

# Advances in the study of Siouan languages and linguistics

Edited by

Catherine Rudin

Bryan J. Gordon

DRAFT  
of Monday 25<sup>th</sup> April, 2016, 13:31

## Studies in Diversity Linguistics

Chief Editor: Martin Haspelmath

Consulting Editors: Fernando Zúñiga, Peter Arkadiev, Ruth Singer, Pilar Valenzuela

In this series:

1. Handschuh, Corinna. A typology of marked-S languages.
2. Rießler, Michael. Adjective attribution.
3. Klammer, Marian (ed.). The Alor-Pantar languages: History and typology.
4. Berghäll, Liisa. A grammar of Mauwake (Papua New Guinea).
5. Wilbur, Joshua. A grammar of Pite Saami.
6. Dahl, Östen. Grammaticalization in the North: Noun phrase morphosyntax in Scandinavian vernaculars.
7. Schackow, Diana. A grammar of Yakkha.
8. Liljegren, Henrik. A grammar of Palula.
9. Shimelman, Aviva. A grammar of Yauyos Quechua.

ISSN: 2363-5568

# Advances in the study of Siouan languages and linguistics

Edited by

Catherine Rudin

Bryan J. Gordon

DRAFT  
of Monday 25<sup>th</sup> April, 2016, 13:31

Catherine Rudin & Bryan J. Gordon (eds.). 2016. *Advances in the study of Siouan languages and linguistics* (Studies in Diversity Linguistics 10). Berlin: Language Science Press.

This title can be downloaded at:

<http://langsci-press.org/catalog/book/94>

© 2016, the authors

Published under the Creative Commons Attribution 4.0 Licence (CC BY 4.0):

<http://creativecommons.org/licenses/by/4.0/>

ISBN: 000-0-000000-00-0 (Digital)

000-0-000000-00-0 (Hardcover)

000-0-000000-00-0 (Softcover)

ISSN: 2363-5568

DOI:10.17169/langsci.b94.118

Cover and concept of design: Ulrike Harbort

Fonts: Linux Libertine, Arimo, DejaVu Sans Mono

Typesetting software: Xe<sub>La</sub>TeX

Language Science Press

Habelschwerdter Allee 45

14195 Berlin, Germany

[langsci-press.org](http://langsci-press.org)

Storage and cataloguing done by FU Berlin

[./langsci/graphics/FULogo\\_sw\\_CMYK.pdf](#)

Language Science Press has no responsibility for the persistence or accuracy of URLs for external or third-party Internet websites referred to in this publication, and does not guarantee that any content on such websites is, or will remain, accurate or appropriate.

To Bob, whose knowledge was matched only by his  
generosity.



# Contents

Preface	vii
Acknowledgments	xv
1 NP-internal possessive constructions in Hoocąk and other Siouan languages Johannes Helmbrecht	1
Indexes	39





# Preface

This volume presents a group of papers representing a range of current work on Siouan<sup>1</sup> languages, in memory of our colleague Robert L. Rankin, a towering figure in Siouan linguistics throughout his long career, who passed away in February of 2014.

Beyond honoring a beloved colleague, our aim in this volume is to bring a variety of issues in Siouan linguistics to the attention of the linguistic community. The Siouan language family is a large and important one, with branches geographically distributed over a broad swath of the North American plains and parts of the southeastern United States. This puts it in contact historically with several other families of languages: Algonquian, Iroquoian, Caddoan, Uto-Aztec, and Muskogean. Siouan languages are, or were historically, spoken by the members of at least 25 ethnic/political groups. One Siouan language, Lakota, is among the handful of indigenous North American languages with younger speakers today. Siouan languages have occasionally risen to prominence in general linguistics, for instance in the study of reduplication (Shaw 1980); and Omaha and Crow (Apsaalooke) have lent their names to two of the basic categories of kinship systems in anthropology. Nonetheless, the Siouan family has been underrepresented in the descriptive and typological literature, and most of the languages in the family are severely understudied. The majority of work on Siouan languages is unpublished, existing only in the form of conference papers or manuscripts.<sup>2</sup> This volume is a step toward making information on Siouan languages more broadly available and encouraging deeper investigation of the myriad issues they raise.

From the perspective of linguistic typology, Siouan languages have many notable features. Many of these features stand to challenge typological generalizations. Here we briefly sketch a few of the most characteristic features of the Siouan family.

---

<sup>1</sup> “Siouan” is not to be confused with “Sioux”, a controversial term referring to Lakota and Dakota people, rarely to Nakota/Nakoda people too, but never correctly to people of other traditionally Siouan-language-speaking communities.

<sup>2</sup> Many of these unpublished works are collected in the electronic Siouan Archive, maintained by John Boyle at the University of California at Riverside.

All Siouan languages possess a rich variety of applicative affixes, confirming Polinsky's (2013) observation that applicatives are common in North America and adding another language family to her list of applicative-rich families in the area. Helmbrecht (2006) divides the applicatives into three templatic slots: locative applicatives, benefactive applicatives, and applicative markers; all of the Siouan languages sampled by Helmbrecht possess at least two applicative morphemes.

All Siouan languages are strongly head-final, and the consensus among syntacticians working with Siouan languages is that all but the supraclausal projections (and even some of these) are underlyingly head-final in Siouan languages, contra Kayne's (1994) Antisymmetry theory.

All Siouan languages have head-internal relative clauses. A series of strong claims regarding the typological implications of head-internal relative clauses (cf. Cole 1987; Murasugi 2000), including purported distinctions between "Japanese-type" and "Lakota-type" constructions (cf. Watanabe 2004; Williamson 1987; Bonneau 1992), propelled Lakota into the debates of theoretical syntax. It has been pointed out that head-internal relative clauses of the kind found in Lakota and other Siouan languages lack the island restrictions found in other languages. On the other hand, Murasugi (2000) argues that languages with head-internal relative clauses must also have head-external relative clauses, which is not true in Siouan languages.

All Siouan languages have verbal affixes which index subject possession of or relationship with the object. They vary with respect to contexts of obligatoriness of these affixes.

Many Siouan languages have grammaticalized systems of speaker-gender marking, with gender-specific morphology for speech-act markers, address terms, and kinship lexemes.<sup>3</sup> Such usage varies depending on situational factors, however, especially in the case of speech-act markers; see for instance Trechter (1995).

Many Siouan languages have a modal CCV morpheme shape. This does not necessarily imply a preference for CCV phonetic realizations, but may indicate such a preference in the distant past. Another unusual prosodic feature is the preference for second-syllable stress in most Siouan languages. Ho-Chunk may be the only attested language with default third-syllable stress in the world.

Most Siouan languages have ejective stops. The Dhegiha branch is notable for a four-way glottal-state distinction in its stop series (voiced/lenis, tense/pre-aspirated, ejective and aspirated). Outside of the Dhegiha branch are many Siouan

---

<sup>3</sup> In the case of kinship terms, lexical choice is driven by the gender of the "ego" deictic center, which coincides with speaker gender when there is 1<sup>st</sup>-person inflection.

languages which have the unusual feature of a phonemic voicing distinction in fricatives but not in stops.

Verbs play some typologically unusual, prominent roles in Siouan languages. Diachronically, many grammatical items which rarely grammaticalize from verbs in other languages tend to derive from verbs in Siouan languages. For instance, Rankin (1977) documents the derivation of classifiers and articles from verbs. In some Siouan languages, the source verbs and target grammatical items continue to exist in parallel with substantial semantic overlap. The Omaha positional article *t<sup>h</sup>o<sup>n</sup>* ‘OBLVIATIVE ANIMATE SPECIFIC STANDING’, for instance, is homophonous with the root of *át<sup>h</sup>o<sup>n</sup>* ‘stand on’.

This diachronic tendency is mirrored by synchronic flexibility. Siouan languages tend to verb freely — to use nearly any open-class stem as a verb. Thus Lakota *wimačhaša* ‘I am a man’ is derived from the nominal stem *wičhaša* ‘man/person’ with the 1<sup>st</sup>-person stative pronominal *ma-*.

Dhegiha articles (which have many features in common with positional classifiers in e.g. Mayan languages; see Gordon 2009) are homophonous with postverbal and postclausal functional items like subordinating conjunctions and aspect and evidentiality markers. They have considerable semantic overlap with them too, a fact which comprises another area of blurriness between nominal and verbal syntax: In Ponca, *niáshi<sup>n</sup>ga-ama* may mean ‘the [PROXIMATE ANIMATE PLURAL SPECIFIC] people’, but also may mean either ‘they are people’ or ‘I am told s/he was a person’. Plurality is a part of the semantics of *-ama* in both the nominal and the first clausal interpretation. To make matters more interesting, these kinds of ambiguity are not always easily resolved by context alone, and may suggest a “simultaneity” (cf. Woolard 1998) at work as part of speakers’ competence.

This flexibility, that is, the ability of one and the same root to function in both nominal and verbal contexts, has led to some discussion on the status and quality of the noun/verb distinction in Siouan languages (see e.g. Helmbrecht 2002 and Ingham (2001)).

Nominal arguments in general are not required in Siouan languages, thematic relations being signaled by pronominal or agreement markers within the verb — including zero markers. This makes Siouan languages relevant to debates about the existence of “pronominal argument” languages (Pronominal Argument Hypothesis (Jelinek 1984) and to the related issues of whether there are languages with truly nonconfigurational or flat structure. The preponderance of evidence in Siouan is for the existence of hierarchical structure, specifically including a VP (for instance, West 2003; Johnson 2016; Johnson, Rosen & Schuck 2016; Rosen 2016).

Although Siouan languages have many remarkable features in common, they vary on many others. Some Siouan languages have noun incorporation, while others do not. Some Siouan languages have stress-accent systems, and others have pitch-accent systems. Dhegiha languages are notable in having as many as eleven definite/specific articles indexing features such as animacy, proximity/obviation (or case), posture/position, number, visibility, motion and dispersion; meanwhile other Siouan languages have no fully grammaticalized articles at all.

Some Siouan languages reflect longtime cultural presence on the Plains, while others are located as far east as the Atlantic Coast, and many more show cultural aspects of both regions. Dhegiha-speaking peoples (Quapaw, Osage, Kanza, Omaha and Ponca, and likely Michigamea as well (Kasak 2016; Koontz 1995) likely lived at the metropolis at Cahokia, perhaps at a time before any of the descendant groups had separated, and have many Eastern Woodlands-style features of traditional governance and religion, in sharp contrast with the more Plains-typical cultural features of close Lakota and Dakota neighbors and relatives.

One seemingly minor but in fact quite significant issue in Siouan linguistics is the matter of language names and their spelling. Often this involves a self-designation in competition with a name imposed by outsiders. Even when an autonym gains currency among linguists there is sometimes no agreed spelling; so for instance the Otoe self-designation is written <Jiwere> or <Chiwere>. For the most part in this volume the choice of language designations has been left to the individual chapter authors. However, after a volume reviewer pointed out that the language of the Ho-Chunk or “Winnebago” people was spelled no less than ten different ways in various chapters, we encouraged authors to choose one of the two spellings used on the tribe’s web site: <Ho-Chunk> or <Hoocąk>. Most have voluntarily complied. In a related move, we decided to transliterate all Lakota data throughout the volume using the orthography of the *New Lakota Dictionary* (Ullrich 2012).

The volume is divided into four broad areas (Historical, Applied, Formal/Analytical, and Comparative/Cross-Siouan) described in more detail in separate introductions to each part of the volume. Part I consists of five chapters on historical themes: Ryan Kasak evaluates the evidence for a relationship between Yuchi and Siouan; David Kaufman discusses the participation of some Siouan languages in a Southeastern sprachbund; Rory Larson summarizes current knowledge of Siouan sound changes; and Kathleen Danker and Anthony Grant investigate early attempts to write Ho-Chunk, Kanza, and Osage. Part II opens with Linda Cumberland’s interview with Robert Rankin about his work with Kanza language programs. Jimm Goodtracks, Saul Schwartz, and Bryan Gordon present three

different perspectives on Baxoje-Jiwere language retention. Justin McBride applies formal syntax to the solution of a pedagogical problem in teaching Kanza. This applied-linguistics section ends with Jill Greer's sketch grammar of Baxoje-Jiwere. Part III contains formal analyses of individual Siouan languages. David Rood proposes an analysis of /b/ and /g/ in Lakota using the tools of autosegmental phonology and feature geometry. John Boyle elucidates the structure of relative clauses in Hidatsa. Meredith Johnson, Bryan Rosen, and Mateja Schuck, in a series of three interrelated chapters, discuss syntactic constructions in Ho-Chunk including resultatives and VP ellipsis, which they argue show the language has VP and an adjective category. Part IV consists of three chapters which take a broader view of grammar, considering data from across the Siouan family. Catherine Rudin compares coordination constructions across Siouan; Bryan Gordon does the same with information structure and intonation, and Johannes Helmbrecht with nominal possession constructions.

All four of the areas represented by this volume are ones to which Bob Rankin contributed. His scholarly publications centered primarily around Siouan historical phonology, but included works ranging from dictionaries to toponym studies, from philological investigation of early Siouanists to description of grammaticalization pathways. He was deeply involved in language retention efforts with the Kanza Language Project. Other interests included archeology, linguistic typology, Iroquoian and Muskogean languages, and the history of linguistics.

Bob was a major figure in Siouan linguistics, a mentor to nearly all living Siouanists, and a mainstay of the annual Siouan and Caddoan Linguistics Conference meetings for decades. Trained in Romance and Indo-European linguistics, with a specialty in Romanian (Ph.D. University of Chicago 1972), he shifted gears soon after leaving graduate school, and became an expert in Siouan languages, especially the Dhegiha branch, with special focus on Kanza. From the mid 1970s through the end of his life, he devoted himself to Siouan studies, both practical and scholarly. His long association with the Kaw Nation led to a grammar and dictionary of that language (see Cumberland 2016), and he also produced a grammar of Quapaw, and briefly conducted field work on Omaha-Ponca and Osage. At the University of Kansas he directed dissertations on Lakota (Trechter 1995) and Tutelo (Oliverio 1996) as well as several M.A. theses on Siouan languages, and taught a wide variety of courses including field methods and structure of Lakota and Kanza as well as more theoretical courses in phonology, syntax, and historical linguistics. Perhaps Bob's greatest gift to the field was his encouragement of others. At conferences and on the Siouan List email forum, he was unfailingly patient and encouraging, answering all questions seriously, explaining linguistic

terms to non-linguist participants and basic facts of Siouan languages to general linguists with equal enthusiasm and lack of condescension.

Following his untimely passing, a special session was held at the 2014 Siouan and Caddoan Linguistics Conference to organize several projects in Bob's honor: The first of these was publication of the Comparative Siouan Dictionary, an immense project comparing cognates across all the Siouan languages, undertaken by Rankin and a group of colleagues in the 1980s. It had been circulated in various manuscript forms but never published. Thanks to David Rood (another founding member of the CSD project), with help from Iren Hartmann, the CSD is now available online (Rankin et al. 2015). The second project was a volume of Bob's conference papers and other previously unpublished or less accessible work, to be collected and edited by a group headed by John P. Boyle and David Rood; that volume, tentatively titled *Siouan Studies: Selected Papers by Robert L. Rankin*, is currently in progress. The third project was a volume of Siouan linguistic work in Bob's memory, which has taken the shape of the present volume.

## References

- Bonneau, José. 1992. *The structure of internally headed relative clauses*. Montréal: McGill University (Doctoral dissertation).
- Cole, Peter. 1987. The structure of internally headed relative clauses. *Natural Language and Linguistic Theory* 5(2). 277–302.
- Cumberland, Linda A. 2016. *In his own words: Robert Rankin recalls his work with the kaw people and their language*. Catherine Rudin & Bryan James Gordon (eds.). Berlin: Language Science Press.
- Gordon, Bryan James. 2009. "Artifiers" in *Mississippi Valley Siouan: A novel determiner class*. Paper presented at the annual meeting of the Linguistic Society of America, San Francisco, 8–11 January 2009.
- Helmbrecht, Johannes. 2002. Nouns and verbs in Hocank (winnebago). *International Journal of American Linguistics* 68(1). 1–27.
- Helmbrecht, Johannes. 2006. *Applicatives in Siouan languages: A study in comparative Siouan grammar*. Paper presented at the Siouan and Caddoan Languages Conference, Billings, MT.
- Ingham, Bruce. 2001. Nominal and verbal status in Lakhota: A lexicographical study. *International Journal of American Linguistics* 67(2). 167–192.
- Jelinek, Eloise. 1984. Empty categories, case and configurationality. *Natural Language and Linguistic Theory* 2. 39–76.

- Johnson, Meredith. 2016. A description of verb-phrase ellipsis in Hocak. In Catherine Rudin & Bryan James Gordon (eds.), *Advances in the study of Siouan languages and linguistics*, no pages. Berlin: Language Science Press.
- Johnson, Meredith, Bryan Rosen & Mateja Schuck. 2016. Evidence for a VP constituent in Hocak. In Catherine Rudin & Bryan James Gordon (eds.), *Advances in the study of Siouan languages and linguistics*, no pages. Berlin: Language Science Press.
- Kasak, Ryan M. 2016. A distant genetic relationship between Siouan-Catawban and Yuchi. In Catherine Rudin & Bryan James Gordon (eds.), *Advances in the study of Siouan languages and linguistics*, no pages. Berlin: Language Science Press.
- Kayne, Richard. 1994. *The antisymmetry of syntax*. Cambridge, MA: MIT Press.
- Koontz, John E. 1995. *Michigamea as a Siouan language*. Paper presented at the 15<sup>th</sup> annual Siouan and Caddoan Languages Conference, University of New Mexico – Albuquerque.
- Murasugi, Keiko. 2000. An antisymmetry analysis of Japanese relative clauses. In Artemis Alexiadou, Paul Law, André Meinunger & Chris Wilder (eds.), *The syntax of relative clauses*, 231–264. Amsterdam: John Benjamins.
- Oliverio, Giulia. 1996. *A grammar and dictionary of Tutelo*. Lawrence: University of Kansas (Doctoral dissertation).
- Polinsky, Maria. 2013. Applicative constructions. In Matthew S. Dryer & Martin Haspelmath (eds.), *The world atlas of language structures online*, no pages. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Rankin, Robert L. 1977. From verb, to auxiliary, to noun classifier and definite article: Grammaticalization of the Siouan verbs ‘sit’, ‘stand’, ‘lie’. In Robert L. Brown, Kathleen Houlihan, Larry G. Hutchinson & Andrew MacLeish (eds.), *Proceedings of the 1976 Mid-America Linguistics Conference*, 273–83. Minneapolis: University of Minnesota Linguistics Department.
- Rankin, Robert L., Richard T. Carter, A. Wesley Jones, John E. Koontz, David S. Rood & Iren Hartmann (eds.). 2015. *Comparative Siouan dictionary*. Leipzig: Max Planck Institute for Evolutionary Anthropology.
- Rosen, Bryan. 2016. On the structure and constituency of Hocak resultatives. In Catherine Rudin & Bryan James Gordon (eds.), *Advances in the study of Siouan languages and linguistics*, no pages. Berlin: Language Science Press.
- Shaw, Patricia A. 1980. *Theoretical issues in Dakota phonology and morphology*. New York: Garland Publishing.
- Trechter, Sara. 1995. *The pragmatic functions of gendered clitics in Lakota*. Lawrence: University of Kansas (Doctoral dissertation).

## *Preface*

- Ullrich, Jan F. (ed.). 2012. *New Lakota dictionary*. 2nd edn. Bloomington, IN: Lakota Language Consortium.
- Watanabe, Akira. 2004. Parametrization of quantificational determiners and head-internal relatives. *Language and Linguistics* 5. 59–97.
- West, Shannon Louise. 2003. *Subjects and objects in Assiniboine Nakoda*. Victoria: University of Victoria (Master's thesis).
- Williamson, Janis Shirley. 1987. An indefiniteness restriction for relative clauses in Lakhota. In Eric Reuland & Alice ter Meulen (eds.), *The representation of (in)definiteness*, 168–190. Cambridge, MA: MIT Press.
- Woolard, Kathryn. 1998. Simultaneity and bivalency as strategies in bilingualism. *Journal of Linguistic Anthropology* 8(1). 3–29.



# Acknowledgments

We are grateful to everyone who helped with this project, especially the many people who served as chapter reviewers and volume reviewers. Special thanks to Deniz Rudin for his invaluable typesetting assistance and to Jan Ullrich for orthography checking.



## Chapter 1

# NP-internal possessive constructions in Hoocąk and other Siouan languages

Johannes Helmbrecht

Languages usually have more than one construction to express a possessive relationship. Possessive constructions in an individual language usually express semantically different relations, which are traditionally subsumed under the notion of possession such as part-whole relationships, kinship relationships, prototypical ownership, and others. Hoocąk and the other Siouan languages are no exception from this many-to-many relationship between possessive constructions and semantic kinds of possession. The present paper deals with NP-internal types of possession in Siouan languages leaving aside constructions that express possession on the clause level such as benefactive applicatives, reflexive possessives and the predicative possession. The NP-internal possessive constructions will be examined according to the semantic/syntactic nature of the possessor (regarding the Animacy Hierarchy), and the semantic nature of the possessed (alienable/inalienable distinction). I will begin with an analysis of Hoocąk and will then compare the Hoocąk constructions with the corresponding ones in some other Siouan languages. At least one language of each sub-branch of Siouan will be discussed. It will be shown that the choice of different NP-internal possessive constructions depends on both semantic scales (the Animacy Hierarchy and the alienable/inalienable distinction), but in each Siouan language in very individual ways.

## 1 The structure of NP-internal possessive constructions

It may safely be assumed that all languages have grammatical and lexical means to express a possessive relation between an entity A and an entity B. Semantically, possession is a cover term for a broad range of distinct relations, which are expressed by possessive constructions (PC) in the languages of the world. Central to the notion of grammatical possession are the relations of ownership, whole-part relations, and kinship relations. Less central to the general notion of possession are attribution of a property, spatial relations, association, and perhaps nominalization. All these relations may be expressed by NP-internal possessive

constructions in English as exemplified in Table 1.<sup>1</sup>

Table 1: Semantics of possessive relation in the broad sense (cf. **Dixon2010**)

Entity A	Possessive relation	Entity B	English example
Possessor	←————→	Possessed	
	Ownership		my car/ Peter's house
	Whole-part		Mary's teeth/ the teeth of the bear
	Kinship		Peter's wife/ my daughter
	Attribution of property		her sadness/ his age
	Spatial relation		the front of the house/ the inside of the church
	Association		Jane's teacher/ her former school

Not all of the different kinds of relations in Table 1 can be expressed by possessive constructions in all languages, but in most cases ownership, whole-part, and kinship relations are covered by their NP-internal PCs. It is still an open question whether there is a general semantic notion of possession that covers all relations expressed by PCs. There is at least one prominent approach to possession which claims that there is a semantic prototype with a core and a periphery (cf. Seiler's prototype approach (**Seiler1983**; **Seiler2001**); and a critical examination of it in **Helmbrecht2003**). Others reject this idea (cf. for instance **Heine1997** **Dixon2010** and others).

Languages usually have more than one syntactic construction expressing possessive relations on the clause level as well as on the NP level. In Tables 2 and 3, there are examples of different possessive constructions from Hoocąk,<sup>2</sup> English and German for illustrative purposes.

The present paper deals only with PCs on the NP level. Languages often possess more than just one NP-internal PC, as is the case for instance in English. English has the *of*-construction and the genitive =s construction to express possession NP-internally; similarly for German. If there are two or more NP-internal PCs in a language, the choice of these constructions often depends on the semantic and syntactic category of the possessor and/or the semantic type of the possessed entity.

<sup>1</sup> See **Dixon2010** for a more detailed discussion of these relations.

<sup>2</sup> Hoocąk, formerly also known as *Winnebago*, is a Siouan language still spoken in Wisconsin. Hoocąk together with Ojibwe, Ioway, and Missouria forms the Winnebago-Chiwere sub-branch of Mississippi-Valley Siouan. For the widely accepted classification of Siouan languages see, for instance, **Rood1979** **Mithun1999** and **ParksRankin2001**

Table 2: A brief typology of possessive constructions (part 1, Clausal)

level	construction type	examples
Clause	predicative possession	English <i>I <b>have</b> a blue car.</i> <i>The blue car <b>belongs</b> to me.</i>
	external possession <sup>a</sup> (possessor raising)	Hoocak (BO979) <i>Huuporo=ra <b>h̥j</b>-teek-ire</i> ... knee=DEF 1E.U-hurt-SBJ.3.PL 'When my knees hurt, ...'
	dative of interest	German <i>Sie schneidet <b>ihm</b> die Haare</i> she cuts <b>him</b> .DAT the hair 'She cuts his hair.'
	beneficiary	Hoocak (Helmbrecht2003) <i>Wažqtíre<sup>a</sup>ra h̥jigí'eenq.</i> <i>wažqtíre=ra hi&lt;<b>h̥j</b>-gí&gt;'e=nq</i> car=DEF <1E.U-APPL.BEN>find=DECL
	-possessor poly- semy	'He found the car for me.'/ 'He found my car.'
	possessive reflexive	Hoocak (HelmbrechtLehmann2010) <i>Hin̥ik=ra nq&lt;<b>kara son=DEF &lt;POSS.RFL&gt;embrace(SBJ.3SG&amp;.OBJ3SG)=and</b></i>
'He (i.e. the father) embraced his son, and ...'		

<sup>a</sup> See, for instance, PayneBarshi1999 on types of external possession.

Table 3: A brief typology of possessive constructions (part 2, Non-clausal)

level	construction type	examples
NP	juxtaposition (no marking at all)	Hoocak (Helmbrecht2003) <i>Peter=gá şuyk=rá</i> ‘Peter’s dog’ Peter=PROP dog=DEF
	genitive attribute	English <i>Peter’s dog</i>
	(genitive case marker on possessor)	
	prepositional attribute	German <i>der Hund von Peter</i> DEF dog of Peter ‘Peter’s dog’
	pronominal index on possessed noun (possessor marking on possessed)	Mam (England1983) <i>t-kamb’ meenb’a</i> 3SG-prize orphan ‘the orphan’s prize’
	mixed strategy (genitive case marking plus pronominal index)	Turkish (Kornfilt1990) <i>Ayşe-nin araba-sı</i> Ayşe-GEN car-3SG ‘Ayşe’s car’
4	nominalized predicative possession	Hoocak (Helmbrecht2003) <i>hicuwí waháara</i> <i>hicuwí wa-háa=ra</i> aunt obj.3PL-have.kin(1E.U)=DEF ‘my aunts’
	Word nominal com-	

With regard to the possessor, the choice of the PC may depend on the specific NP type of the possessor. For instance, if the possessor is expressed by means of a possessive pronoun a different construction may be used than with a possessor expressed by a lexical noun phrase. If the possessor is a proper name or kinship term this may determine the selection of a specific PC, too. Animacy proper of the possessor, i.e. possessor NPs with a human, animate or inanimate common noun, may play a role as well. The implicational scale that brings together these different NP-types that may be relevant for the choice of different NP-internal PCs in Siouan languages as well is called Animacy Hierarchy (AH). The AH is a scale that describes many different grammatical phenomena cross-linguistically. The AH is usually considered as:  $1/2 > 3 > \text{proper noun/kin term} > \text{human common noun} > \text{animate common noun} > \text{inanimate common noun}$  (cf. for instance Dixon1979 Comrie1981 Croft2003).

With regard to the possessed, it can be observed that the choice of the NP-internal PC depends on the semantic class of the possessed, i.e. these languages often have two sets of nouns, so that set<sub>1</sub> nouns designating the possessed entity require one type of the PC, and set<sub>2</sub> nouns designating the possessed entity the other. This classification of nouns with regard to PCs is better known under the heading alienable versus inalienable distinction. Alienable nouns usually designate entities that can be owned in the prototypical sense implying that the possessor has full control over these possessed entities; for instance the possessor can sell them, give them away, and so on. The class of inalienable nouns is much more heterogeneous with regard to the semantics; inalienable nouns designate entities that bear a close association to the possessor implying that the possessor has no or only a limited control over them. Often, kinship terms, body-part terms, and other relational nouns (local/spatial nouns) belong to this class. With regard to the formal marking of the respective PCs, the following possibilities can be distinguished (cf. Dixon2010):

- i. the alienable PC is similar to that for inalienable possession with an added grammatical element;
- ii. the grammatical marking for alienable possession is longer than that for inalienable possession;
- iii. the alienable PC requires a classifier, the inalienable construction does not;
- iv. overt marking only in an alienable PC;

The possibilities i-iv cover the cross-linguistic observation that inalienable PCs tend to be shorter and morphological less complex than alienable PCs. In other

words, the PC for alienable possession is always more marked than the PC for inalienable possession. In what follows it will be shown that this observation also holds in general for the different NP-internal PCs in Siouan.

## 2 Methodical remarks

The goal of this study is to search for all different NP-internal PCs in selected Siouan languages and to describe the conditioning factors for their choice. The guiding hypothesis is that the syntactic/semantic properties of the possessor (Animacy Hierarchy) and the semantic properties of the possessed (alienable vs. inalienable) is a fruitful notional frame for the discovery and the description of the splits in the expression of possession; cf. Table 3.

Typological studies on possession show that the properties of the possessive relation itself such as actual possession vs. possession in the past, temporary possession vs. permanent possession, close possession vs. loose possession and so on, may trigger a constructional split too, in some languages (cf. [Dixon2010](#)). This is, as far as I can see, not the case in Siouan languages. Therefore, these semantic parameters won't play a role in the rest of the paper.

Table 4: Semantic/syntactic parameters for constructional splits in NP-internal possessive constructions.

Semantic-syntactic properties of the possessor (Animacy Hierarchy)	Semantic properties of the possessive relation	Semantic properties of the possessed (alienable - inalienable)
pronoun (SAP/3rd person)	temporal/ closeness	A) ownership
proper name	temporary/ permanent	B) whole-part relation
kinship term	close/ loose	C) kinship relation
common noun	general type of possession	D) attribution
[human]		E) orientation/ location
[animate]		F) association
[inanimate]		G) nominalization

The properties of the possessor and the possessed as summarized in Table 4 serve as a kind of questionnaire or guideline for the search for constructional splits in the various grammatical descriptions of Siouan languages that are used here. The data and descriptions of PCs are taken from the grammars that are available for the different Siouan languages. For Hoocąk, data from a text corpus



and from fieldwork sessions will be taken.

I will exclude the question of the relation between NP-internal PCs and the clause level PCs for later research. My own experience with text data from Hoocąk makes me think that clause level PCs are often preferred over the NP-internal PCs at least in Hoocąk, but this needs to be shown in more detail.

### 3 NP-internal possession in Hoocąk

Hoocąk and Chiwere (Missouria, Otoe, Ioway) are closely related and constitute the Winnebago-Chiwere sub-branch of the Mississippi Valley group of the Siouan languages. Hoocąk is taken as a representative of this sub-branch, then.

Hoocąk has no possessive pronouns comparable to English *my, your, his, her*, etc., no nominal case marking in general, and no genitive case marker in particular. In addition, there are no connectives, linkers or possessive markers, i.e. grammatical forms that indicate a possessive relation between two nominals. Hoocąk has in principle two different types of NP-internal PCs. The first one is a simple juxtaposition of two nouns without any special possessive marking, see example (1) below. The second type of PC is a complex construction with an inflected verb of possession, e.g. *=hii* ‘have.kin’ plus a definite article nominalizing the entire construction illustrated in example (1b). Without this definite article, we have a clause expressing a kind of predicative possession.

(1) Hoocąk (Helmbrecht2003)

- a. *Petergá šųųkrá*  
Peter=gá šųųk=rá  
P.=PROP dog=DEF  
‘Peter’s dog’
- b. Hoocąk Helmbrecht2003  
*hicųwǎ́ wahaará*  
hicųwǎ́ wa-haa=rá  
aunt OBJ.3PL-have.kin(1E.U)=DEF  
‘my aunts’

Both types of NP-internal PC will be discussed in more detail in the subsequent sections.

### 3.1 Juxtaposition

The semantic/syntactic type of the possessor does not require the choice of the juxtaposition PC in Hoocak with one exception. If the possessor is a speech act participant or a third person, the second construction type with the nominalized possessive verb has to be chosen obligatorily (see §3.2 below).

The following series of examples demonstrates that neither the AH – except with regard the pronoun/noun distinction – nor the distinction between alienable vs. inalienable nouns have any effect on the expression of attributive possession in Hoocak. The example in (2) is an attributive possessive relation with a proper name as possessor and a kinship term as possessed noun. The relation is inherent and inalienable. The definite article is required.

(2) Hoocak (Helmbrecht2003)

*Petergá hi'qcrá*

Peter=gá hi'ac=rá

P.=PROP father=DEF

'Peter's father'

The possessive relation in (3a) is a part-whole relationship with a human possessor and a body-part term as possessed. The possessive relation is inherent and inalienable. The same holds for the examples in (3b)-(3c). The whole PC needs to be specified by a determiner, i.e. the definite article, or a demonstrative pronoun. If there is a definite article following the possessor (cf. (3b)), then it is the possession of a specific and definite possessor. If the indefinite article follows the possessor (cf. (3c)), it is the possession of an indefinite possessor.

(3) Hoocak (Helmbrecht2003)

a. *hinúk hišja=rá*

woman face=DEF

'the woman's face'

b. *hinúk=rá hišja=rá*

woman=DEF face=DEF

'the face of the (specific/definite) woman'

c. *hinúk=íza hišja=rá*

woman=DEF face=DEF

'the face of an (indefinite) woman'

The PCs in (4) and (1) (above) are alienable. Both contain alienable possessed nouns, the inanimate noun *hiráati* ‘car’ and the animate noun *šuyk* ‘dog’. The possessor is a human being (proper name) in both cases.

(4) Hoocąk (Helmbrecht2003)

*John=ga hiráati=ra*

J.=PROP car=DEF

‘John’s car’

The possessive relation in (5) includes a body-part term as possessed noun (inseparable, inalienable) with a non-human possessor. The example in (6) represents a part-whole relation with an inanimate object as possessor and an inanimate object as possessed (separable, alienable). Both possessors in (5) and (6) can be interpreted either as specific or as generic.

(5) Hoocąk (Helmbrecht2003)

*wijúk huu=rá*

cat leg=DEF

‘the leg(s) of the/a cat’

(6) Hoocąk (Helmbrecht2003)

*wažqtíre hogis=rá*

car circular.part=DEF

‘the wheel(s) of a/the car’

Note that the constructions in (5) and (6) often resemble a nominal compound with the first noun specifying the second noun thus creating a new word and concept instead of expressing a possessive relation. For instance, the Hoocąk word *nqqhá* ‘bark’ is a compound of the noun *nqq* ‘tree’ and *haa* ‘skin, pelt, hide’ thus giving the new concept ‘tree skin’ which corresponds to ‘bark’ in English. This combination of two nouns is a nominal compound on phonological grounds. The vowel in the second noun is shortened, which is a normal word-internal process in Hoocąk. However, the boundary between compound and juxtaposition is often blurred and the function “the first noun specifies the second” can be found in phrasal juxtaposition as well as in nominal compounding. The expressions in (5) and (6) are certainly phrasal in nature. Both words in these expressions have their own primary accent and there are no sandhi processes between the two nouns.

The same type of construction employed for the expression of possession in the preceding examples is also used for the expression of spatial relations. There

are numerous local nouns such as *coowé* ‘front part’, *nqaké* ‘back part’, *rook* ‘inside’, *hihák* ‘top, surface’, and so on, which are used to express the specific local/spatial relation of an object vis-à-vis the spatial region of another object. The local nouns are the possessed nouns in these constructions. They designate the spatial position of the possessor. The possessor functions as the reference point (cf. Langacker1993) of the localization, it represents the object with regard to which another one is localized, cf. the examples in (7). The clitic =*eja* ‘there’ is a local adverb almost obligatorily used in these constructions.

(7) Hoocak (Helmbrecht2003)

- a. *šuykrá hinarúti coowéja akšqna*  
*šuyk=rá hinarúti coow=eja ak=šana*  
dog=DEF car front=there be.lying=DECL  
‘The dog is (in a lying position) in front of the car.’
- b. *šuykrá hinarúti hihákeja jeena*  
*šuyk=rá hinarúti hihák=eja jee=na*  
dog=DEF car top=there be.standing=DECL  
‘The dog is (in a standing position) on the top of the car.’
- c. *šuykrá hinarúti rookéja nqakšqna*  
*šuyk=rá hinarúti rook=eja nak=šana*  
dog=DEF car inside=there be.sitting=DECL  
‘The dog is (in a sitting position) inside of the car.’

The expressions in examples (2) through (7) show that the semantic nature of a lexical possessor does not trigger a shift to another construction type: this holds if the possessor is a proper name (=ga PROP), human noun (=DEF/=INDEF/=Ø), animate noun (=DEF/=INDEF/=Ø), or inanimate noun (=DEF/=INDEF/=Ø). In addition, the expressions in (2) through (7) show that there is no alienable-inalienable distinction: the same construction type is chosen with kinship terms, body-part terms, relational spatial nouns, as well as with alienable nouns. The possessor noun may be marked by a definite (DEF), an indefinite (INDEF) article, or by zero. If the possessor is a proper name (PROP), it will be marked by the proper name marker. The entire PC is always definite (DEF) (marked on the possessed noun) except with spatial nouns. They are usually marked by means of a local adverb clitic =*eja* ‘there’ which – in this respect – could also be analyzed as a general local postposition. The examples also show that this type of PC may express real ownership, part-whole relations, kinship relations, and spatial relations.

### 3.2 Nominalized verbal possessive constructions

The juxtaposition of two nominals is a general construction type to express possession and other binary relations in Hoocąk. There is, however, an alternative NP-internal possessive construction, which indeed exhibits a classification of nouns: inalienable nouns such as kinship terms, domestic (pet) animals, and alienable nouns. These alternative constructions are in each case a nominalized version of the possessive predication employing different possessive verbs for different types of possessed entities. The nominalized possessive clauses appear in the same syntactic position as the juxtaposed nouns, i.e. in a noun phrase position of the clause.

(8) Hoocąk (Helmbrecht2003)

- a. *John=gá hiráati=ra hacáa=nq*  
J.=PROP car=DEF see(1E.A&OBJ.3SG)=DECL  
'I see John's car.'
- b. *John=gá hiráati hanj=rá hacáa=nq*  
J.=PROP car own(SBJ.3SG&OBJ.3SG)=DEF see(1E.A&OBJ.3SG)=DECL  
'I see John's car.'

Both clauses in (8) have the same translation, but speakers indicate that they prefer the nominalized variant over the juxtaposed variant. The same constructional pairs exist for possessive constructions with kinship terms and pet animals (domestic animals). These nominalized possessive clauses represent a kind of transition from attributive to predicative possession. The general structure of these nominalized possessive clauses is given in (9).

(9) General structure of the nominalized verbal possessive construction

[(N-POSSESSOR<sub>i</sub>) N-POSSESSED<sub>j</sub> PRO<sub>j</sub>-PRO<sub>i</sub>-Verb of  
possession=DET]<sub>NP</sub>

If the possessor is a speech act participant or third person, these nominalized PCs are the only possibility. Since the possessor is often a topic (given and definite) in discourse and hence expressed pronominally as a 3SG, this type of PC prevails in discourse over the alternative juxtaposition. Note that 3SG arguments are always marked zero on the verbs. Both entities  $X_{\text{possessor}}$  and  $Y_{\text{possessed}}$  are cross-referenced in the verb of possession utilizing the two different series of pronominal prefixes, the actor/subject series for the possessor and the undergoer/object series for the possessed. The verbs of possession are treated as regular transitive verbs.

If the possessor is a lexical human noun, this construction type competes with the juxtaposition type of PCs dealt with in the preceding section; cf. the following examples in (10).

(10) Hoocak (Helmbrecht2003)

- a. *Peterga hi'ác hiirá*  
 Peter=ga hi'ác **hii**=ra  
 P.=PROP father have.kin=DEF  
 'Peter's father'
- b. *Peterga šúyuk niíhíra*  
 Peter=ga šúyuk **niíhí**=ra  
 P.=PROP dog have.pet=DEF  
 'Peter's dog'
- c. *John=gá hiráati haní=rá*  
 J.=PROP car own=DEF  
 'John's car'

The verbs of possession that are used in the PCs in (10) are restricted in their usage. The verb =*hii* 'X has Y as kin' can only be used with kinship terms or with terms designating close friends. This verb is homophonous with the causative auxiliary =*hii* 'to cause'. There are reasons to believe that both verbs are historically cognate, and that they should be considered as different usages of one verb rather than homonyms. The main reason for this analysis is that the causative verb =*hii* has an irregular personal inflection, and the possessive verb =*hii* shows exactly the same pattern.

The possessive verb *niíhí* 'X has Y as pet' is used only with pet animals. Usually, pet animals are domesticated animals such as cats, and dogs, etc. The semantic boundaries of this class are not clear-cut. Historically, *niíhí* is presumably a combination of \**ní* 'to live, living thing', which does not occur independently in Hoocak and the causative auxiliary =*hii*.<sup>3</sup> The verb *niíhí* shows the same inflectional irregularities as the causative verb =*hii*.

The possessive verb *haní* 'to own' is a regular (lexical) transitive verb designating the possession of alienable entities such as inanimate objects, artifacts, animals, and so on. Body parts belong to this group of nouns, too. It is restricted to

<sup>3</sup> \**ní* is the reconstructed Proto-Mississippi-Valley Siouan form for 'live, be alive' (cf. RankinEtAl2015AccessMay). This form can be found in other verbs in Hoocak such as *niíhá* 'to breathe' or in *nií'áq* 'be alive'.

human possessors. Part-whole relations with inanimate possessors, on the other hand, are never expressed with this construction. Cf. the summary in Table 5.

Table 5: Alienable vs. inalienable distinction in Hoocąk

inalienable/ inseparable		alienable/ separable
set <sub>1</sub> : =híi	set <sub>2</sub> : n̄ihí	set <sub>3</sub> : han̄í
kinship (including close social relations such as friendship)	pet animals (usually domestic animals such as dog, cat, horse, etc.)	animate and inanimate objects such as non-domestic animals, artifacts, and so on including body parts

All three verbs in Table 5 form the same type of nominalized verbal PC with pronominal and lexical human possessors. There is no difference between them with regard to structural markedness or with regard to the iconic relationship observed for the inalienable vs. alienable distinction and the size of the corresponding PCs. The paradigms for all three verbs of possession are given below; cf. Table 6, Table 7, and Table 8. The paradigms contain only constructions with a 3SG possessed noun. If the possessed nouns were plural ('aunts', 'dogs', and 'cars') the verbs of possession would be inflected for the third person plural object (*wa-* OBJ.3PL).

Table 6: Paradigm of the possessive verb *hii* 'to have.kin'

possessor	possessed N <i>hicųwí</i>	
1SG	<i>hicųwí</i> haa=rá	'my aunt' (father's sister)
2SG	<i>hicųwí</i> raa=ra/=gá	'your aunt'
3SG	<i>hicųwí</i> hii=rá	'his aunt'
1I.D	<i>hicųwí</i> h̄ihi=rá /=ga	'my and your aunt'
1I.PL	<i>hicųwí</i> h̄ihiwí=ra	'our aunt'
1E.PL	<i>hicųwí</i> haawí=ra	'our aunt'
2PL	<i>hicųwí</i> raawí=ra/=ga	'your aunt'
3PL	<i>hicųwí</i> hiire=ra	'their aunt'

The kinship term *hicųwí* 'aunt (father's sister)' has a variant form that is used for address purposes, *cųwí* '(my) aunt!'. These address forms of kinship terms — often simply lacking the initial syllable *hi-* — cannot occur in a possessive

Table 7: Paradigm of the possessive verb *nijhi* 'to have.pet'

possessor	possessed N <i>şuyk</i>	
1SG	şuyk nijháa=ra	'my dog'
2SG	şuyk nijná=ra/=ga	'your dog'
3SG	şuyk nijhí=ra	'his dog'
1I.D	şuyk nijhi=ra/=ga	'our dog'
1I.PL	şuyk nijháwi=ra	'our dog'
1E.PL	şuyk nijhiwi=ra	'our dog'
2PL	şuyk nijnávira/=ga	'your dog'
3PL	şuyk nijhíre=ra	'their dog'

Table 8: Paradigm of the possessive verb *haní* 'to have'

possessor	possessed N <i>wažqtíre</i>	
1SG	wažqtíre haaní=ná <sup>a</sup>	'my car'
2SG	wažqtíre hašiní=ná	'your car'
3SG	wažqtíre haní=ná	'his car'
1I.D	wažqtíre hijiní=ná	'our car'
1I.PL	wažqtíre hijiníwí=ná	'our car'
1E.PL	wažqtíre haaníwí=ná	'our car'
2PL	wažqtíre hašiníwí=ná	'your car'
3PL	wažqtíre haníjine=ra	'their car'

<sup>a</sup> There are two phonological rules in Hoocak a) that underlying /r/ becomes [n] after nasal vowels and b) that oral vowels are nasalized after nasal consonants. Sometimes rule a) is indicated orthographically by a haček/caron <ň>.



construction. This seems to be a general rule for obvious reasons. The usage of kinship terms as address terms usually presupposes that such a kinship relation holds between speaker and hearer.

There is another kind of variation in the paradigm of kinship possession that may be rooted in the mutual knowledge of the interlocutors. The common determiner in possessive constructions with a kinship term is the definite article *=ra*. However, in the second person singular and plural the determiner is *=ga*, a deictic element also used for the indication of proper names. Lipkind claims that *=ga* has to be used exclusively in these instances (cf. **Lipkind1945**), but Hoocąk speakers gave me forms that show that there is actually a choice between *=ra* and *=ga* in the second person and in the first person inclusive dual form;<sup>4</sup> *=ga* is ungrammatical in all other person categories. One of my most important language consultants, Phil Mike, indicated to me that this choice has to do with the mutual knowledge of the kinsman by both interlocutors. The definite article is used in the second person if the speaker does not know the kinsman (assuming that the hearer knows his or her kinsmen), but *=ga* is used when both interlocutors know the person talked about (which is more naturally the case if the speaker talks about the kinsman of the hearer). This could also explain why *=ga* is not allowed if the possessed is plural. The deictic suffix *=ga* is also used with the address forms of kinship terms indicating the first person as possessor. **Lipkind1945** says that all kin terms with initial *hi-* take *haará* ‘my’ in the first person; the few ones without it take solely *=ga* instead; the reason is that the shorter forms are terms of address while the *hi-* forms are terms for reference. For instance, the form *cųwí* is the address term corresponding to *hicųwí* ‘aunt (father’s sister)’. Hence the 1SG possessive form is *cųwí-gá* which translates literally ‘that aunt’ implying that everybody knows that she is the aunt of the speaker (EGO). It is a kind of reduced form of speaking. The address term implies that the person so addressed has the kin relation designated by the term toward the speaker. It is an effect of the Animacy Hierarchy. Shared background knowledge of the possessor plays an important role here (cf. also **Heine1997**).<sup>5</sup>

---

<sup>4</sup> I am particularly grateful to Henning Garvin helping me to collect the relevant forms here.

<sup>5</sup> This can also be interpreted as an instance where the inherent relationality of kin terms leads to a structural reduction of the expression of possession confirming the prediction of the prototype approach.

## 4 Constructional splits in the other Siouan languages

In what follows a few other Siouan languages are examined with regard to constructional splits that have to do with the NP type of the possessor and the semantics of the possessed. I will begin with the Northwestern Siouan languages Crow, Hidatsa, and Mandan (§4.1–4.3), then I will continue with Lakota (the Dakotan sub-branch of Mississippi-Valley Siouan; §4.4) and Osage (Dhegiha sub-branch of Mississippi-Valley Siouan; §4.5), and I will close this investigation with Biloxi as a representative of the South-Eastern branch of Siouan (Ohio-Valley Siouan; §4.6).

### 4.1 Crow

#### 4.1.1 The possessor

Crow has four different NP-internal PCs depending on the semantic/syntactic nature of the possessor; cf. the examples in (11) through (14).

- (11) Crow (Graczyk2007)
- a. [Poss.Pro – N<sub>possessed</sub>]
  - b. Ø-*iilápxe*  
3SG.POSS-father  
'his father'
- (12) Crow (Graczyk2007)
- a. [N<sub>possessor</sub>(-DET/-Ø) Poss.Pro – N<sub>possessed</sub>]
  - b. *Charlie-sh* Ø-*iilápxe*  
C.-DET 3SG.POSS-father  
'Charlie's father'
- (13) Crow (Graczyk2007)
- a. [Emphatic PRO-POSS.PRO-N<sub>possessed</sub>]
  - b. *bii-w-achuuké*  
1SG.EMPH-1SG.POSS-younger.brother  
'MY younger brother'
- (14) Crow (Graczyk2007)
- a. [[[N<sub>possessor</sub>] [N<sub>possessor</sub>]] [N<sub>possessed</sub>]]

- b. *úuxbishke*            *chíis-uua ííá*  
white.tailed.deer tail-PL    hair  
‘hair from the tail of the white-tail deer’

No matter whether the possessed noun is alienable or inalienable, there has to be a possessive pronoun attached to the possessed noun indicating the possessor (cf. example (11)). The same is true if there is a lexical possessor in addition (cf. example (12)). The possessive prefix may be emphasized by means of a bound emphatic pronoun prefixed to the possessive prefix (cf. example (13)). Interestingly, there are also PCs that do not show any possessive marking and hence look like a juxtaposition expressing a whole-part relationship, cf. the example in (14). I did not find more examples like this in Graczyk’s grammar, so I cannot say if this is generally an alternative possibility or required for non-human possessors.

#### 4.1.2 The possessed

Crow has different paradigms of proper bound possessive pronouns distinguishing different sets of possessed nouns according to the alienable versus inalienable distinction. The paradigm of possessive pronouns for alienable possession is given in Table 9; the paradigm of inalienable possession is given in Table 10.

Table 9: Alienable possession in Crow (Graczyk2007)

	stem <i>íílaalee</i>	
1SG	<b>ba-s-íílaalee</b>	‘my car(s)’
2SG	<b>dí-s-íílaalee</b>	‘your car(s)’
3SG	<b>i-s-íílaalee</b>	‘his/her car(s)’
1I.PL	<b>balee-is-íílaalee</b>	‘our car(s)’
1E.PL	<b>ba-s-íílaalee-o</b>	‘our car(s)’
2PL	<b>dí-s-íílaalee-o</b>	‘your car(s)’
3PL	<b>i-s-íílaalee-o</b>	‘their car(s)’

The possessive pronouns of alienable possession in Table 9 are formally invariable; they have an additional /-s/ thus being phonologically more marked than the prefixes of the inalienable paradigm. The 2SG possessive pronoun of the alienable paradigm shows a shift of the primary stress from the stem to the prefix, a pattern which is found also in some of the active verb paradigms. The 1I.PL prefix *balee-* is taken from the B-set pronominal paradigm for stative verbs. This

Table 10: Inalienable possession in Crow (Graczyk2007)

	stem <i>apá</i>	
1SG	<b>b</b> -apé	‘my nose’
2SG	<b>d</b> -ápe	‘your nose’
3SG	<b>Ø</b> -apé	‘his/her nose’
1I.PL	-	-
1PL	<b>b</b> -ap-úua	‘our noses’
2PL	<b>d</b> -áp-uua	‘your noses’
3PL	<b>Ø</b> -ap-úua	‘their noses’

form is added to the 3SG.POSS *is*- prefix, probably a late innovation introducing a 1PL inclusive-exclusive distinction into the alienable paradigm. This distinction is lacking in the inalienable paradigm of possessive pronouns as well as in the verbal paradigms. The suffixes in both paradigms (-o in the alienable possessive paradigm, -úua in the inalienable possessive paradigm) indicate the plurality of the possessor.

The paradigm of inalienable possession varies in form depending on the stem-initial sounds. There are three phonologically conditioned allomorphic paradigms for stems in /d-/, /i+consonant-/, and /vowel-/. As can be seen in Table 10, the stem itself also undergoes some sound changes.

There are, however, three additional paradigms of inalienable possession: a) one that marks possession with the undergoer series of pronominal prefixes (called B-set of pronominal prefixes in Graczyk’s grammar), b) one with an irregular paradigm, and c) one residual paradigm that shows stem suppletion. Graczyk2007 finds the following classification of nouns associated with these three different inalienable paradigms.

- a) Inalienable possession with the B-set prefixes is used with nouns referring to internal body parts such as ‘gland’, ‘joint’, ‘limb’, ‘hip’, ‘bone’, ‘lung’, ‘stomach’, etc. (cf. Graczyk2007).
- b) There are not enough nouns requiring the irregular paradigm for a semantic classification, but they all seem to belong to the inalienable class of nouns.
- c) The nouns that require suppletive stems refer to kinship relations, clothing, and some culturally important possessions, cf. the examples in Table 11.

The first column shows the nouns in citation form, the second column in a possessive construction. The corresponding stems are clearly suppletive.

Table 11: Suppletive stems in Crow (Graczyk2007)

ihkáa	‘mother’	is-ahká	‘his mother’
huupá	‘shoe’	is-ahpá	‘his shoe’
alúuta	‘arrow’	is-aá	‘his arrow’
buú	‘song’	is-huú	‘his song’

There is also a prefix *bale-* that is used if inalienable nouns are used without indicating a possessor. This form is called *depossessivizer* in Graczyk2007 and it is obligatorily used with unpossessed body-part nouns. This form is not used with kinship terms.

Table 12 summarizes the findings with regard to the alienable/inalienable distinction. Inalienable nouns are a closed class of nouns in Crow. It is clear that the semantic classification of the nouns with regard to the different PCs is not sharp. There are even body-part nouns that belong to the alienable class (set<sub>5</sub>). Gross modo, however, the nouns in set<sub>1</sub> - set<sub>4</sub> could be subsumed under a class of inalienable nouns semantically.

## 4.2 Hidatsa

### 4.2.1 The possessor

Hidatsa and Crow are closely related and constitute the Missouri Valley sub-branch of Siouan. Although they belong to the same sub-branch of Siouan, there are differences in the expression of possession. Hidatsa has different PCs depending on the syntactic/semantic type of the possessor. As in Crow, there is an obligatory marking of the possessor on the possessed noun no matter whether the possessed noun is alienable or inalienable; cf. the alienable PC in (15b). If there is an additional lexical possessor, the structure of the PC in Hidatsa is analogous to the one in Crow, cf. the alienable PC in (15a).

(15) Hidatsa (Boyle2007)

Table 12: Alienable vs. inalienable distinction in Crow

inalienable				alienable
set <sub>1</sub>	set <sub>2</sub>	set <sub>3</sub>	set <sub>4</sub>	set <sub>5</sub>
phonologically conditioned inalienable paradigm	B-set prefixes	irregular paradigm	suppletive possessed forms	alienable paradigm
body parts, kinship	closed class of nouns referring to internal body parts	‘chest’, ‘tail’, ‘husband’	closed class of nouns referring to objects closely associated to a person (e.g. clothing, a few kin terms, culturally important possessions)	open class of nouns not inherently possessed; exceptions are: <i>huli</i> ‘bone’, <i>íili</i> ‘blood’, <i>kahkahká</i> ‘forearm’ and a few others.

- a. *macée idawashúga*  
wacée ita=wašúka  
man 3SG.POSS=dog  
‘man’s dog’
- b. *idawashúga*  
ita=wašúka  
3SG.POSS=dog  
‘his dog’

Boyle2007 does not mention in his grammar of Hidatsa whether there exists a juxtaposition of possessor-possessed as another possible PC in Hidatsa. One of the peculiarities of PCs in Hidatsa is that they can freely be modified by a defi-

nite article and/or a demonstrative pronoun. Since there are a lot of similarities between Crow and Hidatsa, the discussion of the properties of the possessed will be brief.

#### 4.2.2 The possessed

As in Crow, there are two paradigms of possessive pronouns in Hidatsa, one indicating inalienable possession, the other alienable possession; cf. Table 13.

Table 13: Alienable and inalienable possessive pronouns (Boyle2007 80)

	inalienable possessive pronouns			alienable possessive pronouns		
1	ma-	/wa-/	‘my’	mada=	/wa-ta=	‘my’
2	ni-	/ri-/	‘your’	nida=	/ri-ta=	‘your’
3	i-	/i-/	‘his, her’	ida=	/i-ta=	‘his, her’

The paradigm for inalienable possession shows — as with Crow set<sub>1</sub> nouns — phonologically conditioned allomorphy (stem-initial vowel vs. stem-initial consonant, and /r/-initial stems). It seems that there is no semantic sub-classification associated with the allomorphy in the inalienable prefixes and the corresponding irregularities. Therefore, I lumped these different formal properties of inalienable nouns together in one set<sub>1</sub> class of nouns in Table 14.

However, there are also differences. For instance, the 2.POSS forms do not trigger a shift in stress assignment as in Crow, and the inalienable possessive prefixes are true prefixes, whereas the corresponding alienable forms are analyzed as clitics. The alienable forms are identical to the ones for inalienable possession plus /ta-/ which can be found in other Siouan languages as well (cf. e.g. in Lakota alienable PCs of set<sub>4</sub> nouns which have a *-t<sup>h</sup>a* prefix added to the undergoer pronominal prefix; cf. Table 16 below). There is no mention of a depossessivizer in Boyle’s grammar of Hidatsa.

#### 4.3 Mandan

Mandan is considered a proper sub-branch of Siouan neither belonging to the Missouri Valley nor the Mississippi Valley group of Siouan.

The semantic/syntactic properties of the possessor and their possible effects on the choice of the PC are not discussed and described in Mixco’s grammatical sketch (Mixco1997a). However, looking into the appended Mandan text, it seems

Table 14: Alienable vs. inalienable distinction in Hidatsa

inalienable	alienable
set <sub>1</sub>	set <sub>2</sub>
inalienable paradigm (including phonologically conditioned allomorphy and some irregular forms)	alienable paradigm (no allomorphy)
closed class of nouns: body parts, many kinship terms, some clothing items	open class of nouns not inherently possessed

that juxtapositions are possible in case the possessor is a lexical noun. There is at least one clear example of this construction (cf. (16)) that shows that association may be expressed by this PC.

- (16) Mandan (Mixco1997a)  
 'w<sub>i</sub>=ti ru'wq?k=ši-s  
 village man=good-DEF  
 'the village chief'

If the possessor is a speech act participant or a third person, one of the following distinct PCs has to be used. In one construction the possessive pronominal affixes, which are in principle identical to the undergoer series of pronominal affixes (called 'stative' in Mixco1997a) are attached directly to the noun stem that designates the possessed [POSS-N<sub>stem</sub>]<sub>inalienable possession</sub>. This construction is used for inalienable possession; see the relevant forms in Table 15.

The second PC inserts a prefix *ta-* between the stem and the possessive prefix [POSS-*ta*-N<sub>stem</sub>]<sub>alienable possession</sub>. This construction is used for alienable possession. The form *ta-* as an alienable marker is cognate to Lakota *t<sup>h</sup>á-*, see below. The possessive prefixes are the same as in the inalienable PC, see Table 15.

There are some peculiarities with PC for inalienable possession. First, there are some kinship terms that require a prefix *ko-* for third person possessor. I suppose this form is related historically to *ku-/tku-* in Lakota. Secondly, there are kinship terms and a few other alienable terms (old nominalized verb forms) that take the actor series of pronominal prefixes in order to express the possessor. For instance,



Table 15: Possessor affixes in Mandan (Mixco1997a)

	SG	PL
1	wɪ- <sup>a</sup>	ro:-
2	rɪ-	rɪ-stem-rɪt
3	i-	-kræ <sup>b</sup>

<sup>a</sup> Note that this form of the 1SG.POSS differs from the corresponding form of the undergoer series, which is wə-. Mixco speculates that the wɪ- form is a contraction of wə- + i- for the third person, but provides no evidence for this idea.

<sup>b</sup> Mixco does not give the full paradigm, neither for the stative or undergoer affixes nor for the possessive affixes. This is the reason for the question mark. In addition I did not find a single example in Mixco's sketch of Mandan that corresponds to 'their Y'. Note, however, that Kennard1936 gives the form -kere for the 3PL possessive affix. The forms are identical, but the transcription is different.

the kinship term for 'mother' takes the usual undergoer series of prefixes for inalienable possession, but requires *ko-* for the third person possessor; cf. (17).

(17) Mandan (Mixco1997a)

- a. wɪ-hy:-s  
1SG.POSS-mother-DEF  
'my mother'
- b. rɪ-hy:-s  
2SG.POSS-mother-DEF  
'your mother'
- c. ko-hy:-s  
3SG.POSS-mother-DEF  
'his mother'

The term for 'father', on the other hand, requires the actor series of pronominal affixes in Mandan in order to express the possessor, cf. the examples in (18).

(18) Mandan (Mixco1997a)

- a. wa-aʔt-s  
1SG.A-father-DEF  
'my father'

- b. *a-aʔt-s*  
2SG.A-father-DEF  
'your father'
- c. *ko-aʔt-s*  
3SG.A-father-DEF  
'his father'

Interestingly, no mention is made of the way body parts are possessed in Mandan. A quick look into the Mandan text (cf. Mixco1997a) reveals that body-part nouns never occur in one of the above described PCs with possessive affixes. They appear always without the *ta-* form and never carry any possessive affixes. The possessor always has to be inferred from the text.

## 4.4 Lakota

### 4.4.1 The possessor

Lakota is a language of the Mississippi Valley Siouan group, more specifically of the Dakotan sub-branch of this group. Lakota does employ possessive pronouns, which are almost entirely identical to the set of undergoer pronominal prefixes in stative/inactive verbs. If the possessor is a SAP/pronoun and the possessed noun belongs to the class of alienable nouns, the following constructions may be used. Note that the 1SG.POSS *mi-* is a special form that does not correspond to the regular 1SG form of the pronominal undergoer prefixes (*ma-*).<sup>6</sup>

#### a) Ownership

[N<sub>possessed-inanim</sub> PRO.POSS-HAVE DET]

#### (19) Lakota (Buechel1939)

*thípi mi-tǎ́wa kiŋ*  
house 1SG-have DEF  
'my house'

#### b) Ownership, attribution of property

[PRO-*tǎ́*-N<sub>possessed-inanim/abstr</sub> DEF]

---

<sup>6</sup> Data in this section has been re-spelled in the current Lakota orthography.

(20) Lakota (Buechel1939)

- a. *mi-tǎ́-makǎ́oche kiŋ*  
1SG.POSS-POSS-land DEF  
'my land'
- b. *nithóksape kiŋ*  
*ni-tǎ́-wóksape kiŋ*  
2SG-POSS-wisdom DEF  
'thy wisdom'

There is no information about the conditions or the differences between the two constructions; it is clear that the one in (19) contains a stative verb of possession *tǎ́wa*- 'have' that is nominalized in this context inflecting for the person and number of the possessor and the number of the possessed. In RoodTaylor1996 it is said that the stative verb of possession *itǎ́wa* 'have' depends only on the category of the possessor in this PC and not on the number of the possessed. It seems that this stative verb of possession has been grammaticalized towards a marker of possession quite recently in Lakota.

The PCs in (20) contain a marker for possession *tǎ́*- 'POSS' which is attached to the possessed noun and preceded by the pronominal affix of the possessor. This marker is common Siouan (cf. RankinEtAl2015AccessMay). If there are lexical nouns expressing the possessor, the following PCs are used.

c) Ownership

[N<sub>possessed-anim</sub> N<sub>possessor-PROP</sub> PRO.POSS-HAVE DEF]

(21) Lakota (Buechel1939)

- šúŋka wakǎ́ŋ David Ø-tǎ́wa kiŋ*  
horse D. 3SG-have DEF  
'David's horse'

[N<sub>possessed-anim</sub> N<sub>possessor-PROP</sub> PRO.POSS-HAVE DEF]

(22) Lakota (Buechel1939)

- šúŋka wakǎ́ŋ Peter na Paul Ø-tǎ́wa-pi kiŋ*  
horse P. and P. 3SG-have-PL DEF  
'Peter and Paul's horses (or horse)'

d) Association

[N<sub>possessor-PROP</sub> PRO.POSS-*tǎ́*-N<sub>possessed-hum</sub> DEF]

- (23) Lakota (Buechel1939)  
*Itǵáŋčhaŋ Ø-tǵa-wóilake kiŋ*  
Lord 3SG-POSS-servant DEF  
‘the Lord’s servant’

[N<sub>possessor-PROP</sub> PRO.POSS-*tǵa*-N<sub>possessed-hum</sub> DEF]

- (24) Lakota (Buechel1939)  
*Abraham Ø-tǵa-wámakǵaškaŋ-pi kiŋ*  
A. 3SG-POSS-animal-PL DEF  
‘Abraham’s animals’

Again we have two different PCs in the examples (21)-(24) with a lexical possessor, one with a verb of possession that is nominalized, and the other exhibiting a morphological possessor marking on the possessed noun. These examples represent alienable possessions. It can be concluded that the syntactic status of the possessor does not play a role for the choice of the PCs.

If the relation between the possessor and the possessed is a whole-part relation, or a partitive relation, or the possessor noun is an abstract noun or a nominalization, the following constructions are used.

**e) Whole-part relationships**

[N<sub>possessor-inanim</sub> N<sub>possessed-anim</sub> DEF] (juxtaposition)

- (25) Lakota (Buechel1939)  
*maǵpíya zitkála-pi kiŋ*  
cloud bird-PL DEF  
‘the birds of the air’

[N<sub>possessor-inanim</sub> N<sub>possessed-inanim</sub> INDEF]

- (26) Lakota (Buechel1939)  
*čheǵ íkǵaŋ waŋ*  
bucket rope INDEF  
‘a bucket handle, rope of a bucket’

**f) Partitive**

- (27) Lakota (Buechel1939)

*itháŋčhaŋpi kɨ óta*  
 chiefs DEF many  
 ‘many of the chiefs’

Example (27) is not really a PC, but a regular quantified NP. The same holds for (28). It can hardly be considered a PC. It is rather a juxtaposition expressing a NP (‘good works’) modifying another NP (‘man’).

**g) With an abstract possessor N**

- (28) Lakota (Buechel1939)  
*wičháša oŋ’aŋ wašté kiŋ héčha*  
 man in.actions good DEF such  
 ‘a man of good works’

**4.4.2 The possessed**

There are different PCs according to the semantic type of the possessed noun; body-part terms are simply affixed by the pronominal series of undergoer prefixes. Among the body-part terms, there is a split between body parts that are “conceived as particularly subject to willpower” (BoasDeloria1941), and the others. Buechel1939 describes this difference as “possession of one’s incorporeal constituents” versus “possession of one’s body and its physical parts”; compare the examples in (29) and (30).

- (29) Lakota (Buechel1939)  
*mi-náǵi kiŋ* ‘my souls’  
*mi-čháže kiŋ* ‘my name’  
*mi-óŋ’aŋ kiŋ* ‘my occupation’  
 etc.
- (30) Lakota (Buechel1939)  
*ma-čhéži kiŋ* ‘my tongue’  
*ma-ísta kiŋ* ‘my eye’  
*ma-sí kiŋ* ‘my foot’  
 etc.

Note that this distinction has become partially obsolete in contemporary Lakota. RoodTaylor1996 note that this distinction is semantically maintained only in the

Oglala variety of Lakota. There *ma-* (1SG.POSS) is used for “concrete visible possessions”, and *mi-* (1SG.POSS) for “intangibles” (cf. **RoodTaylor1996**). Otherwise, both forms are in free variation.

Kinship relations with a possessor of the first and second person are expressed solely by the possessive prefixes. A possessor of the third person requires an additional marker *-ku*, *-tku*, *-ču* which is suffixed to the possessed kinship term; cf. (31).

- (31) Lakota (**Buechel1939**)
- |                          |                       |
|--------------------------|-----------------------|
| <i>mi-tʰúŋkašila</i>     | ‘my grandfather’      |
| <i>ni-tʰúŋkašila kiŋ</i> | ‘thy grandfather’     |
| <i>Ø-tʰúŋkašitku kiŋ</i> | ‘his/her grandfather’ |

Table 16 summarizes the findings. As was mentioned above, the *set*<sub>1</sub> and *set*<sub>2</sub> possessed nouns are no longer separated formally in Lakota (except for Oglala).

Table 16: Alienable vs. inalienable distinction in Lakota (**BoasDeloria1941**)

inseparable/inalienable		separable/alienable	
<i>set</i> <sub>1</sub>	<i>set</i> <sub>2</sub>	<i>set</i> <sub>3</sub>	<i>set</i> <sub>4</sub>
body-part terms [+control] [incorporeal constituents] mouth, lips, facial expression, eye, arm, voice, hand, spirit, etc.	body-part terms [-control] [physical parts] kidney, knee, liver, lungs, blood, etc.	kinship relations  ownership	distal affinal kinship terms prototypical
PC	PC	PC	PC
[PRO.POSS-noun] with a special form in the 1SG.POSS ( <i>mi-</i> )	[PRO.POSS-noun]	[1./2.POSS-noun] [3.POSS-noun- <i>ku</i> ] - <i>tku</i> ] - <i>cu</i> ]	[PRO.POSS - <i>tʰa</i> -noun] [noun PRO.POSS- <i>tʰa</i> ’ <i>wa</i> ]

As in Hoocąk, the causative verb is used for the clause-level predicative expression of possession of a kinship term, cf. (32).

- (32) Lakota (**Buechel1939**)

- a. *t̥hʉŋkášila-wa-ya*  
grandfather-1SG.A-have.kin  
'I have (him) as grandfather.'
- b. *t̥hʉŋkášila-uŋ-yaŋ-pi*  
grandfather-1L.A-have.kin-PL  
'We have (him) as grandfather.'

I found no example showing that this verb of possession could be used like the alienable verb of possession *t̥háwa* illustrated in (19) above. If this were the case, we would have a quite similar opposition of verbs of possession in Lakota as we found in Hoocąk.

In addition, it should be mentioned that Lakota allows the non-modifying auto-referential usage of the possessive pronouns, however only the expressions based on the verb of possession *t̥háwa* plus the definite article. This could be interpreted as a nominalized possessive predication; cf. (33).<sup>7</sup>

- (33) Lakota (Buechel1939)  
*mit̥háwa kiŋ hé ahí ičú*  
mine DEF she came take  
'She came and took mine'

Interestingly, this is a PC in which there is no possessed noun. All other PCs discussed so far require a possessed lexical noun.

#### 4.5 Osage

Osage is taken as a representative of the Dhegiha sub-branch of Mississippi Valley Siouan. It was chosen because there is a recent extensive grammatical description of this language (Quintero2004). Unfortunately, it is difficult to find the relevant data in Quintero's grammar of Osage. There is no specific chapter on possession, and there is no index in the grammar. Quintero uses the terms alienable and inalienable, but it is not made explicit which nouns are alienable and which are inalienable. However, some conclusions about this question can be drawn from the numerous examples provided by the grammar. There is a special construction for PCs with possessed kinship nouns. Kinship nouns are inflected with a series of inalienable pronominal prefixes, cf. Table 17.

<sup>7</sup> One of the reviewers mentioned that *mit̥háwa ki he* could be analyzed as a null head relative clause. This is probably the best way to treat it. It does not, however, change the argument here. The example only demonstrates that a nominal expression for the possessed is not required in this possessive construction.

Table 17: Inalienable possessive prefixes for kinship terms in Osage (Quintero2004f)

Possessor	inalienable prefix paradigm	example	translation
1SG	wi-	wi-sóka	‘my (male’s) younger brother’
2SG	ǫi-	ǫi-sóka	‘your (male’s) younger brother’
3SG	i-	i-sóka	‘his (male’s) younger brother’
1PL	does not exist	-	-
2PL	?	?	
3PL	?	?	

The question marks in Table 17 indicate that Quintero did not provide the expected forms. In addition, PCs with possessed body-part nouns are not provided either.

Alienable nouns require another construction, which has the following properties. There is a pronominally inflected (bound) stem *-hta*, which marks possession.<sup>8</sup> The pronominal prefixes resemble the ones used for the PCs with possessed kinship terms, with one exception. There is a dual and plural form for the first person, which does not exist in the PCs with possessed kinship terms. The inflected possessive form follows the possessed noun; cf. the examples in (34) and (35). The full paradigm is given in Table 18.

(34) Osage (Quintero2004)

ówe      che      *hcí*      *qkóhta-api*      *aǫ́l-ahi-a*  
 groceries those house 1PL.POSS-PL have-arrive.there-IMP  
 ‘Bring those groceries to our house!’

(35) Osage (Quintero2004)

*Máry Jóhn-a*      *hcí*      *íhta-api*  
 M.      J.-SYL house 3SG.POSS-PL  
 ‘Mary and John’s house’

Quintero analyzes the possessive form *-hta* as a noun or nominal element for two reasons: first, this stem is inflected by the same prefixes as the inalienable

<sup>8</sup> Again, this is the Common Siouan marker for alienable possession (cf. RankinEtAl2015AccessMay).



Table 18: Alienable possession in Osage (Quintero2004f)

	possessed	possessor	translation
1SG	hcí 'house'	wihta ? (<wi-hta)	'my house'
2SG	hcí 'house'	đíhta (<đí-hta)	'your house'
3SG	hcí 'house'	ihta (<i-hta)	'his/her house'
1DU	hcí 'house'	ąkóhta (<ąkó-hta)	'our house'
1PL	hcí 'house'	ąkóhtapi (<ąkó-hta-api)	'our house'
2PL	hcí 'house'	đíhtaapi (<đí-hta-api)	'your house'
3PL	hcí 'house'	ihta-api (<i-hta-api)	'their house'

nouns (kinship terms), and secondly, if it were analyzed as a verbal stem, the possessive inflection would be quite irregular (cf. Quintero2004f).

One problem with this reasoning is that one would have to expect that the nominal stem *-hta* belongs to the group of inalienable nouns because it requires the inalienable series of prefixes. There is, however, no evidence for that. Secondly, the order of elements suggests that the *-hta* stem is of verbal origin. If it were nominal, it should precede the possessed noun. Attributive nouns always precede the head nouns; all other modifying elements follow the head noun. That the pronominal prefixes are different from the ones for stative/inactive verbs is not necessarily an argument for the non-verbal character of the stem – there are often deviations in possessive paradigms. Furthermore, this possessive form may be used autonomously without a possessed noun, cf. the example in (36). This construction is not possible in Hoocąk. The utterance in (36) would require the reflexive possessive prefix *k-/kara-* in Hoocąk.

- (36) Osage (Quintero2004)  
*ąkóhta akxa Ø-xq-api-đe*  
 1PL.POSS SBJ 3SG.SBJ-break-PL-DECL  
 'Ours is broken'

Part-whole relationships - at least with regard to inanimate parts - seem to be expressed by means of a simple juxtaposition. However, I found only one example illustrating this in Quintero's grammar, cf. example (37).

- (37) Osage (Quintero2004)

*ođihtq hci hciže áđiitq-a*  
 car house door close-IMP  
 ‘Close the garage door!’

To summarize: there is an alienable/inalienable distinction in Osage and it seems that kinship terms belong to the inalienable set of nouns (set<sub>1</sub>), while all other nouns belong to the alienable set of noun (set<sub>2</sub>); cf. Table 19.

Table 19: Alienable vs. inalienable distinction in Osage

inalienable set <sub>1</sub>	alienable set <sub>2</sub>
kinship terms	all other nouns ?
PC	PC
PRO-N <sub>possessed</sub>	(N <sub>possessor</sub> ) N <sub>possessed</sub> PRO.POSS- <i>hta</i>

#### 4.6 Biloxi

Biloxi was chosen as a representative of the Ohio Valley sub-branch of Siouan. The standard reference work with respect to a grammatical description is **Einaudi1976**■. She mentions two NP internal PC types in her grammar of Biloxi, a) a juxtaposition of two nominals to be used for all kinds of possessed nouns, and b) pronominally inflected nouns designating body parts and kinship relations (cf. **Einaudi1976**). Concerning a) the order of nouns in the juxtaposition PC is possessor precedes possessed. Concerning b) if body parts and kinship terms are possessed, the possessed nouns have to be inflected obligatorily with pronominal prefixes that are identical to the ones in verbs. This holds also for some intimate personal possessions such as ‘house’, ‘clothing’, etc. See two examples for the juxtaposed PC construction in (38) and two examples of the inflected PC construction in (39).

(38) Biloxi (**Einaudi1976f**)

- a. *qya ti-k*  
 man house-DET  
 ‘the man’s house’

- b. *ama tupe kq*  
ground hole DET  
'the ground's hole'

(39) Biloxi (Einaudi1976f)

- a. *tuhe Ø-tukqni yandi*  
T. 3SG-uncle DET  
'Tuhe's uncle (mother's brother)'
- b. *qya Ø-anahj kq*  
man 3SG-hair DET  
'people's hair'

Full paradigms of inalienable possession are given in Table 20.

Table 20: Paradigm of inalienable possession in Biloxi (Einaudi1976f/62f)

possessor	kinship term adi 'father'	body-part term cake 'hand'
1SG	nk-adi	nk-cake
2SG	iy-adi	i-cake
3SG	Ø-adi	Ø-cake
1PL	nk-ax-tu	nk-cak-tu
2PL	iy-adi-tu	i-cak-tu
3PL	ax-tu	cak-tu

I did not find any examples that illustrate how alienable nouns are possessed by SAP possessors, something like 'my horse', 'your car', etc.

## 5 Conclusions

There is an alienable-inalienable distinction in one way or other in all Siouan languages, even in Biloxi, as seen in Table 21, but there, the inalienable nouns (kinship, body parts) are inflected by means of the subject prefixes. As the examination of PCs in the various Siouan languages shows, there are at least four kinds of constructions that are used to express possession on the NP level. The simplest construction is juxtaposition, which is used in all sample languages except for Hidatsa, for which no data were available. Inalienable possession is expressed in

Table 21: Alienable vs. inalienable distinction in Biloxi

inalienable	alienable
set <sub>1</sub>	set <sub>2</sub>
kinship terms body-part terms intimate personal possessions such as 'house', clothing'	all other nouns
PC	PC
PRO-N <sub>possessed</sub> DET	N <sub>possessor</sub> -N <sub>possessed</sub> DET

all sample languages with a series of possessive affixes directly attached to the possessed. The sole exception is Hoocak, which has no possessive affixes. There are two principal constructions that express alienable possession in the sample Siouan languages. There is a construction that has a possessive marker attached to the stem indicating alienable possession. The same set of possessive affixes appears with these constructions. This construction is not available in Hoocak and Biloxi. The second construction utilizes a verb of possession that is nominalized by a determiner and inflected by the same paradigm of possessive affixes. It follows the possessed noun. This construction is missing in Missouri Valley Siouan and in Biloxi. I have no clear data for Osage. The principle types of constructions that are used in Siouan languages to express possession are summarized in Table 22 together with the semantic kinds of possessed nouns.

The nominalized verbs of possession appear only in Mississippi Valley Siouan, most prominently in Hoocak. Hoocak is particular also with regard to the lack of the two middle construction types in Table 20; one could perhaps say that Hoocak has not really grammaticalized a NP-internal possessive construction: juxtaposition is semantically the most abstract means, hence able to subsume all kinds of binary relations (among them also real ownership) and the verbal expression of possession is semantically the most concrete one, hence excluding many binary relations that are often expressed by means of possessive constructions (there is no possibility to express association, whole-part, attribution of property relations with these PCs).

Another interesting observation is that there is no neat classification of nouns with respect to the alienable/inalienable distinction. Alienable and inalienable

Table 22: Distribution of NP-internal possessive constructions among Siouan languages

	juxtaposition N <sub>poss</sub> or N <sub>poss ed</sub>	less marked		more marked	
		POSS.PRO-N <sub>poss ed</sub>	POSS.PRO-POSS-N <sub>poss ed</sub>	N <sub>poss ed</sub>	POSS.PRO-verb.poss-DET
Crow	1) part-whole 2) others?	1) body parts, kinship terms 2) internal body parts 3) 'chest', 'tail', 'husband' 4) closely associated with possessor, e.g. clothing items, kin terms, cultural possession	rest, plus some exceptions	Ø	
Hidatsa	?	1) many kinship terms 2) body parts 3) some clothing items	rest	Ø	
Mandan	1) association 2) body parts	1) kinship terms 2) ?	1) kinship terms 2) ?	?	
Lakota	1) ownership 2) part-whole	1) body parts 2) internal body parts 3) kinship terms	1) kinship terms 2) ownership 3) attribution of property 4) association	1) ownership 2) kinship	
Hoocąk	1) part-whole 2) body parts 3) kinship 4) local nouns	Ø	Ø	1) kinship 2) domestic/ pet animals 3) rest	
Osage	part-whole	kinship terms	ownership?		
Biloxi	1) part-whole 2) ownership 3) rest	1) kinship 2) body parts 3) intimate personal belongings ('house', 'clothing')	Ø	Ø	

nouns are distributed over all kinds of PCs and it seems that the often observed markedness relations between alienable and inalienable PCs do not really hold in Siouan. For instance, juxtapositions as the least marked PCs comprise real ownership (Lakota, Biloxi) as well as body parts (Mandan, Hoocąk) and kinship terms (Hoocąk). On the other hand, nominalized predicative PCs, which are the most complex PCs in this study, include not only real ownership (Lakota, Hoocąk) but also kinship terms which are inalienable nouns. The two construction types in the middle columns in Table 20 show a markedness relation between inalienable and alienable nouns that is much clearer. The PC with the possessive pronouns attached to the possessed nouns (second column from left) are chosen primarily for inalienable possession (all languages except Hoocąk) and the PC with the added possession marker (POSS) are used overwhelmingly for alienable possession such as real ownership or as a kind of rest category that always includes alienable nouns (all languages except Hoocąk). In Lakota and Mandan, however, kinship terms as possessed nouns are included, which blurs this distinction to some degree.

## Abbreviations

1, 2, 3, = first, second, third person; A = actor; AH = Animacy Hierarchy; APPL.BEN = benefactive applicative; APPL.SUPRESS = locative applicative superessive; DAT = dative; DECL = declarative; DEF = definite article; E = exclusive; EMPH = emphatic; GEN = genitive; I = inclusive; INDEF = indefinite article; OBJ = object; PC = possessive construction; PL = plural; POSS PRO = possessive pronoun; PREP = preposition; PROP = proper name; REFL.POSS = reflexive possession; SAP = speech act participant; SBJ = subject; SG = singular; U = undergoer.

## References

- Rankin, Robert L. 1988. Quapaw: Genetic and areal affiliations. In William Shipley (ed.), *In honor of Mary Haas: From the Haas Festival conference on Native American linguistics*, 629–650. Berlin: Mouton de Gruyter.
- Rankin, Robert L. 1998. Grammatical evidence for genetic relationship and the Macro-Siouan hypothesis. In Marie-Lucie Tarpant (ed.), *Actes du 21ième colloque annuel de l'Association de Linguistique des Provinces Atlantiques*, 20–44. Halifax: Mount Saint Vincent University.

- Rankin, Robert L., Richard T. Carter & A. Wesley Jones. 1998. Proto-Siouan phonology and grammar. In Xingzhong Li, Luis López & Tom Stroik (eds.), *Papers from the 1997 Mid-America Linguistics Conference*, 366–375. Columbia: University of Missouri Press.
- Rankin, Robert L., Richard T. Carter, A. Wesley Jones, John E. Koontz, David S. Rood & Iren Hartmann (eds.). 2015. *Comparative Siouan dictionary*. Leipzig: Max Planck Institute for Evolutionary Anthropology.





# Name index

- Agbayani, Brian, 262  
Anderson, Stephen R., 33  
Awakuni-Swetland, Mark, 57
- Baldwin, Daryl, 150  
Basilico, David, 259  
Ben-Yehuda, Eliezer, 149  
Bird, Stephen, 372, 377  
Blowsnake, Sam, 77, 78, 85, 86, 88–90, 92–94  
Boyle, John P., viin2, xi, xii, 173n6, 213  
Burnett, Lonnie, 118, 119
- Campbell, Sky, 138  
Carter Jr., Richard T., 57, 58, 220  
Choteau, Levi, 114  
Clark, Carol, 118  
Clark, Elmer, 113, 115, 119  
Clay, Mary, 342n2  
Conn, Tom, 112  
Costa, David, 105  
Cumberland, Linda A., x, 109
- Dailey, George Washington, 196  
Dailey, Truman W., 170n1, 198n37  
Danker, Kathleen, x, 3  
de Reuse, Willem, 57  
de Soto, Hernando, 10, 12  
DeKnight, Emma, 204n44  
Deloria, Ella, 221, 376  
Dorsey, James Owen, 113–115, 153–155, 178n14, 204n45, 342, 344■
- Eagle, Annie, 371, 380  
Eschenberg, Ardis, 345
- Fletcher, Alice C., 79, 88, 93  
Foster, Lance M., 138  
Franquelin, Jean-Baptiste-Louis, 9  
Frenchman, Jim, 92  
Furbee, Nonnie Louanna, 57, 169, 170■  
171n3, 206
- Garvin, Cecil, 286, 287n1, 309, 332, 378  
Garvin, Henning, 401n4  
Goodtracks, Jimm G., x, 57, 109, 125, 126, 133, 137–143, 146–150, 182n19, 205, 206, 372  
Goodtracks, Sage, 126, 131–133, 143, 147, 148, 150  
Gordon, Bryan James, x, xi, 109, 125, 126, 131, 141, 143, 146, 147, 335, 352  
Graczyk, Randolph, 57, 354  
Grant, Anthony, x, 4  
Greer, Jill D., xi, 57, 110, 206  
Gwin, Alex, 262
- Haldeman, Samuel Stehman, 4  
Hamp, Eric, 170  
Hartmann, Iren, xii, 200n40, 286, 309■  
332, 352  
Heim, Irene, 213  
Helmbrecht, Johannes, xi, 200n40, 335■

## *Name index*

- Hendricks, Johnny “Bigg Rigg”, 140  
Hieber, Daniel, 44
- Jason Merchant, 262  
Johnson, Meredith, xi, 213, 214, 309  
Jones, A. Wesley, 57
- Kasak, Ryan M., x, 3  
Kaufman, David, 121  
Kaufman, David V., x, 3  
Kekahbah, Curtis, 118  
Kekahbah, Walter, 112, 116, 117  
Koontz, John E., 57, 128, 130, 344
- Larson, Rory, x, 3  
Li, Yafei, 286, 309  
Lightfoot, Arthur, 146, 198n37  
Little Doe, Jessie, 150n12
- Maxúthga, 146  
McBride, Justin T., x, 109, 111, 118, 119,  
121n6, 351  
McCauley, Johnny, 118  
Mehojah family, 112  
Mike, Phil, 401  
Miner, Kenneth L., 57, 128  
Monroe, Clyde, 112  
Morehouse, George, 122
- Nicklas, Dale, 112
- Oliverio, Giulia, 105, 121
- Pepper, Hattie Lou, 113  
Pepper, Jim, 118  
Pepper, Ralph, 112, 113, 116, 117
- Quintero, Carolyn, 57, 184n20
- Rankin, Robert L., vii, x, xi, 3, 5, 33,  
43, 57, 58, 105, 126, 128–130,  
145, 146, 153–155, 170, 171, 173■  
262, 351, 355, 359
- Rice, Keren, 230, 234  
Rood, David S., xi, xii, 57, 213, 342n1  
Rosen, Bryan, xi, 213, 214, 286  
Rowe, Maude, 112–114, 116, 117, 122  
Rudin, Catherine, xi, 234, 262, 286,  
309, 335, 366n3, 367n5, 379n31■  
Rudin, Deniz, xiii
- Schields, Becky, 309  
Schuck, Mateja, xi, 214  
Schwartz, Saul, x, 109, 125, 126, 132  
Schweitzer, Marjorie, 131  
Shaw, Patricia A., 57, 220  
Shea, Kathleen, 57  
Small, Edward, 187, 202n42, 205n46  
Stabler, Coolidge, 343n2  
Stewart, Francis, 371, 381  
Stubbs, Addison, 122  
Susman, Amelia L., 88, 90, 93
- Test, Kelly, 118  
ThigréPi, 368n7, 368, 379  
Trechter, Sara, 121
- Ullrich, Jan F., xiii
- Valentine, Rand, 286, 309  
Voorhis, Paul, 57
- White Cloud, 146  
White, Sr., Felix, 77, 78, 85, 89, 90,  
92–94  
Whitman, William, 185n21  
Wilkinson, Helen, 368–370  
Williamson, Janis Shirley, 251n9, 257  
Wistrand-Robinson, Lila, 130  
Wolfe, Bertha, 342n2

Wolfe, Sr., Clifford, 342n2, 365, 367,  
379

zu Wied-Neuwied, Maximilian Alexan-  
der Philipp, 101

# Language index

Hoocak, 393

Algic, 6

Algonquian, vii, 4, 6, 8, 10, 28, 53, 78,  
81, 94, 99, 104, 150

Algonquian-Wakashan, 13

Apache, 52, 99, 139, 144, 145, 180n17

Apsaalooke, vii, 8, 39, 58, 60–62, 68,  
69, 122, 180n15, 235, 236, 321■  
322, 335, 353, 354, 357, 362,  
368, 370, 371, 374, 380, 381,  
386, 401–407, 421

Assiniboine, viin1, 8, 58, 59n2, 65, 66,  
66n25, 156, 195n32, 236, 320■  
324, 331n1, 332, 353, 356–358■  
362, 371, 381, 382, 384

Atakapa, 35, 36, 39–41, 43–45, 47, 49,  
51, 55, 56

Athabaskan, 52, 180n17

Austronesian, 7

Balto-Slavic, 6

Baxoje-Jiwere, x, xi

Biloxi, 3, 9, 14n3, 20, 35–37, 37n6, 38,  
38n7, 39–43, 43n10, 44–47,  
49, 51, 52, 54–56, 59, 74, 121,  
122, 183, 335, 355, 357, 362,  
370, 372, 384, 402, 418–421

Bulgarian, 341

Caddo, 13, 98, 99, 101, 104

Caddoan, vii, xi, 3, 4, 13–15, 52, 55,  
99, 167, 359

Cantonese, 98, 373

Catawba, 8, 12, 13, 15–17, 19, 21–28,  
30n8, 32, 33, 52, 59

Catawban, 3, 6–8, 12, 13, 20, 21, 24,  
26, 28, 30, 34

Cherokee, 12, 13, 99, 127

Cheyenne, 8

Chickasaw, 35, 35n2, 36, 36n4, 39, 41■  
43, 45, 46, 53, 54, 56

Chinese, 98, 302

Chinook, 99

Chisca, 12

Chitimacha, 35, 36, 41, 43–47, 49, 51,  
56

Chiwere, 356, 357

Choctaw, 13, 35, 35n2, 36, 36n4, 39,  
41–47, 53, 55, 56

clauses, relative, 202

Coahuilteco, 101

Cocopa, 260

Comanche, 52, 55, 99

Creek, 55, 127

Crow, 332

Dakota, viin1, x, 8, 24, 29, 34, 58, 59n2■  
65n22, 66n23, 112, 122, 197,  
218n2, 220, 343, 346, 349, 353■  
356

Dakotan, 3, 5, 9, 13, 32, 58, 59n2, 64,  
65, 74, 112, 122, 141n8, 156,

- 219, 220, 352, 358, 382, 401, 410
- Dhegiha, viii–xi, 3, 10, 24, 34, 40, 46, 48, 56, 59, 67, 70, 71, 98, 99, 101, 102, 104, 105, 115n3, 122, 154–157, 159n7, 197n36, 219, 350, 351, 358, 359, 401, 415
- Diegueño, 239, 260
- Dutch, 230
- Eastern Muskogean, 53
- Elem Pomo, 139
- English, 4, 10, 17, 19, 23, 78, 80, 83–85, 88–90, 92–94, 115, 115n3, 116, 127–129, 132, 133, 139, 140, 141n8, 142, 144n10, 147–150, 154, 157n2, 159n8, 162, 166, 167, 170, 187n22, 188n23■, 195n31, 196, 200, 221, 230, 230n4■, 231, 236, 238–240, 242, 244, 245, 247, 248, 264, 268, 272n1■, 273, 279–281, 283–285, 288, 291, 292, 296n5, 297, 298, 300■, 305, 308, 309, 315, 316, 325, 328, 329, 331, 338, 341, 342, 347, 351, 354, 355, 358, 362n1■, 377, 380, 388–390, 393, 395
- Eskimo-Aleut, 13
- Euchee, *see* Yuchi
- French, 49, 78, 129, 217, 230, 272n1
- German, 35n1, 36n3, 40, 101, 102, 220, 227, 228, 230, 304, 388–390
- Grebo, 99
- Gulf, 14
- Haudenosaunee, 9n2, 13
- Hebrew, 149, 150n11, 159n7, 264
- Hidatsa, xi, 8, 39, 41, 58, 60–62, 68, 69, 156, 213, 235–238, 238n1, 239–242, 247, 248, 248n7, 249■, 250, 250n8, 251, 251n9, 252, 254, 258, 260–262, 313, 320–■, 324, 332, 335, 354, 357, 362, 362n1, 365, 368, 370, 371, 377■, 378, 380, 381, 383, 385, 386, 401, 406, 407, 419, 421
- Hittite, 5
- Ho-Chunk, viii, x, xi, 3, 4, 8, 24, 28, 34, 59, 61, 62, 67, 68, 68n28, 69, 77–91, 93–95, 128, 131, 172n5■, 174, 174n8, 176n10, 197, 200n40■, 213, 214, 219, 263–265, 269–272, 272n1, 273–276, 276n2, 277–284, 284n3, 285–290, 292–■, 296, 296n4, 297–308, 308n14■, 309, 311, 312, 316–320, 322–326, 328–331, 331n1, 332, 335■, 346, 362, 362n1, 365, 370, 371■, 378, 385, 387, 388, 388n2, 389■, 390, 392–398, 398n3, 399–401, 413, 414, 417, 419–421
- Ho-Chunk-Chiwere, 131, 138, 139
- Ho-Chunk-Jiwere, 3, 59, 67, 70, 352, 388n2, 393
- Hokan, 13
- Iipay ‘Aa, 99
- Indo-European, xi, 5, 6, 23, 34
- Ioway, 8, 59, 109, 125, 127, 131, 132, 134, 147, 170, 172, 172n4, 175, 177n11, 178, 179, 187, 189n26, 199, 201, 202n42, 205, 205n46■, 206n49, 362, 365, 368, 370, 372, 379, 384, 386, 388n2, 393■
- Ioway, Otoe-Missouria, 67, 69, 72, 75, 109, 110, 125, 125n1, 126, 126n2■

- 127–133, 137, 137n4, 138, 138n5■  
 139–142, 142n9, 143–151, 169–■  
 171, 171n3, 172–174, 176, 177,  
 177n11, 179, 180, 184n20, 186,  
 189, 190, 195, 196, 196n33, 197■  
 198, 198n37, 199, 200, 200n40■  
 202, 202n43, 203, 204, 206,  
 219, 393
- Irish, 264
- Iroquian, 13
- Iroquoian, vii, xi, 3, 13–15, 99
- Japanese, viii, 291, 302
- Jicarilla Apache, 99
- Kansa, 4, 46, 102–105, 128
- Kanza, x, xi, *see* Kansa, 8, 40, 48, 59,  
 69, 72, 97, 99, 101–105, 109–  
 114, 116, 118, 119n4, 120, 121,  
 121n6, 122, 123, 142, 153–157,  
 157n1, 157n2, 158, 158n5, 158n6■  
 159, 159n7, 159n8, 162, 164,  
 164n11, 166, 167, 351, 356
- Kaska, 139
- Kaw, 48
- Kiowa, 52, 55, 127
- Kiowa-Tanoan, 52
- Koasati, 12
- Lakota, vii, viin1, viii–xi, 8, 20, 28, 32,  
 34, 53, 58, 59n2, 66, 112, 122,  
 148, 176, 179, 180n15, 183, 200n39■  
 200n41, 213, 215–217, 218n2,  
 219–224, 226–228, 230, 231,  
 233, 236, 242, 251n9, 314, 315■  
 320, 331n1, 335, 343, 346, 349■  
 353, 353n7, 356, 357, 362, 362n1■  
 364, 367, 371, 373, 373n16, 374■  
 375, 381, 382, 384, 385, 401,  
 407, 408, 410, 410n6, 411–414■  
 420, 421
- Latin, 97, 98, 115, 115n3
- Macro-Siouan, 13–15
- Makah, 99
- Maliseet, 139
- Mam, 390
- Mandan, 8, 22, 24, 27–30, 30n8, 31,  
 34, 41, 58, 60–62, 68, 69, 121,  
 122, 249n7, 335, 354, 357, 362■  
 362n1, 370–372, 377, 381, 383–■  
 386, 401, 407–409, 420, 421
- Mayan, ix, 53, 55
- Mesquakie, 78, 80–85, 90
- Miami, 150
- Miami-Illinois, 10
- Michigamea, x, 10
- Mississippi Valley Siouan, 3, 58, 60,  
 63–65, 67, 69, 70, 75, 104, 156■  
 219, 220, 362, 410, 415, 420
- Missouri Valley Siouan, 3, 58, 60, 156,  
 353, 362, 374, 375, 420
- Missouria, 59, 170, 388n2, 393
- Mobilian Trade Language, 35, 36, 39,  
 40, 46, 52–56
- Mojave, 260
- Mopan, 53
- MTL, 35
- Muskogean, vii, xi, 9, 13, 35, 36, 39,  
 40, 44, 53, 99, 104
- Na-Dené, 13, 33
- Nahuatl, 55
- Nakota, viin1, 66n23
- Natchez, 13, 35, 36, 39–41, 43–46, 51,  
 52, 55, 56
- Navajo, 127
- Northern Tiwa, 127

- Ofo, 3, 9, 14n3, 24, 34–38, 38n7, 39–41, 43, 43n10, 44–46, 48, 49, 51, 52, 54, 56, 59, 74, 355, 357■
- Ofo-Biloxi, 74
- Ojibwe, 53
- Omaha, vii, ix–xi, 71, 72, 101, 116, 128, 167, 341, 342, 344, 345, 348–350, 356, 362, 365, 370, 371, 374, 379, 384, 386
- Omaha-Ponca, 8, 59, 71, 104, 167, 335, 337, 341, 342, 347–350, 350n6■, 351, 357, 358
- Osage, x, xi, 4, 8, 59, 69, 70, 72, 99, 101–105, 116, 122, 127, 128, 155■, 156, 184n20, 236, 335, 351, 356■, 401, 415–417, 420, 421
- Oto, *see* Otoe
- Otoe, x, 59, 109, 125, 127, 140, 170, 172, 172n4, 173, 174n8, 177n11, 179■, 183, 195, 200n40, 205, 205n46■, 206n49, 362, 372, 384, 386, 388n2, 393
- Otoe-Missouria, 8, 178, 189n26, 196, 200
- Papuan, 7
- Pawnee, 52, 127
- Pennsylvania German, 102
- Penutian, 13
- Polynesian, 6
- Ponca, ix–xi, 71, 72, 101, 127, 167, 342, 350, 356, 362, 370, 371, 384
- Potawatomi, 94
- Proto-Siouan, 14–17, 19–30, 30n8, 33, 34, 37, 41, 52, 59–62, 64, 67–70, 73, 74, 176, 186, 190n27, 219, 220, 335, 350
- Proto-Siouan-Catawban-Yuchi, 16
- Quapaw, x, xi, 8, 10, 48, 59, 73, 97, 104, 112, 116, 128, 155–157, 179■, 186, 190n27, 356
- Romance, xi, 145, 228
- Romanian, xi, 112
- Russian, 220
- Sac and Fox, 78–85, 88, 93, 94
- Santee, 58, 59n2, 65, 99, 353
- Saponi, 59
- Sauk, 78, 80–83, 127
- Seminole, 127
- Sioux, viin1
- Sioux Valley, 59n2, 65n22
- Slavic, 6, 340
- Southeastern Siouan, 3, 32, 36, 37, 54, 58, 59, 73, 104, 354, 362, 418
- Spanish, 10, 127–129, 173, 351
- Sranan, 303
- Stoney, viin1, 58, 59n2, 65, 67, 352
- Swahili, 264
- Teton, 58, 66
- Tlingit, 139
- Tocharian, 5
- Tonkawa, 52, 55
- Totonac, 52, 53
- Tunica, 13, 35, 36, 39, 40, 44–46, 48, 51, 55, 56
- Turkish, 390
- Tutelo, xi, 8, 9, 11, 24, 34, 36, 38, 38n7, 59, 73, 121, 355, 357, 381
- Uto-Aztecan, vii, 13
- Wasco, 144, 149
- Welsh, 230n4, 272n1
- Western Apache, 180n17
- Western Muskogean, 40, 44, 53

## *Language index*

Wichita, 98, 99, 101, 104

Winnebago, 88, 89

Wiyot, 6

Woccon, 8, 15, 21

Wyandot, 99

Yankton, 59n2, 353

Yankton-Yanktonai, 58, 66, 66n23

Yeniseian, 7, 33

Yuchi, x, 3, 5–7, 11–20, 20n5, 21–28,  
28n7, 29, 30, 30n8, 31–34, 59■

Yukatek, 53, 55

Yuman, 99

Yurok, 6



# Subject index

- ablaut, 17n4, 31, 32, 157n1, 158n4, 175,  
176, 186, 188, 189n25, 201, 224■  
353
- adjective, xi, 48, 199, 213, 287, 288,  
288n2, 289, 291, 299, 299n6,  
300–302, 302n8, 304–306, 306n11■  
307, 307n12, 308, 308n14, 309■
- adjunct, 263, 268, 277, 281, 296, 300,  
313, 314, 317, 325–327, 352
- alienable possession, 177, 387, 391, 392■  
394–399, 402–408, 410, 412,  
414, 415, 416n8, 417–420
- animacy, ix, x, 25, 46, 48, 56, 189, 200,  
238, 352, 387, 391, 392, 394–  
396, 398, 399, 401, 417, 422
- aspiration language, 213, 215, 230, 231■  
233
- Atakapa, 35
- autosegmental phonology, xi, 213, 215■  
233, 234
- Biloxi, 35
- binding, 258, 294, 315, 383
- body-part term, 21, 23, 51, 140, 177n11■  
391, 394–396, 398, 399, 404,  
405, 407, 409, 413, 414, 418–  
421
- borrowing, 12, 14n3, 20–22, 24, 24n6,  
31, 44, 46, 48, 49, 51–54, 56,  
104, 180, 358
- calque, 54, 55, 140
- Carter's Law, 60
- Chickasaw, 35
- Chitimacha, 35
- Choctaw, 35
- clauses, 92, 156, 158, 159n8, 161, 201,  
213, 236, 238, 240, 241, 248,  
248, 249n7, 251, 262, 263, 268■  
269, 273, 277, 278, 280–283,  
285–287, 292–295, 299, 301,  
308, 313, 315, 318, 322, 325,  
327, 329, 338, 340–344, 348,  
348n5, 349–355, 397
- clauses, internally headed relative, viii■  
213, 235, 236, 239, 240, 240n2■  
241, 242, 242n4, 243–251, 254–■  
258, 258n10, 259–262
- clauses, relative, viii, xi, 202, 202n43,  
235–242, 244–250, 250n8, 255–■  
262, 283, 284, 327, 414n7
- cluster, 23, 57, 59, 61–65, 66n23, 66n25■  
67, 68, 68n28, 69–74, 78, 83,  
88, 89, 92, 174, 195, 205, 213,  
215–218, 218n2, 219, 222, 224–■  
226, 229, 232, 233
- coda position, 105, 189, 215, 216, 220,  
226–229, 231–234
- cognates, xii, 3, 5, 7, 14–17, 19–24, 24n6■  
28, 31–33, 167, 176, 183, 200n40■  
200n41, 335, 350, 354, 358,  
398, 408
- comitative, 30, 267, 326, 339–341, 347■

## Subject index

- 348, 351–353, 355, 357–359  
 comparative method, x, 3, 6, 57, 118,  
 120, 123, 184n20, 189n24, 215■  
 Comparative Siouan Dictionary, xii,  
 3, 16, 57, 57n1, 58, 59n2, 65n22■  
 66n23, 66n25, 68n30, 69, 73–■  
 75, 171, 233  
 Comparative Siouan Grammar, 359  
 complement, 221, 235, 248, 249, 250n8■  
 252, 259, 261, 264, 268, 272,  
 275, 276, 278, 286–288, 288n2■  
 290, 296–298, 300, 309, 325,  
 331, 352, 358  
 compound, 104, 157, 166, 180, 181, 187n22■  
 193, 195n31, 201, 218, 221, 227■  
 293, 294, 299, 302, 374, 376,  
 376n23, 390, 395  
 configurationality, ix, 214, 311–316, 318–■  
 322, 324, 325, 328, 332  
 conjugation, viiin3, 7, 33, 148, 156, 159n7■  
 179, 182, 184, 192, 194, 195,  
 196n34, 197, 268, 269, 300,  
 398, 416  
 conjunction, ix, 130, 203, 263, 280–  
 282, 284, 285, 290, 297, 324,  
 329, 337–339, 341, 342, 345,  
 348–358  
 coordination, xi, 248n7, 263, 273, 280■  
 322–324, 331, 335, 337–359  
 corpus, 126, 126n2, 129, 154, 155, 162,  
 335, 361, 362, 365, 392  
 curriculum development, 141, 153, 154■  
 deaccenting, 189, 361, 365–368, 370,  
 383  
 determiner drop, 200, 365, 371–376,  
 376n21, 383, 393  
 diacritics, 88, 90, 92, 97, 98  
 dialects, 39, 58, 59n2, 65, 66n23, 125,  
 146, 169, 170, 172, 204, 218n2■  
 230n4, 352, 353  
 dictionary, xi, 23, 57, 58, 111, 117, 120,  
 121, 126, 126n2, 129–133, 142■  
 143, 145, 146, 148, 154, 177n12■  
 205, 206, 215, 216, 218, 231,  
 233, 286, 309, 332, 340, 351  
 discourse, 26, 38, 41, 42, 85, 146, 196,  
 201, 289, 317, 341–343, 348,  
 350, 352, 362, 363, 367, 369,  
 381, 397  
 ejective, viii, 17, 101, 102, 217, 227  
 ellipsis, 214, 263, 265–268, 272, 273,  
 278, 282–285, 339  
 ellipsis, verb-phrase, xi, 213, 263–272■  
 272n1, 273–275, 276n2, 277,  
 278, 281–286, 296, 297, 300,  
 311, 326–328, 331, 332  
 existential closure, 235, 236, 256, 257,  
 259–262  
 feature geometry, xi, 213, 215, 222,  
 234  
 field work, xi, 9, 154, 348  
 flat structure, ix, 297, 312, 316, 325,  
 328, 330  
 fricative, ix, 24, 31, 38, 39, 53, 56, 59,  
 60, 64, 67, 69, 74, 80, 86, 90,  
 175, 197, 217, 219–221  
 functional head, 263, 264, 269, 298  
 gapping, 264, 269, 277–279, 281  
 geminate, 102, 103, 105  
 gender, viii, viiin3, 28n7, 110, 159n7,  
 169, 173, 177–179, 189, 199n38■  
 203, 205, 206, 206n48, 208  
 Givenness Hierarchy, 363  
 glottal, 40, 59, 60, 62, 64, 67, 69, 71,  
 73, 74, 81–83, 86, 88, 90, 92,

- 93, 101, 148, 171, 181, 216, 218,  
226, 227
- Ho-Chunk, 352, 356
- immersion, 133, 146
- inalienable possession, 64, 176, 177,  
177n11, 387, 391, 392, 394–  
397, 399, 402–409, 414–420
- indefiniteness restriction, 213, 235, 236■  
241, 242, 247, 256, 258, 262
- information structure, xi, 38, 316, 335■  
361–363, 365–367, 371, 374,  
380, 381, 383, 397
- Intonation, 377
- intonation, xi, 204, 290, 323, 335, 339■  
358, 361, 363–365, 370, 383
- Ioway, Otoe-Missouria, 352
- isolate, 5, 6, 11, 58
- isolates, 35, 36
- kinship, vii, viii, viiIn3, 24, 49, 133n3,  
137, 143, 144, 144n10, 151, 177■  
205, 335, 388, 392, 394, 396–  
399, 401, 401n5, 404, 405, 407–  
409, 413–421
- Lakota, 235, 242
- language area, 3, 14n3, 35, 36, 36n3,  
37, 38, 38n8, 40, 41, 46, 48,  
54, 56
- language classes, 89, 130, 137, 138, 144–  
146, 154, 341, 348
- language documentation, 8, 10, 97, 101■  
105, 109, 112, 113, 116, 117, 119■  
120, 122, 125, 126, 128, 145,  
146, 150, 155, 169, 170, 174,  
197, 206, 331, 361, 374, 383
- language nest, 126, 131, 143, 144, 146,  
147, 149, 150, 150n12, 151
- language revitalization, 109, 125, 126,  
137, 139–142, 144–146, 149,  
150, 150n11, 151, 153, 154, 167■  
169, 361, 362
- lenition, 213, 215, 220, 227–229, 233
- light verb, 263, 264, 269, 270, 272, 272n1■  
286, 296, 326
- liquid, 18, 98, 104, 172, 175, 193
- Lower Mississippi Valley, 3, 14n3, 35–  
38, 38n8, 39–41, 43–46, 48,  
49, 52–54, 56
- morphological features, 6, 35, 36, 38,  
40, 41, 56
- nasalization, 32, 38, 39, 53, 56, 61, 65,  
66, 66n25, 67, 78, 81, 83, 86,  
89, 90, 92, 93, 98, 101, 102,  
104, 173, 174, 213, 215, 216,  
218, 219, 221–225, 228, 229,  
231–234, 400
- Natchez, 35
- negation, 38, 109, 153–155, 159, 162,  
165, 187, 190n27, 196, 208, 234■  
284, 293, 299, 319, 351, 352,  
357
- nominals, ix
- noun incorporation, x, 15, 169, 180n15■  
182, 235, 354, 362, 365, 374–  
376, 383
- object, viii, 27, 43, 48, 56, 176, 180,  
182, 184, 185, 188, 190, 202,  
207, 214, 237, 240, 241, 248,  
251, 252, 264–266, 268, 271,  
275, 276, 280–284, 286, 288–  
292, 294–296, 296n5, 297–  
300, 306, 309, 311, 313–315,  
318–322, 324–332, 352, 354,  
375, 380, 381, 397, 399, 422

## *Subject index*

- Ofo, 35  
orthography, x, xiii, 4, 10, 68n30, 77–79, 95, 99, 101, 103, 125n1, 129■  
157n2, 158n6, 197n35, 216, 217■  
343n2, 350n6, 353n7, 358, 410n6■
- PAH, 313  
pedagogical materials, xi, 66n23, 109, 110, 126, 138, 142, 144, 145, 147, 153–155, 166, 168  
phonetic alphabet, 97  
phonology, xi, 23, 58, 102, 105, 110, 158, 171, 213, 222–224, 226–231, 233, 234, 307n12  
positional auxiliaries, ix, x, 38, 41, 44–46, 48, 56, 169, 188n24, 189, 202n43  
possessed, 237, 282, 375, 387, 388, 390–392, 394–397, 399–413, 415, 415n7, 416–420  
possessive construction, viii, xi, 24, 190, 335, 387–390, 393, 396, 397, 399, 404, 415n7, 420, 422■  
possessive pronoun, 176, 185n21, 190, 191, 315, 319, 391, 393, 402, 404, 422  
possessor, 191, 318, 375, 387–397, 399–402, 404, 406–413, 416, 418, 419, 421  
postverbal arguments, 316, 361, 365, 367–370, 380, 381  
preaspirate stops, 16, 60, 62–65, 67, 70–72, 102  
predicate, 45, 236, 238, 242, 248, 257, 261, 269, 270, 272n1, 287–291■  
293–298, 300–302, 302n8, 304–308, 329, 331, 363, 364, 367–369, 371, 375, 381
- Pronominal Argument Hypothesis, ix, 312, 313
- quantifier scope, 290
- resultative, xi, 213, 214, 265, 266, 287–295, 295n4, 296, 296n4, 297–300, 302, 302n8, 304–308, 308n14■  
309, 311, 329–332
- scope, locative, 311, 332  
scope, quantifier, 311, 328, 332  
simple stops, 67, 71–73, 98, 217, 221, 231
- Siouan and Caddoan Linguistics Conference, xi, xii, 97, 105, 128, 131
- Siouan List, xi, 58, 141, 144
- sloppy readings, 263, 273, 281–283
- sonorant, 16, 68, 68n28, 215, 218n2, 219, 223, 224, 226–230, 230n4■  
232, 233
- sonorant obstruents, 215, 223, 225, 228■  
230, 231, 233
- sound change, 20, 23, 28, 32, 174n8, 228, 229
- specificity, 236, 238, 239, 247, 354, 371■  
375, 376, 383
- specifier, 156, 235, 241, 253–255, 257, 260–262, 287, 288, 298–300, 306, 306n11, 307, 307n12, 308■  
352, 358
- sprachbund, x
- stress, viii, x, 29, 66n23, 101, 104, 173, 174, 174n8, 177, 185, 189, 193, 204, 376n23, 404, 407
- stripping, 264, 269, 278, 280–283, 376■
- subject, viii, 24n6, 25, 27, 56, 63, 157, 162, 163, 192, 202, 208, 214,

- 236, 240, 241, 248, 248n7, 256■  
267, 271, 280, 282, 285, 286,  
289–291, 294, 295, 298, 299,  
309, 311, 313–315, 317, 318,  
320–322, 324–326, 328–332■  
338, 341, 352–354, 380, 381,  
384, 397, 419, 422
- subordination, ix, 201, 202, 220, 222,  
236, 241, 243, 248, 249n7, 251■  
258, 259, 337–343, 350–355,  
359, 376n23
- syllabary, 3, 4, 77–95
- syncopation, 63, 64
- syntax, viii, ix, xi, 110, 153–156, 158,  
159, 162, 163, 166, 168, 196,  
199, 213, 239, 241, 243, 244,  
247, 257, 258, 260, 288, 289,  
299n6, 311, 320, 335, 337–342■  
348, 350–352, 354, 355, 358
- topic, 38, 41, 56, 262, 289, 316, 320,  
335, 361–365, 370, 377–384,  
397
- toponyms, 10, 37, 37n6
- transcription, 74, 88, 92, 97, 98, 101–  
105, 111, 113n2, 117, 173, 231,  
343n3, 361, 370, 374, 386, 408■
- Tunica, 35
- typology, vii–ix, xi, 17, 77, 213, 215,  
231, 234, 235, 264, 273, 291,  
295, 296n4, 312, 335, 340, 389■  
390, 392
- verb phrase, ix, 160, 161, 165, 166, 236,  
249, 250, 252, 253, 259, 261,  
263, 264, 268, 272n1, 273–  
275, 281–288, 296–300, 306,  
311–315, 320–326, 328–332
- vowel length, 16, 17, 21, 59, 62, 64, 65,  
68, 81, 101, 102, 104, 173, 177,  
182n19, 204
- VP, xi, 213, 214, 352, 354, 356, 357
- VP-shell, 287, 288, 298, 300, 300n7,  
309
- whole-part relation, 387, 388, 392, 403■  
412, 420
- word order, 26, 153, 156, 169, 199, 203,  
235–237, 289, 290, 313, 316,  
320–322, 328, 329, 331, 361,  
365, 380, 383
- XP, 287, 293, 312, 331, 339, 355, 358



langsci/graphics/didyoulikethisbook.pdf





# Back Title

The Siouan family comprises some twenty languages, historically spoken across a broad swath of the central North American plains and woodlands, as well as in parts of the southeastern United States. In spite of its geographical extent and diversity, and the size and importance of several Siouan-speaking tribes, this family has received relatively little attention in the linguistic literature and many of the individual Siouan languages are severely understudied. This volume aims to make work on Siouan languages more broadly available and to encourage deeper investigation of the myriad typological, theoretical, descriptive, and pedagogical issues they raise.

The 17 chapters in this volume present a broad range of current Siouan research, focusing on various Siouan languages, from a variety of linguistic perspectives: historical-genetic, philological, applied, descriptive, formal/generative, and comparative/typological. The editors' preface summarizes characteristic features of the Siouan family, including head-final and "verb-centered" syntax, a complex system of verbal affixes including applicatives and subject-possessives, head-internal relative clauses, gendered speech markers, stop-systems including ejectives, and a preference for certain prosodic and phonotactic patterns.

The volume is dedicated to the memory of Professor Robert L. Rankin, a towering figure in Siouan linguistics throughout his long career, who passed away in February of 2014.

