

On the Plains Cree Passive: An Analysis of Syntactic
and Lexical Rules

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1. General Introduction.

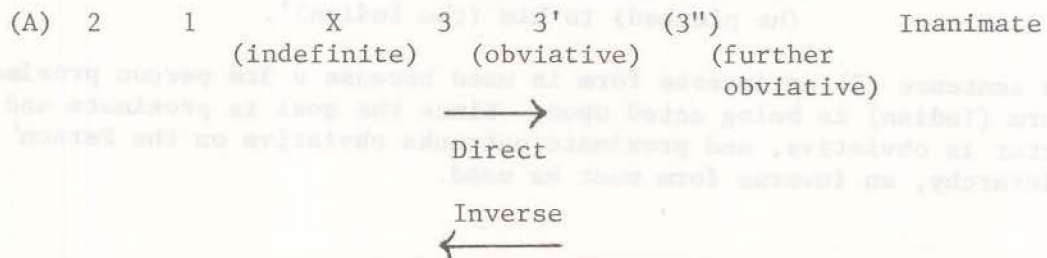
In this paper, certain verbal constructions in Plains Cree, traditionally interpreted as non-passive, are reanalyzed as passive and it is argued that by postulating a passive construction as an integral part of the Cree verbal system the entire Cree grammar is clarified.¹ Section 1 provides a brief sketch of the Plains Cree verbal system, and traditional analyses of the construction in question are reviewed. Section 2 considers the question of how we might best "diagnose" passives cross-linguistically and Perlmutter and Postal's characterization of a universal passive in a Relational Grammar (RG) framework is appealed to. Section 3 provides the central arguments for a passive construction in Plains Cree, and Section 4 considers a class of lexical passives in Cree.

1.1. Introduction to the Cree Verbal System.

Verbs in Plains Cree,² as in other Algonquian languages, exhibit complex verbal morphology, inflecting for number, person, and gender of both subject and object. Consequently, verbs can belong to at least one of the four verbal paradigms: transitive animate (TA), transitive inanimate (TI), animate intransitive (AI), or inanimate intransitive (II). Briefly, they are differentiated as follows: A TA verb expresses the performance of some action on an animate goal (i.e. object) by an animate or inanimate actor; TI verbs express some action on an inanimate goal by an animate or inanimate actor; AI verbs ascribe a quality or action to an animate entity;³ and an II verb ascribes a quality or action to an inanimate entity.

1.1.2. Direction.

Within the TA paradigm, in both the independent and conjunct orders,⁴ there is an additional category of direction, important for actor/goal distinctions in the sentence. The two sets which make up the category of direction are known as Direct and Inverse. Traditionally in Algonquian, direct and inverse forms, expressed morphologically in Cree by direct and inverse theme markers /ē/ and /ekw/ respectively, have been analyzed as denoting "the direction of the action." All TA verbs include a special direction marker or theme marker, the choice of which is based on a person hierarchy, (in Hockett's terms (1966:60), an obviation hierarchy):



If the actor of a TA verb is higher on the hierarchy (leftmost) than the goal, in Hockett's terms "less obviated", the resulting form is direct; if the goal is higher or "less obviated" than the actor, the resulting form is inverse. So, for instance, a 1st person acting on a 3rd person goal would be indicated with a direct theme sign, while action by a 3rd person on a 1st person would be indicated by an inverse theme sign. (examples are given in Section 1.2.) The hierarchy in (A) may be better termed Direction or Person Hierarchy so as not to confuse it⁵ with the proximate/obviative distinction in 3rd person forms in Cree.

1.2.

The following sentences exemplify the use of direct and inverse forms:

- (1) tsikāmā äkusi nistam kā- isih-wāpamat
 certainly thus first relative marker thus to see
 (TA conjunct direct 3-3')

ayisiyiniw wāpiski- wiyāsah⁶
 human being white man [B2-23]
 (Indian) obviative
 proximate sg.

'Certainly, thus it was, that the Indian first saw white man.'

In this sentence we understand that a 3rd person (Indian) is the actor, and a 3rd person obviative (white man) is goal, therefore a direct form is used, given that proximates outrank obviatives on the Person Hierarchy given in (A).

- (2) (ki)ka- muwāwāwak ōki atimwak [B8-16]
 future to eat those dogs
 (TA 2pl-3pl direct prox. pl. prox. pl.)

'You will eat those dogs.'

- (3) äwak ōhtsih pikw isih-kā- tōtākut
 this because whatever thus relative to do
 (TA 3'-3 conj. inverse)

mōniyāwiyiniwa [B6-7]
 Canadian
 obviative

'That is why the Canadian has been able to do whatever (he pleased) to him (the Indian).'

In sentence (3) an inverse form is used because a 3rd person proximate form (Indian) is being acted upon. Since the goal is proximate and the actor is obviative, and proximate outranks obviative on the Person Hierarchy, an inverse form must be used.

- (4) namuya matsi-kakway kā-kih-miyikuyāhk
 not evil thing rel. past to give
 (TA conj. inv. 3-1p)

manitōw [P4-23]
 spirit
 proximate

'It is not an evil thing which the spirit has given to us.'

1.3. Analyses of Inverse Markers.

Algonquianists have given various analyses of direct and inverse markers at various points in time. These different analyses are considered below.

1.3.1. Traditional Explanations.

At least some investigators have hypothesized that while direction markers do serve to specify actor and goal, inverse forms themselves are, in a sense, passive forms. (See Howse 1844, Hunter 1875, Voegelin 1946). Voegelin writes of Delaware, another Algonquian language, 'Transitive animate direct (active) and inverse (passive) third persons are marked, respectively, by suffixes -a(w)- and -kw. The two voice types are parallel, enjoying much the same possibilities of person and number affixation. Thus, in the direct (active), the prefixed person is actor while a third person is goal: nu·hala "I keep him"...But in the inverse (passive) the prefixed person may be regarded as a psychological subject with a third person agentive, or more briefly, the prefixed person may be translated as a goal with 3rd person as actor: nu·lhal@kw "I am kept by him".' In fact, many of the Cree inverse forms have been translated into English as passive (specifically in Bloomfield 1934).

- (5) nama wihkats nipahik nāhiyaw piyāsiwah [B4-15]
 not ever to kill cree thunderers
 (TA inv. 3'-3 prox. obviative
 Indep. Indic.)

'Never is a Cree killed by the Thunderers.'

- (6) äka wihkats uhtinwah kā-nipahikut [B4-14]
 not ever winds rel. to kill
 obviative (TA conj. inv. 3'-3)

'He is never killed by winds.'

- (7) nayāstaw wāpiski-wiyas matsi- manitōwah ä-
 only white man evil spirit conjunct
 proximate obviative (TA conj. inv. 3'-3)

kiskinōhamākut wayōtisiwin [B4-39/40]
 to teach wealth

'Only white man was taught by the Evil Spirit how to acquire wealth.'

- (8) äkwah nahiyaw wiya manitōwa kīh-
 now Cree himself God past
 prox. obviative (TA 3'-3 inv. Indep. Indic.)

kakāskimik
 to teach

[B10-33/34]

'The Cree was now taught by God himself.'

More recently, however, analysts have seen direct and inverse forms differently. Wolfart notes, 'The extensive symmetry of the transitive animate (TA) paradigm and the reversibility of direction in many forms are highly reminiscent of voice in the Indo-European languages. However, the tempting similarity of the verbal forms must not be allowed to obscure the fundamental difference' (1973:25). Also, as Wolfart points out, Bloomfield in his work with various Algonquian languages claims no voice contrast in the TA paradigm, but maintains the direct/inverse contrast, and Hockett follows his example in his description of Potawatomi (see Bloomfield 1958). Bloomfield and Hockett differ, however, as to whether there exists a productive passive in Cree. Bloomfield terms passive the indefinite actor forms in all four main paradigms, which usually translate into English as agentless passives. The following sentences provide examples of indefinite actor forms.

- (9) äkwah ispīh kīskinohamōwan tanīs ta-
 then at that time to teach how future
 (TA indef.-3 direct (AI 3rd
 Indep. Indic.) sg. conj.)

tōtahk
 to perform

[B4-3/4]

'And at the same time, he was taught how to perform it (by someone).'

- (10) nāhiyawak äkutah tahtw- āskiy
 Cree to that place every year
 prox. pl.

kīhmiyawak
 past to give
 (TA indef.-3 pl. direct Indep. Indic.)

[B4-28/29]

'It was given to the Cree every year (by someone).'

- (11) potih nipahaw
 Oh! to slay
 (TA indef.-3 direct Indep. Indic.)

[B6-12]

'He was slain (by someone).'

Hockett, working with Potawatomi, which has no indefinite actor forms, argues against a passive in Algonquian in any sense. 'Algonquian "passives" are not like those of Latin or Greek; rather they (the indefinite forms) are special inflected forms for indefinite actor, showing the same inflectional indication of object shown by other inflected forms of the same verb' (Bloomfield 1958:vi.) I provide a different account of these indefinite forms in Section 3.

1.3.2.

The general consensus more recently, then, has been that inverse/direct forms should not be analyzed as passive but should instead be strictly interpreted as marked for "direction" so as to reflect the actor/goal relationship. It should be pointed out, however, that this consensus is based entirely on the notion of passive as known from Indo-European languages: a stylistic option derived in some sense from more basic active sentences, though there are restrictions even here. (Syntactic arguments are given below which shed a different light on the problem). It is argued on a number of grounds that these inverse forms, as Voegelin suspected, are indeed passives. (For parallel analyses in other Algonquian languages, see Rhodes 1980 and LeSourd 1976).

2.1.

What is needed, then, is a clear statement of what the passive construction consists of. I believe the reason for most Algonquianists' failure in recognizing the passive is this lack of a diagnostic tool. As Perlmutter and Postal (1977, henceforth P & P) point out, the cross-linguistic variation found in verbal morphology, nominal case marking, and word order in passive sentences is such that it is virtually impossible to "identify" universal passive indicators of any sort. However, it is possible, given general observations about passive universally, to characterize the construction succinctly and to use certain aspects of it diagnostically to determine "passiveness". P & P argue that in characterizing passive universally, we must appeal to notions such as "subject of" and "object of", two of the grammatical relation primitives of Relational Grammar. P & P's claim is that I and II below characterize passive in every language, though they will be manifested differently cross-linguistically. Thus, in the sentence John was hit by Bill a final passive intransitive stratum (intransitive in the sense that there is no object) results from an initial transitive stratum. The claim made by P & P is that intransitivity of the final stratum will be true of any passive construction in any language.

- I.
 - i. A direct object of an active clause is the (superficial) subject of the corresponding passive.
 - ii. The subject of an active clause is neither the (superficial) subject nor the (superficial) direct object of the corresponding passive (specifically, it is en chômage or is absent entirely, as in many languages with agentless passives).

(i) and (ii) taken together have the following consequence:

- II. In the absence of another rule permitting some further nominal to be direct object of the clause, a passive clause is a (superficially) intransitive clause.

2.2.

Thus, we now have a diagnostic tool by which to test the so-called passive in Cree, in that if inverse forms can be shown to be syntactically intransitive, they may be called passive. It is argued that despite the claims to the contrary by Wolfart, Bloomfield, and Hockett, inverse forms in the TA paradigm are indeed passive forms. Moreover, it can be shown that these forms are obligatorily passive, based on the Person Hierarchy

discussed earlier. Finally, the passive analysis of inverse forms to be given here has the added benefit of explaining a number of troublesome grammatical relations and problems associated with any traditional analysis of the inverse forms:

- (1) Why inverse and direct forms appear to show an asymmetry with marking of direct object and subject at different syntactic levels.
- (2) Why the inverse theme marker gives no information as to the object or subject, while the direct theme marker does, in general.
- (3) Why some form of the inverse theme sign /ekw/ shows up, not only in inverse forms, but also in what Wolfart calls "marginal" paradigms-- the Indefinite Actor Paradigm and the Inanimate Actor Paradigm.
- (4) Why the indefinite actor forms show no inverse form with the TA paradigm.

By reanalyzing morphology traditionally treated as inverse markers as a marker of the passive, we can answer the above questions, and account for some of the seeming inconsistencies.

3.1.

Below we consider properties of Independent Order verb agreement in some detail. The analyses given in this section follow the traditional Algonquian approach in, for example, the use of terms actor and goal. In Section 3.3, we consider an alternative to such an analysis, which provides arguments for a passive analysis.

3.1.2.

It is first important to understand the agreement properties of the direct forms in the TA paradigm. TA verbs make inflectional references to an actor and an animate object. As was noted earlier, TA direct forms can conceivably be any one of the following types, based on the Person Hierarchy restrictions:

- (a) A second person acting on a first person:

kitasamin 'you feed me' [W24-2.5]

- (b) A non-third person acting on a third person:

nitagamāw 'I feed him' [W24-2.5]

kitagamāw 'you feed him'

- (c) A proximate third person acting on an obviative:

asamēw 'he (prox.) feeds him (obv.)' [W24-2.5]

- (d) An obviative acting on another (further) obviative:

asamēyiwa 'he (obv.) feeds him (obv.)' [W24-2.5]

- (e) An indefinite person acting on a third person:

asamāw 'someone feeds him' [W24-2.5]

In considering the inflectional morphology of the above examples, it is important to note four types of forms:

- (1) Those whose reference involves a third person and a non-third person--the mixed set;
- (2) Those whose reference is to third person only--third person forms
- (3) Those whose reference is to first and second persons only--the you-and-me set
- (4) Those whose reference is to an indefinite actor--the indefinite paradigm.

In the mixed set of the Independent Order, both actor and goal are expressed morphologically. In nitawamāw 'I feed him', ni- is the personal prefix identifying a first person and -w the suffix identifying a third person proximate singular form. The -a- functions as a theme marker for direct action.

In the third person forms, only the actor is expressed morphologically, so that in asamēw 'he (prox.) feeds him (obv.)', -w marks third person proximate singular, with -e- functioning as direct theme sign.

In the you-and-me set, only the actor is expressed morphologically, so that in kitasamin 'you feed me', the prefix ki- and the suffix -n taken together identify a second person, and -i- functions as the direct theme marker.⁷

It should be mentioned that not only can direct/inverse forms be identified in the Independent Indicative Order of the TA paradigm but also in the Conjunct Order. The same principle of direction follows there, though the specific conjunct morphology is not dealt with here.⁸

Now we turn to verbal morphology in the inverse forms. The following are inverse forms for the root asam- 'to feed' (based on the forms in [W24-2.5]):

- (a) A first person acting on a second person:

kitasamitin 'I feed you'

- (b) A third person acting on a non-third person:

nitasamik 'he feeds me'

kitasamik 'he feeds you'

- (c) An obviative third person acting on a proximate:

asamikwak 'he (obv.) feeds them (prox. pl.)'

- (d) A further obviative third person acting on an obviative:

asamikoyiwa 'he (further obv.) feeds him (obv.)'

- (e) An indefinite actor acting on a non-third person:

nitasamikawin 'someone feeds me'

The inverse theme marker in all but the you-and-me set is underlyingly /ekw/ ~ /eko/ ~ ∅, following Wolfart's morphophonemics, with phonological variants of -ikw, -iko-, -ik-, and ∅, and idiosyncratic

morphological variants such as -ikawi- in the indefinite actor paradigm. /et/ ~ /eti/ (realized as -it- and -iti-) marks inverse forms in the you-and-me set. Note the following agreement properties of the inverse forms:

In kitasamitin, ki--n agrees, in this case, with the goal, not the actor as it would were it a direct form. -it- marks inverse action.

In asamikwak, -wak marks a proximate plural goal third person and -ik marks inverse action.

In asamikoyiwa, -iko- marks inverse action, -yi is a thematic obviative morpheme, and -wa identifies that a third person is involved, in this case a third person goal.

Finally, in nitasamikawin, ni--n identifies a first person, in this case the goal, and -ikawi- is the suffix of the indefinite actor paradigm.

3.2. Passive Analysis.

It is essential, in order to get a clear picture of the Cree verbal system, to analyze agreement properties of personal affixes and direction markers separately. The marking of grammatical relations and how the direction markers and personal affixes function, given a traditional Bloomfieldian analysis, is contrasted with how they function give a passive analysis. I show that without a passive analysis of the inverse forms the appearance of personal affixes is not correlated with grammatical relations at any one level. With a passive analysis, however, a generalization can be made concerning agreement with final subjects. Further, if we analyze the inverse marker /ekw/ as a passive marker and direct markers as agreement markers for final objects, we can explain the fact that /ekw/ provides less information than direct markers concerning objects. It is argued that, in fact, /ekw/ signals the absence of a final object (though it does indicate that there was an initial object), which strongly suggests the intransitivity of these "inverse" forms.

3.2.1.

The following charts outline the information about grammatical relations which are available from personal affixes, given the traditional analysis of direct and inverse forms:

Chart A

	<u>Direct</u>	<u>Inverse</u>
(A)	<u>Mixed Set</u>	
	Subject and Object	Subject and Object
	kitasamāw 'you feed him'	nitasamik 'he feeds me' ⁹
(B)	<u>Third Person</u>	
	3-3' Subject	3-3' Object
	asamēw 'he (prox.) feeds him (obv.)'	asamikwak 'he (obv.) feeds them (prox.)'
	3'-3'' Subject and Object	3'-3'' Subject and Object
	asamēyiwa 'he (obv.) feeds him (obv.)'	asamikoyiwa 'he (further obv.) feeds him (obv.)'

Chart A (cont'd)

(C) You-and-Me Set

Subject

kitasamin 'you feed me'

Object

kitasamitin 'I feed you'

(D) Indefinite Forms

Object

asamāw 'someone feeds him'

Object

nitasamikawin 'someone feeds me'

The following chart shows information provided by direct/inverse theme markers concerning the object:

Chart B

Direct:

ā

ē

i

Inverse:

/eti/

/ekw/

Object

3 or 3'

3' or 3''

1

2

1, 2, 3, 3', indef.

3.2.2.

If we assume that different grammatical relations can be marked at different levels (see Perlmutter 1980) and if we make the further assumption that inverse forms are passive, a pattern of agreement begins to emerge.

In the you-and-me set, kitasamin 'you feed me', the initial and final subject (second person) is marked by ki(t)-n. (In direct forms such as we have here, we assume that the initial level and the final level subject are the same; under a passive analysis initial object equals final subject for the same nominal). In this example, if -i- is analyzed as an object agreement marker instead of a direct marker, the final and initial object is also indicated. In kitasamitin, 'I feed you' agreement is with initial object (second person). If -it(i)- is analyzed as an agreement marker (instead of a passive marker) then initial subject is also marked here.¹⁰

In the mixed set, kitasamāw, 'you feed him', initial and final third person object is marked by -w. In the inverse forms, nitasamik 'he feeds me' and nitasamikwak 'they feed me', both initial object and initial subject are marked. ni- marks first person initial object/final subject and \emptyset marks a third sg. initial object (see footnote 9) and -wak marks a third pl. initial object.

In third person forms, as in asamēyiwa 'he (obv.) feeds him (further obv.) initial and final subject is marked; 3' is marked by -wa and the initial/final object, 3'', is marked by -yi. In the inverse form, asamikoyiwa, the initial object/final subject and the initial subject/final chômeur are marked respectively by -wa and -yi.

In the indefinite paradigm, direct form asamāw, 'someone feeds him', initial/final object is marked by -w, and again, if -ā- is an agreement marker, initial/final subject is marked. In a form in which an indefinite is acting on something higher on the hierarchy, for instance indef. -1, nitasamikawin 'someone feeds me' the initial object is marked by the prefix ni(t)- (the initial object is also the final subject, given the passive analysis).

The various direct and inverse markers are considered more closely below. The direct marker -ā- found in third person forms signals that an initial or final object is 3 or 3'. -ē-, also found in third person forms, signals an initial/final object as being 3' or 3''. An -i- direct marker, found in the you-and-me set, marks an initial/final object as being first person.

On the other hand, with the so-called inverse markers, we get exact information only as to what the initial object is; /et(i)/ signals the initial object as second person, and an inverse marker of /ekw/ signals an initial object of either first, second, third (prox.) or third (obv.) persons.

3.2.3.

Given Bloomfield, Hockett, and Wolfart's analysis of direction markers, it is not possible to link the appearance of specific personal affixes and their referents to certain grammatical relations at any one level. (See Chart A). With a passive analysis of these inverse forms, there is always agreement with final subject. We can formulate the following agreement rule for Cree:

(D) The verb must always agree with final terms.

The indefinite forms seem to be an exception to this generalization, but if we posit \emptyset as the indefinite subject marker, we can save the generalization.¹¹

Although there is always agreement with final subject, there is, in some cases, also agreement with final object. The cases cited above involved 3''-3' forms, and third persons in the mixed set showing a mark for initial object/final subject in the inverse. Although this 'extra agreement phenomenon' may seem inconsistent with the operation of the other sets, its consistent application allows us to state just when extra agreement will occur and so does not threaten to weaken our generalization concerning agreement with final subject.

Let us turn to the implications of information given by direction markers: the imbalance of predictions made by direct and inverse markers cannot be overlooked. While direct markers help delineate the initial object to a fairly specific degree (since there are three different direct markers), /ekw/ gives no such information at all, with the same morpheme figuring in so many of the inverse forms (see above). From this observation, we might conclude that direct markers are in some sense agreement markers for final objects (i.e. direct theme markers mark both initial and final object, since the nominal has the same grammatical relation at both levels).

On the other hand, /ekw/ simply registers the possibility of one of several initial objects, and initial objects only.

In this way, then, the so-called inverse forms are rendered intransitive since these clauses show no final object (See Perlmutter 1980). The intransitivity of /ekw/ constructions is a crucial consequence for our passive analysis since this was recognized as a defining property of passive clauses in Section 2. Our analysis, in fact, rests on maintaining that all /ekw/ constructions are intransitive.

3.3.

It seems at this point, then, that the passive analysis is secure, supported by specific agreement phenomena noted above. Given what we now know about agreement, problems with the you-and-me set can be examined.

Up until this point we have assumed that subject-verb agreement is defined on final terms. Thus, if there is 2 → 1 advancement, the theme marker shows no overt indexing of the object. As LeSourd (1976) points out in examining this same question in Fox, another Algonquian language, the exception to this seems to be in the you-and-me set, where the inverse marker is /i/ ~ /en(e)/. The cognate forms in Cree, /e/ ~ /et(i)/, are unique in showing no form of /ekw/. Also in Cree, as in Fox, these "passive" markers indicate the object as being first person (/et/ occurs in the direct and inverse sets of the TA paradigm as the first person suffix). LeSourd has suggested that in order to account for these aberrant forms, which are counter to the generalizations which the passive analysis allows us to make, object agreement must (in his terms) precede passive in forms of the you-and-me set.¹² In this way, then, even after the passive has applied and the first person subject is place en chômage, the inverse marker notes the presence of a first person at some level. If we assume, as LeSourd does, that this is an object agreement marker, then we have a problem in not being able to call this clause intransitive; our passive hypothesis thus seems endangered. However, if we assume that, in this case, the passive marker is indexing the initial 1 in the clause and does not neutralize it as the other sets do, then our generalization is safe. This, I believe, is the more viable analysis, and below I discuss my reasons for arriving at this conclusion.

3.3.1. The you-and-me inverse forms can be analyzed:

- (A) As not being passives in the same sense as the other sets.
- (B) As being passives, but passives with a few special features:
 - (1) The passive marker is /et(i)/ instead of /ekw/ or some variant of it.
 - (2) Like the 3"-3' forms, there is agreement with more than just final subject, if /et(i)/ is an indicator of an initial first person subject.

First, let us look at reasons for not considering these forms as passive. Support for this analysis comes from the fact that no form of /ekw/ occurs as the "inverse" marker. A reason for this inconsistency of you-and-me forms not showing a normal passive form may lie within the you-and-me set itself. Hockett (1966:65) identifies you-and-me forms as "local" forms: 'Local forms can thus be classed (using Bloomfield's terms) as I-thee and

thou-me.' Thus, while first and second person forms rank highest on the hierarchy and are functional in defining direct vs. passive forms in the mixed set, it could be that in relation to one another you-and-me forms are not passive in the same sense as the rest. Interaction between first and second person positions on the hierarchy may not be the same as interaction between other positions on the hierarchy. In fact, first and second persons may form a unit, i.e. occupy the same rank on the hierarchy in which passive is not an option. This does not mean that first and second person forms are "immune" in some sense to passive, since they do operate in a predictable manner in the Mixed-Set. The suggestion is that they do not reciprocally form passive. Moreover, there seems to be evidence that such a restriction on first and second person forms is not uncommon. Specifically in Picuris, passive is obligatory if the subject is third person and the object is a non-third person. Passive is optional, however, when the subject and object are both third person, and impossible if subject is non-third person and object third person, or when subject and object are both non-third persons.

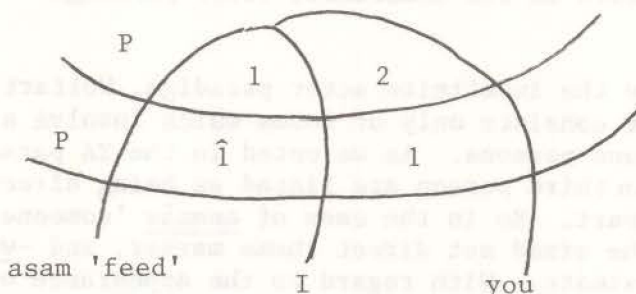
There is also a problem in that what we considered to be a mark of the passive, /ekw/ does not show up in you-and-me set "inverse" forms, though it does in every other set, and as we shall see certain "marginal" paradigms which are analyzed as passive. Obviously, /et(i)/ cannot be analyzed as a phonological variant of /ekw/. Though this absence of /ekw/ in the you-and-me set inverse forms is troublesome, it need not be the decisive factor in determining the non-passivity of these forms.

More troublesome is the fact that agreement in these "inverse" forms is not just with final subject. If /et(i)/ is analyzed as marking an initial first person subject, then, like the 3"-3' forms, we have agreement with more than final subject. This agreement with an initial subject (and given the passive analysis a final chômeur) creates two problems. First, it threatens the generalization stated as (D) in Section 3.2.3, and second, it seems to suggest that the chômeur is marked on the verb in these cases. As was suggested, we might assume that this marks agreement not with a chômeur but with an initial subject, a feature of Cree grammar which seems independently motivated by 3"-3' forms and third person forms in the mixed set in the inverse. Though this marking of initial terms in restricted forms may appear ad hoc, the consequences of not analyzing the forms this way must be considered. If we are forced to give up a passive analysis in you-and-me forms because of this agreement property, we will also be forced to give it up for the other forms similar to them. This would create a serious problem since 3"-3' forms do indeed show /ekw/ in their inflection. Further, this would mean splitting up third person forms and mixed set forms into those that do allow passive and those that don't. At present, there seem to be no independent reasons for doing this.

3.3.2.

The decisive evidence in favor of you-and-me inverse forms being analyzed as passive comes from the generalization concerning agreement with final subjects. If we do not interpret the inverse form as a passive, with second person initial object advancing to second person final subject, then the only exception to our generalization concerning agreement with final subjects is this one. If we assume, as the passive analysis allows us to, that second person is the final subject, we can safely posit

second person Subject in inverse forms, and we do not miss a generalization. In the you-and-me direct forms, then, kit-n in kitasamin 'you feed me', as does the kit-n in kitasamin 'you feed him' and also the same prefix which occurs in the IA and TI paradigms, for example, B8/9 kika-nimihitunawaw 'you (pl.) will dance' (AI), and B8/11 kik-astanawaw 'you (pl.) will place it' (TI), marks an initial and final second person subject, and in the passive form kitasamitin 'you are fed by me', kit-n marks a final second person subject. (The same principle can be stated in terms of ni-n where ni-n marks an initial/final first person in the AI and TI paradigms as well as in the TA paradigm direct forms where first person is acting on anything except a second person.) The stratal diagram below illustrates the change in terms kitasamitin:



The evidence of the final-subject agreement generalization suggests that it is a better option to consider you-and-me forms as idiosyncratic passives instead of non-passive forms. Otherwise, Generalization (D) is threatened and the agreement pattern which emerges from the Cree verbal system as a result of it is destroyed.

3.4. Extension of /ekw/ in other paradigms.

An analysis of /ekw/ as being the marker of passive allows us to account for two additional paradigms treated differently by Wolfart: the TA indefinite actor paradigm and the TA inanimate actor paradigm. In both of these paradigms, a variant form of /ekw/ occurs: /eko/ in the inanimate actor paradigm and /ekawí/ in the indefinite actor paradigm. Note the following sentences containing examples of these forms:

- (12) kīkway mākwahikōw [W61-5.83]
 something to bother
 (inanimate-3, inanim. paradigm)
 'Something bothers him.'

In this case, an inanimate is acting on a third person animate; -iko is the inverse marker in this paradigm and -w marks a third person object.

- (13) äyukuh tahtw-āskiy kita- tōtahkik ayīsiyiniwak
 this annual future to do people
 (TI conj. 3 pl) prox. pl
 kīh- miyāwak [B4-2/3]
 past to give
 (TA indef.-3 pl.)

'The people were given the annual performance of this rite.'

In this sentence, the goal is third person, so the verb is inflected as a regular TA independent indicative.

Contrast (13) with (14):

- (14) nipīhtokwehikawinān [W62-5.84]
to take inside
(Indef-1 pl. Indefinite Paradigm)
'We were taken inside (by someone).'

Since the goal in this sentence is non-third person with an indefinite actor, it is inflected in the indefinite actor paradigm.

3.4.1.

With regard to the indefinite actor paradigm, Wolfart (1973:62, Section 5.84) notes that it consists only of forms which involve a non-third goal, i.e. first and second persons. As we noted in the TA paradigm, forms with indefinite acting on third person are listed as being direct forms with no inverse counterpart. So in the case of asamāw 'someone feeds him' - -ā- functions as the mixed set direct theme marker, and -w- identifies a third person proximate. With regard to the appearance of /ekawi/ Wolfart states (1973:62): 'The relation between /ekw/ and the suffix of the TA indefinite paradigm /ekawi/ remains unexplained'. Though Wolfart, in making this statement, is concerned only with the morphology of the /ekw/ ~ /ekawi/ relationship, he gives no indication that they should be related in any way. By analyzing these indefinite actor forms as passive, we can account for (1) the similarity (though not the exact forms) of the morphemes /ekw/ and /ekawi/ and (2) the fact that the indefinite actors in the main TA paradigm have no inverse counterparts. In fact, the separate indefinite actor paradigm contains forms which are all passive as I have characterized passive in Plains Cree, and /ekawi/ is evidence of this. Given the Person Hierarchy and the position of the indefinite on it, if an indefinite acts on first or second persons it must be an inverse form, or, under the new analysis, a passive form. The reason that indef.-3 forms are not contained in this marginal indefinite actor paradigm is that they are included as direct forms in the TA paradigm, and rightly so, assuming the form of the hierarchy given earlier.

3.4.2.

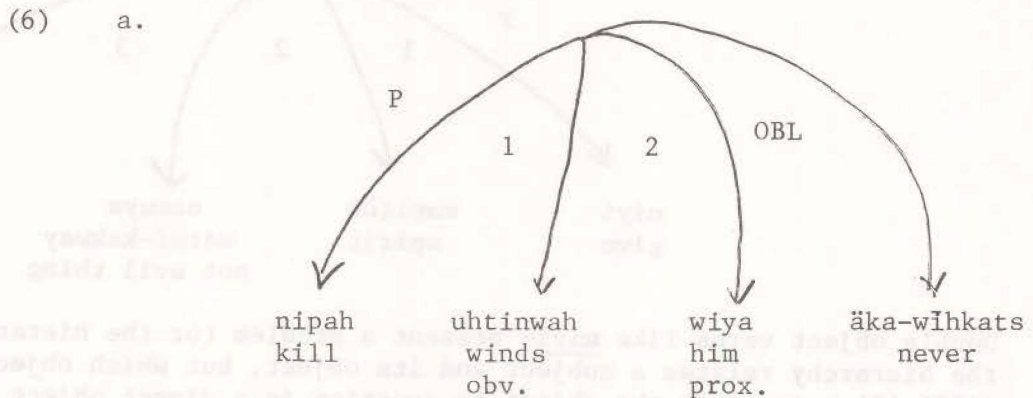
Following this same line of reasoning, it is also not surprising that we find /ekw/ in the inanimate actor paradigm. Wolfart states (1973:61): 'The transitive animate (TA) inanimate actor paradigm is based on the theme sign /ekw/ ~ /eko/'. Given our analysis of inverse forms as passives, we can account for the occurrence of /eko/. Assuming the person hierarchy, inanimates rank below all animates and would, therefore, require an inverse marker. Finally, in both the indefinite actor and inanimate actor paradigms, Generalization (D) argues for a passive analysis. In the sentence nipīhtokwēhikawinān 'they took us inside' where 'they' is indefinite, we note the first person plural affix ni-nan. Similarly, in the inanimate actor paradigm, Wolfart (1973:61) gives the following forms:

1	ni-	ikon
2	ki-	ikon
21	ki-	ikonanaw
3		-ikōw-, -ik
3 pl.		-ikwak

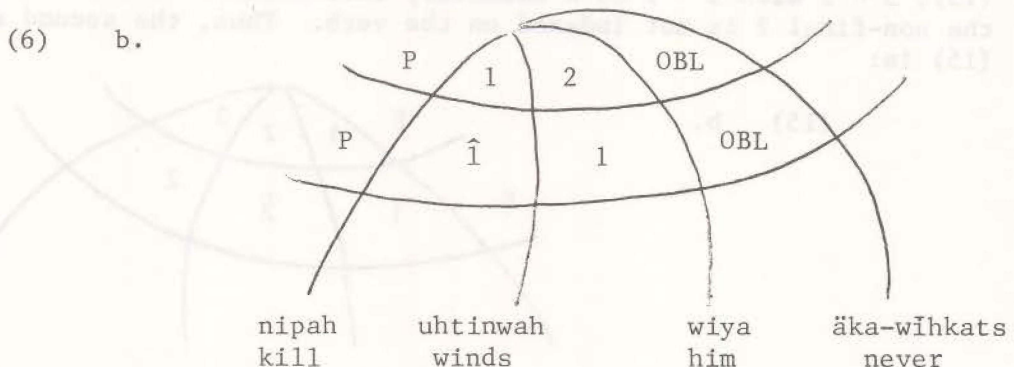
Thus, the distribution of ni- and ki- in these so-called marginal paradigms conforms Generalization (D) since first and second persons in these paradigms are final subjects in each case. Although the occurrence of the inverse marker within these two paradigms can be explained simply by appealing to directionality of an action, analyzing these forms as obligatory passive also allows us to account for the appearance of some form of /ekw/.

3.5.

Let us now give an analysis of sentence (6): äka wihkats uhtinwah ka-nipahikut 'He is never killed by winds' cited above employing the passive. In a relational framework, the initial stratum of this sentence would be:



In the initial stratum, then, winds is the subject and third person proximate form wiya 'him' is the object. Note that this stratum in Cree is not well-formed as a final stratum since a more obviated actor is acting on a less obviated goal. It is when this situation arises that the passive rule is obligatory, yielding the following network:



At this level in the network, /ekw/ marks the verb as passive, and -t marks the final subject as third person proximate sg. While there is no overt

marker of uhtinwah as chomeur, it triggers no marking on the verb at all.

3.6. Double Object Verbs.

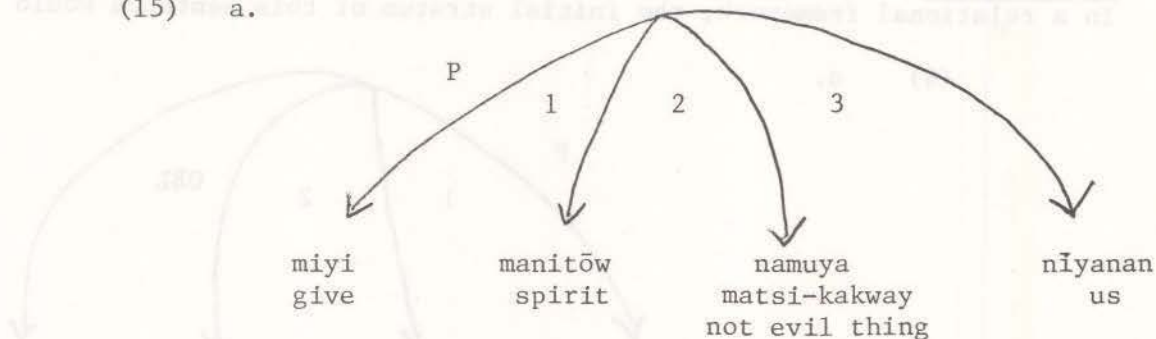
It is useful at this point to note consequences in Cree of Postal's (1980) Principle of Initial Determination. While in the above clause the proximate third person sg. pronoun is unquestionably the 2 term object, many 2 term objects in Cree are initial level 3's or Benefactees. Note the following sentence:

- (15) namuya matsi-kakwy kā- kīh- miyikuyāhk
 not evil thing rel. past to give
 (TA inverse conj. 3-1 pl.)

manitōw [P4-23]
 spirit
 prox.

'It is not an evil thing which the spirit has given us.'

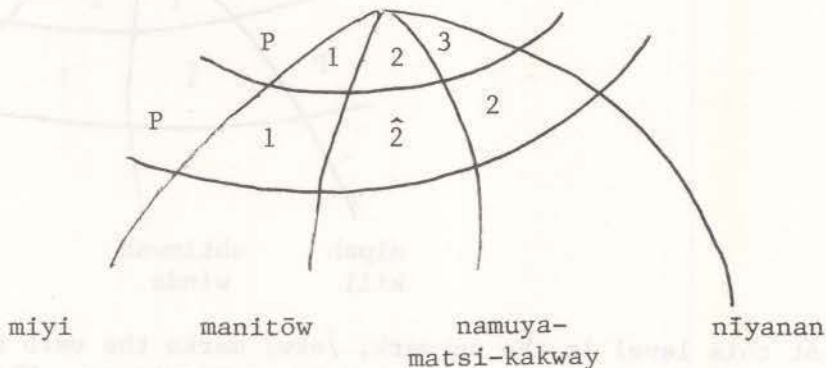
(15) a.



Double object verbs like miyi- present a problem for the hierarchy; i.e. the hierarchy relates a subject and its object, but which object? LeSourd (1976:19) notes that the object in question is a direct object only when a logical indirect object or benefactee object is absent: 'Whenever a logical indirect or benefactive object is present in a clause, it counts as a direct object for purposes of inflection'. The logical direct object triggers no index on the verb at all.

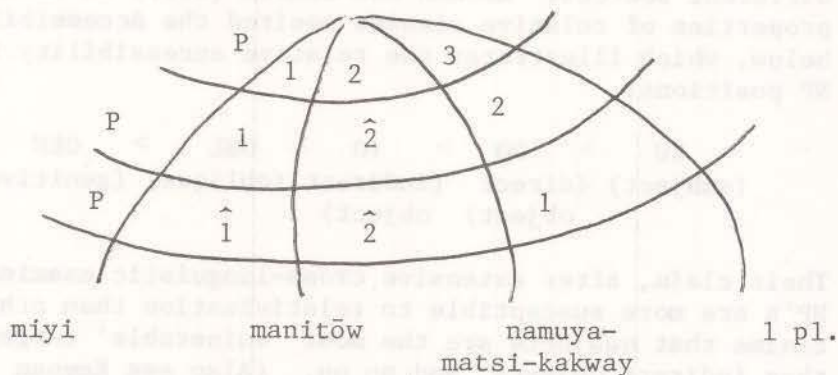
What these facts suggest is an advancement rule of in this case of (15), $3 \rightarrow 2$ with $2 \rightarrow \hat{2}$ as a necessary side-effect. This accounts for why the non-final 2 is not indexed on the verb. Thus, the second stratum of (15) is:

(15) b.



The rule, then, of $3 \rightarrow 2$ advancement is obligatory, and it is also the case that benefactees undergo obligatory $Ben \rightarrow 2$ advancement. In network (15b) the conditions are met for obligatory passive since a third person, which ranks lower on the Person Hierarchy than a first person, is acting on a first person. Thus the complete network appears as follows:

(15) c.



3.6.1.

Positing obligatory $3 \rightarrow 2$ or $Ben \rightarrow 2$ advancements has several important implications. First, it allows us to generalize the rule of passive as acting only on final 2's; otherwise, we would be forced to state a rule of "passive" at least 3 ways: once applying to direct objects, another to account for indirect objects, and still another to account for benefactee advancement. Although Perlmutter and Postal (to appear) argue that direct and indirect objects can be grouped together as simply Object, advancement of benefactee means a generalization to Object-advance-to-Subject won't work. Further, the $3 \rightarrow 2$ advancement analysis predicts the advancement of $2 \rightarrow 1$ under the conditions set forth by the Person Hierarchy. The analysis of Wolfart's (1973:75), which says that in double-object verbs the verb cross-references the subject and indirect (and not the direct) object, makes no such prediction. 'The meaning of these verbs clearly reflects their morphological structure: the inanimate goal of the underlying stem, although not cross-referenced in the derived verb, is still the primary object, and the animate goal of the derived stem is the secondary object; since in the great majority of instances it is the beneficiary of the action, we may also call these verbs "benefactive"'. What Wolfart fails to capture is a generalization concerning the different possible objects available in a TA form, and which ones actually receive morphological indexing in the paradigm.

3.7.

Thus, our passive analysis, taken together with $3 \rightarrow 2$ advancements accounts for the following facts:

- (1) The inverse and direct forms show an asymmetry with marking of direct object and subject at different syntactic levels.
- (2) /ekw/ provides no information as to object, in general.
- (3) /ekw/ shows up in the indefinite and inanimate actor paradigms.
- (4) The indefinite actor forms show no inverse form in the TA paradigm.

3.8. Support from Universal Grammar.

An additional piece of evidence which seems to support our passive analysis comes from Universal Grammar. Support for Johnson's Relational Hierarchy, given in Chapter 2, Section 2.1.2, has come from a number of different sources. Keenan and Comrie (1977) in their analysis of universal properties of relative clauses posited the Accessibility Hierarchy given below, which illustrates the relative accessibility to relativization of NP positions:

SU	>	DO	>	IO	>	OBL	>	GEN	>	O COMP
(subject)		(direct object)		(indirect object)		(oblique)		(genitive)		(object of comparison)

Their claim, after extensive cross-linguistic examination, is that certain NP's are more susceptible to relativization than others. The above hierarchy claims that subjects are the most 'vulnerable' targets, then direct objects, then indirect objects, and so on. (Also see Keenan (1975).) The similarity between the Accessibility Hierarchy and Johnson's Relational Hierarchy (SU < OBJ < IND. OBJ. < OBL) is striking.

Kuno's extensive work on the notion of "empathy" and syntax (1975, 1976a, 1976b, 1977) has resulted in hierarchies of the following sort:

speaker > hearer > third person

subject ≥ object ≥ by-agentive

human > animate nonhuman > thing

The similarity between Kuno's hierarchies and the Person Hierarchy in Cree is also striking (a difference being in the addresser/addressee positions).

Analyses which support some form of Johnson's Relational Hierarchy also indirectly support the passive analysis in Cree for the following reason. Given a passive analysis, final grammatical relations end up corresponding to final grammatical positions on the Relational Hierarchy; without passive, there is no such correlation. So, for instance, if the form nitasamik 'he feeds me' is analyzed as an inverse rather than a passive form, a lower position on the hierarchy is acting on a higher position of the hierarchy:

2 ① Indefinite ③

←

If, however, we analyze this form as a passive form, the first person, indicated by ni-, bears the final grammatical relation of subject, and the correlation between the Person Hierarchy and the Relational Hierarchy is maintained. Thus, everything which is a final subject in Cree ends up higher on the Person Hierarchy than any final non-subject. If there is, then, any basis for a universal hierarchy of the sort mentioned above, we can see this as providing a functional motivation for the application.

3.9.

It can be concluded, then, that the Cree passive is not limited to indefinite actor forms as Bloomfield believed, but is, in fact a quite

vital part of the verbal system. By examining more closely inverse forms in the TA paradigm, we can see that these forms constitute passive forms (as passive is defined universally).

As was noted in Section 1, the failure of Bloomfield, Hockett and others to analyze inverse forms in Cree as passive was a result of their own beliefs about what passives looked like--a belief not in keeping with the properties of the inverse forms. There are at least two characteristics of Cree passives which seem, to many Algonquianists, "unpassivelike": (a) the fact that passives are either obligatory or impossible, and (b) the fact that operation of passive is dependent on a person hierarchy, described in Section 1. Though this may, at first, seem to not be a feature of passives cross-linguistically, we must keep in mind that P & P's universal characterization of passives says nothing about optionality in this rule. Perlmutter (1980:203-204) states: 'The detailed study of individual languages reveals that a particular construction in a given language may be restricted to a particular mood or aspect...or possibly only in certain syntactic environments. Similarly, a particular construction may be linked in individual languages with semantic, pragmatic or presuppositional effects', and in Perlmutter (1978:183) he proposes that there can be 'Interaction of the Passive construction with hierarchies of person, animacy, etc.' For discussion of constraints on passive or "passivelike" construction similar to those in Cree, see Hale (1975) on Navajo and Zaharlick (this volume) on Picuris.

4.0.

Up until this point it has been assumed that passives in Cree were restricted to the sort described in Section 3. They were defined as passive on the basis of P & P's universal characterization of the construction (see Section 2.2) and it was argued that analyzing the construction as passive allowed for a more straightforward account of the workings of the Cree verbal system. Even those analysts who disagree with relational grammar's formalism of passive do agree with its description in a functional sense. Bresnan (1978:88), who argues for a lexical treatment of passive, states, 'An active-passive relation exists in many languages of the world, having highly different syntactic forms. The syntactic form of the relation seems to vary chaotically from language to language. But an examination of functional structures reveals a general organizing principle. Perlmutter and Postal (1977) have proposed that the active-passive relation can be universally identified as a set of operations on grammatical functions: "Eliminate the subject", "Make the object the subject".' She goes on to say, however, that 'Perhaps the active-passive relation belongs to a universal "logic of relations" by which the lexicon of a human language--the repository of meanings--can be organized' (p. 23). As is subsequently argued, Bresnan's conception of passive when applied to the Cree constructions in question is not consistent with other conceptions of lexical rules, notably Partee (1975), Dowty (1975, 1978) and Wasow (1976).

In examining Cree passives earlier, the passive marker /ekw/ was observed in other paradigms, and these were seen as consistent with generalizations made concerning obligatory passive and the Person Hierarchy. This does not exhaust the positions where /ekw/ or some form of it occurs, however, nor does it exhaust the form that passive constructions in Cree might take. This section looks at these constructions in Cree and argues that they might well be characterized as 'lexical' passives.

4.1.

Wolfart, in his discussion of word formation processes in Cree (pp. 70-71, Section 6.43), briefly lists a number of so-called intransitive and inanimate verb finals which form animate intransitive and inanimate intransitive verbs. Two abstract finals, -isi- /esi/ for animates and -a- or -an- for inanimates, are freely added to all stems--roots, extended roots, particles, and other verbs. So, from the root kaskitē- 'black' the addition of the final -isi- gives kaskitēsīw 'he is black'. These finals also occur in complex finals, i.e. a sequence of two or more medials or finals: Wolfart (1973:71) states, 'Thus -isi- is part of the complex final ākosi- which derives "medio-passive" verbs from transitive inanimate stems, e.g. itēyihtākosiw 'he is thus thought of' from itēyiht- (TI) 'think so of it'; nisitawēyihtakosiw 'he is recognized' from nisitawēyiht- (TI) 'recognize it'... (The other constituents of the complex final are the inverse or "passive" marker /ekw/ and a pre-final element -a-.¹³ These complex finals are noted as occurring with roots with finals denoting sensory perception 'such as TA -naw, TI -n 'see', TA -htaw-, TI -ht 'hear'; e.g. ohcinākosiw 'he is seen from there'... kitimākihtākosiw 'he sounds pitiable' (p. 71)'. Verbs with these particular complex finals generally denote single action, thus differing from so-called middle reflexives which refer to habitual action of some sort.¹⁴

-isi- -an- also combine with another alternant of /ekw/ to form the complex final -ikōwisi- meaning 'action by supernatural (or higher) powers'. These finals combine with TA stems, but like the medio-passives discussed above, are inflected in an intransitive paradigm. A common form is derived from pakitin- 'set him down by hand': pakitinikōwisiw 'he is set down by the powers'. Examples of usage with this particular complex final are numerous in Bloomfield's texts, a few instances of which are given below:

(16) mīna tahtuh kakway kā- sākikihk ōtah askīhk
 also every thing rel. to grow here earth
 (0. conj. AI) locative

āwakunih kīh- kiskinōha mākowisiwak kit-si-
 that past they were told (or shown future thus
 the way) by the Higher Powers

mawimustahkik [B 10-11/12/13]
 to worship
 (3rd pl. conj. TI)

'Also everything which grows here on the earth, that they would worship, they were told by the higher powers.'

(17) ākutuh uhtsih ntāyihtānān nawats
 aside from that to think rather
 (first pl. AI Indep. Indic)

nāhiyaw āh- kitimākinākowisit [B4-16]
 Cree conjunct have compassion for
 prox. (third sg. conj. AI)

'That is why we think that the Cree is favored by the Higher Powers.'

- (18) ăkută ah-pawātahk wihtamakōwisiw
 that place conj. to dream to tell by higher powers
 (Indef. conj. AI) (AI third sg.)

nipākwasimēwikanik [B4-2]
 Sun Dance Lodge

'Dreaming of that place, he was told by the Higher Powers of the Sun Dance Lodge.'

- (19) ăwaku wiyawāw utsipwāwak nikan kă- kĭh-
 that they Ojibwa first rel. past
 prox. pl. prox. pl.

miyikōwisitsik mitāwiwin [B10-7/8]
 to give by Higher Powers medicine ceremony
 (AI conj. third pl.)

'They, the Ojibwa, were the first who were given the medicine lodge by the Higher Powers.'

4.1.2.

In some respects the constructions cited above are similar to the inverse forms analyzed as passive in previous chapters. In other ways, they behave quite differently. These similarities and distinctions will be illustrated briefly below.

4.1.3.

The most obvious property these "lexical" constructions share with inverse passives is the occurrence of a morpheme /ekw/ in some form. Earlier, we analyzed /ekw/ as the passive morpheme, and since it occurs in these forms we might wonder if these are also passive. Though it is dangerous to do so, we might also consider as evidence that these are passives, the fact that they are translated by native speakers as such, at least in the 'higher power' constructions. And at least in some sense, medio-passives are passivelike, as we can observe from, e.g. itēyihtākosiw 'he is thus thought of' where the agent is completely indefinite.

4.1.4.

Despite the occurrence of /ekw/ in these forms, there are more characteristics which distinguish them from inverse passive forms than correlate with them. We will look at these characteristics in some detail later, but briefly, they are as follows:

(a) They are inflected in either the AI or II paradigm rather than the TA paradigm.¹⁵

(b) They tend to be more restricted in terms of which verbs can form them as a result of their highly specialized meaning (in a transformational sense, they may be thought of as lexically governed).

(c) They don't adhere to the same hierarchical constraints as the inverse passives.

(d) Instead of /ekw/ preceding personal endings as it does in the inverse passive, it precedes another final.

We will attempt to follow Wasow (1976) in arguing that differences (a)-(d) suggest a lexical analysis of these 'special' passive forms. If

we decide on a lexicalization of these passive forms, however, several questions are raised concerning (1) lexical vs. syntactic (relation changing) rules, (2) the assignment of inflectional types and when and where in the grammar assignment takes place and (3) where lexical rules fit into a relational grammar.

4.2.

There has been quite a bit of discussion lately centered around the problem of distinguishing lexical and syntactic rules. Many linguists, especially Montague grammarians, are convinced that many rules previously analyzed as transformational can, in fact, be better described as lexical rules. Passive is such a rule. (See Dowty 1978a, 1978b, Bach 1980, Thomason 1976, Bresnan 1978). By calling the 'special' passives in this chapter 'lexical' and thereby distinguishing them from the more productive inverse passive, it may be argued that we presuppose that the distinction has already been made. Though the purpose of this thesis is not to decide the theoretical question of lexical vs. syntactic rules, there seems to be no question that the previously analyzed inverse passives are syntactic. Before arguing for the constructions in Section 4.1 being lexical, the syntactic status of inverse passives will be discussed below.

4.2.1.

Dowty (1975, 1978a, 1978b) argues that for English, all lexically governed transformational rules such as Dative Movement, Raising to Object, and Passive can be better characterized as lexical rules in a Montague Grammar framework. Though he makes a good case that at least at an earlier point in English all passives were lexical (see Lightfoot 1979 and Lieber 1979 for other analyses), the same cannot be said for all passives. Dowty himself provides evidence for the non-lexicality of most Cree passives (1978a:120), 'A crucial fact about lexically derived expressions is that they are (or always can be) learned individually, whereas syntactically derived expressions are not. If they are learned individually, then there must always be at any one state of a person's linguistic knowledge, a fixed finite number of them, though this number may grow from time to time...These observations suggest the formalization of lexical rules not as a part of the grammar of a language proper, but rather as a means for changing the grammar from time to time by enlarging its stock of basic expressions.'

From this characterization, and it is shared by most lexicalists, it is obvious, given the facts of Cree in Section 2, that passive forms in the TA paradigm cannot be 'learned individually'. The Person Hierarchy is the central mechanism which decides active vs. passive constructions and it is unreasonable to suppose that only active forms are learned syntactically and passive forms individually as an additional part of the grammar.

Dowty also states (p. 397), 'From my point of view, a lexical rule need differ essentially from a syntactic rule only in the "role" it is claimed to play in a grammar--its outputs are recorded individually and sometimes idiosyncratically among the basic expressions ("lexical entries") of the language. Hence, it need not be fully "productive" nor are its outputs invariably strictly predictable in meaning.'

Here again, recalling passives in Cree, we note the fully productive nature of the construction (dependent on the Person Hierarchy of course) and the particularly invariant interpretation which it affords.

Dowty also states (1978b:422), 'From the point of view of MG (Montague Grammar) the properties of certain putative syntactic rules that might lead us to construct a theory of lexical rules for them are (a) their partial productivity (not all outputs of a putative syntactic process are acceptable as well-formed), and there is no systematic way of excluding the exceptions on syntactic grounds...' Here again, we conclude that there are no exceptions to passive when given the traditional interpretation, action on the Person Hierarchy is inverse. The 'exceptions' to passive (in fact the blocked passive) can be accounted for on syntactic grounds, i.e. constraints provided by the semantically based hierarchy. When Bresnan (1978:22) states, 'We can see, then, that it is the lexical relation between the noun phrase and its verb that governs passivization, not the syntactic relation between them', it is not clear whether she is stating this only in relation to English passive or is making a universal claim. If she is making a universal claim, it seems, again, that Algonquian languages (and many others for that matter) are an exception to it.

Dowty admits (1978b:419-420), 'Another thing that relation-changing rules cannot do in this theory is to account semantically for apparent movement from more than one distinct syntactic position. No single category-changing Passive rule, for example, could passivize both direct and indirect objects...because it would be impossible to define an adequate unique semantic interpretation rule for such an operation. Thus, unbounded movement and/or deletion rules cannot possibly be recast as lexical rules for two reasons: the NP's moved or deleted do not always stand in a categorically-defined relationship to a verb (or other functor category) and NP's are moved from different grammatical positions by the same unbounded rule.'

In Cree, recall that direct objects are advanced to subject only if there is no indirect object present. If there is an indirect object, $3 \rightarrow 2$ advancement is obligatory; the initial $2 \rightarrow 2$ and the non-initial $2 \rightarrow 1$. It is not clear that this sort of operation, where a non-initial direct object ends up as the subject of the clause, could also be recast as lexical, even excluding evidence against such an analysis up to this point.

Finally, Dowty illustrates the interface between morphology and syntax and the question of lexical vs. syntactic rules (1978a:123): 'Both morphological and syntactic operations may be available to be used in either syntactic rules or lexical rules. Thus we have a cross-classification such as in (30):

kind of rule	operation used	Syntactic Rules	Lexical Rules
Syntactic Operations		traditional syntactic rules (PS-like and transformation-like	rules forming lexical units of more than one word
Morphological		1. rules introducing inflectional morphology 2. rules introducing "derivational" morphology when unrestricted and semantically regular (polysynthetic lang.)	rules introducing derivational morph., zero derivation, and compounding where partially productive and less than predictable semantics

Dowty (1978a:124) notes the productive nature of many polysynthetic languages such as Cree, and for this reason claims that 'morphological operations which are used by syntactic rules will correspond to those traditionally classed under inflectional morphology.'

4.2.2.

Thus, we may conclude from the above discussion that so-called inverse forms, reanalyzed as passive, can in no way be characterized as lexical. Their fully productive nature and exceptionless application indicates that they are indeed syntactic. The same cannot be said for the medio-passive and higher power passives outlined in Section 4.1. Using Dowty and Wasow's characterization of lexical rules, it is concluded that these constructions can best be characterized as lexical passives.

4.3.

Wasow (1976:8) outlines the differences between lexical rules and transformational rules and argues, as does Dowty, that the English passive can be either syntactic or lexical. He summarizes his criteria for distinguishing between lexical rules and transformations in the following table:

	Lexical Rules	Transformations
Criterion 1	don't affect structure	need not be structure preserving
Criterion 2	may relate items of different grammatical categories	don't change node labels
Criterion 3	'local'; involve only NP's bearing grammatical relations to items in question	need not be local; formulated in terms of structural properties of phrase markers

Criterion 4	apply before any transformations	may be fed by transformations
Criterion 5	have idiosyncratic exceptions	have few or no true exceptions

Though the above characterizations may look straightforward enough, the degree to which we may apply them successfully is limited. There are two reasons for this: (1) Wasow bases his criteria on language specific data--English, and his arguments supporting the criteria rest on English. (2) Wasow is "talking transformationally" so it is sometimes difficult to see what certain criterion translate into in a different framework such as Relational Grammar. Dowty notes similar problems in comparing Wasow's analyses with his own using a framework of Montague Grammar.

Despite the problems with this model, the above criteria serve as, at least, a vague guideline distinguishing syntactic and lexical rules.

4.3.1.

Denny (1981:23) in his work on Ojibwa argues for the classificatory medial ssak in sakk/issak/at missi 'the firewood is damp' as being syntactically derived rather than lexical on the following basis: 'is the incorporated medial joined to verb morphemes by derivational rules to form a new lexical item, or is the link a syntactic one in which case sakk-at and ssak are the lexical items although they must be combined by morphological processes? I think that syntactic combination is the more likely answer both because the medial expresses a semantic component of the noun and not the verb [ssak expresses the "sort of thing"--processed wood--which is the argument of the noun missi 'firewood'] and because any classificatory medial can be incorporated in the verb as long as it expresses a sort appropriate to the verb predicate.'

Denny concludes simply on the basis of productivity that the above-mentioned construction is syntactically and not lexically derived. Unfortunately, if a linguist working with a language other than English is interested in finding the appropriate component in which to place a rule or construction he is usually reduced to productivity vs. nonproductivity as the only available evidence for a lexical vs. non-lexical analysis. Although Wasow's criteria given in Section 4.2.1 are available, for reasons cited, they are difficult to use. Further, most of the reaction to Wasow (Bach, Dowty, Bresnan, Partee, Lightfoot) has been based solely on its usability for English. Section 4.2 below attempts to follow Wasow's criteria in deciding the status of so-called lexical passives in Cree described in Section 4.1.2. and I show that while suggesting a lexical analysis, the criteria are not useful enough to provide an entirely convincing argument for such an analysis. Section 4.4 discusses other features of these passives, briefly listed in Section 4.1.4 which further strengthen the case for a lexical analysis. It is concluded, finally, that Wasow's criteria, while perhaps valid for English, are not sufficiently universal in deciding the question of lexicality cross-linguistically and, in fact, language specific facts must be examined in the context of the language in deciding the question.

4.3.2.

Before listing his criteria for lexical vs. syntactic constructions Wasow states (p. 8): 'I assume (following Jackendoff (1975)) that lexical rules are part of the evaluation metric and will typically have unsystematic exceptions...the existence of numerous idiosyncratic exceptions to a relationship will be taken as evidence for handling it in the lexicon.' Thus, Criterion 5, which states that lexical rules have idiosyncratic exceptions, has already been introduced as the deciding criterion--if there are idiosyncratic exceptions, the rule will be treated in the lexicon. Dowty (1978b: 412) confirms this and notes that 'semantic exceptionality, as well as lack of full syntactic productivity is allowed for.' The semantic restrictedness of medio-passives and higher power passives was demonstrated in Section 4.1.2 and it was listed as a characteristic which set these passives apart from inverse passives in Section 4.1.4. There is no question that these passive forms are highly restricted, and according to Wasow and Dowty's criteria, would be analyzed as lexical constructions.

Criterion 1--Lexical rules don't affect structure--is interpreted by Dowty (1978b:412) in the following way: 'A 'transformationlike' syntactic rule is one that applies to syntactically complex expressions and may rearrange or otherwise alter the components of these input expressions producing in some cases a syntactic pattern not derivable from the 'structure building' (or phrase-structure like) rules alone. A lexical rule, however, can apply only to basic expression, which will then be treated the same as other basic expressions by the 'structure building' syntactic rules.' Note that this also goes hand in hand with Criterion 4, which says that lexical rules apply before any transformations while syntactic rules may be fed by transformations. Both Criteria 1 and 4 lead us to conclude, again, that the restricted passives are lexical for the following reasons. It seems that since these passives do not adhere to the same hierarchical constraints as the inverse passives (in fact they disobey them), they do not apply to the same 'syntactically complex expressions' that the inverse passives do. In fact, their marked status would classify them as exceptions which deviate from the regular syntactic operations of the language. Thus it seems that medio-passives and higher power passives do not affect structure, but instead apply only to basic expressions as Dowty predicts. It is difficult to evaluate the ordering stipulation in a relational framework but there seems to be no evidence to suggest that these lexical passives are fed by any sort of syntactic rule, but are built up by word formation processes as Wolfart suggests. We also note that there are no examples in texts which suggest that these lexically formed constructions can themselves feed syntactic rules. In other words, the "higher powers" morpheme in the "higher power" passives could not be reanalyzed as a subject (or anything else). This suggests that their status as lexical islands (similar to frozen idioms in English) is well established.

It is more difficult yet to apply Criteria 2 and 3 to the facts at hand except to say that the concept 'higher power' expressed by -ikōwisi- and interpreted as an agentive is grammatically realized as a complex final which surely suggests that node labels have been changed--an effect which Wasow would claim would force the rule to be classified as lexical.

4.4.

Though it seems to be clear at this point that medio-passives and higher power passives should be classified lexically, other characteristics

which set them apart from the more productive passives should be appealed to in order to strengthen the argument. These differences constitute more evidence for distinguishing them from syntactically produced passives.

The most obvious difference (besides the clear semantic difference) is the fact that these specialized passives seem to disobey the Person Hierarchy. In the medio-passive forms, for example, we would predict not to get /ekw/ since there is an indefinite acting on a third person. Since indefinite ranks above third person, one would expect a direct, active form, not a passive form with /ekw/. This deviation suggests that these forms do not obey the regular syntactic rules of the language and consequently must be derived in some other way.

Another observation concerning these restricted passives concerns the fact that they are inflected in the two intransitive paradigms rather than the TA paradigm. It was argued in Section 3 that despite their occurrence in the TA paradigm, the passive forms there are intransitive. It is interesting that these restricted forms should be inflected in a different paradigm, and it follows logically if we consider again Wasow's comments. According to Wasow, lexical constructions are formed before any syntactic rules operate. Given this assumption, /ekw/ would mark the constructions in question as intransitive before they are inflected--thus inflection in an intransitive paradigm is predicted. Though the matter of when and where in the grammar inflectional type is decided is still unresolved (see Piggott 1979 for further discussion for Algonquian) it is reasonable to assume that it would come after word formation in the lexicon.

Another difference brought out in Section 4.1.4 was that /ekw/ in the inverse passives immediately precedes personal endings, whereas in the restrictive passives it precedes another final, isi or -an-, again suggesting that /ekw/ is operating in conjunction with other finals to form a more restricted meaning of passive. Aissen (1974) has also suggested that the order in which a morpheme is added to a stem may correlate with its position in the derivation which would explain why the lexical passives are conjugated in an intransitive paradigm while the syntactic passives are not.

So, we may conclude that while a syntactic rule of passive plays a vital role in the verbal system, there also exists a small class of lexical passives in Cree which are restricted semantically and consequently less productive than the syntactic passive.

5.0.

Structuralists, from Michaelson and Bloomfield on have been perplexed by certain Algonquian morphemes, and special attention has been paid to the so-called direction morphemes. As I have argued, however, attempting to fit the morphemes into a paradigm based on direction of action does not provide an adequate explanation of what they are and how they operate. Only by examining the syntax of the constructions themselves can we gain insight into their function within the grammar. Thus, /ekw/ is not an inverse marker, but rather the marker of a construction which has undergone the relation changing rule of Passive. To simply say that the action is 'reversed' from direct action is not enough. Syntactic changes have occurred which the inverse/direct interpretation does not explain, but which the the passive/active interpretation does.

Another important theoretical issue raised in Section 4 is the lexical/non-lexical status of passive issue. As was noted in my discussion, many

linguists have been anxious in recent years to decide where in the grammar to put certain rules, and much ink has been spilled trying to argue that most relation changing rules, such as passive, are strictly lexical. More recently, however, there has emerged a somewhat solid consensus that such a strong hypothesis cannot be maintained. Dowty, Wasow, and Lightfoot all agree that some English rules of passive are arguably lexical, while others are arguably syntactic. The same dichotomy exists in Cree and can be maintained quite easily.

As a consequence of the two rules of passive in Cree, Relational Grammarians are faced with the necessity of responding, in some way, to the two different constructions. As their theory stands, there is no way of distinguishing between the two constructions, and there are obvious differences being missed. Donna Gerdts (1980 LSA abstract), in working with the Salish language of Halkomelem, discovered a problem with describing both Anti-Passive and Passive as syntactic. In treating Anti-Passive as a lexical rule and Passive as a syntactic rule in this language she accounts for the recurrent differences between the two constructions. Her theory of Revised RG which allows for both lexical and syntactic rules, and in which the output of lexical rules constitutes the initial level, seems to account more clearly for the Cree facts. Although Revised RG is, as of yet, unformalized, the two different passives in Cree lend support to it.

Also arguing against the Principle of Initial Determination as stated in Postal (1980) are some facts from Southern Tiwa observed by Allen, Frantz, and Gardiner (1981). They provide a considerable amount of syntactic evidence which suggests that some initial direct objects in that language are phonologically null. 'The fact that these DO's are not required by the semantics of their clause makes it clear that the initial stratum in a relational grammar of Southern Tiwa cannot be equated with the semantic representation, nor can the latter completely determine the initial relations' (p. 11). If the Principle of Initial Determination in its strongest form must be given up,¹⁶ as it seems it will, we may gain insight into where in a grammar verbs are assigned properties such as being transitive or intransitive, a particular problem for a language such as Cree.

Theoretical issues aside, we may note the insights into Cree itself which the close examination of one construction has given us. The function of the rule has been illuminated, the crucial role which the Person Hierarchy plays is better understood, and the morphology and syntax which result are startlingly consistent with rules of agreement in the language. All in all, the interaction between morphology and syntax is more apparent and findings presented here may be applicable to other parts of the Cree grammar.

Footnotes

¹This paper is a part of my Master's Thesis, Ohio State University, Summer 1981. Some sections have been revised slightly, but the central points and arguments are unchanged. A chapter on the Relational Grammar framework as well as a chapter on the interaction of Person Hierarchies with relation changing rules cross-linguistically have been omitted altogether.

²Plains Cree is a member of the Algonquian family and is spoken in parts of Alberta and Saskatchewan, Canada. Data upon which the present study is based are taken from Bloomfield's published texts (1934) and Wolfart's Plains Cree: A grammatical Study (1973).

³In some cases, AI verbs may have an overt object in the clause though still be inflected like an AI verb. In these cases, the verb is marked with the derivational morpheme -hta.

⁴Basically, Cree verbs are inflected in three orders: independent, conjunct, and imperative. Affixes differ in these sets though there is some overlap (affixes associated with the conjunct are given in note 8). In terms of syntactic function, the independent and imperative orders can occur as independent clauses, and thus form full sentences. Conjunct forms, common in narrative, usually only occur in dependent clauses.

⁵Algonquian languages distinguish between the third person--one marked proximate which is considered to be 'in focus' (Wolfart 1973:17), the topic of the discourse, or the 3rd person first spoken of an already known, the other marked obviative which is considered to be 'not in focus'. We may also note that within any given contextual span only one third person is proximate while all others are obviative. Further discussion of problems associated with the proximate/obviative distinction is outside the scope of this paper, but it is important to note their position on the person hierarchy. 3rd person proximates are analyzed as the unmarked 3rd person and are ranked higher on the hierarchy than obviative 3rd persons. Thus a proximate 3rd person acting on an obviative 3rd person is marked with a direct theme sign and an obviative 3rd person acting on a proximate 3rd person is marked with an inverse theme sign. Further obviatives are not well motivated as independent persons (see Wolfart 1978).

⁶Citations from Bloomfield's published texts (1934) are indicated by B and the line and page number, e.g. B23-5. Examples which appear in Wolfart's grammar (1973) (some of which are from his unpublished field notes, others from Bloomfield's 1930 texts) are indicated by a W and page and section number, e.g. W16-2.2.

⁷The -t- in kitasamin is not a part of the second person prefix but is rather the result of an insertion rule, which inserts a -t- between personal prefixes and a stem which is vowel initial.

⁸Endings for the Simple and Changed Conjunct are as follows:

Mixed Set (direct)

indef.	ih̄t	ih̄cik	imiht			
1st	ak	akik	imak	it	icik	iyit
2nd	at	acik	imat	isk	iskik	iyisk
1pl.	ayahk	ayahiki	imayahk	ikoyahk	ikoyahkik	ikowayahk
2pl.	ayahk	ayahkok	imayahk	ikoyahk	ikoyahkok	ikowayahk
2pl.	ayek	ayekok	imayek	ikoyek	ikoyekok	ikowayek

(inverse)

Third Person (direct)

3	at	imat	ikot
3pl	ayik	imacik	ikocik
3'	ayit		ikoyit

(inverse)

You-and-Me Set (Direct)

2	iyān	iyahk	itan	itahk
2pl	iyek	iyahk	itakok	itahk

(inverse)

⁹Note that -ik is equal to /ekw/ in both the singular and plural forms. Since w is lost at morpheme boundaries in Cree, -ik could actually reflect /ekw + w/ and -ikwak could reflect /ekw + wak/, since -ww- is not a possible sequence in Cree.

¹⁰There are problems with the analysis of /eti/ in the you-and-me set. The problem centers around whether to call /eti/ an object agreement marker, or an aberrant form of /ekw/, the predominant passive marker. An analysis of each option is considered in Section 3.3.

¹¹This seems to be a fairly safe assumption to make since typologically the \emptyset morpheme is often associated with indefinite forms (See Watkins 1962).

¹²LeSourd also posits /ekw/ as an underlying passive marker which is obligatorily deleted in you-and-me forms. Though this move doesn't explain why this set is different, it does save his generalization that /ekw/ is present (at some level) in all passive constructions.

¹³It is very interesting that Wolfart should term /ekw/ a passive marker even in a qualified sense, since he spends an entire section (See Wolfart, p. 26, Section 2.53) arguing that /ekw/ is definitely not a passive marker.

¹⁴Middle reflexives also involve intransitive verb finals and a few examples of their use may be given from Wolfart, p. 73, Section 6.439: 'From the transitive inanimate stem masinah- 'mark, write it' and besides the animate intransitive verb masinahikē 'write' we find masinahikasow 'he is marked, pictured' and masinahikatew 'it is marked, pictured, written'.'

¹⁵AI and II endings are distinct from TA endings. (See Wolfart, Section 5.24-5.31 for the complete set of paradigms.)

¹⁶Also see Perlmutter (1980) for a similar problem in Achenese.

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