65) a. **Nuwamiigisiaʳhgáàcic.** b. **Miigiruwasiaʳhgáàcic.**
nuwa-mii-hgi-siaʳhgá-aci-c **mii-hgi-nuwa-siaʳhgá-aci-c**
some-1B-GI-that.much-COMPR-DECL **1B-GI-some-that.much-COMPR-DECL**
I have gotten a little better (after illness). *I have gotten a little better (after illness).*

Examples (58)–(62) demonstrated that, unlike prototypical affixes, **nuwa** can also serve as a base for deriving independent adverbs and pronouns. However, at least one derived pronoun, ‘someone’ or ‘something’ in (66), which is derived without suffixation, is also subject to allomorphy before **m**-initial stems as if it were a prefix. (Note that the definite ‘someone/something’ and indefinite ‘anyone/anything’ are not distinguished in Hidatsa; **maaruwa/maaruu** can denote either one.)

(66) **maaruwa / maaruu** *someone, anyone; something, anything*

In addition to independent adverbs and pronouns, **nuwa** serves as a base for deriving a few verbs, such as **maaruwádhaa** *to be nothing, be OK* and **nuwahgarú** *something to be wrong with something*. Note that the second syllable of **nuwá** in **maaruwádhaa** is now clearly accented as the following negative morpheme **-dhaa** is pronounced with low pitch. Examples are (67)–(69).

(67) **Dóòsa náwahgu’?** -- **Miiwaaruwádhaac.**
 dóòsa ná-mahgú-’? -- mii-maa-nuwa-dhaa-c
 how 2A-dwell-inter -- 1B-INDEF-some-NEG-DECL
How are you? -- *I am fine. (lit. There’s nothing wrong with me.)*

(68) **Miiruwahgarúàcic.**
 mii-nuwa.hgarú-aci-c
 1B-some.wrong-COMPR-DECL
Something is wrong with me (i.e., I am getting sick).

(69) **Máàhdi maaruwahgarúc.**
 máàhdii maa.nuwa.hgarú-c
 vehicle something.wrong-DECL
There’s something wrong with the car.

15.2.6 *-hagháà* ‘approximative’

The sequence of the abilitative suffix *-hahgá* (see 6.6.1) and the general adverbial suffix *-haa* (see 15.2.1) indicates an approximation or estimation of an amount or number. The sequence is usually realized as *-hagháà*, as in (70) and (71), and less often as *-hahgáà*, as in (72). The approximative suffix can be glossed as ‘about’ or ‘approximately’.

- (70) *Maabixubá nuwacahaghaa.*
maabí-xubáà nuwáca-**hahgá-háà**
day-holy one-ABIL-ADV
In about a week.
- (71) *Mirí ruubahaghaa mahgiguucgíc.*
mirí núùba-**hahgá-háà** maa-hgiguucgí-c
month two-ABIL-ADV 1A-study-DECL
I've been studying for about 2 months.
- (72) *Dahawiahagháà maaréèc.*
dahawíá **hahgá-háà** maa-néè-c
how.many.times-ABIL-ADV 1A-go-DECL
I went several times.

Another infrequent variant form of the approximate suffix is *-hgahaag* *about*. An example is (73).

- (73) *Maabí ruubahgahaag isáh.*
maabí núùba-**hgahaag** isá
day two-**about** again
About two more days.

The sequence of *-hahgá* and *-haa* can also be used in a locative sense in which case *-hagháà* means ‘up to’ or ‘until’, as in (74).

- (74) *Abádaahaghaa ihgirusíàc.*
abádaa-**hahgá-háà** ihgi-núsia-c
chest-ABIL-ADV 3REFL-take.apart-DECL
He is stripped to the waist.

The final meaning of **-hagháà**, ‘even’, is related to the locative sense ‘up to’. An example of the this usage given in (75a). At a different time the same speaker produced a different version of the same sentence, given in (75b); however, instead of **-hagháà** *even* she used an otherwise unattested form **-hagháág** that, according to the speaker, should be translated as ‘including’.

- (75) a. **Maa’èèca bhéèc. Aruhiruhagháà bhéèc.**
 maa-èèca bhéè-c aru-hirú-**hahgá-háà** bhéè-c
 INDEF-all eat.up-DECL REL-bone-**ABIL-ADV** eat.up-DECL
*He ate everything up. He **even** ate up the bones.*
- b. **Èèca bhéèc. Aruhiruhagháág bhéèc.**
 èèca bhéè-c aru-hiru-**hahgá-??** bhéè-c
 all eat.up-DECL REL-bone-**ABIL-??** eat.up-DECL
*He ate up everything. He ate it (all) up **including** the bones.*

15.2.7 **-hdaag** ‘even’

This affix occurs after nouns and indicates that, contrary to expectation, the entity referred to by the noun is included. Examples are (76)–(78).

- (76) **Aruhirúhdaag bhéèc.**
 aru-hirú-**hdaag** bhéè-c
 REL-bone-**even** eat.up-DECL
He ate up even the bones.
- (77) **Icíhdaag íheec.**
 ící-**hdaag** íhee-c
 foot-**even** anoint-DECL
He painted even his feet.
- (78) **Sáàgihdaag íbgidic.**
 sáàgi-**hdaag** íbgidi-c
 hand-**even** smear.on-DECL
He even painted his hands.

15.2.8 -daga ‘even’

The concessive adverbial suffix **-daga** *even* is not particularly common. An example is in (79).

- (79) **Éèca ihabá’wa** **masúgadaga** **maabá** **áàghic.**
 èèca ihabí-’a-wa masúga-**daga** maa-báá-Ø áàghi-c
 all happy-PL-SIMULT **dog-even** INDEF-holler-CONT sound.PL.EVID-DECL
Everybody is happy, even the dogs are noisy.

15.2.9 ii- ‘just’

The instrumental prefix **ii-** may also occur as an adverbial modifier. It is an extremely common prefix but it is not always easy to distinguish between the instrumental and adverbial functions.

When used adverbially, it is usually translated as ‘just’, ‘right’, or ‘right away’. Examples are

(80)–(82).

- (80) **liwiriwaarag** **maahúc.**
ii-miriwaari-g maa-húù-c
 INST-1A.enter-CRD 1A-come-DECL
*I came **right** in.*

- (81) **Girahág** **iijihxúàc.**
 hgi-nahí-g **ii-hgi-hxúà-c**
 GI-get.up-CRD INST-GI-fall-DECL
*He got up and **right away** fell again.*

- (82) **ligihxúà** **mahgúc.**
ii-hgi-hxúà-Ø mahgú-c
 INST-GI-fall-CONT be.at-DECL
*He **just** keeps falling.*

Lexical nouns always precede the instrumental prefix, but pronominal prefixes, independent pronouns, and a few incorporating lexical nouns, such **hucí** *wind*, follow it, as examples (83)–(85), respectively, demonstrate.

- (83) Aruʔiiwahgiwíác.
 aru-**ii-maa**-hgiwíác-c
 IRR-INST-1A-return-DECL
I will come back right away.
- (84) liʔéèca haabhááʔawa míhcagi miiʔiríc.
ii-éèca haawí-hee-ʔa-wa m-ì-hcági mii-irí-c
 INST-all destroy-3CAUS.DIR-PL-SIMULT 1-PRO-LIM 1B-alive-DECL
They were all annihilated, I'm the only one who survived.
- (85) lihucí miréèra naagic.
ii-hucí miréèri-Ø naagí-c
 INST-wind enter-CONT sit-DECL
It is drafty in the room.

When used adverbially, the instrumental prefix resembles in many respects similar affixes *wee-* in Arikara and *-le* in Chinese, both of which have mirative overtones and denote a novel state of affairs or a change of state. The Hidatsa *ii-* is similar in that it often co-occurs with causativized stative stems (see 4.7.2.1) that have a mutative or inchoative meaning, as illustrated in (86). The instrumental prefix precedes the pronominal subject, as in (87), but not an overt nominal subject, as shown in (88).

- (86) ligihirúhgeec. *He has become **just** bones (of an emaciated person).*
ligiwaabhíhgeec. *He has **just** turned into powder (of and old person).*
ligidhadáhihgeec. *He has **just** become stiff (of a dead person).*
- (87) liriigihirúhgeec. *You are **just** bones!*
- (88) Ará iigixîrihgeec. *His hair is **just** turning white.*
Masagí iiwirúxihgeec. *My hands have become **just** ice.*

Finally, *ii-* may indicate a cause-and-result relationship between two clauses, as in (89).

- (89) Masdá núhsisia iidahdahsá naaghíc.
 ma-isdá núhsisia-Ø **ii-dahdahsí**-Ø naaghí-c
 IPOS-eye twitch.REDUPL-CONT INST-slap.REDUPL-CONT sit.EVID-DECL
*My eyes are twitching **so that** you can almost hear them slapping.*

15.2.10 Derivation of temporal adverbs

Present time adjuncts are formed with the attributive demonstrative suffix **-hee** *this* (10.2.1), past adjuncts with the sequence of the past suffix **-si** and generic temporal suffix **-rú** (17.4.1.1), and future adjuncts with the irrealis suffix **-rúg** (see 17.4.1.2 and 17.4.2.1). The three-way contrast between time periods referring to the present, future, and past is illustrated in (90).

(90)	-hee <i>PRESENT</i>	-rug <i>FUTURE</i>	-si-ru <i>PAST</i>
	óhbaa he <i>this evening</i>	óhbaa rug <i>in the evening</i>	óhbaa siru <i>yesterday evening</i>
	óògci ahe <i>tonight</i>	óògci rug <i>(later) tonight</i>	óògci siru <i>last night</i>
	giraagudh éhe <i>this morning</i>	giraagudh éerug <i>tomorrow m.</i>	giraagudh éesiru <i>yesterday m.</i>
	awa'ar èhe <i>this summer</i>	awa'ar èrug <i>next summer</i>	awa'ar èsiru <i>last summer</i>
	máàraa he <i>this winter</i>	máàraa rug <i>next winter</i>	máàraa siru <i>last year</i>

The concessive suffix **-rús** (see 17.4.2.3) is occasionally used instead of **-rúg** in reference to future events and in the derivation of time adjuncts. Constructions with **-rús**, however, occur much less frequently than constructions with **-rug**.

Temporal adverbs that can be glossed as ‘X didn’t happen until Y’ are formed by suffixing **-gháà** to demonstrative stems. Some stems in combination with **-gháà** have a lexicalized meaning. For example, **gúá** *that* + **-gháà** means ‘finally’, and **hirí** *this* + **-gháà** means ‘by now’. The second mora of the preceding long vowel or a diphthong is deleted before **-gháà**. Examples are (91)–(93).

(91)	Miixéèwic	gugháà.
	mii-xéèwi	gúá- gháà
	1B-lonesome	that- ADV.TEMP
	<i>I am finally lonesome.</i>	

(92)	Hirigháà	ooráàwiis	hîhicgi.
	hirí- gháà	aru-náàwii-s	hîi-hi-cgíí
	this- ADV.TEMP	REL-three-DEF	get.to-3SG.FT-PRES
	<i>It must be about 3 o'clock by now.</i>		

- (93) Hùrisighaa giʔaréèc.
hùiri-si-gháà hgi-aréè-c
yesterday-PAST-ADV.TEMP GI-warm-DECL
It didn't warm up until yesterday.

16 Adpositions

The range of concepts expressed in many other languages by adpositions and case endings is communicated in Hidatsa by a variety of morphological and lexical means, such as locative verbal prefixes (see 4.4), other types of applicative prefixes (see 4.5), and a small number of lexical verbs that have become bleached in certain syntactic constructions, such as *gúʔ* *to give something to somebody* in benefactive constructions (see 17.5.2).

Nevertheless, Hidatsa also has two types of adpositions, bound postpositional suffixes and independent postpositions. Both types of adpositional morphemes combine with noun phrases and indicate the semantic relationship of that noun phrase to the verb (Dryer 2007: 81-82).

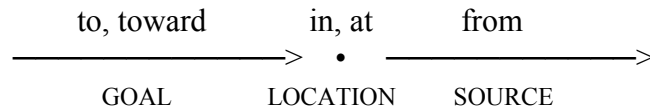
The majority of adpositions indicate relations in space and time and postpositional phrases serve usually as locative or temporal adverbial adjuncts. A small number of adpositional morphemes indicate other types of relations, such as comitativity and instrumentality.

16.1 Postpositional suffixes

Since the locative morphemes that are described in 16.1 always attach to whatever is the last word in the noun phrase, their position is obviously not defined in the morphology but in the syntax (Dryer 2007: 82). Postpositional enclitics combine with nouns (see Chapter 7), demonstratives (Chapter 10), pronouns (Chapter 11), D-words (Chapter 12), dependent locative roots (15.1), and independent postpositions (see 16.2), as well as with each other.

The most important relations that Hidatsa postpositional suffixes express are the most basic spatial and temporal notions of goal, location, and, source, as illustrated in Figure 16.1.

FIGURE 16.1. SEMANTIC RELATIONS BETWEEN POSTPOSITIONAL SUFFIXES



In addition to the concepts expressed in FIGURE 16.1, Hidatsa postpositional suffixes also express the secondary notions of path and distribution. The five types of Hidatsa postpositional suffixes and their possible combinations are presented in TABLE 16.1. (The tertiary notion of instrumentality is treated separately in section 16.1.2.1.1.)

TABLE 16.1. POSTPOSITIONAL SUFFIXES

GOAL	LOCATION	SOURCE	PATH	DISTRIBUTION
		(* -haag)	-haa	-séeè -haa.see
	-hgua	-hgu.haag	-hgu.haa	-hgua.see
	-rú	-rú.haag	-rú.haa	-ru.séeè
	-hgaa	-hga.haag	-hga.haa	-hgaa.see
-hdaa			-hda.haa	
-hgidaa			-hgida.haa ?	
-xaa	-xaa.ru		-xa.haa	
	-xaa.hgua			
	-xaa.hgaa ?			

The following subsections of 16.1 comprise a survey of individual postpositional suffixes.

16.1.1 Location

There are three suffixes that refer to location. The first two, **-hgua** and **-rú**, indicate specific location and are often interchangeable, although **-rú** appears to occur more often in noun phrases that have a more abstract meaning. The third enclitic, **-hgaa**, indicates a general area or location.

16.1.1.1 *-hguá* ‘at, on’

The most common locative suffix in Hidatsa is *-hguá*. It is used mostly in reference to spatial and less often to temporal location. Compared to *-rú* (see 16.1.1.2), another locative suffix that is largely synonymous with *-hguá*, the latter occurs much more frequently.

The suffix *-hguá* never undergoes the final long vowel shortening (see 2.4.3) even if it is the final element in a word. However, the second mora in the diphthong is deleted if certain other grammatical morphemes follow, such as the path suffix *-haa* (see 16.1.4) and the source suffix *-haag* (see 16.1.3). It is not shortened before the distributive suffix *-sée* (see 16.1.5).

This postpositional suffix has two allomorphs. It occurs as *-hguá* after diphthongs and long vowels (including vowel and glottal stop sequences), and as *-gua* after short vowels.

Examples are (1) and (2). A few nouns, such as *awá* *land, ground* in (3), permit both allomorphs.

- (1) *Maaʔiiʔiréʔhgeehguá* *niiwiigigúàc.*
 maa-ii-iréʔ-hgee-**hguá** nii-mi-iigigúà-c
 INDEF-INST-speak-3CAUS.INDIR-LOC 2B-1C-hear-DECL
I heard you on the radio.
- (2) *Mirí aruʔawáxaadigua* *awáàgidhaara!* *Aruʔòògciahguá* *awáàgaara!*
 mirí aru-awáxaadi-**hguá** awáàgi-dhaa-ara aru-òògcia-**hguá** awáàgi-ara
 sun REL-shine-LOC sit.down-NEG-IMP.PL REL-shade-LOC sit.down-IMP.PL
Don't sit in the sun! Sit in the shade!
- (3) *Awáguá* / *awáhguá* *awáàg!*
 awá-**hguá** / awá-**hguá** awáàgi-Ø
 ground-LOC / ground-LOC sit-IMP.SG
Sit on the ground!

Although *-hguá* typically expresses location, there are a couple of temporal adverbs, listed in (4), that have been lexicalized with it.

- (4) *maadadáguá* = *madháàhguá* *long ago* < *maa-* INDEF, *dadá* *early*
(maa)siaʔhgáguá *long ago, way back then* < *maa-* INDEF, *siaʔhgá* *that much*

16.1.1.2 -rú 'at, on'

The locative suffix **-rú** is largely synonymous with **-hguá**, but it seems to have a more abstract meaning and its co-occurrence with nouns that have specific referents in the real world is less common. Still, in many cases **-rú** and **-hguá** are freely interchangeable, as in (5).

- (5) **Masúùdigua** = **masúùdiru** **awáàga** **naagíc.**
 ma-isúùdi-**hguá** ma-isúùdi-**rú** awáàgi-Ø naagí-c
 1POS-lap-LOC 1POS-lap-LOC sit-CONT sit-DECL
He is sitting on my lap.

In other contexts, only **-hguá** is possible while **-rú** is ungrammatical, as in (6b) where the relational noun **ibîidi** n. *lower back, rump, rear end*, postp. *behind sth* is interpreted literally.

When **ibîidi** is used in a headless postpositional phrase, as in (6c), **-rú** is again grammatical.

Currently there is no explanation that would explain the licensing of **-rú** and **-hguá** in this and other similar contexts.

- (6) a. **Adí ibîidigua** **áhguá?c.**
 adí ibîidi-**hguá** áhgu-?a-c
 lodge behind-LOC be.at.PL-PL-DECL
They are behind the house.
- b. ***Adí ibîidiru** **áhguá?c.**
 *adí ibîidi-**rú** áhgu-?a-c
 *lodge lower.back-LOC be.at.PL-PL-DECL
 **They are on the bum of the house.*
- c. **Ibîidiru** **maaraharééc.**
 ibîidi-**rú** maa-naharéé-c
 behind-LOC 1A-stand-DECL
I'm standing right behind him.

Example (7a) demonstrates that only **-rú** is grammatical with the D-words **dóò** *where* (see 12.2.9) and **agudóò** *which one* (see 12.1.3). Although the interrogative pronoun **agudóò-ru** *in which one* in (7a) is grammatical only with the locative suffix **-rú**, there are no constraints against answering the question in (7b) with **-hguá** instead of **-rú**.

- (7) a. **Masagí agudóòru** /*-h_{gua} naagíʔ? b. **Masagí marabágu** maagíc.
 ma-sáàgi agudóò-**rú** /*-h_{gua} naagí-ʔ ma-sáàgi ma-irába-**h_{gua}** maagí-c
 1POS-hand which.one-LOC /*-LOC sit-INTER 1POS-hand 1POS-right-LOC lie-DECL
Which hand do I have it in? *It's in my right hand.*¹³⁰

It should also be noted that although the clause-final temporal suffix **-rú** is in complementary distribution with the conditional concessive suffix **-rús** / **-rúhsaa** and the conditional suffix **-rúg**, the locative **-rú** occupies a different slot from the clause-final suffixes and can therefore co-occur in the same word with them, as in shown (8) and (9).

- (8) **Dóòruacirus níha!**
 dóò-**rú**-aci-**rúhsaa** ní-hee-Ø
 where-LOC-COMPR-CONC.COND put-3CAUS.DIR-IMP.SG
Put it anywhere!
- (9) **Hawá guarú dóòrurug Naxbichí Oorihsí Ààsis héè wareec.**
 hawá guá-**rú** dóò-**rú**-**rúg** naxbichí aru-nihsí áàsi-s héè waree-c
 then that-LOC where-LOC-COND bear REL-dance creek-DEF say EVID-DECL
So wherever that was, it was called Dancing Bear Creek.

16.1.1.3 -h_{gaa} ‘at, on’

The location suffix **-h_{gaa}**, which is semantically much more bleached than the synonymous **-h_{gua}** and **-rú**, occurs mostly with dependent locative roots (10), demonstratives (11), as well as a few postpositions (12) and the indefinite-interrogative **dóò** *where* (see 12.2.9). It has the allomorph **-h_{gaa}** after long vowels and **-gaa** after short, but in some lexicalized constructions either both allomorphs are grammatical or only the “wrong” one is allowed.

- (10) **iidúgaa** *in the front* < *iidú front
háàgugaa *in the back* < *háàgu back

¹³⁰ The purpose of such expressions in the hand game is to confuse the opponent.

(11) **gugáá** *over there* < **gúá** *that*
hirugáá *over here* < **hirí** *this*

(12) **awahúgaa** *inside sth* < **awahú** *inside*

Direct suffixation to lexical nouns is not common but possible, as illustrated in (13).

(13) **awaxaawi?ihbúgaa** *on the mountain top* < **awaxaawí** *mountain*, **ihbú** *tip of sth*
mîdihbugaa *at the river bend* < **mîd?** *meander ?*, **ihbú** *tip of sth*

Examples of **-hgaa** in context are (14)–(16).

(14) **Áàgugaagaadi níha!**
 áàgu-**hgaa**-gáadi níhee-Ø
 top-LOC-VER put-IMP.SG
Put it on the very top!

(15) **Éècahgaa aguwaa?ihdíàc.**
 éè-ca-**hgaa** aguu-maa-ihdíà-c
 all-LOC REL-INDEF-big-DECL
He's the oldest of the them.

(16) **Mîwahugaa marasí maduc.**
 m-î-awahú-**hgaa** ma-néèsi madú-c
 1POS-mouth-inside-LOC 1POS-tongue exist-DECL
I have a tongue in my mouth.

Alone among the locative suffixes **-hgaa** may sometimes indicate the semantic goal, as in

(17). The verb **giwirígiiri** *to re-enter* in this example is an irregular vertitive form of the verb **miréèri** *to enter*.

(17) **Adiwahúgaa aruwahgiwirígiiric.**
 adí-awahú-**hgaa** aru-maa-hgiwirígiiri-c
 lodge-inside-LOC IRR-1A-enter.back-DECL
I'm going back into the house.

16.1.2 Goal

The three postpositional suffixes that express the notion of locative or temporal goal are **-hdaa**, **-hgidaa**, and **-xaa**. In addition, **-hdaa** is also used as an instrumental and limitive suffix.

16.1.2.1 **-hdaa** ‘to’

The goal suffix **-hdaa** *to, toward* in (18)–(20) indicates motion in a certain direction or towards a given location. It occurs mostly with verbs that encode movement, directed activity, or change in location.

- (18) **Masîxubaahdaa** aʔgdiríáǵ néèc.
maxî-xubáà-**hdaa** aʔg-diríá-g néè-c
white.man-holy-GOAL PORT-run-CRD go-DECL
He rushed her to the doctor.
- (19) **Aruwiigixiʔéèhdaa** mááhaʔc.
aru-mii-hgi-xiʔéè-**hdaa** mááhi-ʔa-c
REL-1B-GI-old-GOAL 3.go.PL-PL-DECL
We are heading towards old age.
- (20) **Hiróʔ** maaʔihdíàʔhcagihdaa maagaháàra!
hiri-ʔo maa-ihdíà-hcági-**hdaa** maa-gahéè-ara
this-PL INDEF-big-LIM-GOAL 3OBJ.PL-give.to.group-IMP.PL
Pass these out to adults only!

The second mora in stem-final long vowels and diphthongs is deleted if **-hdaa** is immediately preceded by an adverbial (see 15.1), pronominal, or demonstrative root. An example with a dependent locative root **guubxéé** *across* is in (21). Other roots that undergo final shortening include **mixdáá** *below, under*, **áàgaa** *top*, the pronominal stem **î** (see 11.2.1 and 11.2.9), and the mesiodistal pronominal demonstrative **hguá** (see 10.1.2).

- (21) **Guubxéhdaa** awawáàǵic.
guubxéé-**hdaa** maa-awáàǵi-c
across-GOAL 1A-sit.down-DECL
I sat across from him.

In some lexicalized cases, two of which are illustrated in (22) and (23), the goal suffix has become fused with the stem and may be directly followed by a speech-act marker.

(22) **Óhba**h**daa**c**.**
 óhbaa-**h**daa-**c**
 evening-GOAL-DECL
It is afternoon.

(23) **Agú**h**daa**c**.**
 agú-**h**daa-**c**
 further-GOAL-DECL
It is the other way.

16.1.2.1.1 -*h*daa ‘with’ (instrumental)

Besides denoting the goal, -*h*daa is also used as an instrumental suffix which indicates that the noun it modifies is used as an instrument or means to achieve a desired outcome of an action.

The primary function of instrumental adjuncts, as the name implies, is to establish the instrument used to accomplish an action. In this sense the basic meaning of -*h*daa can be glossed as ‘with something’. Examples are (24) and (25).

(24) **Madarú**h**xa**h**daa** **cîdadagi** **maari[?]c.**
 mada-mirúhxaa-**h**daa cîda-adagí maa-ní[?]-c
 1POS-gun-INST tail-white 1A-shoot-DECL
I shot a white-tailed deer with my gun.

(25) **Ní**h**dawacua** **níras**h**daa** **nágisag** **nísag**h**daa**
 nída-macúà ní-néèsi-**h**daa nágisi-g ní-sààgi-**h**daa
 2POS-sinew 2POS-tongue-INST wet.in.mouth-CRD 2POS-hand-INST

gáàge[?]haag **ní**h**dawacidohge** **ii[?]óbcaad.**
 gáàge[?]-hee-g nída-macidóò-hgee ii-óbcaadi-Ø
 roll-3CAUS.DIR-CRD 2POS-awl-DIM INST-stick.in-IMP.SG

*Wet your sinew **with** your tongue, roll it **with** your hands, and thread your needle.*

The instrumental prefix may also indicate a means adjunct, as in (26). In this function the instrumental suffix is usually glossed as ‘by something’.

- (26) **Máàhdii(h)siisihdaa nárahuaʔʔ**
 máàhdii-(h)siisi-**hdaa** ná-nááhu-ʔa-ʔ
 vehicle-snort-INST 2A-come.PL-PL-INTER
Did you come by train?

The instrumental suffix may also mark the agentive adjunct, particularly in passive constructions (see 4.2.3), as in (27).

- (27) **Máàhdiihdaa arahdabíhgaac.**
 máàhdii-**hdaa** arahdábi-hgee-ʔa-c
 vehicle-INST trample-3CAUS.INDIR-PL-DECL
He was run over by a car.

When the noun is followed by the instrumental suffix **-hdaa**, the verb may optionally be preceded by the instrumental prefix **ii-**, as in (28). The instrumental prefix has become lexicalized in certain expressions and cannot be omitted, as in **-hdaa iihirí** *to be made of something* in (29) and **-hdaa iiʔóòdhee** *to be dyed in a color* in (30). Although there is usually no semantic overlap between the locative-directional and instrumental usages of **-hdaa**, at least in the case of ‘to be dyed in a color’ the point of intersection between these meanings is indicated even by the choice of preposition ‘in’ in the English gloss that could be interpreted as referring to the goal.

- (28) **Masbahxééhdaa (ii)mabdáàdic.**
 ma-isbahxéé-**hdaa** (ii-)maa-bádaadi-c
 1POS-elbow-INST (INST-)1A-nudge-DECL
I nudged him with my elbow.

- (29) **Maaxáàxaahdaa iihiríc.**
 maaxáàxaa-**hdaa** ii-hirí-c
 abalone-INST INST-make-DECL
It is made of abalone shell.

- (30) **Dóʔhisehbi^hdaa iiʔóòdha!**
 dóʔhi-séhbi-**h**daa ii-óòdi-hee-Ø
 blue-dark-INST INST-ripe-3CAUS.DIR-IMP.SG
*Dye it in dark blue!*¹³¹

16.1.2.1.2 -*hdaa* ‘only’

When *-hdaa* is added to numerals, as in (31), it has a limitive meaning that can be glossed as ‘only’. In this sense it may also be used with pronouns and demonstratives but only in combination with the limitive suffix *-hcági*.

- (31) **Maaʔaahdú nuwaca^hdaa awágaac máàhdigua.**
 maa-aahdúu nuwáca-**h**daa maa-ígaac máàhdii-hgua
 INDEF-head one-LIM 1A-see-DECL vehicle-LOC
I saw only one head in the car.

16.1.2.2 -*hgidaa* ‘back to’

The vertitive goal enclitic *-hgidaa* *back to, back toward* is formed by combining the GI-morpheme (the vertitive sense of *hgi-* is described in 4.8.2.4) with the goal suffix *-hdaa*. In the derived suffix, *h* in *-hdaa* is deleted.

As the label vertitive implies, *-hgidaa* indicates that the movement denoted by the motion verb is directed back to the entity referred to by the noun, pronoun, or locative adverb to which *-hgidaa* is suffixed. Examples are in (32)-(35).

- (32) **Háàgu^hgidaa maaréèc.**
 háàgu-**h**gidaa maa-néè-c
 back-GOAL.VERT 1A-go-DECL
I’m going to the back.

¹³¹ The causativized form of the stative verb *óòdi* *to be ripe (as berries), be cooked, be done (as meat)* means ‘to cook something, brand something’. In combination with the instrumental prefix *ii-* the causative form means ‘to dye something’.

- (33) **Adi'áàgahgidaa** garadhág néèc.
 adí-ààgaa-**hgidaa** hgi-aradhí-g nèè-c
 house-top-GOAL.VERT GI-climb-CRD go-DECL
He went back upstairs.
- (34) **Maa'aruxabíhgidaa** maaréèc.
 maa-aru-xabí-**hgidaa** maa-nèè-c
 INDEF-REL-lie-GOAL.VERT 1A-go-DECL
I am going back to bed.
- (35) **Maaruudí goowíraarug** **adi'áàgahgidaa** aruwááha'c.
 maa-nuudí goowí-raa-rúg adí-ààgaa-**hgidaa** aru-mááhi-[?]a-c
 INDEF-eat finish-2CAUS.DIR-COND house-top-GOAL.VERT IRR-1go.PL-PL-DECL
If you have finished eating, we will go back upstairs.

The vertitive suffix is always used when the motion implied by the verb is understood to be directed toward one's home or original abode, as in (36) and (37). Besides that, the verb **náàgua** *to go home*, which is used in both of these examples, is semantically vertitive, therefore the non-vertitive counterparts **se'hdáá** and **adíhdaa** of **se'hgidáá** and **adíhgidaa** would not be felicitous.

- (36) **Mandaree se'hgidáá** maagúác.
 Mandaree se'-**hgidaa** maa-náàgua-c
 Mandaree that-GOAL.VERT 1A-go.home.SG-DECL
I am going home to Mandaree.
- (37) **Dóòhgaa náàrahgu'?** -- **Adíhgidaa** maagúá maaragíc.
 dóò-hgaa náà-nahgú-[?] -- adí-**hgidaa** maa-náàgua-Ø maa-naagí-c
 where-LOC 2A-be.sitting-INTER -- home-GOAL.VERT 1A-go.home-CONT 1A-sit-DECL
Where are you? -- I am on my way home.

Finally, there is an interesting group of Hidatsa personal names that are formed with the vertitive goal suffix in order to express the wish that one return to his or her roots. Examples are (38a-c).

- (38) a. **Agíhgidaa**
 agí-**hgidaa**-s
 belong.to.group-GOAL.VERT-DEF
Returns-to-One's-Own
- b. **Aru'ahúhgidaa**
 aru-ahú-**hgidaa**-s
 REL-many-GOAL.VERT-DEF
Returns-to-Many/the Flock
- c. **Awá Igúbahgidaa** **Nuwís**
 awá igúba-**hgidaa** nuwí-s
 land together-GOAL.VERT walk-DEF
Returns-to-Be-With-Her-Land

16.1.2.3 -*xaa* 'further'

The approximative goal suffix *-xaa* indicates that the place referred to is located further in a given direction or closer to a given direction. Examples are in (39)–(41).

- (39) **Sé'xaa** **náà!**
 sé'**-xaa** nées-Ø
 that-GOAL go-IMP.SG
Go over that way a little bit further!
- (40) **Mii'úùdixaa** **awáàgic.**
 mii-úùdi-**xaa** awáàgi-c
 1B-beside-GOAL sit.down-DECL
He sat closer to me.
- (41) **Giraagudhééxaa** **hiráàra!**
 giraagudhéé-**xaa** hirí-ara
 morning-GOAL make-IMP.PL
Do it when it is still morning!

The approximative goal suffix can be followed by the path suffix *-haa*, as in (42).

Combinations with the distributive suffix *-sée* may be possible, but are unattested.

- (42) **lidúxaa** / **lidúxahaa** **náà!**
 iidú-**xaa** / iidú-**xaa-haa** nées-Ø
 front-GOAL / front-GOAL-PATH go-IMP.SG
Move further forward. or Move further up!

The approximative goal suffix may precede location suffixes (the only attested combinations are with **-hgua** and **-rú**). There is little or no difference in meaning between the different combinations, as illustrated with the dependent adverbial root ***noodá** *this side* in (43).

(43) **noodáxaa** = **noodáxaaru** = **noodáxaahgua** *nearer this side*

16.1.3 Source

The source suffix ***-haag** cannot directly follow the nominal stem; it has to be preceded by one of the three location suffixes – **-hgua**, **-rú**, or **-hгаа**. The second mora in **-hgua** and **-hгаа** is deleted before ***-haag**. All three combinations are glossed as ‘from’ if the reference is a location and ‘since’ if the reference is a point in time.

The forms **-hguhaag** and **-hgahaag** are used after stems ending in a long vowel or a diphthong, and **-guhaag** and **-gahaag** after a short vowel.

By far the most common of the three source affix combination is **-hguhaag**. Examples (44) and (45) illustrate its usage when the reference is a location.

(44) **Awadáàhees** **se²hguhaag** **maahúc.**
awá-daahéé-s se²-**hgua-haag** maa-húù-c
land-separated-DECL that-LOC-SOURCE 1A-come-DECL
I came from Independence.

(45) **Maarúdhadiguhaag** **úùwaca nuusaag** **gadaadhééc.**
maa-núdhí-adí-**hgua-haag** úùwaca núùsaa-g hgi-adaarí-héé-c
INDEF-tie-lodge-LOC-SOURCE metal leave-CRD GI-appear-3CAUS.DIR-DECL
He bailed him out of jail.

(46) and (47) are examples of usage when the reference is a point in time.

(46) **Hiróó dadáguhaag** **maawahgúc.**
hiróó dadá-**hgua-haag** maa-mahgú-c
here early-LOC-SOURCE 1A-dwell-DECL
I've lived here since way back.

- (47) **Garísdaguhaag** **aguwaa'ihdíwaaç.**
garísda-**hgua-haag** agu-maa-ihdíà-waa-c
small-LOC-SOURCE REL-INDEF-big-1CAUS.DIR-DECL
He's the one who I raised from childhood.

The affix combinations **-rú-haag** and **-hгаа-haag** occur relatively seldom compared to **-hguhaag** with which they are synonymous. The distribution of **-rúhaag** and **-hgahaag** is mostly restricted to demonstrative and adverbial stems (such as **awahúgaa** *inside* and **háàgugaa** *in the back*). Examples are in (48) and (49).

- (48) **Dibíàrugarees** **agúxaac** **Awadihiráás** **se'rúhaag** / **se'hgúhaag.**
dibíà-arú-garéé-s agúxaa-c awadí-hiráá-s se'**rú-haag** / se'**hgua-haag**
mud-REL-gooney-DEF farther-DECL village-new-DECL that-LOC-SOURCE / that-LOC-SOURCE
Parshall is further away / a little further from New Town.

- (49) **Háàgugahaag** **húùc.**
háàgu-**hгаа-haag** húù-c
back.of.group-LOC-SOURCE come-DECL
He came from the back.

16.1.4 Path

The path suffix **-haa** is homophonous with the adverbial suffix **-haa** (see 15.2.1).¹³² Although it may be added directly to the lexical stem, **-haa** occurs more often after other postpositional suffixes that denote location or goal. The only locative suffix that can follow **-haa** is the distributive **-séè** (see 16.1.5). The second mora in a long vowel or a diphthong in any other prefix that precedes **-haa** is deleted.

¹³² Since in the closely related Crow the adverbial suffix **-haa** is distinct from the path suffix **-taa** (see Graczyk 2007: 155, 364), I have adopted the position that the adverbial and path suffixes are simply homophones in Hidatsa. The similarity of the path suffix **-ha** in Osage (Quintero 2004: 391) to the same morpheme in Hidatsa may be a coincidence.

Locative expressions with **-haa** imply that the activity occurs in the general area, if the verb is non-dynamic, as in (50a), or that the motion is directed in a general way, as in (50b), if the verb is dynamic. In the first type of expressions **-haa** can be glossed ‘around X’ or ‘about X’, and in the second type ‘through X’.

- (50) a. **Hiróóhaa aruwaaháhguc / maaháguwic.**
 hiróó-**haa** aru-maa-háhgu-c / maa-háhgu-wi-c
 here-PATH IRR-1A-be.at-DECL / 1A-be.at-1FT.SG-DECL
I'll be around.
- b. **Hiróóhaa néèsd Tuffy sé'wa.**
 hiróó-**haa** nèè-sd Tuffy se'-wa
 here-PATH go-DEF Tuffy that-FOC
Tuffy went by. / Tuffy went through here.

Expressions that make reference to path are often built upon stems comprising other locative suffixes encoding location or goal, but never source. The first two location suffixes, **-hgua** and **-rú**, are both common before **-haa**, as in (51)–(53). Combinations with the third location suffix, **-hгаа**, are mostly restricted to occurrences with the D-word **dóò** *where* and various locative adverbs, as with the dependent adverbial root ***cúù** *one side* in (54).

- (51) **Awáguhaa así maaréèc.**
 awá-**hgua-haa** así maa-néè-c
 land-LOC-PATH travel 1A-go-DECL
I am traveling on foot.
- (52) **Nídabacidaguhaa náà!**
 nída-báhcida-**hgua-haa** néè-Ø
 2POS-west-LOC-PATH go-IMP.SG
Go by way of west of you! / Go to your west!
- (53) **Awadibáhcihees se'rúhaa maahúc.**
 awadí-báhci-hee-s se'-**rú-haa** maa-húù-c
 village-erect-3CAUS.DIR-DEF that-LOC-PATH 1A-come-DECL
I came through Mandan.

- (54) **Dóhgahaa** **ooráreeʔ?** -- **Mirí** **cúùhgahaa** **aruwaaréèc.**
dóò-hгаа-haa **aru-ná-néè-ʔ** -- **mirí** **cúù-hгаа-haa** **aru-maa-néè-c**
where-LOC-PATH **IRR-2A-go-INTER** -- **water** **side-LOC-PATH** **IRR-1A-go-DECL**
Which way are you going? -- *I will go by way of the other side of the lake.*

Combinations of **-haa** with the goal suffixes **-hdaa** and **-xaa** are illustrated in (55) and (56).

- (55) **Aguseʔhdaháá** **maaréèc.**
agu-seʔ-hdaa-haa **maa-néè-c**
REL-that-GOAL-PATH **1A-go-DECL**
I went towards it.

- (56) **Íàxahaa** **nááhaara!**
íà-xaa-haa **nááhi-ara**
there-GOAL-PATH **3go.PL-IMP.PL**
Go further that way!

The path suffix **-haa** in (57) should not be confused with the goal suffix **-hdaa**.

- (57) **Ibîidhaa** / ***Ibîidihdaa** **néèdha!** **Ooriiʔarabéèc.**
ibîidi-haa / ***ibîidi-hdaa** **néè-dhaa-Ø** **aru-nii-arabéè-c**
hind-PATH / ***hind-GOAL** **go-NEG-IMP.SG** **IRR-2B-kick-DECL**
Don't walk behind it! It'll kick you.

Encoding path is quite flexible in Hidatsa and there is often a choice between a number of expressions whose meaning differs little or not at all. Thus, **isóògi** *front* allows the following expressions which all roughly mean ‘by going in front of something’: **isóòghaa** and **isóòghaasee** with **-haa** and **-haa-séè**, and **isóògiguhaa** and **isóògiruhaa** with **-hgua-haa** and **-rú-haa**. The distributive suffix **-séè** typically only follows **-haa** if there is no intervening location suffix between **-haa** and the stem.

16.1.5 Distribution

Hidatsa distributive morphology implies that an activity affects an extended area or scattered locations. The unmarked form of the distributive suffix is *-sée*. The distribution of the allomorph *-cisée* is restricted to the position after D-words (see Chapter 12).

In the sentences in (58) and (59), the distributive suffix is attached directly to the noun.

- (58) **Oorahdibiséè** mááha^ʔc.
aru-nahdibí-sée mááhi-^ʔa-c
REL-dent-DIST 1go.PL-PL-DECL
We went through the valley.
- (59) **Oogicibáʔs** **adisée** **nááhiʔiiruc.**
agu-gi-cibí-^ʔa-s adí-sée nááhi-îiru-c
REL-GI-dive-PL-DEF house-DIST go.PL-HAB.PL-DECL
The Mormons always go from house to house.

The distributive *-sée* often follows the location suffixes *-hgua*, *-rú*, and *-hga*. Examples are (60)–(62).

- (60) **Ooghíguasee** **náà!**
ooghí-hgua-sée néè-Ø
beyond-LOC-DIST go-IMP.SG
Go around the other way!
- (61) **Dóòrusee** **níwaaʔʔ**
dóò-rú-sée ní-waa-^ʔ
where-LOC-DIST put-1CAUS.DIR-INTER
Shall I put it anywhere?
- (62) **Dóhgaasee** **aruwaaréeʔʔ**
dóò-hga-sée aru-maa-née-^ʔ
where-LOC-DIST IRR-1A-go-INTER
Which places should I go to?

The distributive suffix *-sée* may also occur as the limitive adverbial adjunct that establishes how the activity was accomplished by limiting its scope. Examples (63) and (64) demonstrate the limitive function of *-sée* in combination with nouns denoting body parts.

(63) **Áàbasee** ágsia wareec.
áàba-sée ágsia waree-c
neck-DIST hold EVID-DECL
He held him by his neck.

(64) **Cagáàgas** **ixbasée** ágsiac.
cagáàga-s **ixbá-sée** ágsia-c
bird-DEF **wing-DIST** hold-DECL
He caught the bird by the wings.

The distributive suffix *-sée* has an allomorph *-cisée* that occurs only after D-words (see Chapter 12), illustrated with **dabée** *to be who* in (65) and **dáàba** *to be what* in (66). The only exception is the D-word **dusáàci** *what kind* which is followed by the unmarked form *-sée*, as in (67).¹³³

(65) **Dabéècisee** **ú?sia?oo??**
dabée-cisée **ú?sia-?o-?**
who-DIST arrive-PL-INTER
Who all came? or Which ones came?

(66) **Dáàbacisee** **né??**
dáàba-cisée **n'-é?-?**
what-DIST 2POS-own-INTER
What kinds do you have?

(67) **Dusáàcisee** **né??**
dusáàci-sée **n'-é?-?**
what.kind-DIST 2POS-possess-INTER
What kinds do you have?

¹³³ Note that the final syllable in **dusáàci** and the initial syllable in **-cisée** are identical. There appears to be a constraint in Hidatsa against attaching certain grammatical morphemes to stems if this would result in a sequence of two identical syllables. See 5.5.2 for a similar case where the first person future suffix *-wi* is incompatible with stems whose final syllable is *-wi*.

The distributive *-sée* can sometimes be replaced with the path suffix *-haa* (see 16.1.4) without change in the meaning. The two can also be used together, in which case the path suffix precedes the distributive. The synonymous meanings of the three possibilities are illustrated in (68) with *néèda* *edge*, *nuwáàda* *center, middle*, and **cúù* *one side*. (69) is an example of *-haa-see* in a sentence.

- (68) *néèdasee* = *néèdhaa* = *néèdhaasee* *along the edge*
nuwáàdasee = *nuwáàdhaa* = *nuwáàdhaasee* *through/ in the middle*
cúùhgasee = *cúùhgahaa* = *cúùhgahaasee* *by way of the other side, across*
- (69) *Aruʔúùdhaasee* *níhaara!*
aru-úùdi-haa-sée *ní-hee-ara*
REL-base-PATH-DIST put-3CAUS.DIR-IMP.PL
Put the dirt around it / by it (as when working in the garden)!

However, the distributive *-sée* and the path suffix *-haa* are not always synonymous. The difference between the two is contrasted in (70), where the first sentence with *-haa* simply refers either to the literal path or a general direction, whereas the second sentence with *-sée* implies that journey will take one through a number of scattered locations.

- (70) a. *Dóhgahaa* *ooráreeʔʔ*
dóò-hгаа-haa *aru-ná-née-ʔ*
where-LOC-PATH IRR-2A-go-INTER
Which way are you going?
- b. *Dóhgaasee* *arumaaréeʔʔ*
dóò-hгаа-sée *aru-maa-née-ʔ*
where-LOC-DIST IRR-1A-go-INTER
Which places shall/should I go to?

16.1.6 Causativization of postpositional suffixes

Some postpositions and postpositional enclitics can be causativized and inflected for person.. Only the derivation of direct causatives is possible. Causativized adpositionals indicate movement in the direction implied by the movement.

The most commonly causativized locatives are the three goal affixes, presented in (71).

- (71) -hdaa GOAL → -hdahee
 -hgidaa VERTITIVE GOAL → -hgidahhee
 -xaa GOAL → -xahee

Causativized locative affixes may be directly added to the noun, as in and (72) and (73a), but it is more common for the noun to be followed by a free causativized postpositional complex, as in (73b). (73a) is an example of an incorporated noun *íí fur* which is followed by the causativized enclitic -hgidaa *back towards*. In (73b), *íí fur* is followed by the causativized postposition *awahú inside*.

- (72) **Mii?icidíhdaha!**
 mii-icidí-hdaa-hee-Ø
 1B-tracks-GOAL-3CAUS.DIR-IMP.SG
Follow me!

- (73) a. **Aru?ííhgidawaac.**
 aru-íí-hgidaa-waa-c
 REL-fur-GOAL.VERT-1CAUS.DIR-DECL
I turned the fur side out.
- b. **Íí awahúhdawaac.**
 íí awahú-hdaa-waa-c
 fur inside-DIR-1CAUS.DIR-DECL
I turned the fur side in.

Although it is possible to causativize postpositions directly, it is more common for the causative suffix to be preceded by one of the postpositional suffixes. Example (74) presents three possible ways to causativize the postposition *mixdáá below, under*, first by suffixing the causative directly to the postposition, and then the more common variants with the intervening -hdaa *toward* and -hgidaa *back towards*, respectively.

- (74) **Maa?iráàxi madhéé aru?asá?c.** **Mi?hgííga íí?a?xu**
 maa-iráàxi madhéé aru-así-?a-c mi?hgííga ii-í-a?xúà
 INDEF-spirit already IRR-travel-PL-DECL window INST-LOC-hide

mixdáhaara! / **mixdáhdahaara!** / **mixdáhgidahaara!**
mixdáá-hee-ara / **mixdáá-hdaa-hee-ara** / **mixdáá-hgi-hdaa-hee-ara**
below-3CAUS.DIR-IMP.PL / **below-DIR-3CAUS.DIR-IMP.PL** / **below-GI-DIR-3CAUS.DIR-IMP.PL**

*The spirits are already going around. Put the window blind (back) down!*¹³⁴

Causativized postpositions are particularly common in commands that involve movement in the directions encoded in that postposition, as in (74) above and (75) below.

- (75) **ooghí** *beyond, next, other* > **Ooghíhdaha!** *move over! move it out of the way!*
ooghí *beyond, next, other* > **Ooghíxaha!** *move over! scoot over!*

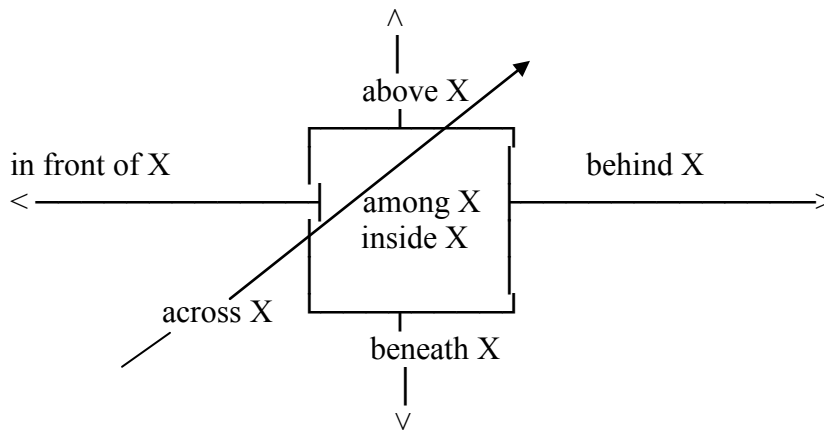
The three locative suffixes (**-hguá**, **-rú**, and **-hgaá**) are seldom causativized, except in historically frozen forms. A common example is **úùdiruhee** (< **úùdi** *beside* **-rú** *LOC* **-hee** *CAUS.DIR*) that has a lexicalized meaning ‘to marry somebody’. Another example is the postposition ***háàgu** *in the back* that never occurs without one of the postpositional suffixes. Besides the expected **háàguhdahee** (< **háàgu-hdaa-hee**) *to remain in the background*, the same meaning can be expressed with **háàgugahee** (< **háàgu-hgaá-hee**).

¹³⁴ The Hidatsa believe that windows should be covered after dark when spirits and other supernatural creatures come out. Children are cautioned against peeking out at night because malevolent spirits may be waiting behind the window for a chance to get a look inside. Coming face to face with such a spirit may cause disfigurement or some other kind of lasting damage.

16.2 Postpositions

Postpositions convey more nuanced and detailed meanings than postpositional enclitics. The main function of most postpositions is to express the relative position of two objects in more than one dimension,¹³⁵ as illustrated by FIGURE 16.2.

FIGURE 16.2. SEMANTIC RELATIONS BETWEEN POSTPOSITIONS



Hidatsa postpositions constitute a heterogeneous class of words whose boundaries overlap with nouns. A number of postpositions, which are derived by conversion from nouns, are reminiscent of relational nouns. Compare, for instance, *úùdi* *the base of something* and *úùdi* *beside something*, and *áàgaa* *the top of something* and *áàgaa* *on top of something*, both of which are inflected with B-set pronominal prefixes. A few postpositions are derived by conversion from inalienably possessed nouns, as exemplified by *ibîdi* *behind something*, which is a zero derivation from *ibîdi* *rump, butt*. A few non-derived postpositions, such as the comitative *ààbi* *with him/her/it*, are always used without postpositional enclitics while many others are formed by attaching postpositional enclitics to bound postpositional roots.

¹³⁵ An obvious exception to this generalization is the comitative relationship expressed by *ààbi* *with*.

A representative list of common postpositions is given in (76). Postpositions that never occur without postpositional suffixes are indicated by an asterisk, but even the unmarked forms, with a few exceptions, seldom occur alone.

(76)	áàbi	with him/her, it
	áàgaa (áàhгаа)	on top of sth ¹³⁶
	awahú	inside of sth
	*cúù	across sth
	héèra	among sth/sb
	ibíidi	behind sth/sb
	isóògi	in front of sth/sb
	igúba	together with sth/sb
	icgháá	toward sth/sb
	mixdáà, mixdáá	beneath sth
	nuwáàda	in the center of sth
	*ooghí	beyond sth, over sth
	úùdi	beside sth/sb

Examples of postpositions in sentences are (77)–(81).

(77)	Mirisibísa	mirá [?] uwaca	áàgaaru	naharééc.
	mirí-sibísa	mirá [?] -úùwaca	áàgaa-rú	naharéé-c
	water-black	fire-metal	top-LOC	stand-DECL
	<i>The coffee is on the stove.</i>			

(78)	Maa [?] oorúùxa	áàgahaa	nîiric.
	maa-arú-núùxaa	áàgaa-haa	nîiri-c
	INDEF-REL-spread	top-PATH	walk-DECL
	<i>He walks on the carpet.</i>		

(79)	Awá ooghirú	áhgua [?] c.
	awá ooghí-rú	áhgu- [?] a-c
	land beyond-LOC	dwell.PL-PL-DECL
	<i>They live over the hill.</i>	

¹³⁶ The relational noun (aru)áàgaa *the top of something* appears to be synchronically derived by combing the adpositional enclitic -hгаа with the nominal *áà. When used as a postposition, áàgaa may optionally occur as áàhгаа. When it is used as a noun, only áàgaa is possible. In contemporary Hidatsa, the relational noun (aru)áà refers either a) to a stem or stalk of a plant or b) an entire plant above the ground.

(80) **Mirí** agihdíà **cúùhgahaag** maahúc.
 mirí agu-ihdíà **cúù-hgahaag** maa-húù-c
 water REL-big **across-SOURCE** 1A-come-DECL
I came from across the ocean.

(81) **Adí** **ibîdiguhaag** húùc.
 adí **ibîdi-hguhaag** húù-c
 lodge **behind-SOURCE** come-DECL
He came from behind the house.

16.2.1 Comitative

The comitative relationship denotes companionship. Unlike many other languages, in Hidatsa the comitative never denotes an instrument. (Instrumentality is expressed with the instrumental/goal suffix *-hdaa*, see 16.1.2.1.1)

There are three ways to indicate a comitative relationship. First, a single person or object in a comitative relationship is expressed with the comitative postposition *áàbi* *with somebody*, as in (82)–(85). The noun may be omitted if it is recoverable from context.

(82) **Áàbi** náà!
áàbi néè-Ø
with go-IMP.SG
Go with him!

(83) **Sîiba** **áàbi** núsghic.
 síiba **áàbi** núsghi-c
 intestines **with** pull.out-DECL
*He pulled it (e.g., a stomach) out **with** the guts.*

(84) **Cibíc** **idawáàhdi** **áàbi**.
 cibí-c **ida-máàhdii** **áàbi**
 drown-DECL 3POS-vehicle **with**
*He drowned **with** his boat.*

(85) **Gaagság** **awaasabóhorowig** **irúgsidi** **áàbi** **nagabá** **muudíc**.
 gaagsá-g **awaasá-bóhorowi-g** **igúgsidi** **áàbi** **nagabáá** **m-nuudí-c**
 potato-CRD **bean-spherical-CRD** **meat** **with** **stew** **1A-eat-DECL**
*I ate a stew **with** potatoes, peas, and meat.*

17 Clause types

There are four principal types of clauses: independent clauses, marked by one of the illocutionary markers; relative clauses, marked by prefixation, and coordinate and adverbial clauses, marked by suffixation.

17.1 Independent clauses

With the exception of exclamations (see Chapter 14), every independent utterance terminates with an illocutionary marker that identifies the clause as a type of statement, question, or command. Speech acts and illocutionary suffixes marking independent clauses are discussed in detail in 6.1.

17.2 Relative clauses

There are two basic relativizers, **agu-** and **aru-**, that mark relative clauses and which function as all of, or part of, an element in the relative clause. Hidatsa relative clauses can be lexically headed or occur without lexical heads.

17.2.1 *agu-* ‘entitive relativizer’

The entitive relativizer **agu-**, which occurs as **oo-** before the obstruent **g**, functions as a relativized element that is anaphorically linked to the head noun. In other words, the prefix functions as a relative pronoun that refers to an antecedent in the preceding clause. The relative prefix marks the position of the subject, agent, or object, as in (1).

- | | | | |
|-----|-------------------------------------|--------------------------|-------------|
| (1) | AGENT | | OBJECT |
| | Macéé | aguriigidéès | awágaac. |
| | macéé | agu-nii-hgi.déè-s | maa-ígaac-c |
| | man | REL-2B-beat-DEF | 1A-see-DECL |
| | <i>I saw the man who beat you.</i> | | |
| | Macéè | aguráhgidees | awágaac. |
| | macéé | agu-ná-hgi.déè-s | maa-ígaac-c |
| | man | REL-2A-beat-DEF | 1A-see-DECL |
| | <i>I saw the man whom you beat.</i> | | |

Nominalization of relative clauses is the only method of noun modification by verbs or other predicative modifiers (e.g., numerals). Nominalized relative clauses often terminate with an article or attributive demonstrative since antecedents of entitive clauses tend to be specific.

Example (2) illustrates an independent clause, a predicative relative clause, and a nominalized relative clause with *sibísa* to be black.

- | | | |
|-----|---|---|
| (2) | a. INDEPENDENT CLAUSE | b. PREDICATIVE RELATIVE CLAUSE |
| | Naxbichíhe sibísac. | Naxbichí(*he) agusibísac. |
| | naxbichí- hee sibísa-c | naxbichí-(*-hee) agu-sibísa-c |
| | bear- DEM black-DECL | bear-(*DEM) REL-black-DECL |
| | <i>This bear is black.</i> | <i>The bear that is black</i> |
| | c. NOMINALIZED RELATIVE CLAUSE | |
| | Naxbichí agusibísahe ihdiác. | |
| | naxbichí agu-sibísa-hee ihdiác-c | |
| | bear REL-black-DEM big-DECL | |
| | <i>This black bear is big. (lit. This bear that is black is big.)</i> | |

As a relativizer, *agu-* indicates that a specific entity is referred to as a whole (as opposed to partial entities or times/locations referred to by the partitive relativizer *aru-*). When the head nominal of the lower clause is an animate or a discrete entity it is relativized with *agu-*, as illustrated by the nominalized clauses in (3)–(7). Since entitive clauses refer to uniquely identified entities, they are usually followed by either the definite article *-s* or an attributive demonstrative.

- | | |
|-----|---|
| (3) | Masúga aguwiiráhcis adáàsigua háhguc. |
| | masúga agu-mii-náhci-s adáàsi-hgua háhgu-c |
| | dog REL-1B-bite-DEF outside-LOC be.around-DECL |
| | <i>The dog that bit me is outside.</i> |

- (4) **Icúùwasga agucagíhdis maaguréèc.**
 icúùwasga **agu-cagí-hdi-s** maa-gurèè-c
 horse **REL-good-DES-DEF** 1A-chase-DECL
I'm chasing a pretty horse.
- (5) **Madúùxi aguhisí se'wa maawáàheec.**
 ma-idúùxi **agu-hisí se'-wa** maa-ma'íihee-c
 1POS-shirt **REL-red** that-FOC 1A-want-DECL
I want my red shirt.
- (6) **Miri'iihíhge agusibísahe nídawaa'e'?**
 mirí-ii-híi-hgee **agu-sibísa-hee nída-maa-é'-'?**
 water-INST-drink-3CAUS.INDIR **REL-small-this** 2POS-INDEF-possess-INTER
Is this small cup yours?
- (7) **Hirí Máàsiwia Agudichís hee'îru? wareec.**
 hirí máàsi-míà **agu-dichí-s** héè-îru? waree-c
 this hire-woman **REL-fat-DEF** say-HAB.PL EVID-DECL
Maasiwia The Heavysset One is what she was always called.

Relative clauses without lexical heads are common. In examples (8) and (9), the entitive prefix **agu-** is the subject of the clause.

- (8) **Aguháàgiwadu maa'iighacídhaa'ac.**
agu-háàgu-ii-madú maa-iighací-dhaa-'a-c
REL-last-INST-exist INDEF-understand-NEG-PL-DECL
This generation doesn't understand.
- (9) **Aguhirí maawáàhees agu'iháàwa a'ghúhgaa'ac.**
agu-hirí maa-wa'íihee-s **agu-iháà-wa** a'g-húù-hgee-'a-c
REL-this 1A-want-DEF **REL** different-INDEF PORT-come-3CAUS.INDIR-PL-DECL
I wanted this one but they sent me a different one.

Predicative relative clauses, illustrated in (10)–(12), are comparatively less common than nominalized relative clauses.

- (10) **Maadí agu'iráhgisaguac.**
 ma-adí **agu-iráhgisa-gua-c**
 1POS-house **REL-left-LOC-DECL**
My house is the one that is on the left.

- (11) **Éècahгаа** **aguwaaʹihdiàc.**
 èèca-hгаа **agu**-maa-ihdià-c
 all-LOC **REL**-INDEF-big-DECL
He's the oldest of them.
- (12) **Agudóòri** **Rose** **aguʹaʹghúùʹʹ?**
 agu.dóò-rí **Rose** **agu**-aʹg-húù-ʹʹ
 which.one-ERG **Rose** **REL**-PORT-come-INTER
*Which one (of you) will bring Rose?*¹³⁷
- **Niirahéèri** **aguriiʹáchac** **Parshall** **seʹhguháág.**
 -- n-iirahéèri **agu**-nii-ácha-c **Parshall** seʹhgua-haag
 -- 2-PRO.ERG **REL**-2B-close-DECL **Parshall** that-LOC-SOURCE
 -- *You yourself are close from Parshall.*

17.2.2 *aru*- 'partitive relativizer'

The partitive relativizer *aru-* (and its allomorph *oo-* before *n/r*) is used in relative clauses in which the relativized constituent is locative, temporal, or a manner expression. It may also indicate that the relativized subject or object is partitive (referring to a part of a whole), as opposed to entitive subjects and objects referred to by *agu-*. The relativizing *aru-/oo-* is homophonous with the irrealis marker *aru-/oo-* (see 6.5.3).

Headless relative clauses with a locative meaning are illustrated in (13) and (14), and temporal meaning in (15). A relativized manner adverbial is illustrated in (16).

- (13) **Arî** **arucawúhciru** **nahíhga!**
 arî **aru**-cawúhci-rú nahí-hgee-Ø
 road **REL**-straight-LOC stand.up-CAUS.INDIR-IMP.SG
Stop the car where the road is straight!
- (14) **Mirí** **aruwadúga** **adíhge** **hiríc.**
 mirí **aru**-madú-hгаа adí-hgee hirí-c
 water **REL**-exist-LOC house-DIM make-DECL
He built a little house where there was water.

¹³⁷ The relativized D-word *dóò* *where* has become grammaticalized as a D-word *agudóò* *which one*.

(15) **Cagáàgaraaga** **ooruudís** **hîc.**
 cagáàga-náàga **aru-nuudí-s** hîi-c
 chicken-young.one REL-eat-DEF get.here-DECL
It's Easter time. (lit. The time when one eats eggs has arrived.)

(16) **Arucagíhaa** **nahgú** **neesác.**
aru-cagí-haa nahgú neesá-c
 REL-good-ADV be.sitting not.exist-DECL
He is mishehaving. (lit. He is unable to sit still.)

Locative-headed relative clauses are often used in reference to landscape formations by pointing to a characteristic feature that is part of a location, such as a curve or a depression, as in (17). However, when a specific location is referred to that is perceived as a whole, the same construction may optionally be relativized with the entitive **agu-** as in (18). Prominent or discrete landscape features that have individuative characteristics, such as the buttes in (19), are also relativized with the entitive **agu-**.

- | | | | |
|------|-----------------------|-------------------------|--|
| (17) | arî arusagúbi | <i>a curve</i> | < arî road, sagúbi be crooked |
| | arî arusáhsa | <i>junction</i> | < arî road, sáhsa be forked |
| | awá aruhobí | <i>cave</i> | < awá land, hobí be a hole |
| (18) | awá aguhobíhe | <i>this cave</i> | < awá land, hobí be a hole, -hee this |
| (19) | caá aguráàwiis | <i>the three buttes</i> | < caá butte, náàwii be three, -s DEF |

When used in reference to partitive entities, the relativizing **aru-** shares semantic features with the irrealis **aru-** as both indicate uncertainty. The uncertainty factor is illustrated in (20), where **aru-** refers to an indefinite number of speakers, and in (21), where it refers to any water that Sage happens to bring.

(20) **Aragaráhu aru'iré'** **neesác.**
 aragaráhu **aru-iré'** neesá-c
 Arikara REL-speak exist.not-DECL
Nobody speaks Arikara (any more).

- (21) **Oxdaarée mirí aru'a'ghúù cigúà'ii.**
 oxdaarée mirí **aru-a'g-húù cigúà-íí**
 sage(in.Mandan) water REL-PORT-come sweet-INTENS
The water that Sage brings to me is oh so sweet!

The difference between partitive and entitive constructions is contrasted in (22), where the clause relativized with **aru-** refers to an indefinite group of very small objects that are a subset of some larger group, whereas the combination of the entitive relativizer **agu-** and the veritive **-gáádi** *really* can be interpreted as the superlative construction in reference to specific entities in the group.¹³⁸

- (22) a. **arugarísdagaadi** *the ones who are small* < **garísda** *small*, **-gáádi** *VER*
 b. **agugarísdagaadi** *the smallest one(s)* < **garísda** *small*, **-gáádi** *VER*

The sentence in (23) illustrates clause-chaining in Hidatsa. The passage consists of three entitive and partitive relative clauses. One of the clauses, **agu'aru'adhahgáàcis** *the one at the end*, is relativized twice: first with the partitive **aru-** to indicate location and then with the entitive **agu-** to single it out from other similar locations

- (23) **Hawá hirí ooroogdeerúusa aguráawi gáaracihe**
 hawá hirí **aru-noogdee-núusaa agunáawii gáá-raci-he**
 and.then this REL-corpse-bury REL-three lie.PL-COMPR-this
- agu'aru'adhahgáàcis arusé? gigéèhe**
agu-aru-adhahgá-aci-s aru-sé? gigéè-he
 REL-REL-end-compr-DEF IRR-that OPIN-EMPH

And this grave, the three that are lying here, the one at the end, I think that would be the one.

¹³⁸ The system of comparison requires further documentation. Preliminary data suggest that with stative verbs the third person future suffix **-hi** is sometimes indicative of the comparative degree and the veritive suffix **-gáádi** of the superlative.

Relative clauses without any kind of lexical heads are common. In examples (24)–(25) the partitive prefix **aru-** is the subject of the clause.

- (24) **Aruwiihagáco?** giwagúùwi cagíc.
aru-mii-hagáci-ʔo hgi-magúùwi cagí-c
REL-1B-butcher-PL GI-close.up good-DECL
It's closed up where they operated on me.

- (25) **Arubiragás** nagsibíc.
aru-biragá-s nagsibí-c
REL-ten-DEF pass-DECL
It's past 10 o'clock.

17.2.3 Indefinite relative clauses

A lexical head of a relative clause is rendered abstract by substituting the noun phrase with the indefinite prefix **maa-** that is immediately followed by one of the relativizing prefixes. Examples are in (26)–(28).

- (26) **Maaʔaruʔawáxiruhxiʔiis** goowíc.
maa-aru-maa-íxiruhxi-íi-s goowí-c
INDEF-REL-1A-worry-HAB.SG-DEF finish-DECL
What I used to always worry about is finished.
- (27) **Maaʔaguwaawáàhee** goʔsdáàcihe.
maa-agu-maa-maʔíihee goʔsdá-aci-he
INDEF-REL-1A-want little-COMPR-EMPH
What I want is only a little bit.
- (28) **Maaʔaguhúùraciʔiis** hîc.
maa-agu-húù-raci-íi-s hîi-c
INDEF-REL-come-COMPR-HAB.SG-DEF get.here-DECL
That one who always comes is here.

17.3 Coordination

In a coordination, two or more elements of equal status, known as conjuncts, are joined to form a larger unit. Coordinative constructions can have any number of coordinates, with two being the lower limit. Coordination in Hidatsa is always polysyndetic as each conjunct in the series, except the last one, is necessarily followed by the coordinating clausal suffix **-g**. The suffix has the same shape but different phonological properties in noun and verb phrases.

17.3.1 Coordinate noun phrases

Coordination of noun phrases is accomplished by suffixing the coordinating marker **-g** and to each of the conjuncts. The suffix is optional with the last member of the series. The coordinating suffix **-g**, unlike the homophonous coordinating same subject marker **-g** that is used to conjoin verb phrases, does not trigger ablaut. Examples of coordinate noun phrases are seen in (29)–(33).

- (29) **Mahúúg** **máàdug** **macuugá** **iirúba** **áhguaʔc.**
ma-ihúú-**g** m-áàdu-**g** ma-icuugá ii-núùba áhgu-ʔa-c
1POS-mother-CRD 1POS-father-CRD 1POS-younger.brother INST-two be.at.PL-PL-DECL
I have mother, father, and two younger brothers.
- (30) **Aguhisíg** **agudóʔhig** **agudóò** **náwaheerug** **núhca!**
agu-hisí-**g** agu-dóʔhi-**g** agudóò ná-waʔihee-rúg núhci-Ø
REL-red-CRD REL-blue-CRD which.one 2A-want-COND take-IMP.SG
Take either the red one or the blue one, whichever you like!
- (31) **Nîg** **mîg** / **nîg** **híi** **mîwa** **mááhiwihaʔc.**
nî-**g** mî-**g** / nî-**g** híi mîwa mááhi-wihi-ʔa-c
you-CRD I-CRD / you-CRD and 1PRO we.go-1FT.PL-DECL
You and I should go.
- (32) **Naxbichíg** **céésag** **iidagí** **mirá** **awahúga** **áhguʔiiruc.**
naxbichí-**g** céésa-**g** iidagí mirá awahú-hgaa áhgu-îiru-c
bear-CRD wolf-CRD rabbit tree inside-LOC be.PL-HAB.PL-DECL
Bears, wolves, and rabbits live in the woods.

- (33) **Gaagság** **gòòxaadig** **awaaság** **gagúwi ruwa óòsaaʔac.**
 gaagsá-g gòòxaadi-g awaasá-g gagúwi nuwa óòsee-ʔa-c
 potato-CRD corn-CRD bean-CRD squash some pour.into-PL-DECL
They planted potatoes, corn, beans, and some squash.

Coordination of noun phrases is symmetric, *i.e.*, the order of conjuncts can be changed without any effect on the interpretation of the meaning, as in (34) and (35).

- (34) a. **Hiróʔ buusíhgeeg masúgac.** *These are a cat **and** a dog.*
 b. **Hiróʔ masúgag buusíhgeec.** *These are a dog **and** a cat.*
- (35) a. **Míàg macéé magiwagárahaa maagirihsáʔc.** *Women **and** men are switch dancing.*
 b. **Macéég míà magiwagárahaa maagirihsáʔc.** *Men **and** women are switch dancing.*

Plural suffixes **-ʔa** and **-ʔo** are not grammatical before the coordinating suffix, rendering the interpretation on occasion ambiguous. For example, the first conjunct in (36) can be interpreted as referring to either one or more than one dog.

- (36) **Hiróʔ masúgag buusíhgaac.**
 hirí-ʔo masúga-g buusíhgee-ʔa-c
 this-PL dog-CRD cat-PL-DECL
 a. *These are dogs and cats.*
 b. *These are a dog and cats.*

17.3.2 Coordinate verb phrases

Coordination of verb phrases is accomplished by suffixing the coordinative marker **-g** *and* to each of the coordinates except for the last one that has a speech-act marker suffixed to it. Verb phrases, unlike noun phrases, are subject to ablaut before the coordinative suffix. Examples are in (37) and (38).

- (37) **Madawiribuhxí iiwaraxúbag iiwaraxúbag**
 mada-mirí-buhxí ii-maa-náxubi-g ii-maa-náxubi-g
 1POS-water-foam INST-1A-drink.up-CRD INST-1A-drink.up-CRD

iihe'sáàg iihe'sáàg iiwiibádhag maaréèc.
 ii-he'séè-g ii-he'séè-g ii-mii-bádhi-g maa-néè-c
 INST-do.this-CRD INST-do.this-CRD INST-1B-fall-CRD 1A-go-DECL

I was downing and downing my beer, just doing that, until I fell over.

- (38) Nídawacua nírasihdaa nágisag nísagihdaa gáàge'haag
 nída-macúà ní-néèsi-hdaa nágisi-g ní-sáagi-hdaa gáàge'-hee-g
 2POS-sinew 2POS-tongue-INST wet-CRD 2POS-hand-INST roll-CAUS.DIR-CRD

nídawacidohge ii'óbcaad!
 nída-macidóò-hgee ii-óbcaadi-Ø
 2POS-awl-DIM INST-stick.in-IMP.SG

Wet your sinew with your tongue, roll it in your hands, and put it through the eye of the needle.

Coordination of verb phrases, unlike the coordination of noun phrases, is usually asymmetric, i.e., the order of the coordinates cannot be changed without a significant effect on the interpretation of the coordination. This is because there is an implication that the sequence of clauses closely matches the sequence of events they describe.

- (39) Míà'gaagag maagaxúhxag miibadhág maaréèc.
 m-íà'gaagi-g maa-nagaxúhxi-g miibádhi-g maa-néè-c
 1-sit.on- CRD 1A-break- CRD 1B-fall.off- CRD 1A-go-DECL
I sat on it and broke it and fell off.

- (40) Mirisibísa maháàg mahgawáàgag ruuwahghîc.
 mirí-sibísa mahéè-g maa-gi-awáàgi-g nuwa-maa-gi-hîi-c
 water-black 1do-CRD 1A-GI-sit.down-CRD some-1A-GI-drink-DECL
I made coffe and I sat down again and I drank coffee.

- (41) Náàg ééhgaag gúág miigiwá'!
 néè-g ééhgee-g gúú-g mii-giwé'-Ø
 go-CRD know-CRD come.back-CRD 1B-tell-IMP.SG
Go, find out what is going on, come back, and tell me!

According to Boyle (2007) and Graczyk (2007), -g marks the connected clauses as having coreferential subjects. Although in most cases this characterization is true, it is certainly possible

17.4 Adverbial subordinate clauses

Hidatsa adverbial subordinate clauses include temporal, conditional, concessive, and reason clauses. Adverbial subordinate clauses are marked with clause-final suffixes that, unlike the coordinative clausal suffix *-g* (see 17.3) are fully compatible with the plural suffix.

17.4.1 Temporal clauses

17.4.1.1 *-rú* ‘when’ (generic temporal)

Temporal clauses whose time reference is indefinite are marked by the clausal suffix *-rú*. This suffix should not be confused with the postpositional suffix *-rú* (see 16.1.1.2). The matrix clause that accompanies the temporal clause typically describes a generic or habitual state of affairs, and the habitual suffix *î-/îru-* is sometimes added to the matrix verb. Examples are (46)–(49).

- (46) **limaaráhchisacmaa ruwa seerú.**
 ii-maa-ráhci-hisa-c maa-ruwa séé-**rú**
 INST-INDEF-bite-SIM-DECL INDEF-some say-**TEMP**
When he says something (unpleasant), it's like biting.
- (47) **Madáàru idaʔarugadíʔo arágidhaaʔac.**
 madáà-**rú** ida-aru-gadí-ʔo arágidi-hee-ʔa-c
 autumn-**TEMP** 3POS-REL-garden-PL burn.land-CAUS.DIR-PL-DECL
They used to burn their fields in the fall.
- (48) **Guasèeru miihasícheeʔiic.**
 gua-sèè-**rú** mii-hasísi-hee-î-c
 that-do-**TEMP** 1B-burning.pain-CAUS-HAB.SG-DECL < *hasíchee* *be angry*
Every time he does that I get mad.
- (49) **Nuwa girahàara! Móòhcaaʔas síʔarus náàru**
 nuwa hgi-nahí-ara móòhcaa-ʔa-s séʔ-ʔa-rus náàru
 some GI-stand.up-IMP.PL coyote-PL-DEF that-PL-CONC crotch
- gixòòdahgeeʔiiruc hiráwi díʔaru / díà hiráwaʔru.**
 hgi-xòòda-hgee-îru-c hiráwi díà-ʔa-**ru** / díà hiráwi-ʔa-**rú**
 GI-moldy-CAUS.INDIR-HAB.PL-DECL sleep late-PL-**TEMP** / late sleep-PL-**TEMP**
- Get up! Even the coyotes' crotches get moldy when they sleep too long.*

Differences in meaning between the indefinite or habitual **-rú**, the co-temporal **-wa**, and the conditional **-rúg** are contrasted in (50) and (51).

- (50) a. **magiʔihgohbaʔru** *when they meet (generic)*
 b. **magiʔihgohbaʔwa** *when they met (past)*
- (51) a. **Maahiri_rèeru Macúàʔhcas awáxiruxiʔiic.**
When Sweetgrass Woman goes to work I always worry about her.
- b. **Maahiri_rèerug Macúàʔhcas awáxiruxiʔiic.**
If Sweetgrass Woman goes to work I always worry about her.

17.4.1.2 **-rúg ‘when’ (irrealis, future, conditional)**

Temporal clauses with the clause-final suffix **-rúg** represent future and hypothetical events. The verb in the matrix clause is marked for irrealis (see 6.5.3) or the future tense (see 6.5.2) if the situation described occurs in the future, as in (52) and (53). It is not marked for irrealis or the future if the situation described in the matrix clause occurs in the present, as ‘I want’ in (54), although the subordinate clause clearly refers to the future. Irrealis and future marking is not used when the matrix clause is in the imperative, as in (55) and (56).

- (52) **Maaʔooragabagí Arugúáhees hiirúg aruwahéèc.**
 maa-arú-nagabagí arú-gúáhee híi-rúg arú-maa-hirí-c
 INDEF-REL-bloom REL-put-DEF get.here-COND IRR-1A-do-DECL
I’ll do it on Memorial Day.
- (53) **Máácu óòdaʔrug aruwaaréèc.**
 máácuu óòdi-ʔa-rúg arú-maa-néè-c
 berry ripe-PL-COND IRR-1A-go-DECL
I will go when the berries are ripe.
- (54) **Giraagudhé maawaaruudíhge maawáàheec naxbigheerihsí miháàrirug.**
 giraagudhéé maa-maa-nuudí-hgee maa-maʔihee-c naxbigheerihsí m-iháàri-rúg
 tomorrow 3OBJ.PL-INDEF-eat-3CAUS.INDIR 1A-want-DECL Sun.Dance 1C-finish-COND
Tomorrow morning I want to feed them when I finish the Sun Dance.

- (55) **Maaruwá seeráàʔarug gáádhaara!**
 maa-nuwá see-ráà-ʔa-rúg gáádi-hee-ara
 INDEF-some say-2-PL-COND real-3CAUS.DIR-IMP.PL
Tell the truth when you say something!
- (56) **Awá cagiha miiʔágsighaara maadirúg!**
 awá cagí-haa mii-ág-sigí-hee-ara maa-déè-rug
 ground good-ADV 1B-LOC-pile-3CAUS.DIR-IMP.PL 1A-die-COND
Bury me well (lit. pile earth on me) when I die.

The irrealis suffix is also used in conditional clauses (see 17.4.2.1).

17.4.1.3 **-wa** ‘when, while’ (simultaneous, past)

Temporal clauses with the clause-final suffix **-wa** describe past events that are simultaneous with the event in the matrix clause, as in (57)–(60). The same suffix is also used in reason clauses (see 17.4.3.2).

- (57) **Mááhgu diawa maaghíc.**
 mááhgu díà-wa maa-gíí-c
 night long.time-SIMULT 1A-get.back-DECL
I got home late at night.
- (58) **Visitors háàʔwa iirúcihca maaréèc.**
 visitors héè-ʔa-wa ii-núcihci-Ø maa-néè-c
 visitors say-PL-SIMULT INST-trot-CONT 1A-go-DECL
When they said “visitors” I just trotted up there (to receive donations at the powwow).
- (59) **Niigarísdawa niwahgirugiʔîc.**
 nii-garísda-wa nii-maa-hgi-gíʔ-îi-c
 2B-small-SIMULT 2B-1A-GI-pack.on.back-HAB.SG-DECL
I used to carry you on my back when you were small.
- (60) **Maaʔasaaríwa awágaac.**
 maa-asaarí-wa maa-ígaac-c
 INDEF-steal-SIMULT 1A-see-DECL
I saw him stealing.

17.4.1.4 -háà ‘as, when’ (simultaneous)

The adverbial subordinator **-háà** *while, as* is relatively rare. As subordinator, **-háà** can be substituted with the more common temporal marker **-wa** to indicate that two events occur simultaneously. All tokens of **-háà** in the database are glossed in the past tense.

- (61) **Maawahgirihsá** **maawahguháà** **gixarééc.**
maa-maa-hgi-nihsí-Ø maa-mahgú-**háà** hgi-xaréé-c
INDEF-1A-GI-dance-CONT 1A-be.at-ADV GI-rain-DECL
As I was dancing it started to rain.
- (62) **Nábia** **náàraghaa** / **náàraghiwa** **miigigúàc.**
ná-bià náà naaghí-**háà** / náà-naaghí-**wa** mi-iigigúà-c
2A-fart 2A-sit.sound-ADV / 2A-sit.sound-SIMULT 1C-hear-DECL
I heard loud and clear when you farted.
- (63) **Madawaa’áàgasi** **mahgaraaxicháá** **maahúc.**
mada-maa-áàgasi **maa**-hgi-araaxisá-**háà** maa-húù-c
1POS-INDEF-mark **1A**-GI-ignorant-ADV 1A-come-DECL
I forgot to bring my book.

17.4.1.5 -s ‘past’ (definite, past)

A temporal clause whose time reference is past may also be marked with the definite suffix **-s**.

- (64) **Maarèès** **miixabáàc.**
maa-néè-**s** mii-xabáà-c
1A-go-DEF 1B become.lost-DECL
When I went I got lost.

17.4.1.6 -dhaháà ‘before’

The subordinating suffix **-dhaháà** *before* indicates that the event described in the main clause occurs before some other event described in the subordinate clause. This complex suffix is formed by adding the adverbial suffix **-háà** to the negative suffix **-dhaa**.

Examples with **-dhaháà** are given in (65)–(67).

- (65) **Maawaarihsidhaháàba** **ú?siac.**
 maa-maa-nihsí-**dhaa-háà**-aba **ú?sia-c**
 INDEF-1A-dance-NEG-ADV-COL arrive-DECL
He arrived before we danced.
- (66) **Irábare? gí?riadhaháà** **idhaaciwidéèraxbis** **idahbá** **gigariicgáhgeec.**
 irábare? hgi?ria-**dhaa-háà** idhaací-midéè-naxbí-s idahbá hgi-gariicgá-hgee-c
 bronco ride-REFL NEG-ADV 3pants-cattle-skin-DEF 3shoe GI-shiny-3CAUS.INDIR-DECL
The cowboy shined his shoes before riding the bronco.
- (67) **Hiróó hiidhaháà** **maagará?o?!**
 hiróó hîi-**dhaa-háà** maa-garáà-?o-?
 here get.here-NEG-ADV 1A-flee-PL-INTER
Let's run away before he gets here!

17.4.1.7 -wa/-rú/-rúg/rús **sia'gháà** 'only when'

Another temporal clause construction consists of the clause-final suffix **-wa**, **-rú**, **-rúg**, or **-rús** and the enclitic adverb **sia'gháà** *only then* (**sé?** *then* + **-gháà** *ADV.TEMP*). This construction indicates that the event described in the main clause does not happen until after some other event, which is described in the subordinate clause, has occurred first. Future events are expressed with **-rúg**, hypothetical and concessive-conditional events with **-rúg** or **-rús**, and generic events with **-rú**. Past events are expressed with **-wa**. Examples are in (68)–(71).

- (68) **Máàgada** **óòda?ru** **sia'gháà** **aruwuudá?c.**
 máàgadaa óòdi-?a-**rú** **sia'gháà** aru-m-nuudí-?a-c
 plum ripe-PL-TEMP **until.then** IRR-1A-eat-PL-DECL
We eat plums when they are ready.
- (69) **Eewáhgeerus** **sia'gháà** **ooriiwahgiwé?c.**
 maa-ééhgee-**rús** **sia'gháà** aru-nii-maa-hgiwé?-c
 1A-know-CONC.COND **until.then** IRR-2B-1A-tell-DECL
I'll tell you when I find out.
- (70) **Maa?aru?awahéèdhaa?rug** **sia'gháà** **maaréèwic.**
 maa-arú-awa-héèra-hee-?a-**rúg** **sia'gháà** maa-néè-wi-c
 INDEF-REL-land-middle-3CAUS.DIR-PL-COND **until.then** 1A-go-1FT.SG-DECL
I'll go during the giveaway.

- (71) **Maréʔ** **goowíwaawa** **siaʔgháà** **maabáàhaʔc.**
 ma-iréʔ goowí-waa-wa **siaʔgháà** maa-báàhi-ʔa-c
 1POS-speak end-1CAUS.DIR-SIMULT **until.then** INDEF-sing-PL-DECL
When I finished talking they sang.

17.4.1.8 **Contemporaneous clauses**

Contemporaneous clauses are marked by the clause-final contemporaneous morpheme that is realized as *ablaut*.¹⁴⁰ In the absence of other clause-final markers, such as temporal or concessive suffixes, the contemporaneous suffix may indicate switch reference (different subject). In (72), the first clause contains a serialized predicate ‘to be waiting in a sitting position’ that is inflected for the first person; the second clause an impersonal predicate ‘to be evening before dark’, and the predicate in the third clause is ‘to arrive’. The first clause is identified by the contemporaneous suffix, the second clause with the simultaneous suffix *-wa* (see 17.4.1.3), and the third clause is marked with the declarative speech-act marker *-c* that has scope over the entire illocutionary act. Note that the first verb in the sentence, *awáàguxda* *I was waiting for him*, is also marked with the contemporaneous suffix, but it does not constitute a clause; rather, it is the first component-verb in the serial verb construction that also includes the verb *maaragá* *I was sitting* (for serial verb constructions see 17.5.1)

- (72) **Awáàguxda** **maaraga** **óhbaawa** **siaʔhgáà** **úʔsiac.**
 maa-áàguxdi-Ø maa-naagí-Ø óhbaa-wa siaʔhgáà úʔsia-c
 1A-wait-CONT 1A-sit-CONT evening-SIMULT until.then arrive-DECL
I was waiting for him (but) he didn't get here until the evening.

¹⁴⁰ Boyle (2007) and Graczyk (2007) label this morpheme as ‘continuative’ (CONT).

17.4.2 Conditional and concessive clauses

17.4.2.1 -rúg ‘conditional’

Conditional clauses indicate that the situation in the matrix clause is contingent on that of the conditional clause. The formation of conditional clauses is mostly identical to the formation of future clauses with **-rúg**; however, the irrealis prefix **aru-**, which is present in the matrix clauses in the examples in (73)–(75), can be dropped if the hypothetical event occurs on a habitual basis, as in (76), and when the hypothetical utterance is a command, as in (77) and (78).

- (73) **Níida náhgiragagidirug arucagíhe.**
n-iidá ná-hgi-nagagídi-**rúg** aru-cagí-he
2POS-face 2A-GI-scrape-COND IRR-good-ASSERT
It would be nice if you shaved.
- (74) **Aruwaabáàhahgarug aruwaawabaahíhe.**
aru-maa-báàhi-hahgá-**rúg** aru-maa-maa-báàhi-he
REL-INDEF-sing-ABIL-COND IRR-INDEF-1A-sing-ASSERT
If I could sing I would sing.
- (75) **Maʔiàʔgaagiheeru awawáàgirug aruʔirúxuhxic.**
maʔiàʔgaagi-hee-rú maa-awáàgi-**rúg** aru-i-núxúhxi-c
chair-this-LOC 1A-sit.down-COND IRR-STAT-break-DECL
If I sit on this chair it will break.
- (76) **Maacóoga iirîrirug gageeghiʔîc.**
maa-cóogi-Ø ii-nîiri-**rúg** gageeghí-îi-c
INDEF-tight-CONT INST-walk-COND creak-HAB.SG-DECL
*He’s so stingy he creaks when he walks.*¹⁴¹
- (77) **Dóòhsee náwaheerug heʔsáh!**
dóòhsee ná-maʔihee-**rúg** heʔséè-Ø
how 2A-want-COND do.this-IMP.SG
Do whatever you want to do!

¹⁴¹ This word play is based on the literal interpretation of the word **maacóogi** *to be stingy* that is derived by prefixing the indefinite **maa-** to the stative stem **cóogi** *to be hard, stiff, tight*. There are many other similar expression that take advantage of the literal translation of being tight with money, for example **Niiwaacóoga iiriidhadáhic**. *You are so stingy that it makes you stiff.*

- (78) **Eeráhgeerug** miigiwá?
 ná-ééhgee-**rúg** mii-giwé²-Ø
 2A-know-COND 1B-tell-IMP.SG
Tell me if you know!

17.4.2.2 -*hsaa* ‘concessive’

Concessive clauses are used to indicate that the situation in the matrix clause is contrary to expectation or to concede a given point in an argument. Simple concessive clauses are formed by suffixing *-hsaa* *but, although, even though* to the subordinate clause, as in (79)–(84).

- (79) **he²sáhsaa**
 he²sá-hsaa
 be.like.this-CONC
even then
- (80) **Hiróó hîhsaa** néèc.
 hiróó hîi-**hsaa** néè-c
 here get.here-CONC go-DECL
He was here but left.
- (81) **Miidiàhsaa** maahúc.
 mii-díà-**hsaa** maa-húù-c
 1B-long.time-CONC 1A-come-DECL
I’m late but I’m here.
- (82) **Isiàhsa** maradhiwáác.
 isià-**hsaa** ma-naadá-hiwáác-c
 bad-CONC 1POS-heart-1CAUS.DIR-DECL
Even though he’s bad, I took him into my heart (i.e., took pity on him).
- (83) a. **Maruhcíhsaa** mahgigúc. b. **Maruhcá’hsaa** mahgigúá’c.
 maa-núhci-**hsaa** maa-hgi-gú²-c. maa-núhc-²a-**hsaa** maa-hgi-gú²-²a-c
 1A-take-CONC 1A-GI-give-DECL 1A-take-PL-CONC 1A-GI-give-PL-DECL
I took it but I gave it back. We took it but we gave it back.
- (84) **Mii’igúba irá’ahsaa** arudáàbaghoo’ eewáhgeedhaac.
 mii-igúba iré²-²a-**hsaa** aru-dáàba-ghí-²o ma-ééhgee-dhaa-c
 1B-with speak-PL-CONC REL-what-mean-PL 1A-know-NEG-DECL
They are talking to me but I don’t know what they’re saying.

A complex sentence comprising a concessive clause may be paraphrased with the concessive conjunction **hahsáá** *but* (often abbreviated to **hás**) into two separate sentences.

Examples are in (85) and (86).

- (85) **Masdá** mahgíruhxiác. **Hahsáá** aru'awáгаа isíác.
 ma-isdá maa-hgi-núhxia-c **hahsáá** aru-maa-ígaa isíà-c
 1POS-eye 1A-GI-wink-DECL **but** REL-1A-see bad-DECL
I squint but I still cannot see well.

- (86) **Íгаа** maahúc. **Hahsáá** hiráwa maagí wareec.
 íгаа maa-húù-c **hahsáá** hiráwi-Ø maagí waree-c
 see 1A-come-DECL **but** sleep-CONT lie EVID-DECL
I came to see him, but he was sleeping.

17.4.2.3 -*rúhsaa* 'conditional concessive'

Conditional concessive clauses are formed with the clause-final suffix **-rúhsaa** *even if*, often abbreviated to **-rús**, which is actually a combination of the generic temporal suffix **-rú** (see 17.4.1.1) and the concessive suffix **-hsaa** (see 17.4.2.2).

- (87) **Dáàbaruhs(aa)** múg!
 dáàba-**rúhsaa** m-gú'-Ø
 what-CONC.COND 1B-give-IMP.SG
Just give me anything!
- (88) **Madahbaraxbí** ruwa hirá múg, aru'áága iisáhcaaraciruh s(aa).
 mada-huubá-naxbí nuwá hirí-Ø m-gú' aru-áága ii-sáhcaa-raci-**ruhsaa**
 1POS-shoe-skin some make-CONT 1B-give-IMP.SG REL-top INST-plain-COMPR-CONC
Make me some moccasins, even if the top is just plain.
- (89) **Maaréèruhsaa** mahgúdhaa'íic.
 maa-néè-**rúhsaa** mahgú-dhaa-îi-c
 1A-go-CONC.COND be.at-NEG-HAB.SG-DECL
Even if I go, he's never home.
- (90) **Maa'aru'isíà** madú wíiheerus miibáhgixa néhgaara!
 maa-arú-isíà madú wíihee-**rúhsaa** mii-báhgixi-Ø néè-hgee-ara
 INDEF-REL-bad exist OBS-CONC.COND 1B-avoid-CONT go-3CAUS.INDIR-IMP.PL
If any bad luck comes around, send it around us!

17.4.3 Reason clauses

Reason clauses are introduced by the clause-final subordinators **-siiri** and **-wa** and they define a reason for the situation or events described in the main clause.

17.4.3.1 **-siiri** 'because'

The only function of the clausal suffix **-siiri** *because, since* is to identify the reason for a situation described in the matrix clause. Examples are (91)–(95).

- (91) **îi** **madusiiri** **iré?c.**
îi madú-**siiri** iré?-c
mouth exist-REAS speak-DECL
He talks because he has a mouth.
- (92) **Aruráaha?siiri** **aruwaaréèdhaac.**
aru-nááhi-?a-**siiri** aru-maa-néè-dhaa-c
IRR-go.PL-PL-REAS IRR-1A-go-NEG-DECL
Since they are going I will not go.
- (93) **Eewáhgeesiiri** **niiwahgiwé?wic.**
maa-ééhgee-**siiri** nii-maa-hgiwé?-wi-c
1A-know-REAS 2B-1A-tell-1FT.SG-DEC
Since I know it I'll tell you.
- (94) **Nídawaahdi** **madúsiiri** **náreerug** **arucagíc.**
nída-mááhdii madú-**siiri** ná-néè-rúg aru-cagí-c
2POS-vehicle exist-REAS 2A-go-COND IRR-good-DECL
Because you have a car it would be good if you go.
- (95) **Mîi** **xagáàracisiiri** **maa?aruséé** **aruseewáàc.**
m-îi xagáà-raci-**siiri** maa-arú-séé aru-see-wáà-c
1POS-mouth move-COMPR-REAS INDEF-REL-say IRR-say-1-DECL
As long as (lit. because) my mouth is moving, I'll say what has to be said.

Reason clauses with **-siiri**, similar to conditional clauses with **-rúg**, are often found in commands, as in (96) and (96). Reason clauses formed with the temporal subordinator **-wa** (see 17.4.3.2), as in (96), are ungrammatical in commands.

- (96) a. Eeráhgeesiiri miigiwá?! Since you know it, tell me!
 b. Eeráhgeerug miigiwá?! Tell me if you know.
 c. *Eeráhgeewa miigiwá?!

In diachronic terms, **-siiri** is a contraction of **-sihiri**, a form that can be seen in Carl Voegelin’s slip files and occasionally heard in older speakers’ speech. The diachronic form infrequently also occurs as **-hsiiri** as a consequence of the intervocalic **h** having become metathesized instead of being elided. An example with the archaic form is given in (97).

- (97) **Arîdisihiri** **maaruudíhgiwaawic.**
 arîdi-**sihiri** maa-nuudí-hgiwaa-wi-c
 hungry-REAS INDEF-food-1CAUS.INDIR-1FT.SG-DECL
Since he is hungry I’ll go feed him.

17.4.3.2 **-wa** ‘because’

The simultaneous suffix **-wa**, described in 17.4.1.3 as a temporal clause-final suffix, is also used to form reason clauses. In reason clauses, **-wa** is usually translated as ‘because’. Examples are in (98)–(101).

- (98) **Mii’óbhiheeraciwa** **mááha’he** **maarihsíhdaa.**
 mii-óbhihee-raci-**wa** mááhi-’a-hee maa-nihsí-hdaa
 1B-influence-COMPR-SIMULT 1PL.go-PL-EMPH INDEF-dance-LOC
Because she influenced me we went to the dance/powwow (I had planned to stay home).
- (99) **Miiwaacagíwa** **madaasí** **maaghéèc.**
 mii-maa-cagí-**wa** ma-masí maa-gahéè-c
 1B-INDEF-good-SIMULT 1POS-robe 1A-give.to.group-DECL
I’m generous, therefore I donated my blanket.
- (100) **Maré’dhaa’wa** **mahgaraaxisá** **máária’c.**
 ma-iré’-dhaa-’a-**wa** maa-hgi-araaxisá-Ø máária-’a-c
 1POS-speak-NEG-PL-SIMULT 1A-GI-ignorant-CONT 1go.around.PL-PL-DECL
Since we don’t speak it [Hidatsa] anymore, we are forgetting it as we go along every day.

- (101) *Mirisibísa goowíwa / neesáwa maaʔihadihdaa néhgiwaac.*
miri-sibísa goowí-wa / neesá-wa maʔihu-adí-hdaa nées-hgiwaa-c
water-black finish-SIMULT / not.exist-SIMULT barter-house-GOAL go-1CAUS.INDIR-DECL
I sent him to the store because we ran out of coffee / there was no coffee.

17.5 Serial verb constructions

A serial verb construction (SVC) is a sequence of two or more verbs within a single clause with no overt signs of coordination or subordination. Serial verb constructions comprise several contiguous verbs, but they are conceptualized as referring to a single event and therefore act together as a single predicate (Aikhenvald 2006: 1).

There are two types of serial verb constructions in Hidatsa. In the first type (the majority of cases), except for the final verb in the sequence, all preceding component-verbs are marked with the contemporaneous suffix that triggers ablaut on the immediately preceding vowel. In the other type, the nonfinal verbs are not marked with the contemporaneous suffix and so do not ablaut.¹⁴²

In terms of composition, verb serialization in Hidatsa is asymmetrical: the first component-verb comes from an unrestricted class of verbs, whereas the second one is usually from a semantically restricted class. In the case of contemporaneous serial verb constructions, most component-verbs in the second position are motion verbs and various types of auxiliary verbs, for instance positional verbs, but other types of verbs denoting a change in location or state, such as ‘die’ and ‘forget,’ are common as well. In the case of serial verb constructions without the contemporaneous suffix, the second verb comes from a limited set of lexical verbs expressing desire or directional motion verbs.

¹⁴² Although serial verb constructions comprising more than two verbs are possible in Hidatsa, they are not common. In the discussion that follows, the description is largely limited to two-verb sequences and, as a matter of convenience, the term ‘second verb’ is used instead of ‘final verb’.

Subjects of verbs in serial verb constructions are coreferential and, with the exception of component-verbs that precede motion verbs in unmarked serial constructions (see 17.5.3), usually marked with pronominal prefixes. In the normal rate of speech serial verb constructions usually form a pitch phrase.

17.5.1 Contemporaneous serial verb constructions

The first element in contemporaneous serial verb constructions indicates the manner in which the activity or state encoded in the second element is realized. Examples are in (102)–(105).

- (102) **Maruxárua iháhdawaac.**
 maa-núxarua-Ø iháà-hdaa-waa-c
 1A-slide-CONT different-LOC-1CAUS.DIR-DECL
I slid it out of the way.
- (103) **Aracoocá nîrag neec.**
 aracooci-Ø nîiri-g néè-c
 shuffle.feet-CONT walk-CRD go-DECL
He went shuffling his feet.
- (104) **Mirí maarîira maadaará?c.**
 mirí maa-nîiri-Ø maa-daari-?a-c
 water 1A-walk-CONT 1A-ford-PL-DECL
We walked through the river.
- (105) **Macuugá maaghúca hirábhiwaac.**
 ma-icuugá maa-naghúci-Ø hiráwi-hiwaa-c
 1POS-younger.brother 1A-swing-CONT sleep-1CAUS.DIR-DECL
I'm swinging my little brother to sleep.

The main verb preceding an auxiliary verb, e.g., a positional verb (see 6.4), the benefactive **gú?** (see 17.5.2), or the imminentive **níhee** (see 6.6.10), is usually marked with the contemporaneous suffix since a typical auxiliary construction acts together as a single predicate in which all components refer to aspects of a single event.

- (106) **Miisîba magigarícgaba reec.**
 mii-sîiba magi-garícgabi-Ø rèè-c
 1B-gut RECIP-stick-CONT PROG-DECL
My intestines are going to stick together. (i.e., I'm hungry)
- (107) **Miháàwag mîhsaaga maaragíc.**
 m-iháàwi-g m-î.hsaagi-Ø maa-naagí-c
 1C-sleep-CRD 1POS-mouth.open-CONT 1A-sit-DECL
I fell asleep with my mouth open.
- (108) **liwarág xagáà maaruwic.**
 iiwarág xagáà-Ø maa-nuwí-c
 barely move-CONT 1A-move.about-DECL
I'm barely moving along.

Contemporaneous serial verb constructions that are not auxiliary constructions may also express a cause and effect relationship between the two verb phrases, as in (109) and (110).

- (109) **ligixi'áà giwaagaraaxisagsác.**
 ii-gi-xi'èè-Ø hgi-maa-gi-araaxisá-gsá-c
 INST-GI-old-CONT GI-INDEF-GI-ignorant-USI-DECL
He's getting forgetful from old age.
- (110) **Mará' maarahgu mii'agháàgac.**
 ma-iré'-Ø maa-náhgu-Ø mii-agháàga-c
 1POS-speak-CONT 1A-be.sitting-CONT 1B-late-DECL
I was late because I was talking to him.

As noted above, sequences of more than two contiguous verbs in serial constructions are possible but not common. Examples of three-verb sequences are shown in (111) and (112).

- (111) **Miidá nuwá ú'sia'c.**
 miidí-Ø nuwí-Ø ú'sia-c
 crawl-CONT go.around-CONT arrive-DECL
He arrived by crawling.
- (112) **Maaghág miixiisá maadá réèc.**
 maa-gíi-g mii-xiisi-Ø maadí-Ø réè-c
 1A-come.back-CRD 1B-tired-CONT 1die-CONT PROG-DECL
I got home and was so tired that I was just going to die.

Contemporaneous serial verb constructions are always paraphrasable into two clauses that are then conceptualized as two separate events; i.e., replacing the contemporaneous suffix with the coordinative suffix yields two clauses that are conceptualized as two separate events (typically, events in sequence). A contemporaneous serial verb construction in (113a) is contrasted with a similar paraphrased expressions comprising two coordinated clauses in (113b).

- (113) a. **Maa'arahdabá** **néèc.** b. **li'arahdabág** **néèc.**
 maa-arahdabí-Ø néè-c ii-arahdabí-g néè-c
 INDEF-trample-CONT go-DECL INST-trample-CRD go-DECL
He's running amok. *He stumbled over him **and** kept going.*

(113a) and (113b) demonstrate that the contemporaneous relationship between two verbs differs from the coordinate relationship in that the former expresses an event that is perceived as a unit, whereas in the latter, one distinct event precedes another. Sometimes, however, there is little or no difference to the meaning when a contemporaneous serial verb construction is paraphrased as a sequence of two coordinated clauses, as illustrated by glosses in (114) and (115). In such cases the difference in usage is purely stylistic.

- (114) a. **Núùwiira** **núsga!** = b. **Núùwiirag** **núsga!**
 núùwiiri-Ø núsgi-Ø núùwiiri-g núsgi-Ø
 twist-CONT open-IMP.SG twist-CRD open-IMP.SG
Twist it open! *Twist it open!*

- (115) a. **Ma'cgaada** **maaréèc.** = a. **Ma'cgaadag** **maaréèc.**
 ma'-aracgaadí-Ø maa-néè-c ma'-aracgaadí-g maa-néè-c
 1A-walk.quietly-CON 1A-go-DECL 1A-walk.quietly-CRD 1A-go-DECL
I went quietly away. *I went quietly away.*

17.5.2 Benefactive serial verb constructions

Benefactive serial verb constructions are formed with an auxiliarized active transitive verb **gú'** to *give sth to an individual* and its suppletive form **gahèè** to *give sth to a group*. Whenever both the

benefactor and the beneficiary are identified, they are realized as pronominal affixes on the benefactive auxiliary that follows the contemporaneous main verb in serial verb construction. Possible combinations of pronominal affixes in the stem are given in TABLE 17.1. The agent (benefactor) affixes are underlined, and the object (beneficiary) affixes are given in bold. Third person agent and object forms are not marked by affixation. Unattested but possible forms are indicated with a question mark. Imperative and precative forms are given in their singular and plural forms.

The inflection of *gúʔ* is highly irregular. Among other irregularities it should be noted that the first person pronominal prefix always precedes the second person prefix regardless of its argument role.

TABLE 17.1. AGENT AND OBJECT PREFIXES IN *gúʔ* TO GIVE STH TO SBʔ

BENEFACTOR	SINGULAR BENEFICIARY / RECIPIENT		
	1SG	2SG	3SG
1SG	—	<u>mar</u> íguc	<u>mag</u> úç
2SG	<u>miir</u> águc	—	<u>ná</u> guc
3SG	<u>mi</u> gúç	<u>ní</u> guc	gúʔç
1PL	—	<u>mar</u> íguaʔç	<u>mag</u> úàʔç
2PL	<u>miir</u> águʔoʔʔ	—	<u>ná</u> guaʔç
3PL	<u>mi</u> gúàʔç	?	gúàʔç
IMPERATIVE	<u>mú</u> g! <u>mi</u> gúàra!	—	gúʔ! guʔààra!
PRECATIVE	<u>mi</u> gúga! ?	—	gúʔga! ?
NEG. IMPERATIVE	? ?	—	gúʔdha! gúʔdhaara!

BENEFACTOR	PLURAL BENEFICIARY / RECIPIENT		
	1PL	2PL	3PL
1SG	—	?	<u>ma</u> aghéç
2SG	?	—	<u>ná</u> àgheeʔʔ
3SG	<u>wi</u> igahááʔac	?	gahéç
1PL	—	?	<u>ma</u> agháàʔac
2PL	?	—	<u>ná</u> àghaaʔooʔʔ
3PL	?	?	gaháàʔac
IMPERATIVE	? ?	—	gaháh! gaháàra!
PRECATIVE	? ?	—	? ?
NEG. IMPERATIVE	? ?	—	gahéèdha! gahéèdhaara!

The intonational properties of benefactive constructions provide another clue that they function as single predicates: both the benefactive auxiliary and the main verb form a single pitch-accent phrase in the normal rate of speech,¹⁴³ although both contiguous components in the series are independent grammatical words. Examples of benefactive serial verb constructions are provided in (116)–(118).

- (116) **Madamacidóhge** **óbcaada** **múg!**
 mada-macidóò-hgee óbcaadi-Ø m-gú²-Ø
 1POS-awl-DIM stick.in-CONT 1B-give-IMP.SG
Thread my needle for me!
- (117) **Mirisibísa** **nuwa** **arugicawéhgiwaa** **maríguc.**
 mirí-sibísa nuwa aru-hgi-cawéè-hgiwaa-Ø ma-ní-gú²-c
 water-black some IRR-GI-warm-1CAUS.INDIR-CONT 1A-2B-give-DECL
I'll add some coffee for you. (lit. I'll warm up the coffee [in your cup] for you.)
- (118) **Idawaa²iigaaxdó²** **girusúùga** **gaháàra!**
 ida-maa-iigaaxdí-²o hgi-núsuugi-Ø gahéè-ara
 3POS-IDEF-mistake-PL GI-wash-CONT give.PL-IMP.PL
Wash away their sins for them!

Benefactive constructions with **gú²** cannot be paraphrased as two phrases. If the coordinative suffix **-g** is attached to the main verb, the meaning changes and the situation is always perceived as comprising two discreet consecutive events, as in exemplified in (119).

- (119) **Nuwa náhbag** **múg!**
 nuwa náhbi-**g** m-gú²-Ø
 some bite-CRD 1B-give-IMP.SG
*Bite it off **and** give it to me! (as thread) / *Bite it off for me!*

The benefactive construction is not used when the beneficiary and benefactor are coreferential. Instead, the object noun-phrase is marked for possession so that the possessor and agent are coreferential, as in (120).

¹⁴³ Accent on the benefactive verb is nevertheless indicated in orthography.

- (120) **Madawirisibísa** **awóseec.**
mada-mirí-sibísa **maa**-óòsee-c
1POS-water-black **1A-pour**-DECL
I poured coffee for myself.

17.5.3 Unmarked serialization

None of the elements in an unmarked serial construction are marked with ablaut-triggering contemporaneous suffixes if the semantics of the serialized construction encodes intent, desire, or purpose. The so-called purposive serial verb constructions anticipate future events, whereby the intended action follows the intent or motion encoded in the second verb.

There are two types of purposive serial verb constructions. In the first type, both verbs in the series are inflected for a coreferential subject, and the second verb is typically a verb of desire or deliberate action, such as **maʔíhee** *to want sth*, **iidéè** *to like to do sth*,¹⁴⁴ or **goowíhee** *to finish doing sth*. Examples are given in (121)–(125) with the purposive predicate underlined and the pronominal prefixes shown in bold (third person is unmarked).

- (121) **Mahgiwíág** **mahguucí** **maawáàhaag** **maareec.**
 maa-hgiwíá-g **maa**-hgúucí **maa**-waʔíhee-g maa-néè-c
 1A-turn.back-CRD **1A**-retrieve **1A**-want-CRD 1A-go-DECL
I went back (because) I needed to pick sth up.

- (122) **Dibí** **sarééheec** **adí** **íbgidi** **míhaag.**
 dibíà saréé-hee-c **adí** **íbgidi** **maʔíhee-g**
 mud damp-3CAUS.DIR-DECL house plaster want-CRD
He wanted to plaster the house and (so) he mixed the mud.

- (123) **Dáàbawa** **náhee** **iirádiʔ?** -- **Magúbareʔ** **iywaadíc.**
 dáàbawa **ná**-hirí **ii**-rá-déè-ʔ -- **ma**-igúba-iréʔ **ii**-maa-déè-c
 what **2A**-want INST-**2A**-die-INTER -- **1POS**-together-speak INST-**1A**-die-DECL
What would/do you like to do? -- I like to talk with him.

¹⁴⁴ Both of these verbs are irregular. The inflected forms of **maʔíhee** *to want sth* are **maʔíheec** *he wants it*, **maawáàheec** *I want it*, and **náwaaheec** *you want it*. **iidéè** *to like to do sth* is derived by prefixing the instrumental **ii-** to **déè** *to die*. The inflected form are **iidéèc** *he likes to do it*, **iywaadíc** *I like to do it*, and **iirádíc** *you like to do it*.

(124) **Maré?** **goowíwaac.**
ma-iré? **goowí-waa-c**
1POS-speak finish-1CAUS.DIR-DECL
I finished talking.

(125) **Hawá níhgi niicagí agáaraa'?**
 hawá n-ihgi **nii-cagí agá.hee-raa-?**
 then 2-PRO **2B-good think-2CAUS.DIR-INTER**

Nába có'hag nísda magi'áchaag nii'isíàc.
 n'-abá có'hi-g n'-isdá magi-ácha-g nii-isíà-c
 2POS-nose pointed-CRD 2POS-eye RECIP-near-CRD 2B-bad-DECL

And yourself, do you think you are good (looking)? Your nose is pointed, your eyes are too close, you're bad.

In the second type of purposive serial verb constructions, normally only the second verb, which is always a motion verb, is inflected for the grammatical subject or agent, as illustrated in (126) and (127). Although A-set pronominal prefixes on the first verb are not common, they are not ungrammatical, as evidenced by the first person pronominal prefix **maa-** on **giguucgí** *to learn something* in (128).

(126) **Úùwacadihdaa úùwaca ruwa gaarí maaréèc.**
 úùwaca-adí-hdaa úùwaca nuwa **gaarí maa-néè-c**
 metal-house-GOAL metal some **ask.for 1A-go-DECL**
I went to the bank to borrow some money.

(127) **Mirúxi nagcagí mááha'c.**
 mirúxi **nagcagí m-nááhi-³a-c**
 ice **chop 1A-go.PL-PL-DECL**
We went to break / chop ice (in order to water the horse).

(128) **Hiraaciré? mahgiguucgí maahúc.**
 Hiraacá-iré? **maa-hgiguucgí maa-húù-c**
 Hidatsa-speak **1A-learn 1A-come-DECL**
I came to learn Hidatsa.

B-set pronominal prefixes indicating the grammatical object are always overtly specified regardless of the purposive construction type, as illustrated in (129) and (130).

(129) Miibhúria maahuc.
mii-bhú-ria maa-húù-c
1B-heal-REFL 1A-come-DECL
I came to get doctored.

(130) Mii'iriigsí húùc.
mii-iriigsí húù-c
1B-scold come-DECL
He came to bawl me out.

17.5.4 Other types of serial verb constructions

The division of serial verb constructions into contemporaneous and purposive types is likely not to be exhaustive, even though these two types cover the overwhelming majority of cases in the database. One of the constructions that is tentatively classified here as serial verb construction comprises the lexical verb *cagí* *to be good* that is used as an appreciative intensifier in serial verb constructions.¹⁴⁵ Examples are (131)–(133).

(131) Awáxaadi cagíc.
awáxaadi cagí-c
illuminate good-DECL
It is bright /well-lit.

(132) Hisí cagíc.
hisí cagí-c
red good-DECL
It is bright red.

(133) Aruwiihagáco? giwagúùwi cagíc.
aru-mii-hagáci-²o hgi-magúùwi cagí-c
REL-1B-butcher-PL GI-would.to.heal good-DECL
It's close up / healed up where they operated on me.

¹⁴⁵ According to an alternative analysis, *cagí* *to be good* has become grammaticalized as an intensifying derivational morpheme whose meaning is still quite transparent (similar to the simulative *hisá* *to be similar to sth.*

17.6 Switch reference

Graczyk observes that in Crow clauses linked with “-ak are more tightly bound to each other than clauses linked with -m in several respects” (2007: 406). The properties he lists include no plural marking before the coordinating suffix and the fact that coordinate clauses have coreferent subjects. He then takes his analysis a step further and demonstrates that Crow has a switch-reference system that marks ‘same subject’ with -ak (Hidatsa -g) and ‘different subject’ with -m (Hidatsa -wa) (2007: 404).

Boyle (2007: 181-190) reaches the same conclusion about the “older Hidatsa.” He identifies -g as the ‘same subject’ marker both in the conversational and narrative styles, and -wa as a ‘different subject’ marker in the conversational style and -rug in the narrative style. As for temporal and conditional clauses, he identifies -wa as the completed action marker in the conversational style and -rug in the narrative style, while future action and conditional clauses are marked with -rug in both styles (Boyle 2007: 182). Boyle then states that the same-subject marker -g has been reanalyzed by modern speakers so that it is now used to conjoin verbs and verb phrases even when the subjects of the clauses are different (Boyle 2007: 191). He provides an example of the modern usage, reproduced below in (134), in which the subjects of the clauses coordinated with -g are different. According to Boyle’s description, -g has lost its function as a same-subject marker and is now only a verbal coordinator (Boyle 2007: 191).

- (134) Awágawag radíriac.
awágawa-**ag** ra-tíria-c
1A.walk-COOR 2A-run-DECL
I walked and you ran. (Boyle 2007: 191)¹⁴⁶

¹⁴⁶ I have been unable to confirm the gloss for awágawag... *I ran and...* The most common Hidatsa verbs that mean ‘to walk’ are nîri and nuwí. Perhaps Boyle’s example is an incorrect translation of awágaag... *I saw and...*, but this interpretation leaves the final syllable -wa before the coordinative suffix unaccounted for.

In the following analysis, I evaluate individually each of these claims.

As for the coordinative suffix **-g**, I have been unable to replicate Boyle’s observation that it is not used as a same-subject marker in the modern language and that it now only occurs as a verbal coordinator (Boyle 2007: 191). In fact, all my informants have judged Boyles example in (134) and other analogous constructions ungrammatical. In the corpus of thousands of tokens with the coordinative suffix **-g**, all of which were recorded from contemporary speakers, I have been able to find only two systematic exceptions to the same-subject rule. First, the insertion of the evidential enclitic **waree-** between coordinate verb phrases overrides the same subject requirement, as illustrated by the different subjects ‘wind’ and ‘leaves’ in (135), and ‘second person’ and ‘telephone’ in (136). The combination of **-g** with **waree-** is unusual also for the fact that the long **ee** in the evidential enclitic does not undergo ablaut before the coordinative suffix (unlike nouns, verbs are always subject to ablaut before **-g**; see 17.3.1).

- (135) **Hucí madu wareeg miráàba siríá áàghic.**
 hucí madú waree-**g** miráàba siríá-Ø áàghi-c
 wind exist EVID-CRD leaves rustle-CONT sound.EVID.PL-DECL
There must be wind, the leaves are rustling.

- (136) **Úùwaca nigíhgaag niiwagúba maré? maawáàheewa**
 úùwaca nigí-hgee-g nii-ma-igúba ma-iré? maa-wa?íihee-wa
 metal hit-CAUS.INDIR-CRD 2B-1POS-together 1POS-speak 1A-want-SIMULT

náwahgudhaa wareeg gíí dawúág dawúág he’sáà naaghic.
 ná-mahgú-dhaa waree-**g** gíí dawúá-**g** dawúá-**g** he’sáà naaghí-c
 2A-be.at-NEG EVID-CRD INTERJ ring-CRD ring-CRD like.this sit.sound-DECL

I wanted to call and talk with you, [but] you must not have been in, it kept ringing and ringing.

The translation and the segmentation of the second verb, **radíriac** /ra-tíria-c/ *you ran*, is correct, but the correct accent should be on the A-set second person prefix **ná-** (**nádiriac**). The accent should be on the last syllable in **diríá** *to run* and the pitch contour level when it occurs in isolation.

The second exception to the same-subject rule regarding **-g** concerns coordinated clauses containing different subjects where the main verb is a direct causative with dative interpretation (see 4.7.2.4). In (137), for example, the subject of the first coordinated clause is third person ('my button'), whereas the agent of the second clause is first person. It is also possible that the same-subject marking with **-g** is possible when possessor in one clause is same as subject in the other – there is not enough data to make this determination at the present.

- (137) **Mîgadiibhe badhág xabíwaac.**
 m-îgadiibhee badhí-**g** xabí-waa-c
 1POS-button fall.off-CRD lie-1CAUS.DIR-DECL
My button fell off and I lost it. / My button fell off and got lost on me.

As for Boyle's identification of older Hidatsa **-wa** as a 'different subject' marker in the conversational style and **-rúg** in the narrative style, the main issue is with his sources. All his examples for the narrative style come from a single source containing four narratives recorded by Lowie (Harris and Voegelin 1939) where the irrealis-marking **-rúg** is indeed used also in reference even to past events, bearing out his claim that in the narrative style **-rug** is used not only in reference to irrealis/future, but also for completive/past events. All his examples of the older Hidatsa conversational style come from a single text in Harris and Voegelin (1939). However, this has not changed.¹⁴⁷

Boyle's identification of **-wa** and **-rúg** as 'different subject' markers that signal a change of subjects is more problematic since both are common in clauses that connect coreferential clauses. However, unlike **-g** that simply chains several coordinates of equal status, **-rúg** introduces a conditional clause and **-wa** a reason or a co-temporal (simultaneous) clause.

¹⁴⁷ The art of traditional story telling has almost disappeared. At the end of the first decade of the 21st century, only a handful of speakers were able to tell stories in the traditional style.

A single coreferent in the main clause and a coordinate or subordinate clause introduced by any of these three clausal suffixes is demonstrated in (138) and (139).

- (138) a. **lxúà're?rug** maahirí ooréèdhaac. *If he gets sick he won't go to work.*
 b. **lxúà'ra?g** maahirí réèdhaac. *He got sick **and** didn't go to work.*
 c. **lxúà're?wa** maahirí réèdhaac. ***Because** he got sick, he didn't go to work.*
- (139) a. **liwaabúàhisag** isíàc. *The child is spoiled rotten.*
 ii-maa-búà-hisa-g isíà-c
 INST-INDEF-swell/rot-CRD bad-DECL
- b. **liwaabúàhisawa** isíàc. *The child is spoiled rotten.*
 ii-maa-búà-hisa-wa isíà-c
 INST-INDEF-swell/rot-SIMULT bad-DECL

Clause-final simultaneous suffix **-wa** is common with coreferential temporal clauses if the predicate it attaches to describes a state, as being small in (140) and sleeping in (141) where both clauses clearly share the ‘same subject.’ Other examples are (142)–(144).

- (140) **Miigarísdawa** maciráá maahághu?iic.
 mii-garísda-wa ma-iciráá maa-háhgu-îi-c
 1B-small-SIMULT 1POS-barefoot 1A-be-HAB.SG-DECL
When I was a child, I was always barefoot.
- (141) **Miháàwigaadiwa** hucí aru?ihdíà miigigúàdhaac.
 m-iháàwi-gáadi-wa hucí aru-ihdíà m-iigigúà-dhaa-c
 1C-sleep-VER-SIMULT wind REL-big 1C-hear-NEG-DECL
While I was in deep sleep, I didn't hear the big wind.
- (142) **Ma?íà?gaagiwa** awawáàgiwa / awawáàgag maagaxúhxic.
 ma?íà?gaagi-wa maa-awáàgi-wa / maa-awáàgi-g maa-nagaxúhxi-c
 chair-INDEF 1A-sit.down-SIMULT / 1A-sit.down-CRD 1A-break.sth-DECL
When/Because I sat on a chair, I broke it. / I sat on a chair and broke it.
- (143) **Mú?siawa** masí?adi ahú awágaac.
 m-ú?sia-wa masí-adí ahú maa-ígaac-c
 1A-arrive-SIMULT white.person-house many 1A-see-DECL
When I arrived there, I saw a lot of houses.
- (144) **Maarées** / **maaréèwa** miixabáàc.
 maa-néè-s / maa-néè-wa mii-xabáà-c
 1A-go-DEF / 1A-go-SIMULT 1B-get.lost-DECL
When I went, I got lost.

Finally, in the absence of other clause-final markers, such as temporal or concessive suffixes, the contemporaneous suffix indicates switch reference. In (145), the first clause contains a serialized predicate ‘to be waiting in a sitting position’ that is inflected for the first person, and the second clause an impersonal predicate ‘to be evening before dark’, and the third clause ‘to arrive’. The first clause is identified by the contemporaneous suffix, the second clause with the simultaneous suffix *-wa*, and the third clause is marked with declarative speech-act marker *-c* that has scope over the entire illocutionary act.

- (145) *Awáàguxda* *maaraga* *óhbaawa* *siaʔhgáà* *úʔsiac.*
 maa-áàguxdi-Ø maa-naagi-Ø óhbaa-wa siaʔhgáà úʔsia-c
 1A-wait-CONT 1A-sit-CONT evening-SIMULT until.then arrive-DECL
I was waiting for him (but) he didn't get here until the evening.

These data suggest that the Hidatsa switch-reference system is not as well developed as its Crow counterpart. While it is true that in narratives new participants are usually introduced by adverbial subordinate clauses, the reasons for that are largely pragmatic.

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- (2004-09) Research Assistant: Caddoan and Siouan languages, Professor Douglas R. Parks. American Indian Studies Research Institute, Indiana University, Bloomington, IN.
- (2003-04) Assistant Instructor of Chinese, Department of East-Asian Languages and Cultures, Indiana University, Bloomington, IN.

FIELD EXPERIENCE

- (2009 – Present) Lakota – linguistic field work on Pine Ridge Indian Reservation, SD.
- (2006-Present) Hidatsa – linguistic field work on the Fort Berthold Indian Reservation, ND.
- (2000-2002) Tibet – ethnographic field work in Kham, Tibet.
- (1995) Seto – ethnographic field work in Setumaa, Estonia.
- (1990-1993) Nenets, Tundra Nenets, and Mansi – ethnographic field work in Siberia, Russia.

PROFESSIONAL WORKSHOPS

- (2007 – Present) Arikara Instructor at the annual Intensive Arikara Workshop, Bloomington, IN.
- (2007- Present) Linguistic Consultant to Fort Berthold Community College and the Three Affiliated Tribes of the Mandan, Hidatsa, and Arikara Nations, New Town, ND.
- (2009) Advisor to the Mandan, Hidatsa, and Arikara Nation's delegation at the National Native Language Revitalization Summit, Washington, DC.
- (2008-11) Organizer of the annual Teacher Training Workshop at Red Cloud Indian School, Pine Ridge, SD.
- (2006-2009) Arikara Instructor at weekly community meetings, New Town, ND.

HONORS AND AWARDS

- (2010) The Society for the Study of the Indigenous Languages of Americas travel award
- (2009-2010) College of Arts and Sciences Dissertation Year Research Fellowship
- (2006-2007) Hans Rausing Endangered Languages Project grant for documenting endangered languages
- (2006) American Philosophical Society, Lewis and Clark Fund for Exploration and Field Research Grant
- (2002-2007) Indiana University Chancellor's Fellowship

PUBLICATIONS

- Park, Indrek. *Arikara Vocabulary Builder: Nouns*. Ms. Bloomington: American Indian Studies Research Institute.
- Park, Indrek. *Arikara Vocabulary Builder: Verbs*. Ms. Bloomington: American Indian Studies Research Institute.
- Park, Indrek. *Arikara Phrasebook*. Ms. Bloomington: American Indian Studies Research Institute.
- Park, Indrek (ed.). *Learning Lakota: High School Level 1*. 2010. Red Cloud Indian School, Lakota Language Project: Pine Ridge, S.D. 57770.
- Park, Indrek (ed.). *Learning Lakota: High School Level 2*. 2010. Red Cloud Indian School, Lakota Language Project: Pine Ridge, S.D. 57770.
- Park, Indrek. 2009. *Hidatsa Student Dictionary*. New Town Public Schools: New Town, ND.

PRESENTATIONS

- Park, Indrek. 2012. *Hidatsa Names*. Paper accepted for the annual meeting of SSILA in Portland, OR.
- Park, Indrek. 2011. *Arikara-Hidatsa Relations*. Paper presented at the 69th annual Plains Anthropology Conference.
- Park, Indrek. 2011. *Compounding as a Syntactic Process in Hidatsa*. Paper presented at the annual SSILA meeting.
- Park, Indrek. 2011. *Fieldwork and the Study of Hidatsa*. Paper presented at the 12th annual CIC-American Indian Studies Graduate Conference, Detroit, MI.
- Park, Indrek. 2010. *Documenting and Describing Hidatsa*. Paper presented at symposium on Sustaining Indigenous Languages: Some Examples from North American Indians. Bloomington, IN.
- Park, Indrek. 2010. *Hidatsa Language Study at Indiana University*. Paper presented at the 68th annual Plains Anthropological Conference, Bismarck, ND.
- Park, Indrek. 2010. *Pitch Accent in Hidatsa*. Paper presented at the annual SSILA meeting .
- Park, Indrek. 2009. *Evidentiality in Hidatsa*. Paper presented at the 14th WSCLA meeting.
- Park, Indrek. 2009. *Ergativity in Hidatsa*. Paper presented at the annual SSILA meeting.

PROFESSIONAL ASSOCIATIONS

Linguistic Society of America, Society for the Study of the Indigenous Languages of the Americas