Motivation vs. Predictability in Algonquian Gender

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The division of nouns in Algonquian languages into an animate gender and an inanimate gender has attracted a great deal of attention from both linguists and anthropologists, especially the fact that some notionally inanimate nouns are classified as grammatically animate. In this paper I take a position on gender that is midway between some of the more extreme claims made by linguists and anthropologists, but not, I believe, too far removed from the actual practice of linguists and anthropologists who have treated the problem of gender in Algonquian. I propose that the animate category is best viewed as having a subset of central members, with semantic extensions connecting most of the other members of the category, along the lines of Lakoff's treatment of Dyirbal (1987) in terms of RADIAL CATEGORIES. The extensions connecting peripheral members with more central members are semantically motivated — that is, once you know them, they make sense — but the membership of the category is not semantically predictable. Below I use Fox examples to sketch an approach in terms of radial categories, but first I will briefly review some previous work on gender.

BACKGROUND

The most extreme positions in the debate over Algonquian gender are represented by Greenberg (1954:15–16), on the one hand, who argues that the entire system must be considered arbitrary because the gender of some items is unpredictable, and Hallowell (1955:109, 1976:361–3), on the other, who asserts that the system appears arbitrary only to outsiders but that in fact the gender of every noun has cultural significance. Though taking opposite positions, Greenberg and Hallowell make the same implicit assumption about the nature of linguistic categories like gender. They assume the system is either completely arbitrary or completely predictable, where predictable means that there is a single

semantic feature which all members of the category have in common, and which does not occur with any nonmembers of the category. According to this view (an example of what Silverstein (1986) calls "naive referential semantics"), a single example of arbitrary gender assignment would be enough to demonstrate the arbitrariness of the entire system (Greenberg's position), while the way Hallowell counters Greenberg is to say that there is in fact an exceptionless semantic principle at work, but one which outsiders have so far failed to grasp.

Lakoff (1987:92–104), discussing Dixon's work on Dyirbal gender (1972), offers a more plausible view of linguistic categorization and makes an important distinction between prediction and semantic motivation. Lakoff's approach is based upon work in psychology on prototypes (e.g., Rosch 1978) and Wittgenstein's ideas (1953) about family resemblances and centrality within categories. Instead of looking for a single semantic property that all members of a gender category have in common, Lakoff assumes only that the central members of the category are picked out by a semantic feature. Various semantic extensions will then link the peripheral members to more central members; a few members of the category may simply be exceptions, with no semantic link to the rest. Each link must be separately learned by speakers of the language and is likely to be culture-specific, perhaps rooted in myth.

With Lakoff's characterization of category structure in mind we can now consider additional linguistic and anthropological treatments of Algonquian gender. Most linguists treat Algonquian gender as having a semantic core based on animacy, plus many exceptional cases of animate gender assignment (e.g., Wolfart 1973:20–23 on Plains Cree, Bloomfield 1962:28–36 on Menomini). The exceptional cases are often grouped by semantic domain: thus Bloomfield (1962:31–32) lists tobacco and items associated with smoking; corn and foods made with corn; wheat and foods made with flour — all animate in Menomini. Within each small domain the semantic links are clear, but the motivations, if any, linking the various semantic domains together are rarely made explicit in linguistic descriptions.

Ethnologists and linguistic anthropologists, on the other hand, have followed Hallowell in trying to find a unifying feature for the animate category. The feature of (spiritual) power, assumed to reside both in

living beings and in sacred objects, is proposed by Black-Rogers (1982) and Straus and Brightman (1982), based upon extensive ethnographic fieldwork on Ojibwa and Cheyenne, respectively. Darnell and Vanek (1976), relying upon dictionary entries for Cree, also argue for power as the relevant feature.[1] Though the stated aim is to establish a single feature underlying all instances of animate gender, in practice these studies end up with a list of items or semantic domains, just as the linguistic descriptions do. The difference is that the anthropological treatments make explicit the semantic links holding among the various domains. For example, Straus and Brightman (1982: 128) point out two ways in which the Cheyenne animate noun *hohtseme* 'ball (basketball, baseball)' is linked to examples of powerful entities: it is derived from a word denoting a part of an originally sacred game, and the shape of a ball evokes the sacred shape of the circle. Explanations like this fit Lakoff's conception of category structure: a relatively peripheral member like 'ball' will be connected to more central members of the category by one or more semantic links. It should also be noted that the recent anthropological studies depart from Hallowell in conceding that some instances of animate gender defy explanation. Black-Rogers (1982:67–68) conjectures that the now unexplainable cases were semantically motivated at an earlier stage of the language; as she observes in a footnote (75 *n*.12), synchronically this is equivalent to the linguists' position that part of the system is arbitrary.

INTERNAL STRUCTURE OF GENDER CLASSES IN FOX

With this preliminary discussion, we can now turn to the gender system of Fox. I assume that the animate category is structured as outlined by Lakoff, with central members picked out by a semantic feature, peripheral members connected to more central ones by semantic links, and some exceptional, unmotivated members. A complete account of Fox gender would identify all the semantic links within the animate category and list the remaining exceptions. This will not be done here: such an account requires the intuitions of a member of the speech

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[1] Shoaps (1993), using dictionary entries for Fox body parts, takes a different perspective, suggesting that location on the lower parts of the body is the relevant factor for animacy.

community, or at least extensive ethnographic investigation as Black-Rogers has done for Ojibwa and Straus for Cheyenne. Here I will undertake the more limited task of outlining the semantic feature picking out the central members of the category and identifying a few of the links to more peripheral members.

The diagrams in Figure 1 are taken from Lakoff (1987) on Dyirbal, but the category structure they illustrate is relevant to Algonquian gender as well. The diagram on the left schematizes the internal structure of the animate gender category, a radial category. The square in the center represents the central members of the category and the circles represent more peripheral members. The lines between the circles and square represent the semantic links motivating the extension of animate gender to various subsets of the category. The circle at the upper left, with no link to the rest, shows that some members of the category are completely arbitrary, and must simply be memorized. In contrast, inanimate gender is simply the "elsewhere" category, with no central subcategory and no semantic links between members.

We will now consider some examples from Fox. The gender of a Fox noun is evident from the suffix it bears encoding number (and obviation, on animate nouns):

(1) Noun suffixes

	animate		inanimate	
	singular	plural	singular	plural
proximate	-a	-aki	-i	-ani
obviative	-ani	-ahi		

In the examples given below, all nouns ending in -a are animate and all nouns ending in -i are inanimate.

The semantic feature picking out the central members of the animate gender in Fox is animacy. Almost all nouns referring to people, spirits, or animals are animate.[2]

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[2] In Fox, two grammatically inanimate nouns have been found which have animate referents. One is the collective noun *mi·čipe·hi* 'game' (e.g., Michelson 1925:266.44, 458.7); compare the animate *mi·čipe·ha* 'game animal', referring to an individual animal. Another example is *či·nawe·ti·weni*, which is ordinarily used to mean 'kinship (system)' but which may also be used to refer to 'kin' (Ives Goddard, personal communication).
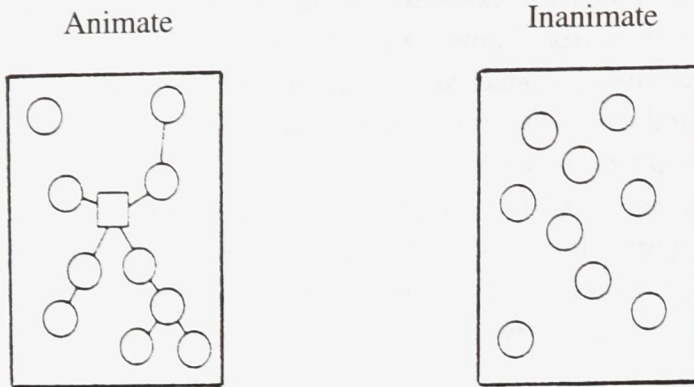
Animate   Inanimate

Figure 1 (after Lakoff 1987:103)

(2) a. *neniwa*   'man'
    b. *ihkwe·wa*   'woman'
    c. *okima·wa*   'chief'
    d. *maneto·wa*   'spirit, manitou; snake'
    e. *anemo·ha*   'dog'
    f. *mahkwa*   'bear'
    g. *pešikesiwa*   'deer'
    h. *ši·ši·pa*   'duck'
    i. *a·mo·wa*   'bee'

The most important semantic extension from the central animate members is to the domain of spiritually powerful entities. There is an overlap between the set of powerful entities and the set of animate entities: spirits are both animate and powerful; some humans and some animals may be powerful as well. Not all entities with power are named by animate nouns, however. For example, *mi·ša·mi* 'sacred bundle, sacred pack' denotes an extremely important and sacred item, yet the noun has inanimate gender.

(3) a. *ase·ma·wa*   'tobacco'
    b. *ahpwa·kana*   'pipe'
    c. *te·we·hikana*   'drum'
    d. *ahkohkwa*   'drum; kettle with lid'
    e. *anemona*   'red ochre'
    f. *a·teso·hka·kana*   'sacred story'

g. *mi·ša·mi*   'sacred bundle'
h. *na·tawino·ni*   'medicine'
i. *mena·kwaški·hi*   'sage'

The fact that the set of nouns denoting powerful entities contains many exceptional inanimates argues against power being the central feature defining the gender category.

A different extension from the central feature of animacy is illustrated by the animate noun *ni·ča·pa* 'doll'. A doll is a representation of a human, which motivates the gender assignment here. Another animate noun, *či·paya* 'corpse; ghost', is doubly linked to the central members of the category. In its meaning of 'corpse' it is a former human being, and in its meaning of 'ghost' it denotes a spiritually powerful being.

(4) a. *ni·ča·pa*   'doll'
    b. *či·paya*   'corpse; ghost'

GENDER SHIFT

Though power may not be the central feature of the animate category it nevertheless plays a prominent role in the gender system, as evidenced by shifts in gender from inanimate to animate. Examples may be found in traditional narratives. The noun stem *aseny-* 'stone' is ordinarily inanimate, but in some contexts describing speech directed to a stone the gender of the noun is shifted to animate. The following sentence, for example, is taken from a text in which a man is addressing prayers to a stone heated for a sweat-lodge:

(5) *e·h=a·čimoha·či   asenye·ni   i·na neniwa*
     speak.to 3–3′/AOR stone.OBV   that man
     'That man [prox.] spoke to the stone [animate, obv.].'
                                                    (Michelson 1925:206.1)

Here *asenye·ni* bears the animate obviative suffix *-ani* and the verb is inflected for an animate obviative object (indicated by 3′ in the interlinear gloss). However, there are other contexts where speech directed to an inanimate object is described without a shift in gender:

(6) *"nahi,   e·h=po·ni·kwe·hiki   ki·h=ihpaho",*
     well!   camp 3p/INTERR.PART/LOC FUT=run.to 2/IND.IND

e·h=itaki	*owi·kewa·wi*	*wi·sahke·ha*
say.to 3–0/AOR	their.house	W.

'"Okay, you should run to wherever they are camping," Wisahkeha said to their house [inan.].'   (Kiyana 1913:106E,F)

Within the quote the house is addressed with second person forms, which are necessarily animate in gender: *ki·h=ihpaho* 'you should run [there]'. But in the quoting frame following the direct quote the object *owi·kewa·wi* 'their house' is inanimate, as seen by the suffix *-i* on the noun and by the verb inflection for an inanimate object (0 in the interlinear gloss).

Gender shifts may occur in religious contexts: for example, the trees 'white oak' and 'sycamore' are named in everyday use by the inanimate nouns *mehtekomiši* and *ki·šowa·hkwi*, but by the animate nouns *mehtekomiša* and *ki·šowa·hkwa* if mentioned in a religious ceremony (Ives Goddard, personal communication). However, not all inanimate nouns denoting sacred objects are able to undergo gender shift to animate, nor can an animate noun like 'raspberry' be shifted to inanimate:

(7) a.   *mehtekomiši*   'white oak'
     b.   *mehtekomiša*   'white oak' [addressed religiously]
     c.   *ki·šowa·hkwi*   'sycamore'
     d.   *ki·šowa·hkwa*   'sycamore' [addressed religiously]
     e.   *na·tawino·ni*   'medicine'
     f.   *na·tawino·na*   'medicine' [addressing it]
     g.   *mi·ša·mi*   'sacred bundle'
     h.   **mi·ša·ma*
     i.   *mena·kwaški·hi*   'sage'
     j.   **mena·kwaški·ha*
     k.   *ahte·himini*   'strawberry'
     l.   *ahte·himina*   'strawberry' [addressing it]
     m.   *wi·tawi·ha*   'raspberry'
     n.   **wi·tawi·hi*

From examples like these we may conclude that gender shift is motivated and culturally significant but not predictable, like the membership of the animate gender overall.[3]

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[3] See Wolfart (1973:21–22) for discussion of gender shift in Cree texts.

ADDITIONAL EXAMPLES

Below I list a number of nouns in other semantic domains, without commenting on possible semantic motivations for the animate examples.[4] Most nouns denoting part of a human or animal body are inanimate, but a few are animate.

(8) a. *ahkani*   'bone'
     b. *meškwi*   'blood'
     c. *owi·ne·tepi*   'brain'
     d. *mete·hi*   'heart'
     e. *menehki*   'hand'
     f. *mi·nakayi*   'penis'
     g. *či·kaško·hi*   'clitoris'
     f. *mi·kona*   'feather'
     h. *ato·wa*   'blood clot'
     i. *owi·wi·na*   'horn; braid'
     j. *oto·neno·ha*   'kidney'
     k. *onešiwa*   'testicle'
     l. *mehketena*   'vulva'

Darnell and Vanek's conjecture (1976) that nouns denoting male genitals should be animate, while those for female genitals should be inanimate, is wrong.   In Fox, *mi·nakayi* 'penis' and *či·kaško·hi* 'clitoris' are inanimate; *onešiwa* 'testicle' and *mehketena* 'vulva' are animate.

Nouns denoting animal skins or fur provide a likely example of arbitrariness in Fox gender. Skins of large animals are inanimate, while skins of small animals are animate (Goddard 1990:452 *n*.11).   The general word for 'skin', *asaya*, is animate.

(9) a. *mahkwayi*   'bear skin'
     b. *meše·we·wayi*   'elk skin'
     c. *nenoswayi*   'buffalo skin'
     d. *asayi*   'skin of a large animal'

(10) a. *amehkwaya*   'beaver skin'
     b. *ašaško·haya*   'muskrat fur'
     c. *e·sepanaya*   'raccoon skin'
     d. *ketiwaya*   'golden eagle skin'
     e. *maneto·waya*   'snake skin'
     f. *wi·teko·waya*   'owl skin'
     g. *asaya*   'skin'

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[4] More examples of animate and inanimate nouns may be found in Goddard (1994).

Nouns for plants are mostly inanimate (e.g., *ahte·himini* 'strawberry'), but some, including *wi·tawi·ha* 'raspberry', are animate. Other animate and inanimate plant examples are given below.

(11) a. *wi·tawi·ha*   'raspberry'
     b. *meškwa·wa·hkwa*   'red cedar'
     c. *mi·twi·wa*   'cottonwood'
     d. *mesa·hkwa*   'ear of corn'
     e. *ahpenya*   'potato'
     f. *maškoči·sa*   'bean(s)'
     g. *ahte·himini*   'strawberry'
     h. *ani·pi*   'elm' [stem *ani·py-*]
     i. *mano·mini*   'rice'
     j. *mehtekwi*   'wood, tree, stick'
     k. *pe·škone·wi·hi*   'flower'
     l. *ta·htapakwi*   'leaf'
     m. *wa·pikoni*   'squash, pumpkin'

Some nouns denoting natural phenomena are animate, others inanimate:

(12) a. *ateko·wa*   'wave'
     b. *ako·na*   'snow'
     c. *ki·šeswa*   'sun'
     d. *ana·kwa*   'star'
     e. *mesihkwa*   'ice'
     f. *aseni*   'stone' [stem *aseny-*]
     g. *ahki*   'earth' [stem *ahky-*]
     h. *aškote·wi*   'fire'
     i. *menesi*   'island'
     j. *nepi*   'water' [stem *nepy-*]

Likewise, some manufactured items are animate, others inanimate:

(13) a. *mehte·ha*   'bow'
     b. *mehtekwa*   'bow' [archaic]
     c. *ata·pya·na*   'wagon'
     d. *ana·kani*   'bowl'
     e. *či·ma·ni*   'canoe'
     f. *ma·tesi*   'knife'
     g. *pa·škesikani*   'gun'

The animate noun *mehtekwa* 'bow' (13b) forms a minimal pair with *mehtekwi* 'wood, tree, stick' (11j).

Nouns derived from verbs by suffixation of *-n*, *-wen*, or *-(a·)kan* are nearly always inanimate:

(14) a. *nakamo·ni* 'song' ← *nakamo-* 'sing'
    b. *a·čimo·ni* 'story' ← *a·čimo-* 'tell a story'
    c. *kepihikani* 'fence' ← *kepihike·-* 'enclose things'
    d. *nepo·weni* 'death' ← *nep-* 'die'
    e. *ayo·weni* 'tool' ← *ay-* 'use'
    f. *a·hkwe·weni* 'anger' ← *a·hkwe·-* 'be angry'
    g. *kota·kani* 'throat' ← *kot-* 'swallow'
    h. *a·teso·hka·kana* 'sacred story' ← *a·teso·hke·-* 'tell a sacred story'

The exceptional form in example 14h is presumably animate because *a·teso·hka·kanaki* are stories about the spirits, who have mystical powers.

A different nominalization process — initial change plus suffixation of *-h* — produces both animate and inanimate nouns:

(15) a. *e·nwe·we·ha·so·ha* 'drum' ← *anwe·we·ha·so-* 'be drummed on'
    b. *mi·seče·ha* 'peach' ← *mi·seče·-* 'have a hairy body'
    c. *mi·simi·si·ha* 'Jerusalem artichoke' ← *mi·simi·si·-* 'defecate repeatedly'
    d. *ke·no·te·hi* 'long house' ← *keno·te·-* 'be a long house'

More clues about the principles underlying a gender system may be found by examining the classification of loan words. Fox borrowed a few words from French in the 17th and 18th centuries and others from English more recently.

(16) a. *fa·me·ha* 'farmer'
    b. *ko·hko·še·ha* 'pig' [< Fr. (dial.) *coucouche*]
    c. *pi·ki·hi* 'playing card' [< Fr. *pique* 'spade']
    d. *i·hke·hi* 'acre'
    e. *pe·škiti* 'basket' [stem *pe·škity-*]
    f. *tre·kite·hi* 'tractor'
    g. *četi* 'jet'
    h. *a·tamo·pi·na* 'automobile'
    i. *nehpaipema* 'my pipe'

(Examples 16a, f, g, and h are from Voorhis (1971); 16i is from Goddard (1991). See Goddard (1974:155 *n*.5) for the source of 16b.)

As 16 shows, the pattern for assigning gender to loan words is similar to that for native Fox nouns. Words for people and animals are animate, while words for other entities are mostly inanimate, with a few items taking animate gender. The animacy of *nehpaipema* 'my pipe' (with *ne-* 'my' and the possessed theme suffix *-em-*) matches the gender of the native *ahpwa·kana* 'pipe'. For *a·tamo·pi·na* 'automobile', the animate gender is presumably due to the motion of automobiles, but note that *tre·kite·hi* 'tractor' and *četi* 'jet' are inanimate.[5]

CONJOINED NPs

A final question about gender concerns conjoined NPs of mixed gender, where at least one conjunct is an animate NP and at least one other is an inanimate NP. Such NPs pose a problem for verb agreement if they are used as subject or first object. Recall that verbs are inflected for the gender of subject and object, and that the shape of the verb stem itself is influenced by the gender of the object (if transitive) or the subject (if intransitive). If the subject or object of the verb is a conjoined NP of mixed gender, what will the form of the verb be? In Fox, the agreement rule for NPs of mixed gender is for the verb to agree with the closest member of the conjoined NP.[6] For example, in the following sentence the NP closest to the verb is the inanimate *ahte·himinani* 'strawberries', so the verb contains the transitive inanimate stem *mi·či-* 'eat', inflected for first person exclusive plural subject and an inanimate object:

(17) *nemi·čipena*   [*ahte·himinani na·hka   wi·tawi·haki*]
      eat 1p–0/IND.IND strawberries   also   raspberries
      'We ate strawberries [inan.] and raspberries [anim.].'
                                                    [*mi·či-* 'eat' TI₃]

It is ungrammatical to use the transitive animate form of the verb stem (*amw-* 'eat') and animate object inflection if the closest NP to the verb is inanimate:

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[5] An example of a borrowed plant name given animate gender may be seen in closely related Kickapoo *aahooha* 'garlic', from Spanish *ajo* (Voorhis 1988:4).

[6] A similar phenomenon occurs in English number agreement (Morgan 1972).

(18)*netamwa·pena   [ahte·himinani na·hka wi·tawi·haki]
    eat 1p–3(p)/IND.IND
    ('We ate strawberries [inan.] and raspberries [anim.].')
                                              [amw- 'eat' TA]

If the order of the conjoined NPs is reversed, with the animate NP closer
to the verb, then the verb stem must be transitive animate, inflected for
an animate object.[7]

(19) netamwa·pena/*nemi·čipena [wi·tawi·haki na·hka ahte·himinani]
    'We ate raspberries [anim.] and strawberries [inan.].'

    The above examples are all elicited sentences; the agreement rule they
illustrate is confirmed by the following textual examples.

(20) ni·h=mawi-ašiha·wa   [nemehte·ha na·hka ni·pani]
    FUT=go-make 1–3/IND.IND my.bow   also   my.arrows
    'I will go make my bow [anim.] and my arrows [inan.].'
                                  [aših- 'make' TA] (Jones 1907:290.19)

(21) e·h=ni·senakehe=ye·toke   [opepikwe·škowa·wi na·hka
    take.down 3–0/PAST.AOR=it.seems their.flute   also

    otaškwa·ne·hkete·mwa·wi kaho·ni otahkohko·hwa·wani]
    their.firestick   and   their.drum.DIM.OBV

    'It seems he had taken down their flute [inan.] and their firestick [inan.]
    and their small drum [anim.].'
                      [ni·sen- 'take down' TI₁] (Michelson 1925:478.19)

In 20 the verb is inflected for an animate singular object, matching the
features of nemehte·ha 'my bow [anim.]', the first half of the conjoined
NP.   In 21, on the other hand, the verb is inflected for an inanimate
object, matching the features of opepikwe·škowa·wi 'their flute [inan.]',
the closest member of the conjoined NP.
    In texts, conjoined NPs of mixed gender occur most frequently as
second objects, which in Fox are not cross-referenced on the verb:

    [7] The same pattern is seen if the conjoined NPs precede the verb: the verb agrees
with the closest NP. The same agreement rule is also found with conjoined subjects of
intransitive verbs. See Dahlstrom (MS) for examples.

(22) *i·ni꞊ke·hi꞊'pi*   *e·h꞊mi·šiwe·či*   *omehte·hani*
      then=and=QUOT   give.O2.away 3/AOR   his.bow.OBV

      owi·pi·꞊'nahi   *o·ni otaša·hti·hi*
      his.arrow=also   and his.headed.arrow

'And then, it's said, he gave away his bow [anim.] and his arrow [inan.]
and his spear [inan.].'
                              [AI+O stem *mi·šiwe··* (*mi·n-* 'give' + *-iwe·-* general goal)]
                                                          (Kiyana 1913:395)

The rule of "agree with the closest NP" accounts for the above cases
of conjoined NPs of mixed gender. Suppose, however, that a verb is
inflected for a pronominal argument which is understood to refer to a
combination of animate and inanimate third persons. Which gender
would be used for the pronominal argument? The one textual example
which has been found uses inanimate gender:

(23) *mi·čikwe·na*
      eat 3–0/INTERR.PART/3
      'whoever ate them [inan.]'   [*mi·či-* 'eat' TI₃] (Kiyana 1913:54K)
      (referring to strawberries and a kind of fish)

The choice of inanimate in this context is not surprising since inanimate
is the semantically unmarked "elsewhere" category of the gender system.
     Further evidence for the unmarked character of inanimate gender may
be seen in constructions with *ke·ko·hi* 'something, anything':

(24) *a·kwi ke·ko·hi*   *nehto·wa·čini*   *ši·ša·čiki*
      not   anything   kill 3p–0/NEG   hunt 3p/PART/3p
      'The ones who were hunting didn't kill anything.' [*neht-* 'kill' TI₂]

The pronoun *ke·ko·hi* triggers inanimate object agreement on the verb and
requires the transitive inanimate form of the verb stem, even though any
semantically plausible object of 'kill' would have animate gender. (The
subject in 24 is a relative clause; verbs in relative clauses take participial
inflection and bear an additional suffix agreeing with the head of the
relative clause.)

     In conclusion, I have argued in this paper that the animate gender of
Algonquian languages is marked and inanimate gender is unmarked;

furthermore, the animate category has internal, radial structure, with the feature of [+animate] picking out the central members of the category. The feature of power is not the central feature, but is an important extension from animacy, motivating many instances of animate gender assignment. However, it should be kept in mind that there are other possible motivations for a noun being assigned animate gender: we needn't look for a single, unifying feature in all members of the category. Likewise, the absence of animate gender does not mean that the entity denoted by the noun lacks power; inanimate gender is simply the un-marked form for notionally inanimate objects. In other words, though the concept of power does play an important role in the animate category, we cannot use gender morphology to simply read off the power associations of objects in Algonquian culture.

REFERENCES

Black-Rogers, Mary B. 1982. Algonquian gender revisited: animate nouns and Ojibwa 'power' — an impasse? *Papers in Linguistics* 15: 59–76.
Bloomfield, Leonard. 1946. Algonquian. *Linguistic structures of native America*, by Harry Hoijer et al. (Viking Fund Publications in Anthropology 6), 85–129.
————. 1962. *The Menomini language.* New Haven: Yale University Press.
Dahlstrom, Amy. MS. *Morphology and syntax of the Fox (Mesquakie) language.* In preparation.
Darnell, Regna, and Anthony L. Vanek. 1976. The semantic basis of the animate/inanimate distinction in Cree. *Papers in Linguistics* 9:159– 180.
Dixon, R. M. W. 1972. *The Dyirbal language of North Queensland.* Cambridge: Cambridge University Press.
Goddard, Ives. 1974. Dutch loanwords in Delaware. *A Delaware Indian symposium*, ed. by Herbert C. Kraft (Harrisburg: Pennsylvania Historical and Museum Commission), 153–160.
————. 1990. Primary and secondary stem derivation in Algonquian. *International Journal of American Linguistics* 56:449–483.
————. 1991. Observations regarding Fox (Mesquakie) phonology. *Papers of the 22nd Algonquian Conference*, ed. by William Cowan (Ottawa: Carleton University), 157–181.
————. 1994. *Leonard Bloomfield's Fox lexicon: critical edition.* Algonquian and Iroquoian Linguistics Memoir 12.
Greenberg, Joseph H. 1954. Concerning inferences from linguistic to nonlinguistic data. *Language in culture: conference on the interrelations of language and other aspects of culture*, ed. by Harry Hoijer (Chicago: University of Chicago Press), 3–19.
Hallowell, A. Irving. 1955. *Culture and experience.* Philadelphia: University of Pennsylvania Press.
————. 1976. *Contributions to anthropology: selected papers of A. Irving Hallowell.* Chicago: University of Chicago Press.
Jones, William. 1907. *Fox texts.* American Ethnological Society Publications 1.
Kiyana, Alfred. 1913. wisakea osani okyeni osimeani okomeseani. National Anthropological Archives, Smithsonian Institution, MS 2958a.

Lakoff, George. 1987. *Women, fire, and dangerous things: what categories reveal about the mind.* Chicago: University of Chicago Press.

Michelson, Truman. 1925. Accompanying papers. *Annual Report of the Bureau of American Ethnology* 40:23–658.

Morgan, J. L. 1972. Verb agreement as a rule of English. *Papers from the 8th regional meeting of the Chicago Linguistics Society,* 278–286.

Rosch, Eleanor. 1978. Principles of categorization. *Cognition and categorization,* ed. by Eleanor Rosch and B. B. Lloyd (Hillsdale, N.J.: Lawrence Erlbaum Associates), 27–48.

Shoaps, Robin. 1993. The image schema of the body in Fox: a study in linguistic anthropology. B.A. honors thesis, Dept. of Anthropology, University of Chicago.

Silverstein, Michael. 1986. Classifiers, verb classifiers, and verbal categories. *Proceedings of the 12th Annual Meeting of the Berkeley Linguistics Society,* 497–514.

Straus, Anne Terry, and Robert Brightman. 1982. The implacable raspberry. *Papers in Linguistics* 15:97–137.

Voorhis, Paul H. 1971. New notes on the Mesquakie (Fox) language. *International Journal of American Linguistics* 37:63–75.

———. 1988. *Kickapoo vocabulary.* Algonquian and Iroquoian Linguistics Memoir 6.

Wittgenstein, Ludwig. 1953. *Philosophical investigations.* New York: Macmillan.

Wolfart, H. Christoph. 1973. *Plains Cree: a grammatical study.* Transactions of the American Philosophical Society, n.s., v. 63, part 5.