A Native American view of the "Mind"

as seen in the lexicon of cognition in East Cree

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Abstract

East Cree, an Algonquian language spoken in Northern Quebec, Canada, has a classifier, - eyi- , that indicates mental activity. This morpheme is found in a very large number of cognition words including all verbs for thinking, most for knowing, all for wanting, and several for feeling. A morphosyntactic analysis of over 500 words shows that many common metaphors for thinking are found in the etymology of Cree thinking words as well as culture-specific ones. These are interesting correlations between thinking and feeling and between

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rational and supernatural processes. The data support the existence of semantic universals for mental predicates, as defined by Goddard and Wierzbicka (1994, 2002), by providing evidence that East Cree has exponents for the semantic primes THINK, WANT, and KNOW. Interviews with elders confirm that the Cree "theory of mind" has both universal and culture-specific aspects, like the ideas of wholeness, a connection with the greater "mind" of creation (the Great Spirit), and respect for others, which is a central value of Cree culture.

1. Introduction

East Cree, an Algonquian language spoken in Northern Quebec, Canada, has a classifier, -*eyi-* , that indicates mental activity. This classifier is found in a very large number of cognition words including all verbs for thinking, most for knowing, all for wanting, and several for feeling. An example of each is presented in (1).

(1) THINKING:

    a. *Chihkaat**eyi**meu.* 'S/he thinks positively about him/her.'

    b. *Naapeuch**eyi**htaakusuu.* 'S/he thinks s/he is like a male (but really is not).'

    c. *Iyaaiw**eyi**meu.* 'S/he kills him/her by thinking.'

    KNOWING:

    d. *Chisch**eyi**meu.* 'S/he knows him/her.'

    WANTING:

    e. *Nituw**eyi**htam.* 'S/he wants it.'

    f. *Mushtehn**eyi**htam.* 'S/he desires it, longs for it."

FEELING:

g. *Pikweyimeu.* 'S/he is anxious about him/her (absentee).'

h. *Macheyihtam.* 'S/he is sad (about it).'

 i. *Paasikweyihtam.* 'S/he is excited (about it)'

j. *Kaweyimuu.* 'S/he dies from grief.'

This paper begins by presenting aspects of the Cree language required to understand the grammar and semantics of *-eyi-* constructions. A morphosyntactic analysis of the verbs containing *-eyi-* reveals three patterns of semantic composition. Many common metaphors for thinking are found in Cree, but some of these are quite culture-specific. The data support the existence of semantic universals for mental predicates, as defined by Goddard and Wierzbicka (1994, 2002), by providing evidence that East Cree has exponents for the semantic primes THINK, WANT, and KNOW. More culturally specific aspects of thinking in Cree are revealed in the organization of the lexicon. There are interesting correlations between thinking and feeling and between rational and supernatural processes. Interviews with elders confirm that the Cree theory of mind has both universal and culture-specific aspects.

2. East Cree

East Cree is an Algonquian language spoken on the Eastern Coast of James Bay, in Northern Quebec, Canada. There are approximately 13,000 speakers and two major dialects, the Northern and the Southern. Data discussed in this paper are from the Southern dialect, but no major difference is expected between the two, nor with neighboring Western varieties of Cree, like Moose Cree and in the East, Naskapi or Montagnais. Existing resources on the East Cree language are few: MacKenzie (1972) and MacKenzie et al. (1987), but more

documentation is currently under way (Junker et al. 2000-2002) .[1] Descriptions of Western

varieties (Wolfart 1973, Dahlstrom 1991, and Stark 1992) are available.

East Cree is a non-configurational (Hale 1983), polysynthetic (Sapir 1921), head-marking

(Nichols 1986) language. Every verb constitutes a grammatical sentence in itself. It contains

pronominal affixes which cross-reference optional full nominals adjoined in a relatively free

word order (Junker, 2000). Parts of speech consist of nouns, pronouns, verbs, and particles.

There are no adjectives. Eighty-one percent of words in the McKenzie, et al. (1987) lexicon

are verbs. This reflects a linguistic reality where most things are characterized as processes

rather than things. Cree nouns fall into two classes: animate and inanimate. This gender

distinction is a principal term of classification for verbs.

Following Bloomfield (1946), Cree verbs can be divided by their morphology into four

classes, according to the gender of the subject for intransitive verbs, and the gender of the

object for transitive verbs.[2] So we have: Intransitive verbs that take an Inanimate subject

(VII)[3], Intransitive verbs that take an Animate subject (VAI), Transitive verbs that take an

Inanimate object (VTI) and transitive verbs that take an Animate object (VTA) (see also,

Wolfart 1973, 1996). Examples of each based on the root *mach-* 'bad' appear in (2 a-d). Not

all verbs are so regular, many have different forms for each construction as in (2 e and f).

(2) a. *Macheyihtaakun.* (VII) 'It is unpleasant.' (inanimate)

    b. *Macheyihtaakusuu.* (VAI) 'S/he is unpleasant.' (animate)

    c. *Macheyihtam.* (VTI) 'S/he dislikes it, she is sad about it.' (inanimate)

    d. *Macheyimeu.* (VTA) 'S/he dislikes him/her, she is sad about him/her.' (animate)

    e. *Miichuu.* (VTI) 'S/he eats it.' (inanimate)

    f. *Muweu.* (VTA) 'S/he eats it.' (animate)

The structure of Cree words is illustrated in Figures 1-3. Nouns consist of a stem that can take a personal prefix to indicate possession and inflectional suffixes. Verb stems take personal prefixes, preverbs indicating tense, aspect or modality, and various derivational and inflectional suffixes. The verb stem has an internal structure with three components: **initials** (including the category "root" established by Bloomfield 1946), **medials**, and **finals**. All three components may consist of more than one morpheme; that is, they may be composed of combinations of initials, medials and finals. (Wolfart 1973; Clark and MacKenzie, In press).

Figure 1. *Structure of a Cree noun*

(person prefix)	**stem**	suffixes

Figure 2. *Structure of the Cree verbal complex*

person prefix	preverbs	**stem** **initial–medial- final**	suffixes

Figure 3. *Internal structure of the stem*

initial **initial –medial- final**	**medial** **initial-medial- final**	**final** [**-*eyi*-ht/m-**] **initial –medial- final**

The *-eyi-* morpheme that indicates mental activity is always found preceding the final *-m-* meaning "involvement of the face, or the mouth". *-m-* also appears in telling words like *tipachimu* and talking words like *ayimu.* It seems to

reinforce and focus the *-eyi-* morpheme. For transitive inanimate verbs, the nasal *m* becomes *h* by phonological rule, before the TI final *-t-*. Thus, the components *-eyi-* and *-m-* form a complex final, as illustrated in (3) below.[4]

(3) a. *Macheyimeu.*

Mach-eyi-m-e-u

bad-by mind-by face(TA final)-TAdirect theme sign-3

'S/he dislikes him/her, she is sad about him/her.'

b. *Macheyihtam.*

Mach-eyi-h-t-am-(u)

bad-by mind-by face-TI final-TI theme sign-(3)

'S/he dislikes it, she is sad about it.'

This complex final is found in its minimal form in the verb "to think". There is one basic verb stem that means "to think", made up of a relative root *it-* ("thus", "so"), *-eyi-*, and the final *-m-(or -h-)* as in (4).

(4) a. *Iteyimeu.* 'S/he thinks so about someone.'

It-eyi-m-e-u

so-by mind-by face(TA final)-TA.direct 3>3'-3

b. *Iteyihtam.* 'S/he thinks so about something.'

It-eyi-h-t-am-(u)

so-by mind-by face-TI final-TI theme sign-(3)

c. *Iteyimuu.* 'S/he thinks so.'

It-eyi-m-u-u

so-by mind-by face-AI final-3

The initial components of the stem are usually found occurring in words that lack the *-eyi-* component. This allows us to infer a gloss for them. When the initial is identical to a

particle, we use the particle's meaning as a gloss. For many verbs, however, the initial

component requires *-eyi-*. An example is the word *uweshipeyihtam* in (5). For such verbs, a

gloss of the initial component would be highly speculative, thus it will not be attempted here.

(5) a.   *Uweshipeyihtam.* (VTI) 'S/he has it in her thoughts, she has reason, she is sensible.'

   b.   *Uweshipeyimeu.* (VTA) 'S/he has him in her thoughts.'

Nouns containing *-eyi-* are usually derived from verbs by the addition of a noun final, and

are more complex morphologically, as shown in (6) and (7).

 (6) a. *Nituweyihtam.* 'S/he wants it.'

      nituw.eyi-ht-am-(u) (VTI)

      want-TI final-TI theme sign-(3)

--> b. *Nituweyihtamuun* 'a will, a wish'

      [Nituw-eyi-h-t-am-u]-un (NI)

      [want-TI final-TI theme sign-3]-noun final

(7) a. *Chistimaacheihchicheu.* 'S/he is compassionate, merciful.'

      Chistimaach-eyi-hchi-che-u (VAI)

      pity-think-AI final-AI final-3

--> b. *Chistimaacheyihchicheun* 'Compassion, kindness, pity'

      [Chistimaach-eyi-hchi-che-u]-n (NI)

      [pity-think-AI final-AI final-3]-noun final

A corpus of 513 words containing *-eyi-*were collected from the MacKenzie et al. (1987) Cree lexicon, prior to the translation of the Bible into East Cree. The lexicon reflects the East Cree language as it was used in the 1970s and 1980s by speakers born prior to 1960. The data were then rechecked in 2001 by interviews with five bilingual and four monolingual speakers. The ages of the speakers were 37, 47, 55 (2), 60 (2), 74, 76 and 80 years. There was a difference in knowledge about some words between elders and younger speakers. Bilingualism with English did not seem to make a difference, since all speakers were totally fluent in East Cree, which was their first and best language.

Table 1 shows the repartition of the data according to parts of speech. The words containing *-eyi-* make up 3.3 percent of the total number of words of the corpus. There is a higher percentage of transitive verbs with *-eyi-*: 5 percent of VTA and 6.65 percent of VTI, for only 2 percent of VII and 2.5 percent of VAI. The morpheme *-eyi-* is found only in nouns and verbs, never in particles and pronouns.

Table 1. *Total words by part of speech and inclusion of -eyi-*

Part of speech:	Total in dictionary	Total with *-eyi-*	Percent with *-eyi-*
words	**15 362**	**513**	**3.3**
verbs:	12 400	465	3.75
vii	2 183	45	2
vai	5 045	126	2.5
vta	3 142	159	5
vti	2 030	135	6.65
nouns	2260	48	2.1
other (particles, pronouns)	702	0	0

Because the Cree verb is highly derivational (verb classes, applicatives, causatives), these 513 words with *-eyi-* can be reduced to about 70 different stems in combination with *-eyi-*.

The examples in (8) below show five different forms the basic verb 'to think' can take,

depending on its syntax and derivations.

(8) a. *Iteyimeu.* 'S/he thinks so about someone.'

    It-eyi-m-e-u (VTA)

    so-think-TA final-TA direct theme sign.3>3'-3

  b. *Iteyihtam.* 'S/he thinks so about something.'

    It-eyi-ht-am-(u) (VTI)

    so-think-TI final-TI theme sign-(3)

  c. *Iteyimuu.* 'She thinks so.'

    It-eyi-mu-u (VAI)

    so-think-AI final-3

  d. *Iteyimisuu.* 'S/he thinks so of himself/herself.'

    It-eyi-m-isu-u (VAI-REFLEXIVE)

    so-think.AI final-Reflexive-3

  e. *Iteyimituuch.* 'They think so of each other.'

    It-eyi-m-itu-u-ch (VAI-RECIPROCAL)

    so-think-AI final- RECIP-3-PL

  f. *Iteyihcheu.* 'S/he assumes so.'

    It-eyi-hche-u (VAI)

    so-think-AI final-3

In the next section, we examine the semantics of the compounds with *-eyi*. We discover

their metaphors, and some evidence for the existence of universal semantic primes.

3. The semantics of compounds

The semantics of the compounds was investigated in two ways: First, I looked for the existence of the elements preceding *-eyi-* in verbs without *-eyi-*. Second, I asked speakers if they could tease apart the components and attribute a separate meaning to each. Then I asked whether they saw a connection or difference in meaning between the verbs that contained *-eyi-* and the corresponding ones that did not. Most *-eyi-* words that have corresponding non-*eyi-* words can be classified in three semantic compositional patterns:

'Think that...+ (incorporated complement clause)'

'Think like + [NP]'

'Think like (this)'

It is in the third pattern that metaphors are found. Some of these seem universal, while others seem more culture-specific. Finally, there are two words whose initial components are clearly attested in other words, but whose meaning speakers absolutely refused to paraphrase.

3.1. To think that... + intransitive verb

An example of this type of compound meaning is given in (9) below. The initial element of the stem corresponds to a verb of the VAI class, which is interpreted as an incorporated complement clause.

(9) *Nichihihtimuweyimaau*

   Ni-[chihihtimuw]-eyi-m-aau

   1-[s/he.is.lazy]-think-TA final- TA direct. 1>3

   'I think that s/he is lazy.'

The meaning of such verbs can be explained with a very simple gloss, using the Cree verb *iteyimeu* ("Someone thinks so about someone else.") or *iteyihtam* ("Someone thinks this about something."), preceded by a verb or an expression based on the initial component. For example, (10) is considered synonymous to (9). Additional examples are provided in (11-15).

(10) *Chihtimuu, nititeyimaau.*

   Chihti-mu-u, ni-t-iteyi-m-aau

   be.lazy-AI final-3, 1-think.TA final-TA direct.1>3

   she is lazy, I think this about her

   'I think that s/he is lazy.'

(11) a. *Meyaaucheyimeu.* (VTA) 'S/he thinks it serves him/her (other) right.'

    [*meyaau naashch.* 'you deserved it!' ; *-eyim-* 'think about someone']

--> b. *Meyaau naashch, iteyimeu.*

   (you) deserved that, so s/he thinks about him.

   'S/he thinks that it serves him/her (other) right.'

(12) a. *Maamaskaateyihtam.* (VTI) 'S/he thinks it is strange, surprising.'

   b. *Maamaskaateyimeu.* (VTA) 'S/he thinks s/he (someone else) is strange, surprising.'

   c. *Maskaa.* (P) 'it is strange, it is bizarre.'

(13) a. *Chishuweyimeu.* (VTA) 'She thinks s/he (someone else) is capable (physically).'

  b. *Chisuusiyuu.* (VAI) 'S/he is capable of doing anything because of his/her physical

   abilities.'

(14) a. *Iyaauteyimeu.* (VTA) 'S/he thinks s/he (someone else) is a not worth it (is a

   nuisance).'

  b. *Iyaauteyihtam.* (VTI) 'S/he thinks it is a not worth it (a nuisance).'

  c. *Iyaauch.* (P) 'not worth the trouble! '

  d. *Iyaauchihuu.* (VAI) 'S/he is a nuisance.'

 (15) a. *Wiineyihtam.* (VTI) 'S/he thinks it is dirty'

  b. *Wiiniheu.* (VTI) 'S/he dirties it.'

The VTA counterpart of (15a), given in (16), also has a second meaning, showing that

more than one type of compound meaning can exist in one verb.

(16) *Wiineyimeu.* (VTA)

  1) 'S/he thinks s/he (someone else) is dirty.'

  2) 'S/he thinks dirty about him/her.' / 'He has dirty mind about her.' (sexual sense)

3.2. To think like this + noun

This pattern is not very frequent, and may be due to the fact that the Cree language has few

noun stems to start with. Most nouns are derived from verbs, and the language consists

mainly of verbs. In the data examined here, only one example, (17), has a nominal root :

(17) a. *Chisheinuweyihtam.* 'S/he thinks (about it) like an elder.'

    Chisheinuw-eyi-ht-am (VTI)

    elder-think-TI final-TI theme sign.3

  b. *Chisheinuu* ' an elder'

   Example (17) can be glossed using the Cree words *itheyihtam* "s/he thinks about it" and *mwech* "like", as shown also by (18). These words are the Cree exponents of the universal semantic primes THINK and LIKE, proposed by Wierzbicka's (1996).

(18) *Mwech chisheinuu itheyihtam.*

    like elder think.TI.3

    Like an elder, s/he thinks so about it.

    'S/he thinks (about it) like an elder.'

3.3. To think like this...

The compounds with the semantic compositional pattern "to think like this..." are not reliably transparent or predictable. However speakers do recognize the compositional meaning of them. The initial verbal element can be found in at least one and often many other verbs without *-eyi-,* which allows us to look at the etymology of these words. Each word has a story that is still recognized by speakers today (cf. Denny 1989). In order to explain their meaning to me, speakers actually like to translate them into English compounds. An explanation of these compounds would have in common the following elements: "S/he thinks like this." Many common metaphors for thinking are found here.

Examples (19), and (20) exhibit the metaphor: THINKING IS OBJECT MANIPULATION. Jäkel (1995) claims that this metaphor is the most important one for the conceptualization of thinking. It is attested in East Cree with etymologies like "sweep-think" and "test-think", for which we find corresponding words without *-eyi-* in (19c-d) and (20b) with an instrumental affixe.

(19) to sweep-think

    a. *Wepeyihtam* . 'S/he forgives it.'

       Wep-**eyi-**ht-am (VTI)

       sweep/away-think-TI final-TI theme sign.3

    b. *Wepeyihtamuweu* . 'S/he forgives him.'

       Wep-**eyi-**ht-am-uw-e-u (VTA- applicative)

       sweep/away-think-TI final-TI theme sign.3-APPL-TA direct.3>3'-3

    c. *Wepahiikan*   'broom'

       Wep-ahii-kan (NI)

       sweep/away-tool/instrument-action.noun final

    d. *Wepahiicheu.* 'S/he sweeps (the floor).'

       Wep-ahii-che-u (VAI)

       away/sweep-by tool/instrument-regular activity.AI final-3

(20) to test-think

    a. *Kakwet**eyi**htam*. 'S/he is making up his/her mind about it.'

     Kakwet-**eyi**-ht-am (VTI)

     test-think-TI final-TI theme sign.3

    b. *Kakwetaham*. 'S/he tests it (using a tool).'

      Kakwet-ah-am (VTI)

     test-by.tool/instrument-TI final- TI theme sign.3

Another common metaphor for thinking is: THINKING IS MOVING (Lakoff and Johnson 1999). Many Cree thinking verbs have an initial component that expresses movement like "turn-think", (21), "stop-think", (22), or "down-think" (23).

(21) to turn-think

    a. *Kwesch**eyi**hta*. 'S/he changes his/her mind about it.'

     Kwesch-eyi-ht-am (VTI)

     turn-think-TI final-TI theme sign.3

    b. *Kwesch* (P) 'In turn.'

    c. *Kweschiiu*. (VAI) 'S/he turns.'

(22) to stop-think

    a. *Puun**eyi**htam*. 'S/he stops thinking about it.'

     Puun-**eyi**-ht-am (VTI)

     stop-think-TI final-TI theme sign.3

    b. *Puuniiu*. (VAI) 'S/he stops/quits.'

(23) to down -think

   a. *Kaweyimuu*. 'S/he dies because of grief.'

   ('This verb would be used in a situation involving an orphan, for example, suffering

   over a long period of time, when rejection feelings built up, and when there is a lot of

   abuse. It means both thinking and feeling. ')

   *Kaw-**eyi**-mu*-u (VAI)

   [kaw- (or kau-)*: idea of downward movement]-think-AI final-3

   b. *Kaupayuu.* (VAI) 'S/he falls down.'

The third metaphor that is found in East Cree thinking verbs is: THINKING IS PERCEIVING

(Lakoff and Johnson 1999). The words in (24) are made up with the initial component

waaskam-, used for physical perception like a clear day in (24c). *Waskam-* also found in

words where it denotes positive qualities of the mind (24a), the voice (24e) or the heart (24f).

The question (24b) shows that clarity of thinking is associated with sanity.

(24) to clear-think

   a. *Waaskam**eyi**htam.* 'S/he thinks straight/clearly.'

   Waaskam-eyi-ht-am (VTI)

   clear-think-TI final-TI theme sign.3

   b. *Chi waaskam**eyi**hten aa?* 'Are you in your right mind?'

   d. *Waaskamaau.* (VII) 'It is a clear day.'

   e. *Waaskamiweu.* (VAI) 'She has a clear voice.'

   f. *Waaskamiteheu.* (VAI) 'S/he has a pure heart.'

Many other verbs express ways of thinking that incorporate qualities. These qualities can be physical, as in (25), or moral, as in (26). They have to do with skills as in (27) and (28) or ability to perform skills, as in (29). Notice in (27b) how by its etymology, *kachehtaaw**eyi**htaamuun* "wisdom" is considered a skill.

(25) to firm-think

    a.*Yaait**eyi**htam.* 'She is firm-minded/sure about it.'

      Yaait-eyi-ht-am (VTI)

      firm-think-TI final-TI theme sign.3

    b. *Yaaitin.* (VII) 'It is firm.'

(26) to wrong-think

    a. *Wan**eyi**htam*. 'S/he can't think properly (about it).'

      Wan-eyi-ht-am (VTI)

      wrong-think-TI final-TI theme sign.3

    b. *Wanituutam.* (VTI) 'S/he does it wrong.'

 (27) to skillfully-think

    a. *Kachetaaw**eyi**htam.* 'S/he thinks skillfully; s/he knows how; s/he is wise and alert.'

      Kachetaaw-eyi- ht-am (VTI)

      skillful-think-TI final-TI theme sign.3

    b. *Kachehtaaw**eyi**htaamuun* (NI) 'Wisdom.'

    c**.** *Kachehtaaunam.* (VTI) 'S/he holds it skillfully.'

(28) to uncertain-think

a. *Kuituteyihtam.* 'She does not know what to think of it.'

   Kuitu-t-eyi-ht-am (VTI)

   uncertain-think-TI final- TI theme sign.3

b. *Kuitu-t-eyi-meu.* 'She does not know what to think of him.'

   Kuitu-t-eyi-m-e-u (VTA)

   uncertain-think-TA final-TA direct theme sign.3>3'-3

c. *Kuituumiichisuu.* (VAI) 'She does not know what to eat.'

(29) to confuse-think

a. *Chiishkweyeyihtam*. 'S/he has a lot on his/her mind, confused mind (lots of yelling and screaming going on, driving you mad, out of your mind).'

   Chiishkwey-eyi-ht-am (VTI)

   confuse-think-TI final- TI theme sign.3

b. *Chiishkweu* (VAI) 'S/he is crazy.'

c. *Chiishkwemeu* (VTA) 'S/he confuses him with noise or talking.'

While Lakoff and Johnson suggested that a submetaphor of THINKING IS PERCEIVING is THINKING IS FEELING, a number of Cree verbs illustrate rather the inverse metaphor: FEELING IS THINKING. If we look again at the verb in (23), partially repeated below, we see that a certain way of thinking describes a very strong emotional state (grief) and that there is a belief, implicit in the etymology of this verb, that too much grief makes you die (i.e. 'to die of sorrow'). Why does such a verb, describing death and its emotional cause, contain *-eyi-* ?

(30) *Kaweyimuu*.

   Kaw-eyi-mu-u (VAI)

down-think-AI final-3

'S/he dies because of grief.' 'S/he dies of sorrow.' ('This verb would be used in a situation involving an orphan, for example, suffering over a long period of time, when rejection feelings built up, and when there is a lot of abuse. It means both thinking and feeling. ')

Speakers explained this to me by saying that most feelings are caused by certain ways of thinking and that they ultimately originate in the mind. The polysemy of an example like (31) below shows a thread that links the mental attitude of disliking to a feeling state: being sad. Etymologically, the verb is made up of a preverb meaning "bad" and the components of the verb "think about something". When this preverb is reduplicated, indicating intensity or repetitive action, we get the meaning of "being jealous", also a consequence of "bad thinking".

(31) to think badly (so as to affect one self)

   a. *Macheyihtam*. 'S/he dislikes it, she is sad.'

     Mach-eyi-ht-am (VTI)

     bad-think-TI final-TI theme sign.3

   b. *Mamacheyihtam*. 'S/he is jealous.'

     Ma-mach-eyi-ht-am (VTI)

     REDUP- bad-think-TI final-TI theme sign.3

But bad thinking does not only affect oneself, it also affect others, as shown in (32a-d). The verbs in (32) are made up of an initial component *maay-* found in words for evil things (32e), beings (32f), concepts (32g) or actions (32h), or for bad omens (32i). Combined with -

eyi-, it means thinking in a way that goes against one of the most important values of Cree culture, respect for others.

(32) to think badly, in an evil way (so as to affect others)

   a. *Maayeyihtam.* (VTI) 'S/he is disrespectful towards it, makes fun of it.'

   b. *Maayeyimeu.* (VTA) 'S/he is disrespectful towards him/her, s/he insults him.'

   c. *Maayeyicheu.* (VAI) 'S/he is disrespectful.'

   d. *Maayeyihtaakun.* (VII) 'It is mocked, ridiculed.'

   e. *Maayaatin.* (VII) 'It is bad, evil.' (premonition, omen)

   f. *Maayaatisiiu.* (VAI) 'S/he is bad, evil.'

   h. *Maayaatisiiun* (NI) 'Evil, badness'

   g. *Maayaachimeu.* (VTA) 'S/he tattles on him/her.'

   i. *Maayaasinam.* (VTI) 'S/he sees a vision, apparition of someone which foretells a death.'

Another couple of examples that show the chain of causation between feeling and thinking are given in (33) and (34).

(33) to startle/shock-think

   a. *Kushkweyihtam*. 'S/he feels startled about it and as a consequence, s/he is deep in

     thought about it.'

     Kushkw-eyi-ht-am (VTI)

     startle-think-TI final-TI theme sign.3

   b. *Kushkweyimeu*. 'S/he is deep in thought about him, because s/he was shocked.'

     Kushkw-eyi-m-e-u (VTA)

   startle-think-TA final-TA direct.3>3'-3

c. *Kushkwepayuu* (VAI) 'S/he is startled, caught by surprise.'

(34) to be.attracted-think

a. *Mushten**eyi**htam*. 'S/he desires it, longs for it.'

   Mushten-eyi-ht-am (VTI)

   attract-think-TI final-TI theme sign.3

b. *Mushtenam* (VTI) 'S/he is attracted to it.'

Surprisingly, the common metaphor ACQUIRING IDEAS IS THINKING (Lakoff and Johnson 1999) is not attested in the data obtained from documents nor could it be elicited.[5] This section on etymology would not be complete without a look at the words that cannot be decomposed semantically. This is what we turn to next.

3.4. The undecomposable ones: evidence for universal mental predicates

Not all *-eyi-* verbs in Cree can be fully decomposed into semantically transparent elements. Some are archaic forms, whose other components cannot be recognized independently by speakers. However, there are verbs for which speakers do recognize the initial component, but which they refuse to decompose. They also refuse to provide paraphrased English compounds for these verbs. The first one is the equivalent of English *want*, given in (35 a and b). The *Nituw-* initial component is found in hunting verbs like (35 c and d), and in other verbs of exploration like (35 e and f):

(35) a. *Nituw**eyi**htam.* 'S/he wants it.'

     Nituw.eyi-ht-am (VTI)

   want-TI final-TI theme sign.3

b. *Nituweyimeu.* 'S/he wants him/her.'

   Nituw.eyi-m-e-u (VTA)

   want-TA final-TA direct.3>3'-3

c. *Nituwaascheu* (VAI) 'S/he is goose hunting.'

d. *Nituwaaweu* (VAI) 'S/he goes egg-hunting.'

e. *Nituwaapameu* (VTA) 'S/he goes to see him.'

f. *Nituwaahtaau* (VAI) 'S/he checks it.'

The second compound that speakers refuse to decompose is the equivalent of English *know,* given in (36a and b). The *Chisch-* initial component is found in various non *-eyi-* words like (36 c-g).

(36) a. *Chischeyihtam.* 'S/he knows it.'

   Chisch.eyi-ht-am (VTI)

   know-TI final-TI theme sign.3

b. *Chischeyimeu.* 'S/he knows him/her.'

   Chisch.eyi-m-eu (VTA)

   know-TA final-TA direct.3>3'-3

c. *Chischiwaahiicheu* (VAI) 'S/he prophecizes.'

d. *Chischisuumeu* (VTA) 'S/he reminds him.'

e. *Chischinuwaapuu* (VAI) 'S/he learns how to do it from watching.'

f. *Chischinuwaachisham* (VTI) 'S/he cuts a mark on it.'

g. *Chischinuhtiheu* (VTA) 'S/he leads, directs, guides him.'

The verbs in (36a-b) and (37a-b), semantically undecomposable and equivalent to English *want* and *know*, turn out to be universal semantic primitives. Semantic primitives, as defined by Wierzbicka (1996) cannot be decomposed themselves. The concept they embody is indefinable without circularity.

Another term that cannot be decomposed is the verb ***Iteyi**htam/It**eyi**meu* 'think'. The Cree data thus support Wierzbicka's hypothesis that mental predicates like THINK , WANT and KNOW are semantic primes. Their exponents in Cree are all marked by this *-eyi-* morpheme, thus confirming their status as mental predicates.

(37) ***Iteyi**htam/It**eyi**meu* THINK

(38) *Nituw**eyi**htam/Nituw**eyi**meu* WANT

(39) *Chisch**eyi**-htam / Chisch**eyi**meu* KNOW

Because Cree is a polysynthetic language, and each verb is a sentence in itself, the Cree exponents of the semantic primes will always appear in their syntactic frames. In fact, there is a neat fit between Cree verbs and the syntactic frames recently proposed by Goddard and Wierzbicka (2002) for the primes (see Junker 2001). Notice however, that although a number of feeling verbs in Cree bear the *-eyi-* morpheme, the exponent of the prime FEEL in Cree does not : *itamahchihuu* (VAI) 'S/he feels a certain way'. We now turn to what the Cree *-eyi-* verbs tell us about thinking.

4. A view on the "mind"

4.1. Thinking and Feeling

A first observation is that not all verbs containing *-eyi-* can be an answer to the question in (40), where the verb *iteyihtam* 'to think' is used. Instead, many *-eyi-* verbs are answers to the question in (41), containing the verb *itamahchihuu* 'to feel'.

(40) *Taan e it**eyi**htaman ?*

    Taan e it**eyi**htam-an ?

    How preverb(conjunct) think.TI-2

    ('How are you thinking about it?') = 'What are you thinking?'

(41) *Taan e **itamahchihu**yin?*

    Taan e itamahchihu-yin?

    How preverb(conjunct) feel.AI-2

    'How are you feeling?'

    All speakers interviewed agreed that some "*it**eyi**muu*" 's/he is thinking' (mental process), is involved in all the *–eyi-* verbs, including wanting, knowing, feeling. So the presence of the morpheme is an indicator of how speakers conceptualize and understand the word meaning. In that respect, *-eyi-* acts like a classifier for mental activities.

    Many Cree words corresponding to English emotions contain *-eyi-*, including words meaning: jealous, envious, happy, content, angry, lonely, sad, as in (42 a-h). Notice the association of the feeling of jealousy with the porcupine in (42a).

(42) a. *Kaahkweyimeu.* 'She is jealous of him/her.'

   Kaahkw-eyi-m-e-u (VTA)

   porcupine-think-TA final-TA direct.3>3'-3

   b. *Uhteyimeu.* 'S/he is jealous/envious of him/her.'

   Uht.eyi-m-e-u (VTA)

   be.envious-TA final-TA direct.3>3'-3

   c. *Miyeyihtamiheu.* 'She makes him/her happy, content.'

   Miy-eyi-ht-am-ih-e-u (VTA)

   good-think-TI final-TI theme sign-Causative-TA direct.3>3'-3

   d. *Muuchicheyihtam.* 'S/he is elated, rejoicing.'

   Muuchich-eyi-ht-am (VTI)

   joy-think-TI final-TI theme sign.3

   e. *Niishtaameyihtam.* 'S/he is angry.'

   Niishtaam.eyi-ht-am (VTI)

   be.angry-TI final-TI theme sign.3

   f. *Piichiskaateyihtam.* 'S/he is lonely.'

   Piichiskaat.eyi-ht-am (VTI)

   be.lonely- TI final-TI theme sign.3

   g. *Paasikweyihtam.* 'S/he is excited.'

   Paasikw-eyi-ht-am (VTI)

   going.over.board-think-TI final-TI theme sign.3

   h. *Macheyihtam.* 'S/he is sad.'

   Mach-eyi-ht-am (VTI)

   Bad-think-TI final-TI theme sign.3

Cree words corresponding to English emotional activities also bear *–eyi-*, as in (43 a-e):

(43) a. *Nanehkaat**eyi**meu.* (VTA) 'S/he suffers with empathy, with another.'

   b. *Nanehkaat**eyi**htam.* (VTI) 'S/he suffers from it.'

   c. *Waawiisach**eyi**htam.* (VTI) 'S/he is suffering from it.'

   d. *Mihchiiw**eyi**htam.* (VTI) 'S/he is sorry about it.'

   e. *Mihchii**eyi**htamuweu.* (VTA applicative) 'She is sorry for him.'

This is consistent with Wierzbicka's claim that: "all languages have words for describing feelings based on certain thoughts. Such words all combine the following components:

"someone feels something"

"because this person thinks something" (Wierzbicka 1999:284)

Indeed, when asked why those words had the *-eyi-* component in them, speakers explained to me that it was because such feelings originate in the mind, by ways of thinking. Not all feelings words in Cree contain *-eyi-*, but the ones which do indicate a causal relationship between thinking and feeling. This is consistent with d'Andrade's (1987) proposed chain of causation from thinking to feeling.

Many mental attitude verbs also typically include *-eyi-*. The glosses and explanations offered by my consultants suggest a view of thinking as a continuous, on-going process, that can be either clear and calm or disturbed and difficult, thus affecting one's general emotional state.

(44) a. *Piuutameyihtam*.

      Piuutam**-eyi-**ht-am (VTI)

      clear-think-TI final-TI theme sign.3

      'S/he is peaceful in his/her mind.' ('Her thinking is clear and calm.')

   b. *Chiyaam**eyi**htam.* 'S/he is at peace.'

      Chiyaam**-eyi-**ht-am (VTI)

      calm-think-TI final-TI theme sign.3

   c. *Mikuskaat**eyi**htam.* 'S/he worries.' ('Her thinking is disturbed, s/he has a hard time

      thinking')

      Mikuskaat.eyi-ht-am (VTI)

      worry- TI final-TI theme sign.3

Equivalents[6] of *consider, reason, plan* and *believe* all bear *-eyi-* but interestingly the verb *to judge* does not. *To judge* is polysemous with *to measure*:

(45) a. *Tipaaskunam*. (VTI) 'S/he measures it with a tape or a ruler, s/he judges it.'

   b. *Tipaaskuneu.* (VTA) 'S/he measures her/him with a tape or a ruler, s/he judges

      her/him.'

There are no words for *stupid, idiot,* or *lack of intelligence*. In general, there are no insult words in Cree. The notion of respect for others, so central to Algonquian culture, seems to bar labels that would convey lack of respect. There are many words for not thinking properly, as we saw in section (3), and for misusing the power of thinking. Thinking is not viewed as a state ("I think therefore I am"), rather it is viewed as a skill. It is worse to misuse thinking skills than to lack them. The words for *mind* and *intelligence* are interesting in this respect.

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Item (47) is a reduplicated version of (46)[7], The two words are judged by speakers to be synonyms. Both contain *mitun* meaning "completely" as shown in (48).

(46) *Mituneyihchikan.* 'intelligence, memory, thoughts, mind'

    Mitun-eyi-hchikan (NI)

    whole-think-Noun final

(47) *Maamituneyihchikan.* 'mind, thinking faculty, thinking, thoughts'

    Maa-mitun-eyi-hchikan (NI)

    REDUP-whole-think-Nound final

(48) a. *Mitun* (P) 'completely'

    b. *Mitunisiiu.* (VAI) 'S/he is complete, perfect, accurate.'

So, the etymology of mind and intelligence in Cree indicates an idea of wholeness. It is worth mentioning here the word for *meditation*, because it is built on the same root *mitun* "complete", also with reduplication, via the verb *maamituneyihtam* "to ponder". It also means *thought,* indicating again the importance of wholeness for thinking properly.[8]

(49) *Maamituneyihtamuun* 'meditation, thought'.

    Maa-mitun-eyi-ht-am-u-un (NI)

    REDUP-whole-think-TI final- TI theme sign-3-noun final

The words for mind can be preceded by a prefix indicating goodness, as in (50a,b) or badness, as in (51a,b).

(50) a. ***Miyu****mituneyihchikan* 'good mind (thinking good thoughts)'

Miyu-mitun-eyi-hchikan

good-whole-think-Noun final

b. ***Miyu****maamituneyihchikan* 'good mind (thinking good thoughts)'

miyu-maa-mitun-eyi-hchikan

good-REDUP-whole-think-Noun final

(51) a. ***Machi****mituneyihchikan* 'bad mind (thinking bad thoughts)'

machi-mitun-eyi-hchikan

bad-whole-think-Noun final

b. ***Machi****maamituneyihchikan* 'bad mind (thinking bad thoughts)'

machi-maa-mitun-eyi-hchikan

bad-REDUP-whole-think-Noun final

Speakers described a person having (50), the "good mind", as a person having compassion, being helpful to others in need, looking after others. They described the person having (51), the "bad mind", as a person who is having evil thoughts, wishing ill to others, being destructive. Again, note that (51) does not and cannot mean *being stupid*. People can be viewed as more or less skilled, but it is how they use their skills that matters most. In Cree, misusing the mind, the thinking faculty is considered evil.

4.2. The Cree ethnotheory of the person and of the "mind"

Goddard (this volume) discusses the "Ethnotheory of the person", the fact that languages and cultures universally have a word for BODY, which in turn invites them to theorize or speculate about what the other parts might be. Conceptualizations of these other parts vary from culture

to culture. In modern East Cree, there are three parts of a person that are distinct from the body. These are listed in (52b-d). In traditional culture and religion, there is also a fourth part, given in (52e).

(52) a. *Miyuu* (NID) 'body'

b. *Ahchaahkw* (NA) 'soul, spirit, pompom, toque (Canadian winter hat)'

c. *Mituneyihchikan* (NI) 'mind, memory, intelligence'

d. *Mitehii* (NID) 'heart'

e. *Mistaapeu* (NA) 'own personal power spirit (good or bad)'

Younger speakers do not always understand the polysemy of the word *ahchaahkw,* in (52a). One speaker in her 40's reported to me ignoring the *toque* meaning of it and being shocked the first time it was used like that by her mother, all she knew was the non-literal meaning of *soul*. However, the polysemy seems to be motivated by the fact that the *ahchaakw* is perceived as residing somewhere above or around the head. Item (52e) *mistaapeu* comes from traditional religion and designates a person's personal spirit or helper, who can be good or bad, depending on the person, and who represents a person's supernatural essence and spiritual force. Modern speakers interviewed do not consider the *mistaapeu* a part of the person, and say only shamans in the old religion (pre-Christian) had them. In general, talking about the *mistaapeu* elicited uncomfortable feelings, reminding people of curses and black magic (see section below). Item (52d) *mitehii* indicates both the physical organ of the heart and the qualities associated with it, such as courage and compassion. It is linked with the good use of the *mituneyihchikan* ('intelligence', 'mind'*),* which encompasses both the head and heart, and is located, according to the older speakers, from the waist up and around the body.

Wierzbicka (1992) demonstrated that the concept of *"mind "* is an English folk construct. She also studied how the concept of mind has changed over time in English. She noticed that it shed its spiritual connotations, lost its links with values and emotions, and became a concept focused on the intellect. She thus proposed the following definition (in NSM) for the modern *"mind "* in English:

(53) ENGLISH: (Wierzbicka 1992:45)

  Mind

     one of two parts of a person

     one cannot see it

     because of this part, a person can think and know

I do not feel I have done enough consulting with Cree elders to propose a full explanation of the Cree concept of *mituneyihchikan/ maamituneyihchikan*. Based on the data available to me at this point, I suggest that an explanation of the Cree concept would include the two components in (54):

(54) CREE:

  Mituneyihchikan / Maamituneyihchikan

     (One of the parts of a person

     One cannot see it)

     Because of this part , a person can think, want, know and feel.

     You can do (good and bad) things with it.

The component *because of this part , a person can think, want, know and feel* is there to account for the fact that all thinking, wanting, knowing and many feeling words include *-eyi-* and are considered by speakers to involve some kind of thinking. The component *You can do things with it* is there to account for the view of the thinking faculty as a skill, that can be used and misused. It is also there to account for the view of thinking as affecting the supernatural realm.

4.3. Thinking in the supernatural realm or shamanistic thought

A number of weather verbs bear *-eyi-*. This might seem curious to an outsider, but it is very logical to a traditional Cree person. In traditional Cree culture, the weather is governed by certain spirits, and those spirits have a mind of their own. The example in (55) "has to do with the weather, when there is a lot of falling snow, or a wind that is blowing so hard" (Mali Iserhoff, personal communication). There are four winds in traditional religion. Each is associated with particular spirits who bring certain types of weather. In traditional settings, it used to be common to use magical techniques to control the weather (Tanner 1979).[9] It may be that a reference to the action of wind spirits explains the use of a thinking verb form for the weather, personifying it as a thinking entity.

(55) *Naapeucheyihtaakun* 'It (weather) seems masculine, male.'

    Naapeu-ch-eyi-ht-aakun (VII)

    man(male)-PL-think-TI final- be.like(II final)

There is a series of old words, given in (56), which are used to designate both the trap to catch an animal and the catch you are wishing for. It belongs to a family of verbs meaning "to

wish". *-eyi-* seems to convey the planning and ingenuity required to catch the animal, as well as the hope/wish that an animal will stumble into the trap left for it.

(56) a. *Pikuseyihchikan* (NI)

      1) 'trap or any trapline device left to catch an animal'

      2) 'the catch (you are wishing for)'

   b. *Pikuseyihtam* (VTI) 'S/he wishes for something from it.'

   c. *Pikuseyimeu* (VTA) 'S/he wishes for something from him/her.'

   d. *Pikuseyihchicheun* (NI) 'a wish'[10]

The use of songs can greatly increase your success at trapping. Personal songs allow the skilled trapper to call the animals into her trap (Florrie Mark-Stewart, p.c.). Many songs are still remembered for ice-fishing for example, as a Cree school teacher explained to me, and have the effect not only of attracting the fish into your net, but also of calming your mind, of helping you focus and succeed in your task.[11] So at least for hunting and fishing, there is more to wishing than there is in English. It means using your *mituneyihchikan* (your whole mind) in order to connect with the animals and the greater harmonious mind of the entire creation. Respect for the animals is of utmost importance in all hunting and fishing practices, thus manifesting the wholeness of the *mituneyihchikan*.[12] Two other traditional practices, telepathy and prophecies, also seem to be part of the use of the *mituneyihchikan*. Instances of telepathy as a traditional means of communication are commonly reported. An example is found in the story told by Evadney and Jossy Gunner, and written in English by Ella Saganash (2000). Stories of fulfillment of prophecies made by elders still abound in the communities.[13]

Divination is another traditional practice often spoken about with *-eyi-* words. According to Tanner (1979: 111), it is "part of a general intellectual approach to hunting, and includes a variety of techniques." It can be done with scapulimancy (*mitunsaawaakan*), dream interpretation and divinatory signs (*weciiyaawham* 'something will come'). It is, he added, "conducted as an intellectual exercise which accompanies the collection of hunting data....It fills the gaps in knowledge, which cannot be learned from the environment" (1979:133-134).

Item (57) gives examples of the mental activities of divination and telepathy attested in *-eyi-* words.

(57) a. *Niikaanichischeyihtam.* (VTI) 'S/he foreknows it.'

   b. *Niikaanichischeyimeu.* (VTA) 'S/he foreknows him.'

   c. *Puyeyihtam.* (VTI) 'S/he has a vision, clue, insight about it. When conjuring, s/he predicts by signs, portents.'

   d. *Puyeyimeu.* (VTA) 'S/he has a vision, clue, insight about him/her (conjuring), s/he reads about him/her in signs, portents.'

   e. *Pipeweyihtam.* (VTI) 'S/he interprets the good omen, portent it gives.'

Last, but not least, I found two curse words bearing the *-eyi-* component. The verb in (58) has two meanings. One is the more modern meaning based on an incorporated complement clause interpretation: *she thinks the other person is dead.* The other one is based on the compound interpretation: *s/he kills him/her by thinking.* Item (59) also has the same literal meaning of *to kill by thinking* in addition to the more benign one based on the incorporated clause interpretation *she thinks of it as useless.* The more literal meanings of these two verbs aroused fear in my older consultants when I questioned them about the topic. When I asked them what they meant by the gloss "to kill by thinking", they told me: "Oh no, this is really

bad. You are not supposed to do something like that. This is evil." It is noteworthy that they used the verb *do* rather than *think*! "Can you really kill someone by thinking?" I asked. – "Of course you can, but you should never even try! " An instance of such an event is reported in one of the Plains Cree stories recently edited by Wolfart and Ahenakew (2000).

(58) a. *Iyaaiweyimeu.* (VTA) 'S/he thinks the other person is dead.'; 'S/he kills him/her by

   thinking.'

   b. *Iyaaiuhuu.* (VAI) 'He got himself killed.'

   c. *Iyaaiwiyuu.* (VAI) 'S/he is dead-tired.'

(59) a. *Nanaayiweyimeu.* (VTA)

   1) 'S/he thinks of it (animate) as useless.'

   2) 'S/he kills him/her by thinking.'

   b. *Nanaayuun.* (VII) 'It is wasted.'

   c. *Nanaayuuhtaau.* (VTI) 'S/he wastes it.'

   d. *Nanaayuusham.* (VTI) 'S/he wastes it by cutting it.'

From wishing to cursing, mental powers can heal or destroy. The use of mental powers in traditional Cree medicine is reported in Marshall (In press). The Cree *-eyi-* verbs indicate a wide range of uses for mental powers. The idea that one's thoughts can have far-reaching effects, may it be to affect the weather, to communicate with a remote parent, to predict the future, to attract animals or to kill a person at a distance, is consistent with a supernatural view of thinking. In traditional Cree culture and contemporary Cree usage, thinking includes shamanistic thought. A common admonishment given by elders is: "Watch your thoughts!" Intentionally or not, thoughts can affect oneself, others, and the world.[14]

5. Conclusions

East Cree is a unique language which "talks about thinking" in its morphology. A morpheme *-eyi-* classifies a large number of words as mental processes. The examination of a corpus of over 500 words has shown that many common metaphors for thinking, that has been proposed by Jäkel (1995) and Lakoff and Johnson (1999) for English, like THINKING IS OBJECT MANIPULATION, THINKING IS MOVING, AND THINKING IS PERCEIVING, are also found in the etymology of Cree thinking words. However, metaphors like ACQUIRING IDEAS IS EATING were not found. This analysis has also shown that Cree has exponents for the semantic primes THINK, KNOW and WANT, all bearing the *-eyi-* morpheme, and thus classified as mental processes. This adds further support to the findings of Goddard and Wierzbicka (1994, 2002) pertaining to the universality of these mental predicates. The fact that Cree verbs are also sentences, and appear in specific syntactic frames, fits neatly with Wierzbicka and Goddard's (In press) further hypothesis about the existence of a universal syntax for the semantic primes. The existence of many feeling words containing *-eyi-* shows that many feelings result from thinking, and this conclusion is corroborated by elders. This also supports another hypothesis by Wierzbicka (1999) that all languages have words for describing feelings based on certain thoughts.

Another interesting correlation was found between rational and supernatural processes. Many *-eyi-* words describe acts that could be called "shamanistic thought processes": divination, telepathy, and curses. It is not surprising then, that the Cree word for "mind" turned out to be quite different in meaning from typical English modern usage. Predominant were the ideas of wholeness, and connection with the greater "mind" of creation (the Great Spirit). The words for the bad and the good mind, as well as the absence of potentially insulting words for lack of intelligence, and the fact that other rational concepts, such as

judging, did not involve thinking, echoes a central value of Cree culture, which is respect for others. A look at the Cree ethnotheory of the person confirmed that the Cree folk theory of mind has both universal and culture-specific aspects. While it is true that all languages talk about thinking, the way they do it reveals their culture and their values.

Notes

[1] See the resource section of <u>www.eastcree.org</u> for a complete list of references. See also the reference grammar section for a description of the language and the upcoming on-line dictionary.

[2] There is no case marking of nominal participants in Cree, except for locative.

[3] **List of abbreviations:**

APPL: Applicative; **REDUP**: Reduplication; **VTA**: verb transitive animate class (transitive verbs with an animate object); **VTI**: verb transitive inanimate class (transitive verbs with an inanimate object); **VAI**: verb animate intransitive class (intransitive verbs with an animate subject); **VII**: verb inanimate intransitive class (intransitive verbs with an inanimate subject); **TA**: transitive animate; **TI**: transitive inanimate; **AI**: animate intransitive; **II**: inanimate intransitive; **NI**: noun inanimate; **NA**: noun animate; **NID**: noun inanimate dependent (a noun that always takes a personal prefix); **NAD**: noun animate dependent; **P**: particle; **1**: first person; **2**: second person; **3**: third person animate proximate; **3'**: third person animate obviative; **0**: third person inanimate proximate; **0'**: third person inanimate obviative.

Obviation is the marking of all 3rd persons but one as non-topic in a given discourse span. It is an obligatory morphosyntactic feature in Algonquian languages. For information see Wolfart (1973), and for East Cree, Junker (in press).

Notation: when morphemes are not interpretable separately, a dot "." instead of a hyphen "-" is used.

[4] The glosses "by mind" and "by face" are used here to roughly indicate the morphological structure of the Cree verbs. Actually the morphemes *-eyi-* and *-m-* do not have one-to-one English equivalents; it is only their combination into a word or a phrase that allows us to translate them with an English word or sentence. See Marantz (1997) for a possible explanation.

[5] The only verb that I could elicit was (a), linked to (b). (a) can be used for anything,

including knowledge, says a younger speaker.

  a. *Siiweyitutam.* (VTI) 'S/he is hungry for it.'

  b. *Siweyuu.* (VAI) 'S/he is hungry.'

[6] For example, "to plan":

(i) a. *Iyeskuuw-**eyi**-ht-am.* 'S/he thinks about her/his decision ahead of time'/ 'S/he is

   planning.'

   Iyeskuuw-**eyi-**ht-am (VTI)

   ready-think-TI final-TI theme sign.3

  b. *Iyeskuuw* (P) 'The action is about to happen.'

  c. *Iyeskuuwiiu.* (VAI) 'S/he is getting ready.'

There are no exact equivalents of the English words *to believe*, *to reason*, *to consider*, but

they can be found in the glosses of a number of Cree words with *–eyi-*, such as:

(ii) *taapweucheyihtaakun*. (VII) 'It is credible, believable, it seems true.'

[7] Only the reduplicated word for intelligence has a corresponding verb:

  **Mitun*eyi*htam*   *Mitun*eyi*meu*

  <u>Reduplicated:</u>

  *Maamitun**eyi**htam* . (VTI) 'S/he is pondering, thinking about it.'

  *Maamitun**eyi**meu* . (VTA) 'S/he is pondering, thinking about him.'

[8] The spiritual dimension of thinking also appears in the fact that the word

*Chistimaach**eyi**hchicheun* 'Compassion, kindness, pity' bears *-eyi-*.

[9] Tanner (1979) explains that magical practices are directed at entities associated with certain elements. The practices include offerings to placate *underground entities* or actions designed to drive *above ground entities* away.

[10] Note that today, *wanahiikan* (NI) 'trap (steel)' is used in Mistissini rather than *pikuseyihchikan.*

[11] Note the same initial *pipew-* in the word in (56e) repeated below:

(i) *Pipeweyihtam.* (VTI) 'S/he interprets the good omen, portent it gives.'

(ii) *Pipeweumekweu.* (VAI) 'S/he sings his fish song.'

[12] Tanner (1979:107) reported that "In ideological statements about spirit powers, the Mistassini prefer to speak of a generalized respect which is due to all spirits and all animals".

[13] Luci Salt (p.c.) told me of how her grandmother remembers her own grandmother telling her that she would one day see a flying ship in the sky, long before the first plane made it to her community of Chisasibi. "The elders they knew a lot, always before it happened", she concluded.

[14] The same philosophy is reported in Witherspoon (1977) for Navajo.

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