

NP-internal possessive constructions in Hoocąk and other Siouan languages

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Abstract.

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.

Keywords:

possessive constructions, alienable vs. inalienable, possessor, possessed, possessive pronouns;

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 1¹.

entity A	possessive relation	entity B	Engl. example
Possessor	Ownership	Possessed	<i>my car/ Peter's house</i>
	Whole-part		<i>Mary's teeth/ the teeth of the bear</i>
	Kinship		<i>Peter's wife/ my daughter</i>
	<----->		
	Attribution of property		<i>her sadness/ his age</i>
	Spatial relation		<i>the front of the house/ the inside of the church</i>
	Association		<i>Jane's teacher/ her former school</i>

Table 1. Semantics of a possessive relation in the broad sense (cf. Dixon 2010:262-7)

Not all of the different kinds of relations in Table 2 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 (Seiler 1983, 2001); and a critical examination of it in Helmbrecht 2003). Others reject this idea (cf. for instance Heine 1997; Dixon 2010:263 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 Table 2, there are examples of different possessive constructions from Hoocak², English and German for illustrative purposes.

level	construction type	examples
Clause	predicative possession	English <i>I have a blue car</i> <i>The blue car belongs to me</i>
	external possession ³	Hoocak (BO979) ⁴

¹ See Dixon (2010:262-7) for a more detailed discussion of these relations.

² Hoocak, formerly also known as Winnebago, is a Siouan language still spoken in Wisconsin. Hoocak together with Ojibwa, Ioway, and Missouria forms the Winnebago-Chiwere sub-branch of Mississippi-Valley Siouan. For the widely accepted classification of Siouan languages see, for instance, Rood (1979), Mithun (1999:501), and Parks and Rankin (2001).

³ See, for instance, Payne & Barshi (1999) on types of external possession.

⁴ The following abbreviations are used: PC = possessive construction, DEF = definite article, INDEF = indefinite article, PROP = proper name, DECL = declarative, 1, 2, 3, = first, second, and third person, SG = singular, PL = plural, I = inclusive, E = exclusive, A = actor, U = undergoer, APPL.BEN = benefactive applicative, APPL.SUPRESS = locative applicative superessive, DAT = dative, GEN = genitive, SBJ = subject, OBJ = object, PREP = preposition,

	(possessor raising)	<i>Huuporo=ra hi- teek-ire....</i> knee=DEF 1E.U -hurt-SBJ.3.PL 'When my knees hurt, ...'
	dative of interest	German <i>Sie schneidet ihm die Haare</i> She cuts him.DAT the hair 'She cuts his hair'
	beneficiary-possessor polysemy	Hoocak (Helmbrecht 2003:28) <i>wažqířera hįgi'eenq</i> <i>wažqíře=ra hi- <hi- gí-> 'e= nq</i> car= DEF <1E.U->APPL.BEN -find=DECL 'he found the car for me'/ 'he found my car'
	possessive reflexive	Hoocak (Helmbrecht & Lehmann (eds.) 2010) <i>hinįk=ra nq<kara>t'up</i> son= DEF <POSS.RFL> embrace(SBJ.3SG&OBJ.3SG) ='anqga =and 'he (i.e. the father) embraced his son, and ...'
NP	juxtaposition (no marking at all)	Hoocak (Helmbrecht 2003:13) <i>Peter=gá šuyk=rá</i> Peter=PROP dog= DEF 'Peter's dog'
	genitive attribute (genitive case marker on possessor)	English <i>Peter's dog</i>
	prepositional attribute	German <i>der Hund von Peter</i> DEF dog of P. 'Peter's dog'
	pronominal index on possessed noun (possessor marking on possessed)	Mam (England 1983:142) <i>t-kamb' meenb'a</i> 3SG -prize orphan 'the orphan's prize' (lit. 'his-prize orphan')
	mixed strategy (genitive case marking plus pronominal index)	Turkish (Kornfilt 1990:633) <i>Ayşe-nin araba-sı</i> A.-GEN car-3SG 'Ayşe's car' (lit. Ayşe's car-his)
	nominalized predicative possession	Hoocak (Helmbrecht 2003:19) <i>hicıwı waháara</i> <i>hicıwı wa- háa= ra</i> aunt OBJ.3PL-have.kin(1E.U)=DEF 'my aunts'
Word	nominal compounds	German <i>das Regierungsauto</i> <i>das Regierung-s-auto</i> DEF government-LINKER-car 'the car of the government'

Table 2. A brief typology of possessive constructions

POSS.PRO = possessive pronoun, EMPH = emphatic, REFL.POSS = reflexive possession, AH = Animacy Hierarchy.

The present paper deals only with PCs on the NP level. Languages often possess more than just one NP-internal PC, as it 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.

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 as 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 > proper noun/kin term > human common noun > animate common noun > inanimate common noun (cf. for instance Dixon 1979, Comrie 1989, Croft 2003).

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 set₁ nouns designating the possessed entity require one type of the PC, and set₂ 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. Dixon 2010:286-290):

- 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 morphologically 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. Dixon 2010:274-6). 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.

semantic-syntactic properties of the possessor	semantic properties of the possessive relation	semantic properties of the possessed
Animacy Hierarchy		alienable - inalienable
pronoun (SAP/3 rd 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

Table 3. Semantic/ syntactic parameters for constructional splits in NP-internal possessive constructions.

The properties of the possessor and the possessed as summarized in Table 3 serve as a kind of questionnaire or guideline for the search of 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 principal 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 2. Without this definite article, we have a clause expressing a kind of predicative possession.

1. Hoocək (Helmbrecht 2003:16)

Petergá šuykrá

Peter=gá šuyk=rá

P.= PROP dog= DEF

'Peter's dog'

2. Hoocək (Helmbrecht 2003:19)

hicuwí wahaará

hicuwí 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 Hoocək 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 Hoocək. The example in 3 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.

3. Hoocək (Helmbrecht 2003:16)

Petergá hi'qcrá

Peter=gá hi'qc= rá

P.= PROP father=DEF

'Peter's father'

The possessive relation in 4a. 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 4b.-c. 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. 4b.), then it is the possession of a specific and definite possessor. If the indefinite article follows the possessor (cf. 4c.), it is the possession of an indefinite possessor.

4. Hoocək (Helmbrecht 2003:13)

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=íʒq* *hišja=ra*
 woman=INDEF face= DEF
 'The face of an (indefinite) woman'

The PCs in 5 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.

5. Hoocak (Helmbrecht 2003:13)
John=ga hiráati=ra
 J. =PROP car= DEF
 'John's car'

The possessive relation in 6 includes a body part term as possessed noun (inseparable, inalienable) with a non-human possessor. The example in 7 represents a part-whole relation with an inanimate object as possessor and an inanimate object as possessed (separable, alienable). Both possessors in 6 and 7 can be interpreted either as specific or as generic.

6. Hoocak (Helmbrecht 2003:13)
wijúk huu=rá
 cat leg=DEF
 'the leg(s) of the/a cat'
7. Hoocak (Helmbrecht 2003:13)
wažqtíre hogis=rá
 car circular.part=DEF
 'the wheel(s) of a/the car'

Note that the constructions in 6 and 7 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 Hoocak word *nqahá* '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 Hoocak. 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 6 and 7 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', *nqqké* '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. Langacker 1993) of the localization, it represents the object with regard to which another one is

localized, cf. the examples in 8a.-c. The clitic *=eja* 'there' is a local adverb almost obligatorily used in these constructions.

8. Hoocąk (Helmbrecht 2003:14)

- a. *šųųkrá hirarúti coowéja 'akšąnq*
/šųųk=rá hirarúti coowé=eja 'ak= šąnq/
 dog= DEF **car** **front=** **there** be.lying=DECL
 'The dog is (in a lying position) in **front of the car.**'
- b. *šųųkrá hirarúti hihákeja jeenq*
šųųk=rá hirarúti hihák= eja jee= nq/
 dog= DEF **car** **top=** **there** be.standing=DECL
 'The dog is (in a standing position) on the **top of the car.**'
- c. *šųųkrá hirarúti rookéja nąkšąnq*
/šųųk=rá hirarúti rook= éja nąk= šąnq/
 dog= DEF **car** **inside=** **there** be.sitting=DECL
 'The dog is (in a sitting position) **inside of the car.**'

The expressions in examples 3 through 8 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 3 through 8 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.

9. Hoocąk (Helmbrecht 2003:16)

- 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 9a. and b. 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 10.

10. General structure of the nominalized verbal possessive construction

[(N-POSSESSOR)_i N-POSSESSED_j PRO_j-PRO_i-Verb of possession=DET]_{NP}

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_{possessor} and Y_{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 11a.-c.

11. Hoocąk (Helmbrecht 2003:16)

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

The verbs of possession that are used in the PCs in 11a.-c. 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 Hoocąk and the causative auxiliary =*hii*⁵. The verb *niíhí* shows the same inflectional irregularities as the causative verb =*hii*.

⁵ **ní* is the reconstructed Proto-Mississippi-Valley Siouan form for 'live, be alive' (cf. Rankin et al (eds.) 2015). This form can be found in other verbs in Hoocąk such as *niíhá* 'to breathe' or in *nií'áp* 'be alive'.

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 human possessors. Part-whole relations with inanimate possessors, on the other hand, are never expressed with this construction. Cf. the summary in Table 4.

inalienable/ inseparable		alienable/ separable
set ₁	set ₂	set ₃
= <i>hii</i>	<i>nijhi</i>	<i>haní</i>
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

Table 4. Alienable vs. inalienable distinction in Hoocak

All three verbs in Table 4 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 5, Table 6, and Table 7. The paradigms contain only constructions with a 3SG possessed nouns. If the possessed nouns were plural ('aunts', 'dogs', and 'cars') the verbs of possession were inflected for the third person plural object (*wa*- OBJ.3PL).

possessor	possessed N <i>hiciwí</i>	
1SG	<i>hiciwí haa=rá</i>	‘my aunt’ (father's sister)
2SG	<i>hiciwí raa=ra/=gá</i>	‘your aunt’
3SG	<i>hiciwí hii=rá</i>	‘his aunt’
1I.D	<i>hiciwí hīhi=rá /=ga</i>	‘my and your aunt’
1I.PL	<i>hiciwí hīhiwí=ra</i>	‘our aunt’
1E.PL	<i>hiciwí haawí=ra</i>	‘our aunt’
2PL	<i>hiciwí raawí=ra/=ga</i>	‘your aunt’
3PL	<i>hiciwí híire=ra</i>	‘their aunt’

Table 5. Paradigm of the possessive verb *hii* ‘to have.kin’

possessor	possessed N <i>šuyk</i>	
1SG	<i>šuyk nījháa=ra</i>	‘my dog’
2SG	<i>šuyk nījná=ra /=ga</i>	‘your dog’
3SG	<i>šuyk nījhi=ra</i>	‘his dog’
1I.D	<i>šuyk nījhi=ra/=ga</i>	‘our dog’
1I.PL	<i>šuyk nījháwi=ra</i>	‘our dog’
1E.PL	<i>šuyk nījhiwi=ra</i>	‘our dog’
2PL	<i>šuyk nījnáwira/=ga</i>	‘your dog’
3PL	<i>šuyk nījhire=ra</i>	‘their dog’

Table 6. Paradigm of the possessive verb *nījhi* ‘to have.pet’

possessor	possessed N <i>wažqtíre</i>	
1SG	<i>wažqtíre haanǐ=nq⁶</i>	‘my car’
2SG	<i>wažqtíre hašǐnǐ=nq</i>	‘your car’
3SG	<i>wažqtíre hanǐ=nq</i>	‘his car’
1I.D	<i>wažqtíre hǐjǐnǐ=nq</i>	‘our car’
1I.PL	<i>wažqtíre hǐjǐnǐwi=nq</i>	‘our car’
1E.PL	<i>wažqtíre haanǐwi=nq</i>	‘our car’
2PL	<i>wažqtíre hašǐnǐwi=nq</i>	‘your car’
3PL	<i>wažqtíre hanǐjine=ra</i>	‘their car’

Table 7. Paradigm of the possessive verb *hanǐ* ‘to have’

The kinship term *hicuwǐ* ‘aunt (father’s sister)’ has a variant form that is used for address purposes, *cuwǐ* ‘(my) aunt!’. These address forms of kinship terms – often simply lacking the initial syllable *hi-* – cannot occur in a possessive 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. Lipkind 1945:31), but Hoocak 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 form⁷; *=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. Lipkind (1945:31) says that all kin terms with initial *hi-* take *haará* ‘my’ in the first

⁶ 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 <ǐ>.

⁷ I am particularly grateful to Henning Garvin helping me to collect the relevant forms here.

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 *cųwį* is the address term corresponding to *hicųwį* 'aunt (father's sister)'. Hence the 1SG possessive form is *cųwį-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 Heine 1997:26f)⁸.

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 12 through 15.

12. Crow (Graczyk 2007:234)

- a. [Poss.Pro — N_{possessed}]
- b. \emptyset - *iilápxe*
3SG.POSS-father
'his father'

13. Crow (Graczyk 2007:234)

- a. [N_{possessor}(-DET/- \emptyset) Poss.Pro — N_{possessed}]
- b. *Charlie-sh* \emptyset - *iilápxe*
C.- DET 3SG.POSS-father
'Charlie's father'

14. Crow (Graczyk 2007:235)

- a. [Emphatic PRO-POSS.PRO-N_{possessed}]
- b. *bii-* *w-* *achuuké*
1SG.EMPH -1SG.POSS-younger.brother
'MY younger brother'

⁸ 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.

15. Crow (Graczyk 2007:236)

- a. [[[N_{possessor}] [N_{possessor}]] [N_{possessed}]]
 b. *úuxbishke chíis-uua iia*
 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 12). The same is true, if there is a lexical possessor in addition (cf. example 13). The possessive prefix may be emphasized by means of a bound emphatic pronoun prefixed to the possessive prefix (cf. example 14). 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 15. 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 8; the paradigm of inalienable possession is given in Table 9.

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

Table 8. Alienable possession in Crow (Graczyk 2007:53)

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

Table 9. Inalienable possession in Crow (Graczyk 2007:52)

The possessive pronouns of the alienable possession in Table 8. 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 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, one for stems in */d-/*, one for stems in */i+consonant-/*, and one for stems in */vowel-/*. As can be seen in Table 9, the stem itself undergoes also 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. Graczyk (2007:57) 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. Graczyk 2007:57).
- b) There are not enough nouns requiring the irregular paradigm for a semantic classification, but they all seem to belong semantically rather to the inalienable class of nouns, though;
- c) The nouns that require suppletive stems refer to kinship relations, clothing, and some culturally important possessions, cf. the examples in 16a.-d. The first column shows the nouns in citation form, the second column in a possessive construction. The corresponding stems are clearly suppletive.

16. Crow (Graczyk 2007:58)

a.	<i>ihkáa</i>	'mother'	<i>is-ahká</i>	his mother
b.	<i>huupá</i>	'shoe'	<i>is-ahpá</i>	'his shoe'
c.	<i>alúuta</i>	'arrow'	<i>is-aá</i>	'his arrow'
d.	<i>buú</i>	'song'	<i>is-huú</i>	'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 Graczyk (2007:53/234) and it is obligatorily used with unpossessed body part nouns. This form is not used with kinship terms.

Table 10 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 (set₅). Gross modo, however, the nouns in set₁ – set₄ could be subsumed under a class of inalienable nouns semantically.

inalienable				alienable
set ₁	set ₂	set ₃	set ₄	set ₅
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.

Table 10. Alienable vs. inalienable distinction in Crow

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 17b. If there is an additional lexical possessor, the structure of the PC in Hidatsa is analog to the one in Crow, cf. the alienable PC in 17a.

17. Hidatsa (Boyle 2007:81)

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

Boyle (2007) 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 definite 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 indicates inalienable possession, the other alienable possession; cf. Table 11.

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

Table 11. Alienable and inalienable possessive pronouns (Boyle 2007:72;80)

The paradigm for inalienable possession shows – as with Crow *set*₁ 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 on *set*₁ class of nouns in Table 12.

However, there are also differences. For instance, the 2POSS 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 Lakhota alienable PCs of *set*₄ nouns which have a -*t^ha* prefix added to the undergoer pronominal prefix; cf. Table 14 below).

inalienable	alienable
<i>set</i> ₁	<i>set</i> ₂
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;

Table 12. Alienable vs. inalienable distinction in Hidatsa

There is no mention of a depossessivizer in Boyle's grammar of Hidatsa.

4.3 Mandan

Mandan is considered as 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 is not discussed and described in Mixco's grammatical sketch (Mixco 1997). However, looking into the appended Mandan text, it seems that juxtapositions are possible in case that the possessor is a lexical noun. There is at least one clear example of this construction (cf. 18) that shows that association may be expressed by this PC.

18. Mandan (Mixco 1997:70; text line 24)

'wɨ=ti ru'wqʔk=ʃi-s
village man= good-DEF
'the village chief'

In case that the possessor is a speech act participant or a third person, one of the following distinct PCs have 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 Mixco 1997:44) are attached directly to the noun stem that designates the possessed [POSS-N_{stem}]inalienable possession. This construction is used for inalienable possession; see the relevant forms in Table 13.

	SG	PL
1	<i>wi</i> ⁹ -	<i>ro</i> :-
2	<i>ri</i> -	<i>ri-stem-rit</i>
3	<i>i</i> -	<i>-kræ</i> ¹⁰

Table 13. Possessor affixes in Mandan (Mixco 1997:16f,44)

The second PC inserts a prefix *ta*- between the stem and the possessive prefix [POSS-*ta*-N_{stem}]alienable possession. This construction is used for alienable possession. The form *ta*- as an alienable marker is cognate to Lakhota *t^há*-, see below. The possessive prefixes are the same as in the inalienable PC, see Table 13.

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 Lakhota. 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, the kinship term for 'mother' takes the usual undergoer series of prefixes for inalienable possession, but requires *ko*- for the third person possessor; cf. 19a.-c.

19. Mandan (Mixco 1997:45)

- a. *wi-hy*:-s
1SG.POSS-mother-DEF
'my mother'
- b. *ru-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 20a.-c.

20. Mandan (Mixco 1997:45)

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

⁹ Note that this form of the 1SG.POSS differs from the corresponding form of the undergoer series which is *wq*-. Mixco speculates that the *wi*- form is a contraction of *wq*- + *i*- for the third person, but provides no evidence for this idea.

¹⁰ 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 Kennard (1936:8) gives the form *-kɛrɛ* for the 3PL possessive affix. The forms are identical, but the transcription is different.

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

Interestingly, no mention is made on the way body parts are possessed in Mandan. A quick look into the Mandan text (cf. Mixco 1997:66ff) 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 Lakhota

4.4.1 The possessor

Lakhota is a language of the Mississippi Valley Siouan languages, more specifically of the Dakotan sub-branch of this group. Lakhota 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-*).

a) Ownership

[N_{possessed-inanim} PRO.POSS-HAVE DET]

21. Lakhota (Buechel 1939:98)

tʰípi mi- tʰáwa kɨ
house 1SG-have DEF
'my house'

b) Ownership, attribution of property

[PRO-*tʰa*-N_{possessed-inanim/abstr} DEF]

22. Lakhota (Buechel 1939:98)

- a. *mi- tʰá- makʰoce kɨ* 'my land'
1SG-POSS-land DEF
- b. *nitʰóksape kɨ* 'thy wisdom'
ni- tʰá- wóksape kɨ
2SG-POSS-wisdom DEF

There is no information about the conditions or the differences between both constructions; it is clear that the one in 21 contains a stative verb of possession *tʰáwa-* 'have' that is nominalized in this context inflecting for the person and number of the possessor and the number of the possessed. In Rood and Taylor (1996:458) it is said that the stative verb of possession *itʰáwa* '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 Lakshota.

The PCs in 22a.-b. contain a marker for possession *t^há-* 'POSS' which is attached to the possessed noun and preceded by the pronominal affix of the possessor. This marker is common Siouan (cf. Rankin et al. 2015)

If there are lexical nouns expressing the possessor, the following PCs are used.

c) Ownership

[N_{possessed-anim} N_{possessor-PROP} PRO.POSS-HAVE DEF]

23. Lakshota (Buechel 1939:91)

šúka wak^há David Ø-t^háwa kǵ
horse D. 3SG-have DEF
'David's horse'

[N_{possessed-anim} N_{possessor-PROP} PRO.POSS-HAVE DEF]

24. Lakshota (Buechel 1939:91)

šúka wak^há Peter na Paul Ø-t^háwa-pi kǵ
horse P. and P. 3SG-have-PL DEF
Peter and Paul's horses (or horse)'

d) Association

[N_{possessor-PROP} PRO.POSS-*t^ha-* N_{possessed-hum} DEF]

25. Lakshota (Buechel 1939:92)

It^háqǵ Ø- t^ha- wóilake kǵ
Lord 3SG-POSS-servant DEF
'the Lord's servant'

[N_{possessor-PROP} PRO.POSS-*t^ha-* N_{possessed-hum} DEF]

26. Lakshota (Buechel 1939:92)

Abraham Ø- t^ha- wámak^háškǵ-pi kǵ
A. 3SG-POSS-animal- PL DEF
'Abraham's animals'

Again we have to different PCs in the examples 23 - 26 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. Note that whole-part relationships are expressed by a simple juxtaposition lacking any possessive marking.

e) Whole-part relationships

[N_{possessor-inanim} N_{possessed-anim} DEF] (juxtaposition)

27. Lakhota (Buechel 1939:92)

maxpíya zítkála-pi kǐ
cloud bird- PL DEF
'the birds of the air'

[N_{possessor-inanim} N_{possessed-inanim} INDEF] (juxtaposition)

28. Lakhota (Buechel 1939:92)

cex íkhq wq
bucket rope INDEF
'a bucket handle, rope of a bucket'

f) Partitive

29. Lakhota (Buechel 1939:93)

it^hǫcǫpi kǐ óta
chiefs DEF many
'many of the chiefs'

Example 29 is not really a PC, but a regular quantified NP. The same holds for 30. It can hardly be considered as a PC. It is rather a juxtaposition expressing a NP ('good works') modifying another NP ('man').

g) With an abstract possessor N

30. Lakhota (Buechel 1939:93)

wic^háša ox'ǫ wašté kǐ héca
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 particular subject to willpower" (cf. Boas & Deloria 1941:128), and the others. Buechel (1939:100) describes this difference as "possession of one's incorporeal constituents" versus "possession of one's body and its physical parts"; compare the examples in 31 and 32.

31. Lakhota (Buechel 1939:101)

mi-nági kǐ 'my souls'
mi-cáje kǐ 'my name'
mi-óx'ǫ kǐ 'my occupation'
etc.

32. Lakhota (Buechel 1939:100)

ma-céji kǐ 'my tongue'

ma-íŕta kĭ 'my eye'
ma-sí kĭ 'my foot'
 etc.

Note that this distinction has become partially obsolete in contemporary Lakhotá. Rood and Taylor (1996:458) note that this distinction is semantically maintained only in the Oglala variety of Lakhotá. There *ma-* (1SG.POSS) is used for "*concrete visible possessions*", and *mi-* (1SG.POSS) for "*intangibles*" (cf. Rood and Taylor 1996:458). Otherwise, both forms are in free variation.

Kinship relations with a possessor of the 1st and 2nd person are expressed solely by the possessive prefixes. A possessor of the 3rd person requires an additional marker *-ku*, *-tku*, *-cu* which is suffixes to the possessed kinship term; cf. 33a.-b.

33. Lakhotá (Buechel 1939:102)

- a. *mi-tʰúkášila* 'my grandfather'
 b. *ni-tʰúkášila kĭ* 'thy grandfather'
 c. *Ø-tʰúkášitku kĭ* 'his/her grandfather'

Table 14 summarizes the findings. As was mentioned above, the set₁ and set₂ possessed nouns are no longer separated formally in Lakhotá (except for Oglala).

inseparable/ inalienable			separable/ alienable
set ₁	set ₂	set ₃	set ₄
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	distal affinal kinship terms prototypical ownership
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>]

Table 14. Alienable vs. inalienable distinction in Lakhotá (Boas & Deloria 1941:127-33)

As in Hoocąk, the causative verb is used for the clause-level predicative expression of possession of a kinship term, cf. 34a.-b.

34. Lakhotá (Buechel 1939:102)

- a. *tʰúkášila-wa-ya*
 grandfather-1SG.A-have.kin
 'I have (him) as grandfather'
 b. *tʰúkášila-ŭ-yq-pi*
 grandfather-1I.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 *t^ha'wa* illustrated in 21 above. If this were the case, we would have a quite similar opposition of verbs of possession in Lakhotā as we found it in Hoocąk.

In addition, it should be mentioned that Lakhotā allows the non-modifying auto-referential usage of the possessive pronouns, however only the expressions based on the verb of possession *t^hawa* plus the definite article. It could be interpreted as a nominalized possessive predication; cf. 35.

35. Lakhotā (Buechel 1939:22)
mitháwa kĭ he ahí icú
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 (cf. Quintero 2004). Unfortunately, it is difficult to find the relevant data out of 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 15.

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

Table 15. Inalienable possessive prefixes for kinship terms in Osage (Quintero 2004:481f)

The question marks in Table 15 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 possession¹¹. 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 36 and 37. The full paradigm is given in Table 16.

¹¹ Again, this is the Common Siouan marker for alienable possession (cf. Rankin et al. (eds.) 2015)

36. Osage (Quintero 2004:298)

ówe che hci qkóhta- api ađí- ahi- a
 groceries those **house 1PL.POSS-PL** have-arrive.there-IMP
 'bring those groceries to **our house!**'

37. Osage (Quintero 2004:299)

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

	possessed	possessor	translation
1SG	<i>hci</i> 'house'	<i>wihta</i> ? (< <i>wi-hta</i>)	'my house'
2SG	<i>hci</i> 'house'	<i>đíhta</i> (< <i>đí-hta</i>)	'your house'
3SG	<i>hci</i> 'house'	<i>íhta</i> (< <i>i-hta</i>)	'his/her house'
1DU	<i>hci</i> 'house'	<i>qkóhta</i> (< <i>qkó-hta</i>)	'our house'
1PL	<i>hci</i> 'house'	<i>qkóhtapi</i> (< <i>qkó-hta-api</i>)	'our house'
2PL	<i>hci</i> 'house'	<i>đíhtaapi</i> (< <i>đí-hta-api</i>)	'your house'
3PL	<i>hci</i> 'house'	<i>íhta-api</i> (< <i>i-hta-api</i>)	'their house'

Table 16. Alienable possession in Osage (Quintero 2004:297f)

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 nouns (kinship terms), and secondly, if it would be analyzed as a verbal stem, the possessive inflection would be quite irregular (cf. Quintero 2004:317f).

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 would be 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 38. This construction is not possible in Hoocak. The utterance in 38 would require the reflexive possessive prefix *k-/kara-* in Hoocak.

38. Osage (Quintero 2004:413)

qkóhta akxa Ø- xó- 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 39.

39. Osage (Quintero 2004:423)
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 (set₁), while all other nouns belong to the alienable set of noun (set₂); cf. Table 17.

inalienable	alienable
set1	set2
kinship terms	all other nouns ?
PC	PC
PRO-N _{possessed}	(N _{possessor}) N _{possessed} PRO.POSS- <i>hta</i>

Table 17. Alienable vs. inalienable distinction in Osage

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 Einaudi (1976). 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. Einaudi 1976:57-68). Ad a) the order of nouns in the juxtaposition PC is possessor precedes possessed. Ad 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 40 and two examples of the inflected PC construction in 41.

40. Biloxi (Einaudi 1976:139f)
- | | | |
|----|--------------------|---------------------|
| a. | <i>qya ti-k</i> | 'the man's house' |
| | man house-DET | |
| b. | <i>ama tupe kq</i> | 'the ground's hole' |
| | ground hole DET | |
41. Biloxi (Einaudi 1976:139f)
- | | | |
|----|----------------------------|-----------------------------------|
| a. | <i>tuhe Ø-tukqni yandi</i> | 'Tuhe's uncle (mother's brother)' |
| | T. 3SG-uncle DET | |
| b. | <i>qya Ø-anahj kq</i> | 'people's hair' |
| | man 3SG-hair DET | |

Full paradigms of inalienable possession are given in Table 18.

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

Table 18. Paradigm of inalienable possession in Biloxi (Einaudi 1976:57f/62f)

inalienable	alienable
set1	set2
kinship terms body part terms intimate personal possessions such as 'house', 'clothing'	all other nouns
PC	PC
PRO-N _{possessed} DET	N _{possessor} -N _{possessed} DET

Table 19. Alienable vs. inalienable distinction in Biloxi

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, 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 the juxtaposition, which is used in all sample languages except for Hidatsa for which no data were available. Inalienable possession is expressed in all samples languages with a series of possessive affixes directly attached to the possessed. The sole exception is Hoocąk that has no possessive affixes. There are two principle 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 Hoocąk 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 20 together with the semantic kinds of possessed nouns.

	less marked more marked →			
	juxtaposition N _{poss'or} N _{poss'ed}	POSS.PRO-N _{poss'ed}	POSS.PRO-POSS-N _{poss'ed}	N _{poss'ed} 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 exception	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) ?	?
Lakhota	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

Table 20. Distribution of NP-internal possessive constructions among Siouan languages

The nominalized verbs of possession do appear only in Mississippi Valley Siouan, most prominently in Hoocąk. Hoocąk is particular also with regard to the lack of the two middle construction types in Table 20; one could perhaps say that Hoocąk has not really grammaticalized a NP-internal possessive construction: the 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, excluding hence 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 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 (Lakhota, Biloxi) as well as body parts (Mandan, Hoocąk) and kinship terms (Hoocąk). On the other hand, the nominalized predicative PCs, which are the most complex PCs in this study, include not only real ownership (Lakhota, Hoocąk) but also kinship terms which are inalienable nouns. The two construction types in the middle columns in Table 20 do

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 includes always 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.

6 References

- Barker, Chris 1995: *Possessive descriptions*. CSLI Publications, Stanford
- Baron, Irène. et al. (eds.) 2001: *Dimensions of possession*. Amsterdam & Philadelphia: J. Benjamins.
- Boas, Franz & Ella Deloria. 1941. *Dakota Grammar*. Washington, D.C.: Government Printing Office.
- Boyle, John 2007. *Hidatsa Grammar*. University of Chicago: PhD Dissertation.
- Buechel, Eugene S.J. 1939. *A Grammar of Lakota. The Language of the Teton Sioux Indians*. Saint Francis Mission, Saint Francis P.O., South Dakota.
- Chappell, Hilary & William McGregor (eds.) 1996. *The grammar of inalienability: a typological perspective on body part terms and the part-whole relation*. Berlin: Mouton de Gruyter.
- Comrie, Bernard. 1981. *Language Universals and Linguistic Typology*. Chicago: University of Chicago Press.
- Croft, William. 2003 *Typology and universals, second edition*. (Cambridge Textbooks in Linguistics.). Cambridge: Cambridge University Press.
- Dixon, R.M.W. 1979. Ergativity. In: *Language* 55:59-138.
- Dixon, R.M.W. 2010. *Basic Linguistic Theory. Volume 2. Grammatical Topics*. Oxford: OUP.
- Einaudi, Paula Ferris 1976. *A Grammar of Biloxi*. New York & London: Garland Publishing, Inc.
- England, Nora 1983. *A Grammar of Mam, A Mayan Language*. (Texas Linguistics Series). Univ. of Texas Press.
- Heine, Bernd 1997: *Possession. Cognitive sources, forces and grammaticalization*. Cambridge: Cambridge University Press.
- Heine, Bernd: 2001. Ways of explaining possession, in: Irène Baron, Michael Herslund and Finn Sørensen (eds.) *Dimensions of possession*, 311-328. Amsterdam, Benjamins
- Helmbrecht & Lehmann (eds.) 2010. *Hocąk Teaching Materials, Vol I. Elements of Grammar, Learner's Dictionary*. Albany: SUNY Press.
- Helmbrecht, Johannes 2003. "Possession in Hoocąk (Winnabago) – Problems for a prototype approach." In: *Arbeitspapiere des Seminars für Sprachwissenschaft der Universität Erfurt (ASSidUE)* Nr. 8. Erfurt: University of Erfurt. (Available as a pdf file: <http://www.db-thueringen.de/servlets/DerivateServlet/Derivate-1887/ASSidUE08.pdf>).
- Ingham, Bruce 2003. *Lakota*. (Languages of the World/ Materials 426). München: LINCOM EUROPA.
- Kennard, Edward 1936. "Mandan Grammar." In: *International Journal of American Linguistics* IJAL 9:1-43.
- Koontz, John E. 1984. *Preliminary Sketch of the Omaha-Ponka Language*. PhD diss., University of Colorado in Boulder, CO.
- Kornfilt, Jaklin 1990. Turkish and the Turkic Languages. In: Comrie, Bernard (ed.) *The World's Major Languages*. NY, Oxford: OUP, 619-645.

- Kuno, Susumo & E. Kaburaki 1977. Empathy and Syntax. In: *Linguistic Inquiry* 8:627-72.
- Langacker, Ronald W. 1993. Reference-point constructions. In: *Cognitive Linguistics* 4: 1-38.
- Lehmann, Christian 1998: *Possession in Yucatec Maya. Structures - functions - typology*. Unterschleissheim: LINCOM Europa (LINCOM Studies in Native American Linguistics, 4).
- Lévy-Bruhl, L. 1914. L'expression de la possession dans les langues mélanésiennes. *Mémoires de la Société de Linguistique* 19(2): 96-104.
- Lipkind, William 1945. *Winnebago grammar*. New York; King's Crown Press.
- Lowie, Robert H. 1941. *The Crow Language. Grammatical Sketch and Analyzed Text*. University of California Publications in American Archeology and Ethnology, Vol 39, No.1, pp1-142). Los Angeles & Berkeley: University of California Press.
- Martin, Jack 1993. Inalienable possession in Creek (and its possible origin). In: *IJAL* 59:442-52.
- Matthews, G.H. 1965. *Hidatsa Syntax*. The Hague et al.:Mouton & Co.
- Mithun, Marianne. 1999. *The Languages of Native North America*. (Cambridge Language Surveys). Cambridge: Cambridge University Press.
- Mixco, Mauricio 1997. *Mandan*. (Languages of the World/ Materials 159). München, Newcastle: LINCOM EUROPA.
- Oliverio, Giulia R.M. 1996. *Grammar and dictionary of Tutelo*. Lawrence,KS: University of Kansas.
- Parks, Douglas R., and Rankin, Robert L. 2001 Siouan languages. In: *Handbook of North American Indians, Plains*. Vol.13, ed. by Raymond J. DeMallie, 94–114. Washington, D.C.: Smithsonian Institution.
- Payne, Doris L. & Barshi, Immanuel (eds.) 1999. *External possession*. Amsterdam & Philadelphia: J. Benjamins (Typological Studies in Language, 39).
- Quintero, Carolyn 2004. *Osage Grammar*. (Studies in the Anthropology of North American Indians). Lincoln,NE: University of Nebraska Press.
- Rankin, Robert L. 2002. *Quapaw Dictionary*. Unpubl. ms. University of Kansas.
- Rankin, Robert L. 2004. *An Ofo Grammar Sketch – based on materials collected by John R. Swanton and John R. Swanton's Ofo-English Dictionary*. Unpubl. manuscript, University of Kansas.
- Rankin, Robert L. 2005a. *Kansa-English lexical file*. Manuscript. The University of Kansas, Department of Linguistics.
- Rankin, Robert L. 2005b. "Quapaw." In: Hardy, Heather & Scancarelli, Janine (eds.) *Native Languages of the Southeastern United States*. Pp. 454-498. Lincoln, NE: University of Nebraska Press.
- Rankin, Robert L. & Carter, Richard T. & Jones, A. Wesley & Koontz, John E. & Rood, David S. & Hartmann, Iren (eds.) 2015. *Comparative Siouan Dictionary*. Leipzig: Max Planck Institute for Evolutionary Anthropology. (Available online at <http://csd.clld.org>, Accessed on 2015-05-22.)
- Rice, Keren 1989. *A grammar of Slave*. Berlin: Mouton de Gruyter.
- Rood, David. 1979. Siouan. In: *The Languages of Native America: Historical and Comparative Assessment*, ed. by Lyle Campbell and Marianne Mithun., 236–98. Austin: University of Texas Press.
- Rood, David & Taylor, Allan R. 1996. "Sketch of Lakhota, a Siouan Language." In: Goddard, Ives (ed.) *Languages*. Vol. 17 of Sturtevant, William C. (ed.) *Handbook of North American Indians*. Washington,DC: Smithsonian Institution, pp. 440-482.
- Seiler, Hansjakob 1983: *Possession as an Operational Dimension of Language*. Tübingen, Narr.

- Seiler, Hansjakob 2001: The operational basis of possession: a dimensional approach revisited, in: Irène Baron, Michael Herslund and Finn Sørensen (eds.) *Dimensions of possession*, 27-40., Amsterdam, Benjamins
- Stolz Thomas, Sonia Kettler, Cornelia Stroh and Aina Urdze 2008: *Split Possession*. (Studies in Language Companion Series 101). Amsterdam, Benjamins.
- Susman, Amelia 1943. *The accentual system of Winnebago*. New York: Columbia University [unpublished Ph.D. dissertation].
- Ultan, Russel 1978. Toward a typology of substantival possession, in: Joseph H. Greenberg (ed.): *Universals of human language 4.*, Stanford.
- Van Valin, Robert D. Jr. 1977. *Aspects of Lakhota Syntax. A study of Lakhota (Teton Dakota) syntax and its implications for universal grammar*. Unpubl. PhD Dissertation, University of California, Berkeley.
- White Eagle, Josephine P. 1988. *A lexical study of Winnebago*. Lexicon Project Working Papers 26. Cambridge, MASS.: Center for Cognitive Science, MIT.
- Whitman, William 1947. "Descriptive grammar of Ioway-Otoe." In: *International Journal of American Linguistics* IJAL 13:233-48.