Argument Structure of Quirky Algonquian Verbs

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6.1 Introduction

A hallmark of Annie Zaenen’s work is the careful examination of mismatches between morphology and syntax, as in Icelandic quirky case, and of the role played by argument structure in unaccusativity and other syntactic phenomena (e.g. Zaenen, Maling, and Thrainsson 1985, Bresnan and Zaenen 1990). In the present paper I investigate the argument structure associated with a ‘quirky’ pattern in Algonquian languages: not an instance of quirky case, but rather a mismatch between inflectional morphology and syntactic valence. This paper is a continuation of Dahlstrom (2009), which argued that a set of two-place verbs in the Algonquian language Meskwaki is associated with the valence of <SUBJ OBJ>, rather than the unmarked <SUBJ OBJ> pattern for transitive verbs. An example is given in (1):2

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2 Abbreviations: 3’ obviative (in verb agreement), ANIM animate, AOR aorist (prefix or verb paradigm), EP epenthetic consonant, INAN inanimate, IND independent indicative, OBV obviative (nominal suffix), PL plural, SG singular. ‘>’ separates subject and object features; an en dash indicates the boundary between preverb and verb stem. Obviative is a subtype of third person, used for third persons more peripheral to the discourse.

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The stem *ahpe-nemo-* ‘depend on, rely on’ requires two arguments, but it is inflected only for the subject. In contrast, ordinary transitive verbs are inflected to agree with both subject and object:

(1) ahpe-nemo-wa o-si-me-h ani
depend.on-3/IND his-younger.sibling-ANIM.OBV.SG
‘He relies on his younger brother.’

(2) wa-pam-e-wa o-si-me-h ani
look.at-3/3’/IND his-younger.sibling-ANIM.OBV.SG
‘He looks at his younger brother.’

The analysis in Dahlstrom (2009) presents a number of syntactic arguments demonstrating that the nonsubject argument of verbs like *ahpe-nemo-* in (1) is in fact *obj*$_b$, the thematically restricted object, and not *obj* or *obl*. Little was said in Dahlstrom (2009) about the argument structure of such verbs. But in order to support the claim that the second argument of the verbs in question is a thematically restricted object, it is necessary to discover what the thematic restrictions on this set of objects might be. In the present paper I investigate the lexical semantics of this set of verbs, drawing examples not only from Meskwaki but also from the related languages of Kickapoo, Cree, Ojibwe, and Menominee.\(^3\) (Unmarked examples below are Meskwaki.) It will be seen that the quirky pattern is widespread in the family, and should be reconstructed for the proto-language. Moreover, the quirky pattern is associated primarily with verbs which do not greatly affect the second argument, such as verbs of possession, or verbs expressing location.

Algonquianists call this quirky valence pattern “AI+O”, an opaque label which requires explanation. “AI” stands for Animate Intransitive, one of the four stem classes in the language. (3) lists the four stem classes, which are sensitive to valence and the gender – animate or inanimate – of one of the verb’s arguments. For transitive and ditransitive verbs subcategorized for *obj*, the gender of *obj* determines the stem class (e.g. *wa-pam-* ‘look at’ in (2) is Transitive Animate). Otherwise, the gender of the subject determines the stem class of the verb.\(^4\)

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\(^3\)Sources: Kickapoo: Voorhis (1988); Cree: Wolfart and Ahenakew (1998); Menominee: Bloomfield (1975); Ojibwe: list provided by R. Rhodes in Valentine (2001:242). The various sources use different conventions for indicating long vowels: double vowels in Kickapoo and Ojibwe, a circumflex in Cree, and a raised dot in Meskwaki and Menominee. In the glosses of the various verb forms I have introduced the LFG symbol of *obj*$_b$ for the sake of uniformity.

\(^4\)For the two intransitive stem classes, ‘Animate’ or ‘Inanimate’ precedes ‘Intransitive’ as a mnemonic that the gender of the subject is relevant; the gender specification follows ‘Transitive’ as a reminder that in transitive stems, it is the
(3) Animate Intransitive (AI)  Inanimate Intransitive (II)
Transitive Animate (TA)  Transitive Inanimate (TI)
cf. meškosi- (AI)  meškwa- (II) \( \text{'be red'} \)
\( \text{amw- (TA)} \)  \( \text{miči- (TI)} \) \( \text{‘eat’} \)

For example, ‘raspberry’ is grammatically animate: to say that a raspberry is red the AI stem meškosi- would be selected; to say that someone ate a raspberry the TA stem amw- would be selected. ‘Strawberry’, on the other hand, is grammatically inanimate, so meškwa- would be used to report its color and miči- to report eating a strawberry.

The valence pattern of interest here thus presents a mismatch between syntax and morphology: the verb requires two arguments but is inflected in the pattern appropriate for intransitive verbs. The Algonquianist label ‘AI+O’ means that it is inflected as an AI (Animate Intransitive) verb, but it takes an object (O) as well. This mismatch was noted by Bloomfield (1962:46; underlining in original):

Many AI verbs behave, as to syntax and meaning, like transitive verbs: they are accompanied by substantive expressions, indifferent as to gender and number, which in syntactic behavior and meaning resemble objects. We shall say that these verbs take an implied object.

Below I recapitulate the findings of Dahlstrom (2009), and then turn to the lexical semantics of the verbs that appear in this marked valence pattern.

6.2 Syntax of the construction

Dahlstrom (2009) demonstrates that the non-subject argument of Meskwaki AI+O verbs is not an unrestricted obj but rather obj\(_\theta\), the same grammatical function associated with the second object of ditransitive verbs.\(^5\) This result was obtained by, first, establishing tests for the two object types using ditransitive verbs (e.g. mi-n- ‘give’); second, showing that when the first object of a ditransitive is suppressed by lexical processes such as reflexive, reciprocal, or antipassive, the derived valence is \(<\text{subj obj}_\theta>\) (e.g. mi-šiwe- ‘give obj\(_\theta\) away’; antipassive). The final step is to show that the same valence is found with basic AI+O verbs, such as ahpe-nemo- ‘depend on’, which are not derived from underlying ditransitives.

I will here briefly recount the differences between the two objects

\(^5\)Rhodes (1990) makes an analogous claim for Ojibwe, that the non-subject argument of the AI+O verbs is a 3 in Relational grammar terms. The details of the properties distinguishing the two objects of ditransitives varies from one language to another; see Rhodes (1990) for details of Ojibwe verb inflection.
found with ditransitives. First, as implied in the quote from Bloomfield above, verbs inflect for OBJ; furthermore, the shape of the verb stem (TA vs. TI) specifies the gender of OBJ. OBJ θ neither triggers agreement nor affects the stem shape. Second, OBJ in Meskwaki may be suppressed by a number of valence-decreasing processes, including antipassive, verbal reflexive, and reciprocal formation. The OBJ θ argument, on the other hand, can never be so suppressed, either in ditransitive clauses or in the AI+O construction. Third, while Meskwaki exhibits athematic (“dummy”) subj and OBJ, there are no athematic OBJ θ s. Fourth, pronominal OBJs are expressed by inflectional affixes. In contrast, pronominal OBJ θ s are expressed by zero anaphora or by independent pronouns built on possessed forms of the noun stem -i·yaw- ‘body’ (see Dahlstrom 2009 for details).

Another property distinguishing OBJ from OBJ θ in Meskwaki involves noun incorporation. With verbs containing an incorporated body part noun, an OBJ is construed as the body part’s possessor. An OBJ θ cannot be so construed.

(4) mešketone-n-     ‘open OBJ’s mouth by hand’
    mešk-etone-en
    open-mouth-by-hand

(5) ahpanasite-ka-pa-- ‘stand with one’s feet on OBJ θ’
    ahp-anasite-ika-pa-- [not “stand on OBJ θ’s feet”]
    on-foot-stand

(4) is an example of the very productive Algonquian pattern of transitive verbs containing instrumental “finals”. The final -en means that the subject acts upon an object by some action involving the subject’s hand(s), resulting in the state expressed in the stem-initial morpheme. The medial position is optionally filled; if it is filled it is often filled with a body-part noun. The body part medial in a transitive verb like (4) is understood to belong to the object of the transitive verb. (5), on the other hand, is an AI+O verb. The verb contains a body part noun in the stem-medial position, but here the OBJ θ is not construed as the possessor. Rather it is the subject of the verb which is understood to possess the incorporated body part noun.

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6I here review arguments that the second argument of the AI+O construction is not OBJ. For arguments that it is also not OBL, see Dahlstrom (2009).
7Many Algonquian verb stems are bipartite, combining an initial morpheme with a final morpheme; another common schema is tripartite, with initial, medial, and final stem components.
6.3 Classification of <SUBJ OBJθ> verb types

Having established that there is a syntactic difference between OBJ and OBJθ and that it is possible for Algonquian verbs to subcategorize for subject and OBJθ with no OBJ, we may now ask what types of verbs exhibit this marked valence pattern. This section describes several general semantic classes associated with the <SUBJ OBJθ> valence, plus some instances which are harder to account for.

We may first of all observe that the most prototypical transitive verbs, such as nes- ‘kill’ and pakam- ‘hit’ — that is, verbs with strongly affected patients — do not display the AI+O pattern. Nor do the numerous Algonquian verbs with instrumental finals, such as (4) above, where the final is –en ‘by hand’. The schema exemplified in (4) — an initial specifying the resulting state, an optional medial, such as an incorporated body part noun, plus an instrumental final expressing the type of action — is uniformly associated with the unmarked transitive valence of <SUBJ OBJ>, never the AI+O pattern of <SUBJ OBJθ>.

The AI+O pattern, on the other hand, is most frequently found with less affected entities: e.g. certain subclasses of themes (things possessed, entities undergoing a transfer of possession), or locatives. We will examine instances of all these semantic roles below, beginning with possession.

6.3.1 Possession

Verbs derived from possessed nouns

The most productive set of verbs with the <SUBJ OBJθ> valence are the verbs derived from possessed nouns.8 These include verbs expressing kinship relations, as well as possession of items such as drums and blankets, as seen in (6).

(6) a. ona-pe-mi- 'have OBJθ as a husband'
    b. oki- 'have OBJθ as a mother'
    c. otahkohkwii- 'have OBJθ as a drum'
    d. otakohpi- (Cree) 'use OBJθ as a blanket'

Such verbs may be used either as two place verbs, subcategorized for <SUBJ OBJθ>, or as one place verbs, subcategorized for only <SUBJ>. In other words, the verb stem in (6a) could be used to say of a woman that she is married (one place verb) or that she is married to him (two place verb). The same ambiguity of valence is found throughout this

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8Note that the initial o(t)- of the stem is identical to the 3rd person possessive prefix on nouns. However, in verbs such as those in (6) the o(t)- does not function as agreement with, or pronominal reference to, a third person: it has simply been reanalyzed as part of the verb stem.
set of verbs.

**Verbs with initial kek- ‘having’**

Another set of AI+O verbs expressing possession all have the stem-initial morpheme kek- (Cree kik-) ‘having’:

(7) a. kekišin- 'be buried with OBJ
  (lit. ‘lie having OBJ’)
b. keko-myepaho- 'run with OBJ on back’
c. keki-kotawi- 'go underwater with OBJ’
d. keke-ka-powew (Men) ‘he stands having, holding OBJ’
e. kikâpôhkê- (Cree) ‘add OBJ to soup, enhance one’s soup with OBJ’

In (7c) keki appears as a preverb (a phonologically independent word) compounded with the Animate Intransitive verb stem kotawi- 'go underwater'. See Dahlstrom (2000) for discussion of preverb-verb compounds.

**Other verbs of possession**

Besides the verbs with initial kek- and the verbs derived from possessed nouns, we find other AI+O verbs expressing possessive relations; a few are listed in (8):

(8) a. dnid (Oj) ‘possess OBJ’
b. gwid (Oj) ‘wear OBJ’
c. naapeenemo- (Kick) ‘adopt OBJ’
d. nwapod (Oj) ‘take OBJ along to eat’

(8c) from Kickapoo, *naapeenemo- ‘adopt OBJ’, fits semantically with the kinship terms of (6).*

6.3.2 Loss

The opposite of possession is loss, and verbs expressing loss also often display the AI+O valence pattern:

(9) a. caakiθaa- (Kick) ‘use OBJ up’
b. jaagsed (Oj) ‘run out of OBJ’
c. kehekwi- ‘lose one’s captive/prey
  (OBJ gives s the slip)’
d. pakicî- (Cree) ‘release, let go of OBJ’
e. wani-hke- ‘forget OBJ’
f. wanikiskisi- (Cree) ‘forget OBJ; be forgetful’

*Cultural note: following a death in the family, the Meskwaki and Kickapoo ritually adopt someone else from the community to take the place of the deceased person, establishing a new kinship tie.*
Verbs of forgetting, such as (9e) and (9f), fall into this pattern: to forget is to lose something mentally.

In some of the languages, the verbs for ‘remember’ are also AI+O; if forgetting is a mental loss, then the forms in (10) should perhaps be added to the verbs of possession in the previous section:

(10) a. kiskisi- (Cree) ‘remember; remember obj<sub>θ</sub>’
    b. kehkinooθoo- (Kick) ‘remember obj<sub>θ</sub>’

In Meskwaki, however, mehkwe-nem- (TA), mehkwe-net- (TI) ‘remember’ is a regular transitive verb, not AI+O.¹⁰

6.3.3 Verbs of exchanging

Semantically related to the verbs of possession are the verbs of exchange, such as ‘buy’, ‘sell’, and ‘trade’. Here the possession of an object is transferred from one owner to another. This semantic domain is frequently associated with the <subj obj<sub>θ</sub>> valence in Algonquian languages:

(11) a. ata-we- (Oj) ‘sell, trade obj<sub>θ</sub>’
    b. daawed (Oj) ‘trade/sell obj<sub>θ</sub>’
    c. tepa-ha-kε-w (Men) ‘he sells obj<sub>θ</sub>’
    d. atâwê- (Cree) ‘buy obj<sub>θ</sub>’
    e. atâwâkê- (Cree) ‘sell obj<sub>θ</sub>, sell things’
    f. daawnged (Oj) ‘borrow obj<sub>θ</sub>’

To the class of verbs of exchange we may add the verb meaning ‘steal’, in which possession is also transferred, albeit against the wishes of the previous owner. This verb displays the AI+O pattern in all the languages under consideration:

(12) a. kemot- ‘steal obj<sub>θ</sub>’
    b. gmooodid (Oj) ‘steal obj<sub>θ</sub>’
    c. kemo-tew (Men) ‘he steals obj<sub>θ</sub>’
    d. kimoti- (Cree) ‘steal obj<sub>θ</sub>; be a thief’

The second gloss of (12d) ‘be a thief’ reflects the tendency of AI+O verbs to allow either two-place or one-place readings, discussed further below.

6.3.4 Activities, optionally taking an argument

Another set of verbs associated with the <subj obj<sub>θ</sub>> valence pattern may either be used as a one-place verb denoting an activity, such as cooking, or as a two-place verb in which the item cooked is identified.

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¹⁰Ojibwe and Menominee also have regular transitive forms for ‘remember’.
In the latter case the second argument is syntactically an OBJθ. See also the Cree verbs for ‘sell’ in (11e) and for ‘steal’ in (12d) above.

(13) a. wača-ho- ‘cook; cook OBJθ’
    b. kaskikwâso- (Cree) ‘sew, do one’s sewing; sew OBJθ’
    c. nawaci- (Cree) ‘roast OBJθ; roast one’s food’
    d. bwed (Oj) ‘roast; roast OBJθ’

Note that this construction permits patients (affected by the action of the verb) as OBJθ as opposed to the theme OBJθS exemplified in previous sections.

6.3.5 Comitatives

Another set of <SUBJ OBJθ> verbs associated with a specific morpheme is the set formed with takw- ‘together with’. The thematic role of the OBJθ in such verbs is probably theme:

(14) a. takwi- ‘join OBJθ’
    b. takwisen- ‘lie together with OBJθ’
        (inanimate subject)\(^{11}\)
    c. takwi-natom- ‘summon OBJ together with OBJθ’

(14c) is another example of a preverb-verb compound, comparable to (7c) above. The preverb takwi- ‘together with’ has been added to the Transitive Animate verb stem natom- ‘summon’.

6.3.6 Lexicalized reciprocals, antipassives

A number of verb stems in Meskwaki and other Algonquian languages exhibit frozen forms of valence-decreasing morphemes such as Meskwaki -eti- (reciprocal). For example, in (15a) kakano-eti- now means simply ‘converse’, not necessarily ‘converse with each other’; it can, for example, be used with a singular subject. Like the activity verbs in section 6.3.4 it may optionally take a second argument, expressing the person conversed with. If a second argument is used, its grammatical function is OBJθ.

(15) a. kakano-neti- ‘converse; converse with OBJθ’
    b. mi-ka-ti- ‘fight; fight against OBJθ’
    c. ahčike- ‘plant OBJθ’

(15b) likewise contains a frozen reciprocal suffix, while (15c) is a lexicalized antipassive form of aht- ‘put’, containing the antipassive suffix -ike-\(^{12}\).

\(^{11}\)Note that (14b) is an Inanimate Intransitive stem, requiring a subject in the inanimate gender, so this verb should in fact be labeled “II+O” rather than AI+O.

\(^{12}\)When verbs such as (15a-b) are used with a singular subject and a lexically expressed OBJθ it is clear that they constitute an AI+O construction rather than a
6.3.7 ‘Drink’, ‘throw’, and other verbs taking theme/patients

Finally, let us look at a few remaining verbs taking patient or theme arguments which do not seem to fit any of the categories mentioned so far.

One verb stem which is associated with the $<\text{subj obj}_\theta>$ valence pattern in all of the Algonquian languages under consideration here is ‘drink’. It is hard to understand why ‘drink’ should have this unusual valence pattern when the verbs for ‘eat’ exhibit the regular transitive valence (cf. Meskwaki $amw$- (TA), $mi$-$\dot{c}i$- (TI) ‘eat’). Both the entity drunk and the entity eaten are clearly affected by the action of the verb: based on what we have seen so far, one would predict that ‘drink’ would also exhibit the normal transitive pattern. Yet the uniformity of the $<\text{subj obj}_\theta>$ valence across the language family suggests that this is an old and stable pattern for ‘drink’. Perhaps the ‘drink’ verbs are viewed like the activity verbs of section 6.3.4, where the focus is primarily on the one-place activity of drinking, and secondarily on the liquid being consumed.

\begin{enumerate}
\item a. meno- \textit{‘drink obj$_\theta$; drink’}
\item b. meno- (Kick) \textit{‘drink obj$_\theta$; drink’}
\item c. menuah (Men) \textit{‘he drinks something, he drinks obj$_\theta$’}
\item d. minihkwê- (Cree) \textit{‘drink obj$_\theta$’}
\item e. mnikwed (Oj) \textit{‘drink obj$_\theta$’}
\end{enumerate}

Another instance of the AI+O pattern is found with verbs of throwing in Meskwaki and Kickapoo, but not in Cree, Ojibwe, and Menominee. More precisely, the final -$a$-$\text{hke}$- (Kickapoo -$a$ahkee-) ‘throw’ is AI+O, and it combines very productively with numerous initials, often expressing direction. A sample of the throwing verbs is given in (17):

\begin{enumerate}
\item a. we-$\text{pa}$-$\text{hke}$- \textit{‘throw obj$_\theta$’}
\item b. ina-$\text{hke}$- \textit{‘fling obj$_\theta$ thither’}
\item c. ni-$\text{sa}$-$\text{hke}$- \textit{‘fling obj$_\theta$ down’}
\item d. nowa-$\text{hke}$- \textit{‘fling obj$_\theta$ out’}
\item e. capookaahkee- (Kick) \textit{‘throw obj$_\theta$ in the water’}
\end{enumerate}

Finally, the two $<\text{subj obj}_\theta>$ verbs in (18) both exhibit theme obj$_\theta$s, but do not seem to fit any of the categories of theme arguments described above:

\begin{enumerate}
\item a. nokaazod (Oj) \textit{‘use obj$_\theta$’}
\item b. nitopahtwâ- (Cree) \textit{‘search for obj$_\theta$’}
\end{enumerate}

regular, symmetric reciprocal.
6.3.8 Location

In contrast to the examples of \( \text{obj}_\theta \) given above, all instances of the thematic role of theme, the \( \text{obj}_\theta \) in an AI+O verb may also express location:

\[
\begin{align*}
(19) & \quad a. \text{ahpeka-} \quad \text{‘dance on \( \text{obj}_\theta \)’} \\
& \quad b. \text{ahpe-nemo-} \quad \text{‘depend on \( \text{obj}_\theta \)’} \\
& \quad c. \text{ahpapi-} \quad \text{‘sit on \( \text{obj}_\theta \)’} \\
& \quad d. \text{pabid (Oj)} \quad \text{‘sit on \( \text{obj}_\theta \)’}
\end{align*}
\]

The verbs in (19) all contain the same initial (Meskwaki \( \text{ahp-} \), Ojibwe \( p- \) ‘on’). Note that in (19b) \( \text{ahpe-nemo-} \) ‘depend on \( \text{obj}_\theta \)’ we see the same metaphorical extension of locative ‘on’ as is found in English \textit{depend on} and \textit{rely on}.

Other AI+O verbs without the initial \( \text{ahp-} \) also have locative \( \text{obj}_\theta \)s:

\[
\begin{align*}
(20) & \quad a. \text{aakzid (Oj)} \quad \text{‘have a pain in \( \text{obj}_\theta \) [a part of the body]’} \\
& \quad b. \text{θeeθikaapaa- (Kick)} \quad \text{‘stand perched on \( \text{obj}_\theta \)’} \\
& \quad c. \text{se-sapi-} \quad \text{‘sit on top of \( \text{obj}_\theta \)’}
\end{align*}
\]

The initial \( \text{θeeθ-} \) in Kickapoo is cognate with Meskwaki \( \text{se-}\text{-}\text{s-} \); both mean ‘on top of’.

6.4 Conclusion

The above survey of Algonquian verbs exhibiting the quirky valence pattern reveals that \( \text{obj}_\theta \) in two-place verbs is likely to be associated with nonaffected entities, such as possessums and other subtypes of the theme semantic role; also certain types of locatives. Although the most prototypical transitive verbs associated with patients, such as ‘hit’ and ‘kill’, do not occur with the quirky valence pattern, we cannot assert that patients are never associated with \( \text{obj}_\theta \) in two-place verbs. The patient of ‘drink’ is realized as \( \text{obj}_\theta \) in all the languages under consideration, and the activity verbs in 6.3.4 allow patient \( \text{obj}_\theta \)s as well.

Although the descriptive survey in this paper allows us to better understand the range of uses of the quirky valence pattern, it does not seem possible to predict absolutely whether a given argument will be realized as \( \text{obj}_\theta \). Rather, the patient of ‘drink’ must be lexically specified as an \( \text{obj}_\theta \), as opposed to the patient of ‘eat’, which can undergo the default realization as an \( \text{obj} \). In terms of Lexical Mapping Theory, the Algonquian data present some interesting challenges. The theme and patient arguments of AI+O verbs could be intrinsically associated with the \([+r]\) feature, to ensure their realization as \( \text{obj}_\theta \); however, as-
sociating [+r] with the locative objθs seen in section 6.3.8 would not rule out the locatives being expressed as obl, not the desired outcome. See Dahlstrom (2009) for further discussion comparing the Algonquian quirky pattern to other LFG analyses of differential object marking.

The recurrence of the quirky AI+O valence pattern in the daughter languages points to its antiquity and stability over time: it is not only an interesting theoretical and typological challenge, but it is also of central concern for descriptive and historical Algonquian work.

References