

Transitivity in Sahaptin

Noel Rude

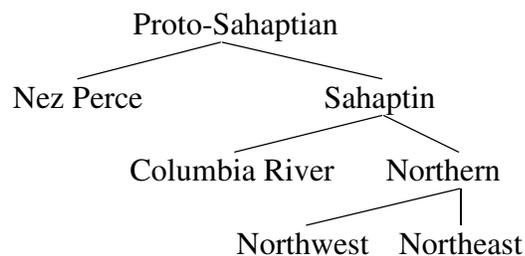
Confederated Tribes of the Umatilla Indian Reservation

Constituent order plays no role in the disambiguation of grammatical relations in Sahaptin, a language native to the southern plateau of the Pacific Northwest of the United States. Grammatical relations nevertheless are as relevant as in any “configurational” language, being distinguished instead by pronominal affixes and nominal case marking. Alignment is mostly nominative-accusative but with limited ergative case. The verb is inherently intransitive, transitive, or ditransitive, and valence changing mechanisms mediate via inverse voice, external possession, dative shift, applicatives, causatives, and subject raising.

KEYWORDS: transitivity, causative, raising, configurationality, external possession, grammatical relations, inverse, Sahaptin

Sahaptin is an American Indian language of the middle regions of the Columbia River in the Pacific Northwest.¹ Sahaptin I and Nez Perce, though closely related, are not mutually intelligible. The two languages constitute the Sahaptian language family.²

Table 1. The Sahaptian language family



There are a number of fairly divergent Sahaptin dialects which fall within three larger clusters: Columbia River (Umatilla, Tenino, Celilo, etc.); Northwest (Klickitat, Yakima, etc.); Northeast (Priest Rapids, Walla Walla, Palouse, etc.).³

¹ Published Sahaptin grammars include Jacobs (1931) and Rigsby and Rude (1996), and published NW texts are found in Jacobs (1929, 1934, 1937). Most examples in this paper are taken from texts. I wish to thank Inez Spino Reves, a Umatilla speaker, for the Columbia River (CR) examples, and Elizabeth Wocatsie Jones, a deceased Walla Walla speaker, for the Northeast (NE) examples.

² On the relationship between Sahaptin and Nez Perce, see Aoki (1962); Rigsby (1965); Rigsby and Silverstein (1969); Rude (1996b, 2006). Sahaptian is more distantly connected to Plateau Penutian, which includes Klamath and Molala (Aoki 1963; Rude 1987; Pharris 2006), and which in turn is reputed to be part of Penutian (DeLancey and Golla 1997; Mithun 1999).

³ The Northern dialects accord with Nez Perce in the frequency of long vowels derived from VCV, and the Northeast dialects accord further in preserving the glottal stop between vowels and word finally. Palatalization is most extensive in the Columbia River dialects. Independent pronouns variously exhibit a

This paper describes the expression of transitivity in Sahaptin. First some theoretical preliminaries are addressed, next the Sahaptin morphology of transitivity and core grammatical relations is described, and then the behavioral rules (valence changing mechanisms) that reference those core grammatical relations. Lastly some overall conclusions are drawn. The paper employs generalist criteria—valence theory, semantic roles, syntactic primitives, prototype semantics—from a typological-functionalist perspective.

1. Theoretical preliminaries.

This section distinguishes between semantic and syntactic transitivity, discusses the typology of alignment strategies, and diagnoses Sahaptin as having a word order conditioned not by syntax but rather by pragmatics.

1.1. Semantic transitivity.

Part of the meaning of a verb is its inherent “valence”, i.e., the number of arguments specified in its meaning. Thus, for example, “die” specifies a single argument, “kill” two arguments, and “give” three arguments. Each argument relates to the verb via a semantic role (Table 2), i.e., “die” implies a patient, “kill” an agent and a patient, and “give” an agent, dative, and patient. These three semantic roles are called *actant* relations in Dependency Grammar (Tesnière 1988), and *core* relations in Relational Grammar (Perlmutter 1983, Perlmutter and Rosen 1984, Postal 1982, Johnson and Postal 1980, Postal and Joseph 1990). This paper follows most closely the framework in Givón (2001). Modern functional grammars view transitivity within what is called Prototype Theory, where some of its features (causation, affectedness, individuation, humanness) may be more central than others and might be seen as gradient or turned off completely depending on context.⁴

Table 2. *Actant* or *Core* Relations⁵

Agent	conscious cause of an event
Dative	conscious involvement
Patient	neither of the above

Given that meteorological verbs have zero valence, that intransitive verbs can encode any semantic role and transitive verbs varying configurations of semantic roles, there are the eight types of semantic transitivity illustrated with Sahaptin examples in Table 3.

final *i* or *y* in the Columbia River dialects and a final *k* in the Northern dialects. There are grammatical differences (e.g., the pronominal *á-* is closer to a true obviative in the Northwest dialects) and lexical differences (e.g., NW *pátka*, NE *tílpí*, CR *lamtáy*, NP /husus/ ‘head’).

⁴ Prototype theory has developed from the research of Eleanor Rosch, as in, e.g., Rosch (1975), and from ideas put forth in Berlin and Kay (1969), Hopper and Thompson (1980), and Lakoff (1987).

⁵ For further description, see Givón (2001). For early expositions of semantic case theory, see Gruber (1965) and Fillmore (1968).

Table 3. Eight Species of Semantic Transitivity

Intransitive	Zero Agent Dative Patient	<i>t'úxt'uxn</i> 'rain' <i>wáyxti</i> 'run' <i>anáwi</i> 'be hungry' <i>łiyáwi</i> 'die'
Transitive	Agent, Patient Agent, Dative Dative, Patient	<i>íłiyawi</i> 'kill' <i>ískawk</i> 'frighten' <i>qínun</i> 'see'
Ditransitive	Agent, Dative, Patient	<i>ní</i> 'give'

Sahaptin does not have labile verbs (such as English *break*) with intransitive and transitive tokens. Rather, verbs have invariant semantic transitivity: they are intransitive, mono-transitive, or ditransitive. Thus *tkúma* 'camp to dig roots' is intransitive but *xní* 'dig roots' is transitive (e.g., *xáwš* is in an oblique case in *a* below and in the objective-accusative case in *b*).⁶

- (1) *a.* pa-tkúman-a xáwš-yaw
3NOM.PL-camp.dig-PST cous-ALL
'they camped to dig for cous'
- b.* pa-xní-ya xáwš-na
3NOM.PL-dig.roots-PST cous-ACC
'they dug cous'

Verbs of speaking must be distinguished as to whether they are mono- or ditransitive. Thus *sínwi* 'talk, speak' is mono-transitive (that which is spoken is the direct object) and *ínn* 'say, tell' is ditransitive (the semantic dative is the direct object). The clauses in *a* and *b* below are examples of the Dative Shift (§3.3.).

- (2) *a.* á-sínwi-ya=aš sínwit-na
OBV-speak-PST=1SG word-ACC
'I spoke words'

⁶ The following abbreviations are used in this paper. 1: first person, 2: second person, 3: third person, ABL: ablative, ABS: absolute, ACC: accusative, ALL: allative, APL: applicative, ASP: aspect, ASSOC: associative, BEN: benefactive, CAUS: causative, CIS: cislocative, COND: conditional, CR: Columbia River Sahaptin, DES: desiderative, DIR: directive, DST: distributive, DU: dual, ERG: ergative, EXC: exclusive, FaFa: father's father, FaMo: father's mother, FUT: future, GEN: genitive, HAB: habitual, HUM: human, IMP: imperative, IMPV: imperfective, INC: inclusive, INV: inverse, MOD: modal, MoFa: mother's father, MoMo: mother's mother, N: Northern Sahaptin, NE: Northeast Sahaptin, NOM: nominative, NP: Nez Perce, NW: Northwest Sahaptin, OBV: obviative, OBr: elder brother, OSi: elder sister, PF: present perfect, PL: plural, PP: past participle, PRP: purposive, PRS: present, PST: past, RCP: reciprocal, REL: relative, RFL: reflexive, SG: singular, TOP: topic, TRL: translocative, V: verb, VRS: versative.

- b. áw-ínn-a=aš íwínš-na, [...]

OBV-speak-PST=1SG man-ACC

'I said to *the man*, "...'

- c. íkʷak kaalás-nan i-ʔín-a íwínš

that raccoon-ACC 3NOM-say-PST man

'the man said that to the raccoon' (Jacobs 1937:2.5.3, pg. 190)⁷

1.2. Syntactic alignment.

Grammatical relations are formal categories rooted in the syntactic universals of Table 4 (Dixon 1994) which mediate between semantic relations (Table 2) and criteria such as perspective, focus, and topicality.⁸

Table 4. Syntactic primitives

S	The single argument in an intransitive clause
A	The argument highest on the accessibility hierarchy in a transitive clause
O	The argument lowest on the accessibility hierarchy in a transitive clause

Core semantic relations (Table 2) are “aligned” with syntactic relations within the typologies pictured in Table 5.

Table 5. Variations in syntactic alignment

	<i>Nominative- Accusative</i>	<i>Ergative- Absolutive</i>	<i>Absolute- Ergative- Accusative</i>	<i>Active- Stative</i>
<i>Intransitive</i>	S	S	S	S S
<i>Transitive</i>	A O	A O	A O	A O

This analysis assumes the syntactic primitives in Table 5 which, for A and O, assumes the accessibility hierarchy in Table 6.⁹

⁷ The orthography in the examples taken from the Northwest texts of Melville Jacobs has been normalized to match that from Umatilla (CR) and Walla Walla (NE), and so nothing should be made of the phonetics/phonology in these examples.

⁸ For pioneering work on topicality and transitivity, see Li (1976), Hopper and Thompson (1980), and Givón (1983).

⁹ Relational Grammar, as in Perlmutter (1983), avoids any semantic associations and labels the elements of the Accessibility Hierarchy “1”, “2” and “3”. These are defined as primitives with no other characterization than their behavior within and across languages. In other formalist theories one finds variously “thematic relations” and “theta roles” (or “θ-roles”). See Harley (to appear).

Table 6. Accessibility hierarchy

Agent \subset Dative \subset Patient

The traditional noun cases thus receive a precise definition: the nominative case codes both A and S, the absolutive O and S, the accusative only O, and the ergative only A. In an Active-Stativ language the more agentive S will tend to be coded as A and the less agentive as O. There is no such thing as a completely Ergative-Absolutive language—all are “split” such that the ergative case shows up only in certain persons (typically third person) or aspects (perfective). A three way alignment (Absolute-Ergative-Accusative) is extremely rare but does occur in Nez Perce and Sahaptin. In Sahaptin the ergative case is limited to third person when the direct object is first or second person.

2. Sahaptin morphological transitivity.

Grammatical relations are coded morphologically—by pronominals that prefix to the verb, second position pronominals, and nominal case suffixes.

2.1. Pronominal prefixes.

Third person core participants are coded by verbal prefixes that are sensitive to various cases.

2.1.1. Nominative pronominals.

The verbal prefixes *i-* and *pa-* are third-person nominative pronominals that occur with or without an accompanying noun in CR and NE Sahaptin.¹⁰

- (3) a. *i-wiyánawi-ya*
 3NOM-arrive-PST
 ‘he/she/it arrived’
- b. *i-wiyánawi-ya t́laaki*
 3NOM-arrive-PST woman
 ‘the woman arrived’
- (4) a. *i-ǰínun-a wínš-na*
 3NOM-see-PST man-ACC
 ‘he/she/it saw the man’ (CR)

¹⁰ Nominative *i-* regularly deletes in rapid speech before a glottal stop: thus *iʔaníya* ~ *aníya* ‘he/she/it made’ (in this orthography the glottal stop is not written word initially).

- b. tílaaki i-ǰínun-a wínš-na
 woman 3NOM-see-PST man-ACC
 ‘*the woman* saw the man’ (CR)
- (5) a. pa-wiyánawi-ya
 3NOM.PL-arrive-PST
 ‘*they* arrived’
- b. pa-wiyánawi-ya awínš-ma
 3NOM.PL-arrive-PST men-PL
 ‘*the men* arrived’
- (6) a. pa-ǰínuna tílaaki-na
 3NOM.PL-see-PST woman-ACC
 ‘*they* saw the woman’ (CR)
- b. awínš-ma pa-ǰínun-a tílaaki-na
 men-PL 3NOM.PL-see-PST woman-ACC
 ‘*the men* saw the woman’ (CR)

In Melville Jacobs’ Northwest Shapatin texts, third-person nominative is also sometimes coded by zero:

- (7) a. ku Ø-wiyánawi-ya
 and 3NOM-arrive-PST
 ‘and *he* arrived’ (Jacobs 1929:220:15)
- b. kúuk áswan Ø-túti-ya
 then boy 3NOM-stand-PST
 ‘then *the boy* stood up’ (Jacobs 1937:8.3.1, pg 14)
- (8) a. áw ǰíks Ø-wii-náçik-ta tk^wátat
 now soon 3NOM-running-bring-FUT food
 ‘soon now *he* will bring food on the run’ (Jacobs 1937:6.8.4, pg. 10)
- b. ikuunák Spilyáy Ø-tamánwi-ya tk^wínat-nan áyat-nan
 that.very.ACC Coyote 3NOM-institute-PST Chinook.salmon-ACC woman-ACC
 ‘*Coyote* ordained that very Chinook salmon woman’ (Jacobs 1929:225:8)

2.1.2. The obviative (or absolutive) pronominal.

The pronominal *á-* (*áw-* before an orthographic vowel) codes the subject of an intransitive verb and the object of a transitive verb.

- (9) a. $\acute{i}k^w\acute{i}n=\acute{x}i$ \acute{a} -wiyawiyáya
 that.ALL=same OBV-arrive-PST
 ‘he arrived at the same place’ (Jacobs 1929:205:10)
- b. páalay \acute{a} -wiyawiyáya $x^w\acute{i}saat$ ku pá- $\acute{?}in$ -a
 unbeknownst OBV-arrive-PST old.man and INV-say-PST
 ‘unbeknownst *an old man* arrived and said to him ...’ (Jacobs 1929:200:2–3)
- (10) a. \acute{a} -šapni-ya \acute{K}^w ayawiyáy
 OBV-ask-PST Cougar
 ‘Cougar asked *him*’ (Jacobs 1937:2.31.4, pg. 123)
- b. $\acute{a}w$ $x^w\acute{i}saat$ -nan \acute{a} -šapni-ta-k
 now old.man-ACC OBV-ask-PRP-IMP
 ‘now go ask *the old man!*’ (Jacobs 1937:12.1.1, pg. 20)

In a transitive clause \acute{a} -, as above, optionally references the object (*b* below) or *i*- the subject (*a*).

- (11) a. i - $\acute{?}iyatnan$ -a $\acute{k}aalás$ \acute{k}^w aalí-in
 3NOM-kill-PST raccoon dangerous.being-ACC
 ‘*raccoon* killed the dangerous being’ (Jacobs 1937:2.2.4, pg. 189)
- b. \acute{a} -wínp-a \acute{K}^w ayawiyáy \acute{k}^w aalí-yin-an
 OBV-grab-PST Cougar dangerous.one-DU-ACC
 ‘Cougar grabbed *the two dangerous ones*’ (Jacobs 1937:2.32.1, pg. 123)

Similarly, in an intransitive clause, \acute{a} - competes with *i*- (and zero). The pronominals *i*- and zero seem to reference more topical subjects (Rude 1988a). Thus, in the second clause in the following example, *i*- references the primary topic (topical object) of the inverse in the first clause (see §2.1.3. below).

- (12) pá-wiyawiyáyuun-a $x^w\acute{i}saat$ -nan. i -lá $\acute{?}iiša$
 INV-arrive-DIR-PST old.man-ACC 3NOM-lie.PRS
 ‘he reached the old man. *He* [the old man] is lying there’ (Jacobs 1929:235:6)

In intransitive clauses, \acute{a} - serves to designate a secondary topic and thus functions to encode “fourth person”. For example, the secondary topic, which is the subject coded by the inverse $pá$ - in the second clause in the following example, is coded by \acute{a} - in the first clause.

- (13) páalay \acute{a} -wiyawiyáya $x^w\acute{i}saat$ ku pá- $\acute{?}in$ -a ...
 unbeknownst OBV-arrive-PST old.man and INV-say-PST
 ‘unbeknownst an old man arrived and said to him ...’ (Jacobs 1929:200:2–3)

Obviative *á-* also can express agreement with the possessor in an intransitive clause (see also §3.5):

- (14) *ḡiwúš-pa á-wa naḡanáš x^wisaat-nímí*
 creek-LOC OBV-be.PRS fish.trap old.man-GEN
 ‘the old man’s fish trap is in the creek’ (Jacobs 1929:184:19)
- (15) *á-wač-a páḡnaw páp-ma t-tmayí-ma Yıḡaya-nmí*
 OBV-be-PST five.HUM daughter-PL RDP-maiden-PL Beaver-GEN
 ‘Beaver had five unmarried daughters’ (Jacobs 1929:178:12–13)
- (16) *i-wač-á iwínš,*
 3NOM-be-PST man
 ‘there was a man,
- á-wač-a isxíp watáy.*
 OBV-be-PST younger.brother weasel
 ‘the weasel was *his* younger brother.’

Watáyá isxíp á-wač-a x^wayama-nímí
 Weasel younger.brother OBV-be-PST eagle-GEN
 ‘Weasel was the younger brother of the eagle’ (Jacobs 1937:11.1.1, pg. 17)

In CR and NE Sahaptin (as also in cognate construction in Nez Perce), intransitive *á-* always codes a possessor (Rude 1999).

- (17) a. *á-wiyanawi-ya miyánaš*
 OBV-arrive-PST child
 ‘her child arrived’ (CR & NE)
- b. *á-wiyanawi-ya tilaaki-nmí miyánaš*
 OBV-arrive-PST woman-GEN child
 ‘the woman’s child arrived’ (CR & NE)

Also in CR and NE Sahaptin (as also in Nez Perce) *á-* occurs in transitive clauses only when the subject is first or second person:

- (18) a. *á-ḡinun-a=aš*
 OBV-see-PST=1SG
 ‘I saw *him*’ (CR)
- b. *á-ḡinun-a=aš x^wisaat-na*
 OBV-see-PST=1SG old.man-ACC
 ‘I saw *the old man*’ (CR)

2.1.3. Direct ~ Inverse.

The pronominal prefix *pá-* codes a semantic inverse (second to first-person transitivity) and a pragmatic inverse (third person to topical third person transitivity), for which see Rude (1994):

- (19) a. *pá-ǰinun-a=nam*
 INV-see-PST=2SG
 ‘you saw *me*’ (CR & NW)
- b. *pá-ǰinun-a*
 INV-see-PST
 ‘he saw *him/her/it* (TOP)’ (CR & NW)

In the pragmatic contrast (third person on third person), the topic in the direct is the syntactic A and the topic in the inverse is the syntactic O.

- (20) a. *Direct*
tílaaki-na i-ǰinun-a wínš-∅
 woman-ACC 3NOM-see-PST man-ABS
 ‘*the man* saw the woman’ (CR)
- b. *Inverse*
tílaaki-na pá-ǰinun-a wínš-in
 woman-ACC INV-see-PST man-ASSOC
 ‘the man saw *the woman*’ (CR)

The associative case also conditions verbal agreement (if human)—plural agreement, as with *pa-* in the following.¹¹

- (21) *tílaaki pa-wiyánawi-ya wínš-in*
 woman 3NOM. PL-arrive-PST man-ASSOC
 ‘the woman arrived *with* the man’ (CR)

The contrastive discourse functions of the Sahaptin direct and inverse are suggested by the following, where nominative *i-* is anaphoric with the nominative subject of the

¹¹ The associative case and dual number are both marked with *-in*. The difference can be seen in a word like NE *taḡnúčimt* ‘boy’ with suppletive plural stem (*amúis* as in *amúisma* ‘boys’; *amúisin* ‘two boys’):

- (i) *taḡnúčimt_{in}* pawiyánawiya *tílaaki* ‘the woman arrived *with* a boy’ (NE)
 (ii) *amúisin* pawiyánawiya ‘two boys arrived’ (NE)

Comparison with Nez Perce indicates that the associative was historically an extension of the past participle with nominal function (‘having, with’ as in ‘(blue) eyed’, ‘(bushy) tailed’, etc.). The Sahaptin dual may be an extension of the associative—there is no dual in Nez Perce. See Rude (1997b).

preceding clause (a) and where inverse *pá-* continues the nominative referent of the preceding clause as direct object (b):

(22) a. *Direct*

waapanlá-an i-ǰínun-a ku i-ʔíłiyawi-ya paanáy
grizzly.bear-ACC 3NOM-see-PST and 3NOM-kill-PST 3ACC.SG
'he saw a grizzly and he killed it' (CR)

b. *Inverse*

waapanlá-an i-ǰínun-a ku pá-ʔíłiyawi-ya
grizzly.bear-ACC 3NOM-see-PST and INV-kill-PST
'he saw a grizzly and it killed him' (CR)

There is also a special pragmatic inverse (CR *patá-*; NE *paʔá-*)¹² when the subject is plural:

(23) a. *patá-ǰínun-a*

INV.PL-see-PST
'they saw him/her/it' (CR)

b. *paʔá-tuuk-a*

INV.PL-see-PST
'they saw him/her/it' (NE)

2.2. Second position pronominals.

First and second person core arguments are obligatorily coded by the second position pronominals listed in Table 7. These map core grammatical relations but are not sensitive to case. Thus, first person =*naš* specifies a subject or a direct object. Disambiguation comes via the pronominal prefix (e.g., nominative *i-* versus obviative *á-* in *c* and *d* below).

Table 7. Second Position pronominals¹³

		<i>Singular</i>	<i>Plural</i>
<i>First Person</i>	<i>Exclusive</i>	= <i>naš</i>	= <i>nataš</i>
	<i>Inclusive</i>		= <i>nan</i>
<i>Second Person</i>		= <i>nam</i>	= <i>pam</i>
<i>Third Person</i>			= <i>pat</i>
<i>Complex</i>		= <i>maš</i>	= <i>mataš</i>

¹² For a discussion of the NW equivalent, see description of =*pat* and *á-* in §2.2. below.

¹³ The pronominals variously reduce in the dialects. The first-person inclusive is =*nan* in NW Sahaptin and =*na* in CR and NE Sahaptin. Third-person =*pat* occurs only in NW Sahaptin.

- b. ku=š ína i-qínun-a tílaaki-nim
 and=1SG me 3NOM-see-PST woman-ERG
 ‘and the woman saw *me*’ (CR)

Table 8. Personal Pronouns in Klickitat Sahaptin

	Singular	Plural	Dual
First Person			
<i>Nominative</i>	<i>ínk</i>	<i>namák</i>	<i>napiinák</i>
<i>Accusative</i>	<i>iinák</i>	<i>niimanák</i>	<i>napiininák</i>
<i>Genitive</i>	<i>nimí, inmí</i>	<i>niimí</i>	<i>napiinanmí</i>
Second Person			
<i>Nominative</i>	<i>ímk</i>	<i>imák</i>	<i>imiiník</i>
<i>Accusative</i>	<i>iimák</i>	<i>iimanák</i>	<i>imiininák</i>
<i>Genitive</i>	<i>iimínk</i>	<i>iimamínk</i>	<i>imiinanmí</i>
Third Person			
<i>Nominative</i>	<i>pínk</i>	<i>pmák</i>	<i>piiník</i>
<i>Accusative</i>	<i>piinák</i>	<i>piimanák</i>	<i>piinininák</i>
<i>Genitive</i>	<i>pimínk</i>	<i>piimínk</i>	<i>piiminanmí</i>
<i>Ergative</i>	<i>pínémk</i>		

A first- or second-person oblique argument is represented by an independent personal pronoun and there is no accompanying second position pronominal (which is obligatory for core arguments). The oblique cases shown in Table 9 suffix to independent pronouns in the genitive.

Table 9. Oblique pronominal cases¹⁴

	CR	NE	NW
<i>Genitive</i>	<i>-míin</i>	<i>-míin</i>	<i>-mínk</i>
<i>Benefactive</i>	<i>-láykay</i>	<i>-láykay</i>	<i>-kaláy</i>
<i>Allative</i>	<i>-yawáy</i>	<i>-yúuk</i>	<i>-yúuk</i>
<i>Ablative</i>	<i>-kníin</i>	<i>-kníin</i>	<i>-knínk</i>
<i>Versative</i>	<i>-kaní</i>	<i>-kaní</i>	<i>-kaník</i>
<i>Locative</i>	<i>-páyn</i>	<i>-páyn</i>	<i>-páynk</i>

- (28) a. pa-wínan-a inmí-kan
 3NOM-go-PST mine-VRS
 ‘they went toward *me*’ (CR)

¹⁴ These stressed suffixes generally attach to second- and third-person genitive pronouns (Table 8), whereas first-person genitive pronouns generally take the unstressed suffixes in Table 10. Personal pronouns are put in the genitive before suffixing an oblique case marker.

- b. qaʔáw=ča i-wá inmí-yaw
 lightweight=MOD 3NOM-be.PRS mine-ALL
 ‘he is lighter weight *than I*’ (NE, Jacobs 1931:130)
- c. ku=tya=š aw kú átɰun-ɣa imi-kín
 and=MOD now and worry-HAB.PRS yours-INST
 ‘but then I worry *about you*’ (CR)
- d. pinmíin timná i-čáɰlp-ša imaami-yawáy
 3GEN.SG heart 3NOM-open-IMPV.PRS yours.PL-ALL
 ‘he is opening his heart *to you*’ (CR)

In NW Sahaptin =pat co-occurs with á- in a direct construction and with i- (or Ø-) in a pragmatic inverse. NW =pat does not occur in intransitive clauses.

- (29) a. *Direct*
 kúuk=pat i-nánan-a
 then=3PL 3NOM-bring-PST
 ‘then *it* brought *them*’ (Jacobs 1929:216:14)
- b. *Inverse*
 ku=pat á-ǰinun-a
 and=3PL OBV-see-PST
 ‘and *they* saw *him*’ (Jacobs 1929:211:8)
- c. *Inverse*
 áw=pat Ø-twána-ɣa
 now=3PL 3NOM-follow-HAB.PRS
 ‘now *she* keeps following *them*’ (Jacobs 1937:12.13.5, pg. 23)

2.3. Noun case.

Sahaptin has noun cases as in Table 10. The absolute (zero suffix) specifies a nominative case (also a “chômeur”, see §3.3., note 20), accusative *-na* (NW *-nan*) marks a direct object, and ergative *-nim* suffixes only to third person singular nominals when the direct object is first or second person. As such, the ergative is a marker of *syntactic* transitivity: it is sensitive to the direct object. The accusative case is optional with non-human nouns. Note that, when neither noun is case marked, disambiguation is via semantics, i.e., in *see* (*boy, house*) in *c* below the boy is more likely to do the seeing.

Table 10. Noun case in Columbia River Sahaptin¹⁵

	<i>Nonhuman</i>	<i>Human</i>		
		<i>Singular</i>	<i>Plural</i>	<i>Dual</i>
CORE CASES				
<i>Absolute</i>	-∅	-∅	- <i>ma</i>	- <i>in</i>
<i>Ergative</i>	- <i>nim</i>	- <i>nim</i>		
<i>Accusative</i>	- <i>na</i>	- <i>na</i>	- <i>maaman</i>	- <i>inaman</i>
OBLIQUE CASES				
<i>Associative</i>	- <i>in</i>	- <i>in</i>		
<i>Genitive</i>	-(<i>n</i>) <i>mí</i>	-(<i>n</i>) <i>mí</i>	- <i>maamí</i>	- <i>inamí</i>
<i>Benefactive</i>	- <i>ay</i>	-(<i>n</i>) <i>míyay</i>	- <i>maamíyay</i>	- <i>inamíyay</i>
<i>Allative</i>	- <i>yaw</i>	-(<i>n</i>) <i>míyaw</i>	- <i>maamíyaw</i>	- <i>inamíyaw</i>
<i>Ablative</i>	- <i>kni</i>	-(<i>n</i>) <i>míkni</i>	- <i>maamíkni</i>	- <i>inamíkni</i>
<i>Versative</i>	- <i>kan</i>	-(<i>n</i>) <i>míkan</i>	- <i>maamíkan</i>	- <i>inamíkan</i>
<i>Locative</i>	- <i>pa</i>	-(<i>n</i>) <i>mípa</i>	- <i>maamípa</i>	- <i>inamípa</i>
<i>Instrumental</i>	- <i>ki</i>	-(<i>n</i>) <i>míki</i>	- <i>maamíki</i>	- <i>inamíki</i>

- (30) a. ku i-wiyánawi-ya áswan-∅
and 3NOM-arrive-PST boy-ABS
'and the boy arrived' (CR)
- b. ku i-ǵínun-a áswan-∅ tílaaki-na
and 3NOM-see-PST boy-ABS woman-ACC
'and the boy saw the woman' (CR)
- c. ku i-ǵínun-a áswan-∅ níit(-na)
and 3NOM-see-PST boy-ABS house(-ACC)
'and the boy saw the house' (CR)
- (31) a. ku=š i-ǵínun-a tílaaki-nim
and=1SG 3NOM-see-PST woman-ERG
'and the woman saw me' (CR)
- b. ku=š á-ǵínun-a tílaaki-na
and=1SG OBV-see-PST woman-ACC
'and I saw the woman' (CR)

If the possessor of the object is coreferential with the subject, there is no accusative case marking on the object—even if the object is human, as in (32). Otherwise lack of case marking can indicate an object of low topicality (if nonhuman).¹⁶

¹⁵ Principal dialect differences are the NW accusative *-nan* and the N Sahaptin ablative *-knik*.

- (32) ku i-yáxn-a tílaaki-Ø (p̄inm̄ín) miyánaš-Ø
 and 3NOM-find-PST woman-ABS 3GEN.SG child-ABS
 ‘and the woman found *her* child’ (CR)
- (33) i-walápalichaša-ša tamám-Ø likúuk
 3NOM-incubate-IMPV.PRS egg-ABS chicken
 ‘the chicken is incubating eggs’ or ‘the chicken is incubating *her* eggs’ (NE)
- (34) áw ík^wak i-wiyának^w-a iníit-Ø ímáma
 now that 3NOM-leave-PST house-ABS old.woman
 ‘now that old woman left *her* house’ (Jacobs 1937:2.5.2, pg. 190)

When an object is a kin term and its possessor is coreferential with a third-person subject, the kinship term is case marked accusative with *-pa*:

- (35) ku i-ǰínun-a áswan-Ø pčá-pa
 and 3NOM-see-PST boy-ABS mother-ACC
 ‘and the boy saw *his* mother’ (CR)

In CR and NE Sahaptin third-person subject-verb agreement is with nominative *i-* (as in the above examples). In NW Sahaptin, however, third-person object-verb agreement is also possible with *á-*:

- (36) k^wnák i-támak-a t’at’áíya-an Spilyáy-Ø
 there 3NOM-pit.cook-PST Soft.Basket.Woman-ACC Coyote-ABS
 ‘there Coyote pit cooked Soft-Basket-Woman’ (Jacobs 1937:28.10.5, pg. 60)
- (37) ku á-waywayn-a x^wísaat-nan iwínš-Ø
 and OBV-call.out-PST old.man-ACC man-ABS
 ‘and the man called out to the old man’ (Jacobs 1929:235:21)

Ergative *-nim* also co-occurs with accusative =*pat* ‘them’ in NW Sahaptin:

- (38) i-šaptayák-ša=*pat* x^wísaat-*nim*
 3NOM-deceive-IMPV.PRS=3PL old.man-ERG
 ‘the old man is deceiving them’ (Jacobs 1929:235:9)

2.4. Constituent order in Sahaptin.

Transitive clauses where both arguments appear as nouns are relatively rare in actual discourse. Nevertheless a superficial perusal of 187 pages of Northwest Sahaptin texts (Jacobs 1929, 1937) revealed 147 examples (Table 11 - see representative examples in Table 12). The fact that all six of the word orders in Table 11 are possible shows that

¹⁶ This construction, in which there is a direct object nominal yet no grammatical sensitivity to it (noun case marking, verbal agreement), can be called an antipassive. See Polinsky (2008a).

Sahaptin has a non-configurational syntax inasmuch as, at least in most of its dialects, the semantic agent and patient are never distinguished by word order.¹⁷

Table 11. Distribution of Word Order patterns in NW Sahaptin texts

	Total	no noun case marking			accusative noun case marking			inverse
		nominative		obviative	nominative		obviative	inverse
		Ø-	<i>i-lpa-</i>	á-	Ø-	<i>i-lpa-</i>	á-	<i>pá-</i>
SOV	9	2	0	1	0	1	4	1
SVO	50	4	13	16	4	7	2	4
VSO	36	0	6	3	0	3	10	14
OSV	4	1	1	0	0	0	1	1
OVS	16	0	2	1	0	3	4	6
VOS	34	1	4	6	0	4	7	12

Also a Noun Phrase is not rigidly definable because a noun and its modifier can be discontinuous, as in the following examples taken from texts.

(39) a áw=naš ín̄k n̄imí wá-ta áyat
 now=1SG I my be-FUT woman
 ‘now I shall have *my woman*’ (Jacobs 1929:224:9–10)

b áw=maš š̄iyíx̄ aní-yani-ta ín̄ín̄
 now=1/2 good make-APL-FUT horn
 ‘now I shall make you *good horns*’ (Jacobs 1937:1.16.1, pg. 116)

(40) áw kúuk á-tk^wati-ini-ḡan-a tamám Spilyáy X̄ališya-man
 now then OBV-eat-APL-HAB-PST egg Coyote Wolf-ACC.PL
 ‘now then Coyote would eat *the Wolves’ eggs*’ (Jacobs 1937:32.14.1, pg. 82)

(41) á-tamaynač-ta=nam tk^wátat-na imi-yawáy wáwnak^wšaš-yaw áwt̄ni-na
 OBV-put.inside-FUT=2SG food-ACC your-ALL body-ALL tabooed-ACC
 ‘you will put *the tabooed food* into your body’ (CR)

(42) a=pat k^wn̄ímk̄ i-nánan-a áyat-n̄im̄
 REL=3PL that.ERG 3NOM-bring-PST woman-ERG
 ‘*that woman* who brought them’ (Jacobs 1929:218:19–20)

(43) ikuunák Spilyáy tamánwi-ya tk^wínat-nan áyat-nan
 that.ACC Coyote legislate-PST Chinook.salmon-ACC woman-ACC
 ‘Coyote ordained *that Chinook salmon woman*’ (Jacobs 1929:225:8)

¹⁷ For the concept of nonconfigurality, see Hale (1989). It is a concession to the fact that there are languages where the syntax cannot be described as arising from constituent order.

Word order, as in any “free” word order language, is not random. It just does not distinguish subject from object; rather, it serves referential and pragmatic functions.¹⁸

Table 12. Variant word orders in Klickitat Sahaptin¹⁹

<i>Direct</i>			<i>Inverse</i>		
V	S	O	V	S	O
ku áw kúuk i-šáχłk-a	χ ^w ayamá tkní		kúuk pá-ʔiłamayka áyat-in		iwínš-nan
and now then 3NOM-cut-PST	eagle rope		then INV-hide-PST woman-ASSOC		man-ACC
‘and now then eagle cut the rope’ (Jacobs 1929:210:1)			‘then the woman hid the man’ (Jacobs 1937:16.9.5, pg. 30)		
S	V	O	S	V	O
kúuk χ ^w ášχ ^w ay i-wínp-a	χapilmi		iwínat-in	pá-nakwínan-a	iwínš-nan
then bluejay 3NOM-take-PST	knife		deer-ASSOC	INV-bring-PST	man-ACC
‘then bluejay took the knife’ (Jacobs 1929:216:16)			‘the deer brought the man’ (Jacobs 1937:7.2.1, pg. 11)		
S	O	V	S	O	V
ku tiskáy áyat-nan	á-χtwayni-χan-a		ši-yin	nakáłas-an	pá-paχ ^w i-ya
and skunk woman-ACC	OBV-talk-HAB-PST		who-ASSOC	my.MoMo-ACC	INV-steal-PST
sčát-pa			ílkwš		
night-LOC			fire		
‘and Skunk would talk to the woman at night’ (Jacobs 1929:207:11–12)			‘who stole the fire from my grandmother?’ (Jacobs 1937:2.11.1, pg. 119)		
V	O	S	V	O	S
i-nánan-a	áyat	χ ^w ayamá	pá-nanan-a	áyat-nan	wiyapnít-in
3NOM-carry-PST	woman	eagle	INV-carry-PST	woman-ACC	elk-ASSOC
‘the eagle carried away his woman’ (Jacobs 1929:208:14)			‘the elk carried away the woman’ (Jacobs 1937:3.1.6, pg. 4)		
O	V	S	O	V	S
χástχ	luK ^w ás-nan	áw-iłiyawi-ya	ku Pčii-my-a	pá-twanan-a	pálka-yin ...
maybe timber	rabbit-ACC	OBV-kill-PST	and Wildcat-ACC	INV-follow-PST	head-ASSOC
		boy			
‘maybe the boy killed a timber rabbit’ (Jacobs 1929:223:7)			‘and the head followed Wild Cat ...’ (Jacobs 1929:186:18)		
O	S	V	O	S	V
kuunák	Spilyáy	itkína	ku tiskáy-nan	k ^w ayawí-yin	pá-wínp-a
that.ACC	Coyote	3NOM-watch-PST	and Skunk-ACC	cougar-ASSOC	INV-grab-PST
‘Coyote watched that’ (Jacobs 1929:230:14)			‘and cougar grabbed skunk’ (Jacobs 1929:213:20–21)		

¹⁸ This is not to say that word order is not being invoked to distinguish grammatical relations among some speakers today, but rather that this applies in the published data and in other data available to the author. For a study of the function of word order in Nez Perce, see Rude (1992*b*), and for a cross linguistic study, see Dryer (2008).

¹⁹ To assuage suspicions that the direct-inverse voice distinction might be sensitive to word order, here as also in Table 11 the data is divided as to direct and inverse, for which see §2.1.3.

3. Valence changing mechanisms.

“Valence changing” refers to the instantiation of a syntactic category (S, A, O) in a non-prototypical grammatical relation, generally described as “advancement/promotion” and “demotion” in dependency grammars (see for example, Perlmutter 1980, Gerdts [to appear]). Below are described valence reducing mechanisms (reflexive, reciprocal, passive) and constructions where various advancements apply (ditransitives, applicatives, external possession, causatives, complementation).

3.1. Reflexives and reciprocals.

The reflexive (sg. *piná-*; pl. *pamá-* [NW *piimá-*]) and reciprocal (*pápa-*) are sensitive to the O of a transitive verb—neither are triggered by an oblique object. Both constructions are syntactically intransitive.

(44) a. *piná-ḡinun-a*
RFL.SG-see-PST
‘he saw himself’ (CR & NW)

b. *piná-ḡinun-a=aš*
RFL.SG-see-PST=1SG
‘I saw myself’ (CR & NW)

(45) a. *pamá-ḡinun-a*
RFL.PL-see-PST
‘they saw themselves’ (CR)

b. *pamá-ḡinun-a=ataš*
RFL.PL-see-PST=EXC.PL
‘we saw ourselves’ (CR)

(46) a. *pápa-ḡinun-a*
RCP-see-PST
‘they saw one another’ (CR)

b. *pápa-ḡinun-a=na*
RCP-see-PST=INC.PL
‘we saw one another’ (CR)

3.2. Passive.

The passive is fairly rare in Sahaptin and much resembles the English passive in that the main verb is a past participle (marked by the suffix *-i*; NE *-î*) and the copula (*wá*, *wáč-*) serves as the finite verb. The O is a nominative subject and the A is completely suppressed.

- (47) ku á-wač-a wátisas aní-yi pìpi-nmí
 and OBV-be-PST rope make-PP intestine-GEN
 ‘and his rope was made of intestine’ (CR)
- (48) ana pmá pa-wá sapsik^wan-í
 REL 3NOM.PL 3NOM.PL-be.PRS teach-PP
 ‘they who are taught’ (NE)
- (49) ku=nam ím=č̣a wá-ta watáy waník-i
 and=2SG 2NOM.SG=too be-FUT weasel name-PP
 ‘and you too will be named “weasel”’ (Jacobs 1937:11.13.1, pg. 20)

3.3. Ditransitives.

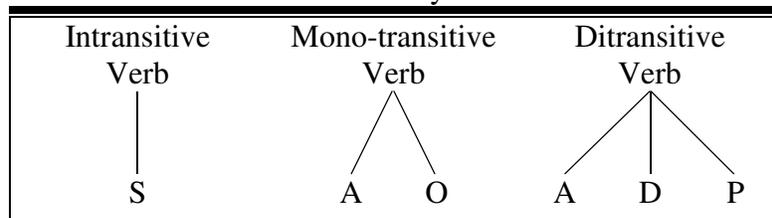
Here it is necessary to distinguish the two objects of ditransitive verbs and thus expand the syntactic primitives of Table 4. I label these D and P (for Dative and Patient), which increases our syntactic primitives to five (as in Table 13).

Table 13. Syntactic primitives

S	The single argument in an intransitive clause
A	The argument highest on the accessibility hierarchy in a transitive clause
O	The argument lowest on the accessibility hierarchy in a transitive clause
D	The semantic dative in a ditransitive clause
P	The semantic patient/theme in a ditransitive clause

The three species of transitivity with corresponding syntactic primitives are charted in Table 14.

Table 14. Valence and Syntactic Primitives



All three core semantic relations of Table 2 (Agent, Dative, Patient) express valence in the prototypic ditransitive verb. This gives rise to the two primary alignment typologies of Table 15.²⁰

²⁰ For these typologies see Dryer (1985), Blansitt (1986), Haspelmath (2005), and Malchukov et al. (2007).

Table 15. Object alignment

	<i>Direct- Indirect</i>	<i>Primary- Secondary</i>
<i>Mono-transitive</i>	O	O
<i>Ditransitive</i>	D P	D P

Thus, Sahaptin appears to exhibit a Primary-Secondary strategy wherein O and D are case marked with accusative *-na* (NW *-nan*) and P is a secondary object with zero case marking.

- (50) a. *áswan i-ǰínun-a t́ilaaki-na*
 boy 3NOM-see-PST woman-ACC
 ‘the boy saw *the woman*’ (CR)
- b. *áswan i-ní-ya t́ilaaki-na ɣaxáykw-∅*
 boy 3NOM-give-PST woman-ACC money-ABS
 ‘the boy gave *the woman* the money’ CR)

- (51) *i-sáyp-a tk^wátat-∅ náxš-nan iwínš-nan*
 3NOM-fed-PST food-ABS one-ACC man-ACC
 ‘she fed *a man* the food’ (Jacobs 1937:2.8.1, pg. 190)

Perhaps the best way to view the Sahaptin Primary-Secondary alignment is as an almost obligatory Dative Shift (Rude 1992a). If P is first or second person (which of course is rare in discourse) then Dative Shift is blocked. Thus in the following examples the direct objects are coded by second position pronominals (*=(n)aš* ‘me’ and *=nam* ‘you’) and the indirect objects by oblique personal pronouns (*inmiyáw* ‘to me’ and *imiyawáy* ‘to you’):

- (52) a. *pa-ní-ya=aš imi-yawáy*
 3NOM.PL-give-PST=1SG yours-ALL
 ‘they gave *me* to you’ (CR)
- b. *pa-ní-ya=nam inmí-yaw*
 3NOM.PL-give-PST=2SG mine-ALL
 ‘they gave *you* to me’ (CR)

If P is not first or second person but nevertheless human, Dative Shift is optional. When Dative Shift occurs, P is demoted (as in *b* below where *wínš* ‘man’ is in the absolute case).²¹

²¹ This would be a *chômeur* in terms of Relational Grammar (see Perlmutter (1980, 1983)).

(53) a. *Unshifted*

wínš-na pá-ʔtayman-a inmí-yaw
 man-ACC INV-sell-PST mine-ALL
 ‘he sold *a man* to me’ (CR)

b. *Shifted*

wínš=naš itáyman-a²²
 man=1SG 3NOM.sell-PST
 ‘he sold *me* a man’ (CR)

(54) a. *Unshifted*

ašwaníya-an pa-ní-ya miyuux-mí-yaw
 slave-ACC 3NOM.PL-give-PST chief-GEN-ALL
 ‘they gave *a slave* to the chief’ (CR)

b. *Shifted*

ašwaníya pa-ní-ya miyúux-na
 slave 3NOM.PL-give-PST chief-ACC
 ‘they gave *the chief* a slave’ (CR)

And if P is nonhuman (as it is in the vast majority of instances) then Dative Shift is obligatory—thus making Sahaptin look like it has a Primary-Secondary object alignment. The first example below is ungrammatical.²³

(55) *tímaš-na pa-ní-ya tílaaki-nmí-yaw
 book-ACC 3NOM.PL-give-PST woman-GEN-ALL
 ‘they gave *a book* to the woman’ (CR)

(56) tímaš pa-ní-ya tílaaki-na
 paper 3NOM.PL-give-PST woman-ACC
 ‘they gave *the woman* a book’ (CR)

3.4. Applicatives.²⁴

There are two primary mechanisms in Sahaptin that advance a semantically oblique argument to direct object: the applicative and the directive. The applicative attaches to transitive verbs with two suffixes, *-(a)ni* and *-(a)yi*. The first occurs in NW Sahaptin, the second in CR Sahaptin, and in NE Sahaptin *-(a)ni* occurs before a vowel and *-(a)yi* before a consonant.²⁵ The applicative shifts a semantic benefactive or possessive argument to

²² Nominative *i-* regularly deletes before the glottal stop, i.e., *itáymana* represents *iʔitáymana* where *i-* has deleted.

²³ See Rude (1992a) and Rude (1997a) for examples.

²⁴ See Polinsky (2008b) and Peterson (2007).

²⁵ For evidence that both morphemes trace historically from a verb ‘give’, see Rude (1991).

direct object with the consequent demotion of the O. The object of the applicative is subject to all morphology of transitivity. It is coded by the obviative (*á-* ‘him/her/it/them’):

- (57) a. *á-sapa^kʷtik-ayi-k núšnu*
 OBV-wipe-APL-IMP nose
 ‘wipe *his/her* nose!’ (CR)
- b. *šaqunk-í=nam á-k^w-ayi-ta tǐpí*
 behead-PP=2SG OBV-do-APL-FUT head
 ‘you will cut off *his/her* head’ (NE)
- c. *ǵí=nam k^wná á-yaxaynak-ayi-ta xáwš*
 FUT=2SG there OVB-pour.in-APL-FUT cous
 ‘you’ll pour the cous in there for *them*’ (NE)

The second position pronominals (=naš ‘me’, =na ‘us’), independent accusative pronouns (*náaman* ‘us’), and the ergative nominal case (*-nim*), which inflects 3rd person only when the direct object is 1st/2nd person, are all sensitive to the object promoted by the applicative:

- (58) *áw=naš i-čáxǐlp-ayi-ša-m-š ina pčǵš*
 now=1/2 3NOM-open-APL-IMPV-CSL-PRS me door
 ‘now he is opening the door for *me*’ (CR)
- (59) *k^wǵnim=na i-wáačaquuk-ayi-ša náaman tiičám naamí-nim sǵnit-nim*
 that.ERG=INC 3NOM-secure-APL-IMPV.PRS us land our-ERG word-ERG
 ‘those words of ours secure the land for *us*’ (CR)
- (60) *kúuš=xǵi=na náaman i-naknúwi-yayi-ša wáwnak^wšaš čúuš-nim*
 thusly=same=INC us 3NOM-take.care.of-APL-IMPV.PRS body water-ERG
 ‘in the same way the water is taking care of *our* bodies’ (CR)

The applicative object (‘you’) is coded within the complex second position pronominals (=maš ‘I ... you’):

- (61) a. *áw=maš aní-yani-ta tanú*
 now=1/2 make-APL-FUT spear
 ‘now I shall make *you* a spear’ (Jacobs 1937:16.12.2, pg. 31)
- b. *ku=maš ník-ani-ta*
 and=1/2 put-APL-FUT
 ‘and I will put it away for *you*’ (Jacobs 1937:2.18.2, pg. 121)

A topical applicative object feeds the inverse (with singular subject *pá-* and plural subject *patá-* or *=pat* plus *á-*):

- (62) a. ku=nam pá-šaxłk-ani-ta páłka
and=2SG INV-cut-APL-FUT head
'you will cut off *my* head' (Jacobs 1929:232:7)
- b. áw=nam pá-ʔani-yani-ta wásas
now=2SG INV-make-APL-FUT canoe
'now you will make *me* a canoe' (Jacobs 1937:16.18.2, pg. 32)
- c. pá-čaxłp-ani-ya pčíš
INV-open-APL-PST door
'she opened the door for *him*' (Jacobs 1937:16.2.1, pg. 28)
- d. áw kúuk pá-waxłk-ani-ya páłka Lučayáy-nan
now then INV-chop-APL-PST head Fox-ACC
'now then he chopped off *Fox's* head' (Jacobs 1929:233:3–4)
- e. kuk pá-wınp-ani-ya xúxux-in áčaš
and INV-get-APL-PST buzzard-ASSOC eye
'and buzzard got *his* eyes' (Jacobs 1937:36.3.3, pg. 89)
- f. patá-ʔani-yayi-ya
INV.PL-make-APL-PST
'they made it for *him/her*' (CR)
- g. ku=pat á-tk^wati-ini-ya łáax^w táwaš
and=3PL OBV-eat-APL-PST all roast
'and they ate up all *his* roast' (Jacobs 1937:32.6.2, pg. 81)

And the reflexives and reciprocal are sensitive to the semantic oblique that has been advanced to direct object via the applicative.

- (63) a. piná-ʔikiik-ayi-k núšnu
RFL.SG-clean-APL-IMP nose
'clean *your* nose!' (CR)
- b. tútanik pamá-šaxłk-ani-ya
hair RFL.PL-cut-APL-PST
'they cut *their own* hair' (NE)

- c. pápa-ʔani-yayi-ya=ataš wápas
 RCP-make-APL-PST=EXC.PL basket
 ‘we made one another baskets’ (CR)

The Directive is marked by a verbal suffix (CR *-awa*; N *-uun*) and advances an oblique semantic goal. The following contrast the intransitive *wiyánawi* ‘arrive’ with oblique goal (*xʷísaatnimíyaw* ‘to/at the old man’) and the directive (*wiyánawiyuun* ‘arrive at’) with direct object *xʷísaatnan* ‘old man’.

- (64) a. *Without directive*

íkʷin=xi xʷísaat-nimí-yaw i-wiyánawi-ya
 that.ALL=same old.man-GEN-ALL 3NOM-arrive-PST
 ‘similarly he arrived at that old man’ (Jacobs 1929:201:8)

- b. *With directive*

pá-wiyanawi-yuun-a xʷísaat-nan
 INV-arrive-DIR-PST old.man-ACC
 ‘he arrived at *the old man*’ (Jacobs 1929:235:6)

The reflexive provides evidence for the objecthood of the goal.

- (65) a=š kúuš piná-ʔititaman-awa-šan-a
 REL=1SG thusly RFL.SG-read-DIR-IMPV-PST
 ‘as I was reading to *myself*’ (CR)

The reciprocal also provides evidence for the objecthood of the directive goal.

- (66) a. pápa-ʔli-yuu-ša=pam
 RCP-bet-DIR-IMPV.PRS=2PL
 ‘you’re betting against *each other*’ (NE)
- b. pápa-wiyanawi-yawa-ḡan-a
 RCP-arrive-DIR-HAB-PST
 ‘they used to visit *one another*’ (CR)

The directive also advances a goal to a transitive verb, thus creating a ditransitive verb.

- (67) a. *Without directive*
tkʷátat-na pa-náčič-a miyanaš-mí-yaw
 food-ACC 3NOM.PL-bring-PST child-GEN-ALL
 ‘they brought *food* to the child’ (CR)

b. *With directive*

tk^wátat pa-náčič-awan-a miyánaš-na
 food 3NOM.PL-bring-DIR-PST child-ACC
 ‘they brought *the child* food’ (CR)

There is also a semi-productive associative advancement marked by verbal suffix (CR -*twana*; NE -*twaa*; NW -*twiin*).²⁶ Compare the direct object in *b* (*inmína miyánašna* ‘my child’) with the oblique object in *a* (*inmíki wišaanítki* ‘with my treasure’).

(68) a. a=pam imáy łqíwi-šan-a inmí-ki wišaanítki
 REL=2PL 2NOM.PL play-IMPV-PST mine-INST treasure-INST
 ‘you who were playing with my treasure’ (CR)

b. á-łqíwi-twana-šan-a inmí-na miyánaš-na
 OBV-play-ASSOC-IMPV-PST mine-ACC child-ACC
 ‘I was playing with *my child*’ (CR)

Though perhaps not as productive, the Sahaptin associative advancement functions the same as the applicatives.

3.5. External possession.

The possessor of an intransitive subject is optionally advanced to subject (called external possession).²⁷ First and second person external possessors are marked by the second position pronominals and 3rd person external possessors by the obviative pronominal (Table 16).

Table 16. External possessors

		<i>Singular</i>	<i>Plural</i>
<i>First Person</i>	<i>Exclusive</i>	=naš	=nataš
	<i>Inclusive</i>		=na(n)
<i>Second Person</i>		=maš	=mataš
<i>Third Person</i>		á-/áw-	

Note the asymmetry (compare Table 7, repeated below as Table 17): the nominative/accusative pronominals (=naš, =nataš, and =na) mark first-person possessors and the complex pronominals (=maš and =mataš) mark second-person possessors.²⁸

²⁶ Cf. *twána* ‘follow, accompany’. The Sahaptin applicatives (applicative proper, directive, and associative) evolve from verbal compounding with clause merger. See Rude (1991).

²⁷ See Rude (1999).

²⁸ That =maš and =mataš serve different functions depending on the inherent transitivity of a verb provides a test for that inherent transitivity, e.g., *kumaš kⁿná łqíwita* ‘and yours will play there’ versus *kumaš áw wiláalak^wta* ‘and now I will leave you’.

Table 17. Second Position pronominals²⁹

		<i>Singular</i>	<i>Plural</i>
<i>First Person</i>	<i>Exclusive</i>	= <i>naš</i>	= <i>nataš</i>
	<i>Inclusive</i>		= <i>nan</i>
<i>Second Person</i>		= <i>nam</i>	= <i>pam</i>
<i>Third Person</i>			= <i>pat</i>
<i>Complex</i>		= <i>maš</i>	= <i>mataš</i>

Though an external possessor has properties of an intransitive subject, a possessor noun or independent pronoun remains in the genitive case.

(69) a. *Internal possession*

i-wiyánawi-ya inmí pšít
 3NOM-arrive-PST 1GEN.SG father
 ‘my father arrived’

b. *External possession*

wiyánawi-ya=aš (inmí) pšít
 arrive-PST=1SG 1GEN.SG father
 ‘my father arrived’

c. *Internal possession*

wač-á=taš iimínk pšít
 be-PST=EXC.PL 2GEN.SG father
 ‘ours was your father’ (Jacobs 1937:31.30.2, pg. 77)

d. *External possession*

iimínk=maš wá tiičám
 2GEN.SG=2GEN.SG be.PRS land
 ‘it is *your* land’ (Jacobs 1937:8.2.4, pg. 13)

A third-person possessor is advanced to subject with the obviative pronominal *á-láw-* (see §2.1.2. above).

(70) a. *Internal possession*

ǰ-wiyánawi-ya (pǰnmíin) pšít
 3NOM-arrive-PST 3GEN.SG father
 ‘his/her father arrived’

²⁹ The pronominals variously reduce in the dialects. The first person inclusive is =*nan* in NW Sahaptin and =*na* in CR and NE Sahaptin. Third person =*pat* occurs only in NW Sahaptin.

b. *External possession*

á-wiyanawi-ya (p̄inm̄iin) p̄šít
 OBV-arrive-PST 3GEN.SG father
 ‘his/her father arrived’

External possession of objects is expressed by the applicative (see §3.4. above).

(71) a. *Internal possession*

i-ǰínun-a (p̄inm̄iin) miyánaš
 3NOM-see-PST 3GEN.SG child
 ‘she saw her (own) child’ (CR)

b. *External possession*

i-ǰínw-ayi-ya (paanáy) miyánaš
 3NOM-see-APL-PST 3ACC.SG child
 ‘she saw her (someone else’s) child’ (CR)

Access to external possession is denied those kinship terms with possessor affixes (a) and possessors coded by independent pronoun with accusative concord with a head noun (b).

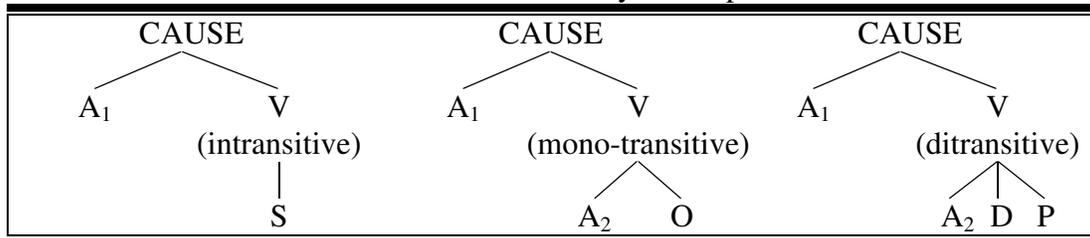
(72) a. i-ǰínun-a nayáyasa-an
 3NOM-see-PST my.OBr-ACC
 ‘he saw my elder brother’ (CR)

b. á-twana-ta=aš naamí-na pát-na
 OBV-follow-FUT=1SG our-ACC OSi-ACC
 ‘I will follow our older sister’ (CR)

3.6. Causatives.

Sahaptin has a morphological (as opposed to periphrastic) causative (Rude 1997a). It is a valence changing mechanism that turns intransitive verbs into transitive verbs, and transitive verbs into ditransitive verbs. The higher, causative agent (A₁) is subject and, if the lower predicate is intransitive, its S becomes the direct object and has all the behavioral characteristics of any other object. Table 18 illustrates the semantic structure with syntactic primitives for the three types of causative construction. The productive causative prefix is *šapá-*, and like all morphological causatives its force varies over the full range of periphrastic causatives (‘cause’, ‘make’, ‘have’, ‘let’, etc.).³⁰ Note how in each of the following examples the subject of the lower predicate is treated as the direct object.

³⁰ See Song (2008) for a typological analysis of causatives.

Table 18. The Causative and syntactic primitives³¹

(73) ku k^wiiní λáax^w wáxwayčt-na pá-šapa-yawayna-šan-a
 and that.ASSOC all bridge-ACC INV-CAUS-washout-IMPV-PST
 ‘and that was causing *the bridge* to wash out completely’ (CR)

(74) ku=š i-šapá-waša-ḡan-a kúsi-pa
 and=1SG 3NOM-CAUS-ride-HAB-PST horse-LOC
 ‘and he used to have *me* ride on the horse’ (CR)

(75) a. ku pá-šapa-tk^waḡaap-a
 and INV-CAUS-walk.between-PST
 ‘and he had *her* walk between’ (CR)

b. kúsi pa-šapá-wayḡti-ta
 horse 3NOM.PL- CAUS-run-FUT
 ‘they will have *their* horses run’ (CR)

When the lower verb is transitive its A₂ (see Table 18) is typically the direct object and the other argument is demoted and its noun put in the absolute. This is equivalent to a Dative Shift.

(76) á-šapa-tk^wata-ta=ataš twáyḡt
 OBV-CAUS-eat-FUT=EXC.PL soup
 ‘we’ll have *them* eat soup’ (CR)

(77) ku=taš k^wná á-šapa-ḡni-šan-a ḡáwš
 and=EXC.PL there OBV-CAUS-did.roots-IMPV-PST cous
 ‘and there we were having *them* dig cous’ (CR)

(78) may-k^wáanik=nam pá-šapa-k^wyam-ta imíin tamánwit
 more-that.way=2SG INV-CAUS-believe-FUT your law
 ‘you will cause *me* to believe your law the more’ (CR)

(79) X^waamayáy-in miyánaš-ma pá-šapa-wḡin-a k^waaná tílaaki-na
 Eagle-ASSOC child-PL INV-CAUS-lose-PST that.ACC woman-ACC
 ‘Eagle made *that woman* lose her children’ (CR)

³¹ Compare Table 14 for the three types of transitivity.

- (80) kúuk áyat miyánaš-nan á-šapa-wɨnp-a íšat-knik nik^wít ku íšat-knik yápaáš
 then woman child-ACC OBV-CAUS-hold-PST side-ABL meat and side-ABL grease
 ‘then the woman had *the child* hold the meat on one side and the grease on the other’
 (Jacobs 1937:31.10.3, pg. 72)

- (81) líxs iksíks-nan láymut-nan líxs tamám á-šapa-wɨnp-a
 single little.SG-ACC youngest-ACC single egg OBV-CAUS-hold-PST
 ‘he made *the little youngest one* hold the last egg’ (Jacobs 1937:31.41.4, pg. 79)

If the O of the lower predicate is human then Dative Shift is optional. Note that in the unshifted example (*a* below) the lower agent is case marked dative—the same as the D in ditransitive clauses (see §3.3. above).

- (82) *a. Unshifted*
patá-šapa-wawyan-a miyánaš-na wawyała-nmí-yaw
 INV.PL-CAUS-whip-PST child-ACC whipman-GEN-ALL
 ‘they had *the child* whipped by the whipman’ (CR)
- b. Shifted*
patá-šapa-wawyan-a miyánaš wawyałá-an
 INV.PL-CAUS-whip-PST child whipman-ACC
 ‘they had *the whipman* whip the child’ (CR)

The nonshifted object noun can retain its case marking (e.g., *paamanáy* ‘them’ in the following). For behavioral evidence that this argument is not the grammatical object, see Rude (1997a).

- (83) pa-šapá-ǰḫ-taḫna=nam paamanáy
 3NOM.PL- CAUS-remember-COND=2SG them
 ‘they can cause *you* to remember them’ (CR)

The following posed in direct elicitation required a human patient (“eat a person up”), this because the unshifted oblique (*winšmíyaw*) requires a human patient (i.e., shifting does not occur unless the patient is human).

- (84) winš-mí-yaw patá-šapa-tk^watan-a
 man-GEN-ALL INV.PL-CAUS-eat-PST
 ‘they had the man “eat a person up”’ (CR)

The oblique *k^waalinimíyaw* in the next example similarly codes the lower agent and, though the inverse *pá-* is normally expected in second- on first-person transitivity (see §2.1.3.), the oblique noun means the Dative Shift has not occurred and the patient is human, i.e., ‘me’.

- (85) šapá-ʔiǰiyawi-ta=m kʷaali-nimí-yaw
 CAUS-kill-FUT=2SG dangerous.being-GEN-ALL
 ‘you will have the dangerous being kill [me]’ (Jacobs 1929:187:12–13)

Though rare in texts, native speakers readily allow the causative with ditransitive verbs. This means a four place predicate (Agent₁, Agent₂, Dative, Patient). Morphological and behavioral criteria specify just one grammatical object in Sahaptin, and in ditransitive causatives the object can be any one of the three arguments of the lower predicate providing it is human (or personified). In the following, the agent is subject and the patient and dative are obliques.

- (86) tú-yay=nam pá-šapa-ni-ya útpas pšwa-nmí-yaw
 what-GEN=2SG INV-CAUS-give-PST blanket rock-GEN-ALL
 ‘why did you make *me* give a blanket to the rock’ (Jacobs 1937:1.11.2, pg. 114)

3.7. Subject Raising.

The verb in a complement clause is nominalized with *-t* (also *-t* plus allative *-yaw* in object complements). The S or A of the subject complement is a possessor, which may be internal (as in *a* below where subject agreement in the main verb is with nominative *i-*) or external (as in *b* where subject agreement is with obviative *á-*).

- (87) *a. Internal possession*
 ana kú i-wiyánaǰi-ta p̄inm̄iín ttáwaǰ-t
 REL and 3NOM-finish-FUT 3SG.GEN grow-N
 ‘when *her* growing will be finished’ (CR)
- b. External possession*
 kʷáy á-wač-a sápsikʷa-t n̄č̄inč̄i-ma-amí
 that OBV-be-PST teach-N elders-PL-GEN
 ‘that was *the elder’s* teaching’ (CR)

The direct object in a complement retains its accusative noun case marking if human—accusative noun case marking is optional otherwise.

- (88) i-wač-á áwtn-i miyánaš-ma-aman čáw nákwina-t
 3NOM-be-PST taboo-PP child-PL-ACC NEG take-N
 ‘it was tabooed not to take *the children*’ (CR)
- (89) ana míš mayní naknúwi-t i-wač-á kúsi-ma-aman
 REL how that.way take.care-N 3NOM-be-PST horse-PL-ACC
 ‘however that it was to take care of *the horses*’ (CR)

- (90) ku i-wá a'úk k^waaná nákpni-t waníčt-na
and 3NOM-be.PRS difficult that.ACC bring.out-N name-ACC
'and it is difficult to bring out *that name*' (CR)

In each of the following examples the S or A of the complement is “raised” to direct object of the main or tensed verb, as expressed by a second position pronominal (=atas ‘us’), an obviative pronominal (áw- ‘them’), an independent pronoun (paanáy ‘him/her’), or a noun with accusative case marking (inmímaaman nčínčimaaman ‘my elders’).

- (91) pa-sápsik^wa-san-a=atas tk^wátat aní-t naknúwi-t-ay ánim-ay
3NOM.PL-teach-IMPV-PST=1EXC.PL food make-N keep-N-BEN winter-BEN
'they were teaching *us* to make food for winter keeping' (CR)
- (92) áw-awt-ta=nam wína-t ana k^wná pa-páyuum-ša
OBV-taboo-FUT=2SG go-N REL there 3NOM.PL-celebrate-IMPV.PRS
'you will taboo *them* going where they are celebrating' (CR)
- (93) pa-wiyákkink-a paanáy wína-t
3NOM.PL-block-PST 3ACC.SG go-N
'they blocked *him* going' (CR)
- (94) k^wáy=š k^wł á-ykín-ḡan-a inmí-ma-aman nčínči-ma-aman sínwi-t-yaw
that=1SG that.much OBV-hear-HAB-PST my-PL-ACC big.PL-PL-ACC speak-N-ALL
'that much I used to hear *my elders* speak' (CR)

The raised subject is optionally advanced as external possessor via the applicative.³²

- (95) ača=š=ta kú pínim ʔáax^w i-šúk^w-ayi-ša-m-š piná-wšuwat
because=1SG=MOD and 3ERG.SG all 3NOM-know-APL-IMPV-CSL-PRS RFL.SG-ready-N
'because he knows all *my* getting myself ready' (CR)
- (96) pá-ḡin-ani-ya íči ím nówčak-t-yaw
INV-see-APL-PST this mouth open-N-ALL
'it saw this mouth of *his* open up' (Jacobs 1937:1.6.6, pg. 113)

When the verb in the object complement is transitive there are two potential objects and Subject Raising becomes analogous to the Dative Shift. Note that, just as in the causative (§3.6.), the nonshifted A is case marked oblique (with *-yaw*). Unlike with ditransitives and causatives, however, the Dative Shift is optional whether or not the patient is human. The following are from Rude (1997a).

³² If external possession in the complement feeds the applicative in the main verb, then there should be no examples where the verb in the object complement is transitive (i.e., there is no external possession of a transitive subject). Unfortunately the author's informants are now too elderly or too hard of hearing to test this theory.

- (97) a. *Unshifted*
 i-tqíx-ša inmí-yaw kíʔlawi-t núsux-na
 3NOM-want-IMPV.PRS mine-ALL taste-N salmon-ACC
 ‘he wants me to taste *the salmon*’ (NE)
- b. *Shifted*
 i-tqíx-ša=aš kíʔlawi-t núsux
 3NOM-want-IMPV.PRS=1SG taste-N salmon
 ‘he wants *me* to taste the salmon’ (NE)

Also, as in the causative, Subject Raising does not preclude accusative noun case marking of the lower O. Disambiguation, if not explicit in the grammar, is via common sense (semantics/pragmatics).³³

- (98) á-sapsik^wa-sa=atas tk^wátat-na nákníknik-t
 OBV-teach-IMPV.PRS=1PL.EXC food-ACC take.around-N
 ‘we are teaching *them* to take the food around’ (CR)
- (99) tílaaki-na pa-wálímsik^wa-šan-a wiyímk-t-yaw pyaxí-na
 woman-ACC 3NOM.PL-watch-IMPV-PST peel-N-ALL bitterroot-ACC
 ‘they are watching *a woman* peel the bitterroot’ (NE)
- (100) á-tqíx-ša=aš pyaxí-na tk^wáta-t
 OBV-want-IMPV.PRS=1SG bitterroot-ACC eat-N
 ‘I want *him* to eat bitterroot’ (CR)
- (101) patá-sapsik^wan-ḡa šúwa-t naknúwi-t ník^wít-na
 INV.PL-teach-HAB.PRS butcher-N take.care.of-N meat-ACC
 ‘they teach *them* to butcher, to take care of the meat’ (CR)
- (102) pamá-wšúwa-ša wištáyma-t naamí-na pát-na
 RFL.PL-make.ready-IMPV.PRS meet-N our-ACC older.sister-ACC
 ‘they are readying *themselves* to meet our older sister’ (CR)

If only one object is coded it might be, depending on context, either the A or the O.

- (103) pa-láyk^wn-a=ataš ḡní-t-yaw
 3NOM.PL-angrily.forbid-PST=1EXC.PL dig.roots-N-ALL
 ‘they angrily forbade *us* to dig roots’ (CR)

³³ For examples with behavioral tests (reflexivization, passivization, etc.) showing that the raised A is the grammatical object, see Rude (1997a).

- (104) čáw=naš pa-tqíx-ša qínu-t-yaw³⁴
 NEG=1SG 3NOM.PL-want-IMPV.PRS see-N-ALL
 ‘they do not want to see *me*’ (Jacobs 1929:228:5)

When no object is indicated, the interpretation is that the subject of the two verbs are coreferent, what I refer to as “equi-subjects”.

- (105) a. ku kúuk i-ḡáwšḡn-a wánp-t
 and then 3NOM-stop-PST sing-N
 ‘and then he stopped singing’ (Jacobs 1937:11.2.2, pg. 17)
- b. ana kú úyi-ḡa wánp-t
 REL and 3NOM.begin-HAB.PRS sing-N
 ‘when he begins to sing’ (CR)
- c. pa-tmíyun-a wana-páyn aní-t
 3NOM.PL-decide-PST river-along make-N
 ‘they decided to make [it] along the river’ (CR)

Inceptive *-ʔuyi*, cessative *-naqi*, and desiderative *-at’a* all compound with a nominalized stem in equi-subject constructions, forming a single clause syntactically.

- (106) a. pa-tk^wáta-t-ʔuyi-ša³⁵
 3NOM.PL-eat-N-start-IMPV.PRS
 ‘they are *starting* to eat’ (CR)
- b. pa-wiyánawi-t-naqi-ya
 3NOM.PL-arrive-N-finish-PST
 ‘they *finished* arriving’ (CR)
- c. patá-ʔani-t-at’a-ša níit-na
 INV.PL-make-N-want-IMPV.PRS house-ACC
 ‘they are *wanting* to build the house’ (CR)

As seen in the last example, the semantic patient patient of ‘make’ is syntactically the direct object of the clause and thus has accusative noun case marking.

4. Conclusion.

This paper shows that transitivity and core grammatical relations are categories just as valid in a language where they cannot be described on the basis of constituent

³⁴ Ordinarily ‘want’ with equi-subjects is expressed by the desiderative (see below).

³⁵ My Umatilla informant, Inez Spino Reves, does not convert an obstruent into an ejective when a glottal stop follows.

order as they are in a language where they can be so described. Sahaptin word order serves mostly a pragmatic function and fails to identify grammatical relations. Rather, grammatical relations are identified morphologically or semantically, by means of agreement markers, which appear in second position or as verbal prefixes, and noun case markers. Shapatin has a three-way alignment with absolute, accusative and ergative nominal cases. Ergativity is split by person, with one nominal case for the non-prototypical third person that acts on first/second person and another nominal case for the non-prototypical third person that acts on a topical third person. In sum, according to the typology set forth in Nichols (1986), Sahaptin should be described as more or less equally head- and dependent-marking.³⁶

There is little lability in Sahaptin, for other than *kú* ‘go, do’, verbs are inherently intransitive, mono-transitive, or ditransitive and should be so labeled in the lexicon. However, there are directive and applicative constructions in the three Plateau Penutian languages for which we have adequate description (Barker 1963, 1964; Rude 1988b; Pharris 2006), and which derive from verbal compounds, e.g., the applicative traces to ‘give’ in Sahaptian, in Klamath and in Molala (Rude 1991, Pharris 2006). The situation is typologically and possibly genetically connected to Uto-Aztecan (Rude 1996a, 2000). Other valence changing mechanisms include inverse voice, external possession, causatives, and subject raising.

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³⁶ The distantly related Klamath is primarily a dependent-marking language. The Klamath verb lacks pronominal affixes but is nevertheless sensitive to an absolutive case via suppletion (singular versus plural/distributive) and classificatory prefixes (see Rude 1987).

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