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PART 1

## Verbal structure inside nominalizations



# Nominalizations in Ojibwe

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The aim of this paper is to account for nominalization processes in Ojibwe including agent and non-agent nominalizations. I make two main claims: (1) in Ojibwe (even) simple nouns (result nominals, cf. Grimshaw 1990) have internal (verbal) structure; (2) agent nominals in Ojibwe are not exactly nominalizations: they are more like full clauses (with no nominal projection on top of the CP). Theoretically, I address for Ojibwe the puzzle mentioned by Harley (2009) for English nominalizations: meaning shifts from event to result readings do not affect the internal morphological structure of the nominalization. In Ojibwe, it will be argued that, although many nominalizations have transitive morphology, the transitive verb that is imported into the nominalization process is devoid of an internal and of an external argument, creating result nominalization rather than event nominalization.

## 1. Introduction

Following Grimshaw (1990) and many others (Lees 1960; Chomsky 1970; Marantz 1997; Borer 2003), two types of nominals can be distinguished in the grammar: result nominals, on the one hand, and event nominals, on the other. Result nominals denote an output/result of an event or simply name an entity in the world (the nominalization process does not retain the event from the verbal base or simply does not contain any) while event nominals involve the process of an event (the event from their verbal base is retained in the nominalization process).

A further distinction can be made between simple event nominals and complex event nominals. Complex event nominals have an extra argument introduced by the *of* phrase that they surface with. (1) is an example of a result nominal. (2) is an example of a simple event nominal. (3) is an example of a complex event nominal.

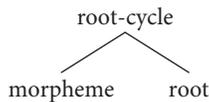
- (1) The examination was on the table.
- (2) The examination lasted two hours.
- (3) The modification of the proposal took a long time.

A noun such as “modification” can also be a result nominal, as illustrated by (4). In this case, no event is retained from the verbal base. Nouns such as *modification* are thus ambiguous. Depending on the structure that is projected, they can be eventive or not.

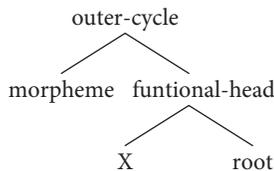
- (4) These proposals are subject to frequent modifications.

In recent years, syntactic approaches of word formation have been popular and for many, eventive deverbal nominals are built from a verb-like structure while non-eventive deverbal nouns are built from roots (Marantz 1997; Alexiadou 2001; Borer 2003, 2005). Following the Distributed Morphology framework, we can say that non-eventive deverbal nouns have the structure in (5a) while eventive deverbal nouns have the structure in (5b). The difference between (5a) Inner word and (5b) Outer word formation is that, while in the first case there is only one layer (the category-making morpheme attaches directly to a root), there are in the second case two layers of composition (the root first attaches to a morpheme and then the whole complex attaches to another morpheme).

- (5) a. *Inner word formation*



- b. *Outer word formation*



In the case of deverbal nouns as *nominalization*, *fossilization*, *caramelization*, etc., it appears that *v* is definitely present, since the suffix *-ize* from the corresponding verb (*nominalize*, *fossilize*, *caramelize*) surfaces in the deverbal noun. In fact, since the heuristics in Distributed Morphology is that morphology is transparent and that there is a close relationship between morphology and syntax (e.g. the presence of verbal morphology is evidence that verbal projections are present), we are coerced to postulate the projection of *v* in such cases. This means that cases such as *nominalization*, *fossilization*, *caramelization*, etc. must correspond to the structure in (5b). In this case, the functional head is *v* (Chomsky 1995), i.e. the head responsible for the introduction of the external argument (typically an Agent).

Yet, we are faced with an interesting puzzle. Even though a deverbal noun such as *nominalization* as in (6a) contains a verbalizer (*-ize*, as in *nominalize*),

it is possible for a non-eventive reading to obtain (*nominalization* is therefore ambiguous) in which case there is no agent involved, as in (6a). In this case we are dealing with a result rather than a process. As (6b) shows, *nominalization* can often be used without a theme as well.

- (6) a. nominalization of verbs  
 b. He works on nominalizations.

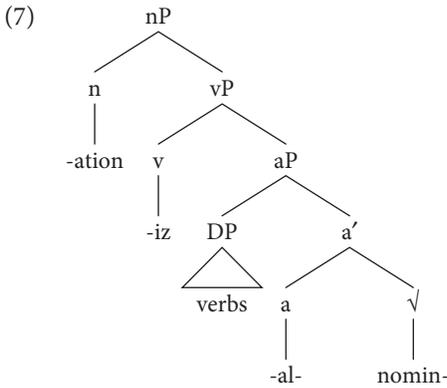
Thus, the question is: is  $\nu$  really projected in this case? If it is projected, why does it not introduce an agent? This challenge to a Distributed Morphology approach to English nominalizations was first laid out in Borer (2003), Ackema and Neeleman (2004) and Alexiadou (2009) and is discussed in detail in Harley (2009). It is difficult to answer the question above as no, since following morphological transparency, the projection of  $\nu$  is unavoidable. However, if  $\nu$  is projected, we cannot say that sometimes it introduces an agent and sometimes it does not.

The solution that Harley (2009) proposes for this conundrum is that  $\nu$  is indeed a verbalizer, but a verbalizer devoid of argument structure (it is a pure verbalizer). It does not introduce the agent (contra, say, Chomsky 1995 and many others). Instead, the agent is introduced (separately) by a projection called Voice (Kratzer 1996).

To illustrate, we see in (7) that Voice is not projected. This is why the noun *nominalization* is, in this case, non-eventive. This is the structure prior to movement (I am using head movement, but see (Barrie & Mathieu 2012) for a different view of word formation in Algonquian languages). To quote Harley (2009:337), “The structure of *nominalization of verbs*, then, is pretty much what any morphologist would tell you it was. It excludes the VoiceP and FP.” (this is the structure before movement)<sup>1</sup>

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1. Harley (2009) does not appear to be entirely satisfied with her conclusions (Harley 2009:335–336, Footnote 15): “I have argued against the presence of an intermediate verbal head in past work (Harley 1995, 2005, for example), and I still feel there are significant puzzles associated with the presence of this intermediate verbalizer. Why, for instance, can it not introduce the external argument, or *some* argument, on its own? Why is there not a distinguishable scope for *again-type* adverbials at this level? Why is there so little morphological attestation of the distinct Voice vs.  $\nu^0$  heads cross-linguistically? One doesn’t see both vCAUS and Voice<sup>0</sup> independently and simultaneously realized in the morphology of verbs (Harley 2005). However, see Pylkkänen (2002), Collins (2005), Merchant (2007), Travis (to appear) and Harley (2007) for additional arguments in favour of Voice  $\neq$   $\nu$ ”



The aim of the present paper is to show that in languages with a richer morphology (English morphology is rather poor), the problem mentioned by Harley (2009) arises a lot. In particular, I show that the morphological transparency problem is common in Ojibwe, an Algonquian language, spoken in parts of Canada, and parts of the United States.<sup>2</sup> Ojibwe is a good test case for theories of what verbal structure is included inside nominalizations because it is agglutinative and shows a high degree of morphological transparency. As such, it clearly highlights the puzzle that Harley (and others) have faced regarding morphology/syntax mismatches. In short, Ojibwe's morphological transparency can give us a window into the internal structure of nominalizations in a way that non-agglutinative languages cannot and this is why it is interesting to study nominalizations in such a language (see Bliss, this volume and Wiltschko, this volume, for an analysis of nominalizations in Blackfoot, another Algonquian language, with perhaps less transparent morphology than Ojibwe for the case at hand).

The paper is organized as follows. In Section 2, I show that in Ojibwe, even result nominals are morphologically complex and can thus undergo a rich decomposition. Yet, in many cases, the verbal morphemes that are part of these nouns do not have the expected correlations, e.g. introduction of an agent, introduction of a theme, etc. Like Harley (2009), I will adhere to the strong hypothesis that morphology is transparent and that there is a strong relationship between morphology and syntax. Like her for English, I will argue that verbal forms in Ojibwe nominalization processes are pure verbalizers without the projections of arguments, but I will also argue on the basis of Ojibwe that sometimes argument-taking verbalizers are introduced to then be detransitivized. In Section 3, following the morphological transparency principle and the assumption that there is close relationship between morphology and syntax, we will see that there is evidence that Ojibwe

2. See also Basic (2010) who discusses Serbian in relation to Harley's problem.

agent nominalizations in fact produce full clauses rather than nominal structures. I conclude in Section 4.

## 2. The hammer, the drum and the chair: When simple nouns are not so simple

In this section, I consider simple nouns in Ojibwe, and especially those that denote instruments, products and locations. To illustrate, in (8), we have a series of nouns that denote instruments. In (9), we have names of various kinds of products (some natural, some not). In (10), we have nouns that have to do with “location”. Most examples are from Valentine (2001).

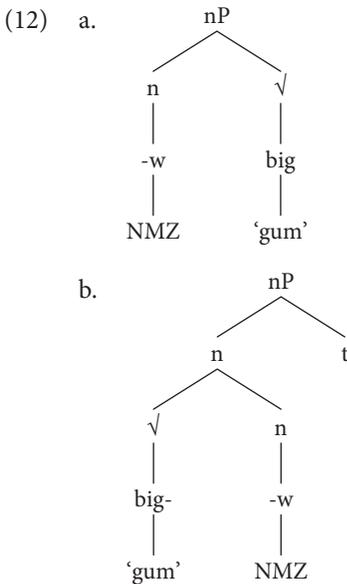
- (8) Instruments
- |    |                       |          |
|----|-----------------------|----------|
| a. | <i>bakitehgan</i>     | ‘hammer’ |
| b. | <i>akwaandawaagan</i> | ‘ladder’ |
| c. | <i>dasoonaagan</i>    | ‘trap’   |
| d. | <i>badakahigan</i>    | ‘fork’   |
- (9) Products
- |    |                     |                   |
|----|---------------------|-------------------|
| a. | <i>bigw</i>         | ‘gum’             |
| b. | <i>misan</i>        | ‘firewood’        |
| c. | <i>bakwezhigan</i>  | ‘bread’           |
| d. | <i>dewehigan</i>    | ‘drum’            |
| e. | <i>biiskawaagan</i> | ‘jacket, coat’    |
| f. | <i>naabkawaagan</i> | ‘scarf, necklace’ |
| g. | <i>damnowaagan</i>  | ‘toy’             |
- (10) Locations
- |    |                  |            |
|----|------------------|------------|
| a. | <i>nibaagan</i>  | ‘bed’      |
| b. | <i>apabwin</i>   | ‘chair’    |
| c. | <i>ataasowin</i> | ‘cupboard’ |

A priori and based on their English translation, all of these nouns look like simple nouns, with no internal structure. Evidence in favour of this view comes from the fact that all these nouns can be pluralized (*nibaaganan* ‘beds’, *bakitehganan* ‘hammers’, etc.). According to Grimshaw (1990), complex event nominals cannot be pluralized (but see Alexiadou, Iordachioaia & Soare 2010, and Borer 2005 for a different/more refined view; it appears that telic/bounded complex event nominal can pluralize while atelic/unbounded complex event nominals cannot).<sup>3</sup> For example, while (11a) is possible, (11b) is not.

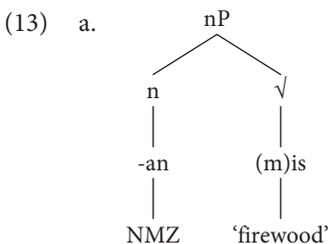
3. There are also complications in Ojibwe since mass nouns can be pluralized (Mathieu 2013), but this issue is beyond the limited scope of the present paper.

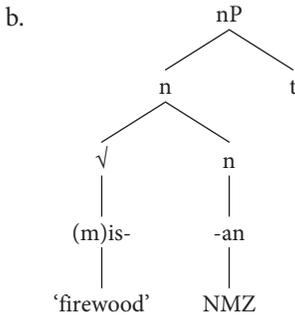
- (11) a. Result nominal  
The assignments were long.
- b. Complex event nominal  
\*The assignments of the problems took a long time.

Clearly, from their translation, the nouns in (8)–(10) are nothing but result nominals. In fact, some of these nouns above are definitely simple nouns in Ojibwe. For example, in (9a) *bigw* ‘gum’ and (9b) *misan* ‘firewood’ there is no morphological evidence for verbal morphology. *bigw* ‘gum’ is formed with the concatenation of a bare root with a nominalizer *-w*. In the traditional literature, *-w* is not considered a nominalizer, since it does not take a verbal form as input. However, I will use the term ‘nominalizer’ for *-w* after all since I am relying on Distributed Morphology as a theoretical model. *-w* is a nominalizer in the sense of DM: it is a category forming functional head. In (12), we have the structure for *bigw* ‘gum’. The nominal root raises to the nominalizer. This is a case of Inner word formation as in (5a).



In (13), we have the structure for (9b) *misan* ‘firewood’. The root *mis* raises to the nominalizer *-an*.





If we now turn to nouns such as *bakitehgan* ‘hammer’ (instrumental), it appears that we are dealing with a much more complex nominalization structure. It turns out that *bakitehgan* ‘hammer’ is derived from a transitive verb (VTA) meaning *to hit*, so that *bakitehgan* means literally *a hitter* (i.e. an instrument you use to “hit” with). The transitive verb is formed of a root *bakite* ‘hit’ (which is intransitive) and a transitive morpheme *-h* that can be found in many other verbs. As part of the nominalization process, a detransitivizer *-ge* is added, and then a nominalizer *-an* is inserted transforming the whole thing into a noun.

Relying on the assumption that morphology is transparent and that wherever we see a morpheme there is a terminal node in the structural analysis of the word or the sentence (Harley 2009),<sup>4</sup> the question that arises at this point is why is it the case that with *bakitehgan* ‘hammer’ the verbal node is not capable of introducing arguments? As pointed out by Valentine (2001:50), nouns in Ojibwe cannot generally surface with complements: the equivalent of *the anticipation of the rejection of the proposal by the committee* is impossible in the language and so it should not come as a surprise that *bakitehgan* ‘hammer’, or more precisely ‘hitter’, cannot take any theme argument. Nouns such as *bakitehgan* ‘hammer’ are non-eventive, which means they do not even introduce an implied theme. Since they are non-eventive, nouns such as *bakitehgan* ‘hammer’ cannot introduce agent arguments either.

How can we reconcile the fact that the noun *bakitehgan* ‘hammer’ takes no argument and is non-eventive with the fact that it is actually built from a transitive verb that itself presumably comes with an internal argument and an external argument as well as an event?

I would like to propose that the verb in *bakitehgan* ‘hammer’ is inserted without Voice (it is inserted as an unaccusative verb) and that, although the verb form comes with an internal argument, the morpheme *-ge* turns the one-argument verb

4. Of course, as pointed out by Harley (2009), it is possible in some cases (in English this happens all the time) that when we do not see a morpheme, there is nevertheless a terminal node (where a null morpheme is inserted).

into a verb without any argument (the addition of *-ge* has the effect of suppressing the internal argument). We know independently that *-ge* suppresses the theme in anti-passive contexts. For example, Valentine (2001) calls *-ge* an actor focus detransitive (it is technically an anti-passive morpheme) and provides examples where a transitive verb becomes an intransitive verb with no theme once *-ge* is added. This can be seen in (14).

- (14) a. (VAI) (kick (people))  
*dangishkaw* (VTA) ~ *dangishkaage*
- b. (VAI) (listen (to people))  
*bizindaw* (VTA) ~ *bizindaage*
- c. (help (people))  
*naadamaw* (VTA) ~ *naadamaage* (VAI)

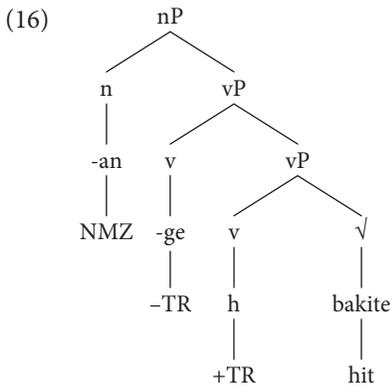
*Bakitehgan* ‘hammer’ nominalizations are thus not unlike, it seems to me, French nominalizations ending in *-oir*, except that in Ojibwe such nominalizations are more productive and less idiomatic. In (15), we have nouns created from verbs with a result interpretation rather than an event reading (denoting locations, instruments and products like in Ojibwe): no argument seems to be associated with the nominal forms.

- (15) a. Location  
*laver* (wash) ~ *lavoir* (washing place)
- b. Instrument  
*gratter* (scrape) ~ *grattoir* (scraper)
- c. Location  
*parler* (speak) ~ *parloir* (parlour)
- d. Product  
*moucher* (blow) ~ *mouchoir* (handkerchief)
- e. Instrument  
*raser* (shave) ~ *rasoir* (razor)

(16) gives the structure before movement for the noun *bakitehgan* ‘hammer’. There is transitive *v* but with no projection for Voice (thus no agent). The internal argument is suppressed by the addition of the antipassive *-ge* and then the nominalizer *-an* is added.<sup>5</sup>

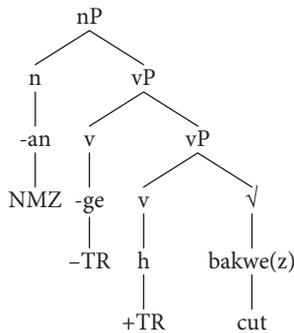
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5. A reviewer asks whether it is ungrammatical to omit the detransitivizer *-ge* from the nominals that have it. The answer is yes.

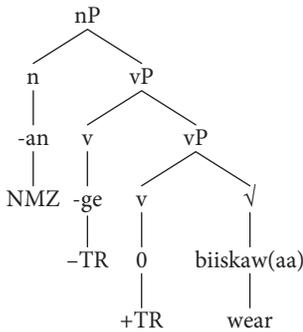


To illustrate further, consider (9c) *bakwezhigan* ‘bread’ and (9e) *biiskawaagan* ‘jacket/coat’. These two nouns can receive the same analysis. They are built from transitive verbs whose external argument is not introduced and whose internal argument has been suppressed.<sup>6</sup> (17a) is the structure for (9c) and (17b) is the structure for (9e). In (17a), a root *bakwe* ‘cut’ merges with the transitive morpheme *-h* while in (17b) the root *biiskaw* ‘wear’ merges with a phonologically empty transitive morpheme.

(17) a. *bread*

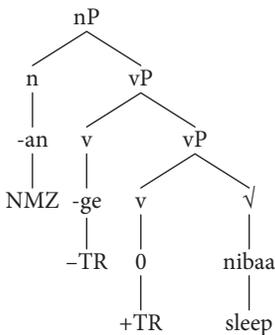


6. A reviewer asks how arguments are introduced in the Ojibwe verbal forms under the present view. On a par with the nominal domain, I assume that it is *Voice* that introduces the agent rather than *v*. On the assumption that verb finals are instances of *v* (Hirose, 2002, Britain, 2003, Mathieu, 2008) this means that verb finals in Ojibwe do not select for an agent.

b. *jacket/coat*

If we now turn to nouns denoting location, as in (10), we are confronted with yet another puzzle. First, I assume, following the logic used above, that (10a) has the structure in (18). The noun *nibaagan* ‘bed’ in Ojibwe wears its structure on its sleeve, as it were: a root *nibaa* ‘sleep’ merges with an empty transitive marker. Then, the transitive verb is detransitivized by *-ge* and finally the nominalizer *-an* is added.

(18) bed



If this is correct, we are faced with the following puzzle: what is *-ge* detransitivizing? The question arises because it might be thought that the verb *nibaa* ‘sleep’ is already intransitive. Following the logic above, we can say that intransitive verbs such as *nibaa* ‘sleep’ are in fact transitive (if they were not, it would be a mystery why the detransitivizer *-ge* surfaces, Valentine (2001) is forced to consider *-gan* here as a nominalizer that is independent of *-an*; not an economical solution and one that goes against Occam’s Razor).<sup>7</sup> This means that in *nibaagan* ‘bed’ the verb enters the derivation without an external argument but with an

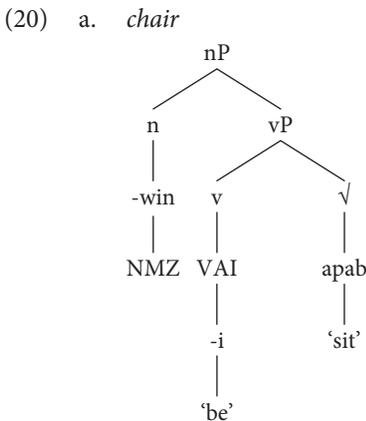
7. Of course, the distinction between unergative verbs as transitive and unaccusative verbs as intransitive is well known (Hale & Keyser 1993; Roberge 2002).

internal argument. That internal argument is further suppressed by way of the detransitivizer *-ge*.

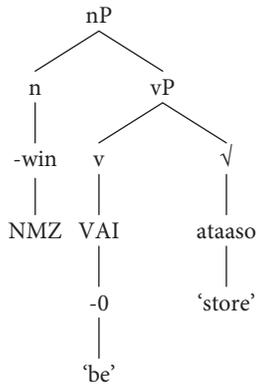
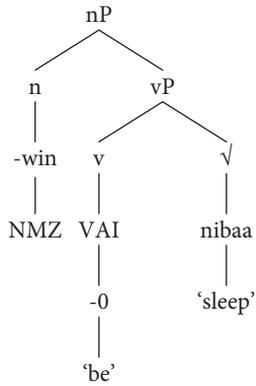
Finally, let us consider nouns such as *apabwin* ‘chair’ (10b) and *ataasowin* ‘cupboard’ (10c). These are different from the case of *nibaagan* ‘bed’, since they do not contain the detransitivizer *-ge*.<sup>8</sup> *ataasowin* ‘cupboard’ comes from the verb ‘store’ (VAI) and *apabwin* ‘chair’ comes from the verb *apabi* ‘be sitting’ which is itself a combination of the VAI *-i* and the root *apab* ‘sit’. The input to the nominalization is an intransitive verb, but this intransitive verb is not a verb that was transitivized to then be detransitivized. It appears that nominalization with *-win* is fairly productive and follows the pattern described above. It can be found with abstract concepts or stative nouns. See the examples in (19) (from Valentine 2011: 506–507). For the idea that dynamic intransitive verbs in Plains Cree have a richer structure than static intransitive verbs, see Hirose (2003). The nominalizer *-win* is, after *-w* and *-an*, the third nominalizer we consider herein.

- (19) a. *aabijiibaawin* ‘resurrection’  
 b. *aakoziwin* ‘sickness’  
 c. *nibaawin* ‘sleep’  
 d. *ayekoziwin* ‘tiredness, fatigue’  
 e. *inaabandamwin* ‘dream, vision’

(20a) is the structure for *apabwin* ‘chair’, (20b) for *ataasowin* ‘cupboard’ and (20c) for *nibaawin* ‘sleep’.



8. A reviewer asks whether *-ge* and *-win* can be used interchangeably. The answer is no.

b. *cupboard*c. *sleep*

To conclude Section 2: while some result nominals are clearly simple nouns, others are visibly more complex. Some result nominals in Ojibwe turn out to be formed from transitive verbs (transitive morphology surfaces in the result nominal). I argued that the reason why result nominals in Ojibwe do not inherit the event semantics of their corresponding verbs is because transitive verbs are inserted in the structure without Voice while a detransitivizing process eliminates the internal argument. The former can be seen in English, but the latter is special to Ojibwe.

### 3. The rider, the spider, the tourist and the sewing machine: Agent nominalizations

In the previous section, I considered Ojibwe result nominals that denote products, instruments and locations. In the present section, I deal with agent nominalizations in Ojibwe. The claim that I will be making is that despite appearances, agent

nominalization in Ojibwe has more in common with verbs and full clauses than nominal structures.

Traditionally, agent nominalization in Ojibwe is said to take the form of a participial construction. In particular, agent nominals in Ojibwe are said to have similarities with English gerunds: they are claimed to have both verbal and nominal properties. One of the main reasons why such participles in Ojibwe are considered to have nominal properties is that they can replace nouns in the discourse. For example, *peemaatisit* ‘he who lives’ may act like a noun and is commonly translated as ‘person’. The other main reason why such participial structures are considered to have nominal properties is that they often surface with a nominal suffix on the verb: *-ig* is one possible form for plural animate nouns and *-in* is one possible form for the plural inanimate nouns. The full form *-jig* ‘animate 3 plural’ is often called the participial form of the verb. Rhodes (1998) cites the appearance of the sequence *-jig*, as evidence of nominal morphology in participles, seen in (21). In this example, ‘those who ride’ can easily be translated as ‘riders’.

- (21) *w-gii-nokaazn-aa-waa bem-bahgo-jig*  
 3-PAST-USE-DIR-3PL wh.along-ride-3PL(PART)  
 ‘Those who ride on horseback used them’, i.e. ‘Riders used them.’

Such nominalizations are said to differ from questions and relative clauses. Rhodes (1998), for example, argues that what we find in questions and relative clauses is Initial Change (Bloomfield, 1957) and conjunct morphology rather than Initial Change and participial morphology: (22)–(23) are questions while (24)–(26) are relative clauses (I have added traces; these were not in the original examples).

- (22) *Wenesh<sub>i</sub> t<sub>i</sub> gaa-bkobiised?*  
*wenesh gaa-bakobii-ise-d*  
 who wh.PAST-in.the.water-fall-3SG(CONJ)  
 ‘Who fell in the water?’ (Valentine 2001: 980)
- (23) *Wegnesh<sub>i</sub> waa-biidwiyan t<sub>i</sub>?*  
*wegnesh waa-biidaw-iyen*  
 what wh.FUT-bring-2SG/1SG(CONJ)  
 ‘What will you bring me?’
- (24) *Mii dash gii-zhitoo-waad iw mshkik-waaboo [waa-aabjitoo-waad.]*  
 and then PAST-make-3PL that medicine-liquid wh.FUT-use-3PL(CONJ)  
 ‘They made the liquid medicine which they were going to use.’  
 (Valentine 2001: 582)

- (25) ...*Gii-kidosh giiwenh miinwaa bezhig*  
 past-say.3sg reportedly and one  
*zhmaagnishii-gimaa wa gaa-bi-waabm-aa-d*  
 military-leader wh.PAST-along-see-DIR-3/3'(CONJ)  
 '['I only spoke to him for a short while'] said the other officer,  
 who had come to see him.' (Valentine 2001: 589)
- (26) *Niin aw gaa-waabm-aa-d waawaashkeshw-an*  
 I that wh.PAST-see-DIR-3/3'(CONJ) deer-OBV  
 'I am the one who saw the deer.' (Valentine 2001: 590)

Before I explain what Initial Change is, I need to explain the distinction between the independent order and the conjunct order. In Ojibwe, independent clauses are main clauses and conjunct clauses are embedded/dependent clauses or interrogatives, relative clauses or focus constructions. The conjunct can also be triggered by particles such as *mii* (Fairbanks 2009). There are quite a few differences between the two orders: in independent clauses both prefixes and suffixes are possible while in the conjunct order only suffixes are possible and the verbal person/number morphology is fairly transparent in the independent order, but it is more opaque in the conjunct order. In interrogatives, relative clauses and focus constructions, in addition to the conjunct morphology, we find Initial Change (Bloomfield 1957).

Initial Change is alteration of the initial vowel in a verbal complex: for example, *i* becomes *a* or *e*. The corresponding answers to the questions in (22)–(23) that appear in (27)–(28) show the original marking of the tense preverb. When initial change applies, *gii-* becomes *gaa-* and *wii-* becomes *waa-*.<sup>9</sup>

- (27) *ngii-bkobiise*  
*n-gii-bakobii-ise*  
 1SG-PAST-in.the.water-fall(IND)  
 'I fell in the water.'
- (28) *gi-wii-biidaw bakwezhigan*  
*gi-wii-biidaw-Ø bakwezhigan*  
 2SG-FUT-bring-1SG(IND) bread  
 'I will bring you bread.'

To summarize so far: the received wisdom in the literature is that Ojibwe agent nominalizations are mixed cases. They have verbal and nominal properties. Like participles in more familiar languages, they are verbal forms that can be used as

9. Initial Change is in fact a type of wh-agreement (Lochbihler & Mathieu 2008/2009, 2012).

nouns. Ojibwe agent nominalizations are not relative clauses or *wh* constructions in disguise: they show different morphology from these.

However, there are problems for this view that leads me to believe agent nominalizations are not nominal and that they are like full clauses.

The first problem is that agent nominalizations in Ojibwe have full verbal morphology: they are not infinitival (in fact, Algonquian languages do not appear to have infinitives) or reduced verbal forms such as auxiliaries or participles (defective verb forms). For example, agent nominalizations involve verb forms that take multiple person morphology (i.e. 1, 2, 3) whereas, cross-linguistically, it is well-known that participles come with full gender and number features, but not with full person morphology (only third person is tolerated, e.g. French, Icelandic, etc.). The second problem is that agent nominalizations in Ojibwe have full argument structure (see Valentine 2001: 138): they surface with agents, themes, instruments, etc. We saw, on the other hand, in Section 2 that other types of nominalizations are such that external and internal arguments often, if not always, disappear after the nominalization process.

The third problem is that, as mentioned above, the “participle” inflection always surfaces with Initial Change. Assuming that Initial Change is the mark of operator movement as in Lochbihler and Mathieu (2008/2009, 2012), then it becomes clear that “participles” in Ojibwe are full clauses. Questions, relative clauses and focus constructions all have in common the fact that a *wh* operator has raised to Spec-CP (Chomsky 1977): it is thus reasonable to assume that Initial Change is akin to *wh* agreement as seen in other languages (French, Irish, etc.). The reason why *wh* agreement surfaces on T rather than on C in Ojibwe is explained via the system of feature inheritance originally proposed by Chomsky (2008). In Lochbihler and Mathieu (2008/2009, 2012), we propose that that  $\varphi$ -features are not the only features that can be inherited from C to T (Richards 2007; Chomsky 2008):  $\delta$ -features (i.e. discourse features that can be found in questions, relatives and focus constructions) are also transferred from C to T. This gives support to Miyagawa’s (2010) hypothesis according to which discourse features and agreement features are two sides of the same coin.

Of course, as a reviewer points out, if nominalization processes can take place at various levels of the extended verbal projection (Abney 1987, Borsley & Kornfilt 2000 among many others ) it is not impossible *a priori* to cap a full clause, including a CP, with nominal morphology so that the whole clause is turned into a noun. While this option may be correct for other languages, including Blackfoot (Bliss, this volume; Wiltschko, this volume), the hypothesis that I put forward is that in Ojibwe there is no evidence that that full clause becomes a noun. The reason why I believe that agent nominalizations in Ojibwe are not nouns is because the participle/nominal morphology surfaces on the verb as a suffix. Since a full CP is

projected in the case of agent nominalizations, and since an operator ends up in Spec-CP, I do not see how the derivation could proceed so that the clause becomes a noun *after* participial/nominal morphology is added on the verb. Assuming a strict derivational morphological process, the clause would have to become a noun as soon as the verb raises to the participial/nominal morphology (under traditional assumptions of the way head movement proceeds) which would mean much structure would remain to be built (above  $\nu$ P) that would essentially not be a noun.

I thus conclude that agent nominalizations in Ojibwe have no participial or nominal properties. Further evidence in favour of this view comes from the following examples. It has been observed that even relative clauses in Ojibwe sometimes show participial morphology ((30)–(31) are head-less relatives):

- (29) *Mii wa nini [da-kweman gaa-bkinaagen'-jin mbingoo.]*  
 it's that man POSS-wife wh.PAST-win-3/3'(PART) bingo  
 'That's the man whose wife won at bingo.' (Valentine 2001:585)
- (30) *gaa-miinaas-wangd-waa-nin*  
 wh.PAST-give-neglect-3PL-1/2PL(PART)  
 'What we evidently neglected to give to them'
- (31) *gaa-waabam-ag-ig*  
 wh.PAST-see-1SG/3SG-3PL(PART)  
 'those whom I saw' (Rogers 1978: 173)

As Valentine (2001) points out wh-questions can also be found with participle morphology (32). These are obviously not nominalization cases.<sup>10</sup>

- (32) a. *wenen ge-wawiidgemaa-jin*  
 who-OBV wh.FUT-marry.TA-3/3'(PART)  
 'Who is he going to marry?' (Valentine 2001:980)
- b. *wanesh niw ge-nwaabndan-gin*  
 what those wh-look.at.TI-3/0PL(PART)  
 'What things is he looking at?' (Valentine 2001:981)

In conclusion, there is little evidence that this *-jig* ending (and its variants) is exclusive to nominal forms or that participles are somehow functionally nominal since they take the full structure of the verb and the template for verbal morphology. The

10. A reviewer claims that it is common in Algonquian to form wh-questions with nominalizations, as in Blackfoot and in Cree (Blain 1997). But I would argue that these constructions have been mis-analysed. In what sense the examples in (32) can be claimed to be nominalizations? What is the evidence that these questions and relative clauses are nominals?

variation between conjunct or participle forms does not signal a structural difference in the clausehood of *wh*-questions and relative clauses, nor does it indicate that either is underlyingly nominal.<sup>11</sup> This means that relative clauses, reduced or otherwise, in Ojibwe do not lack clausal structure or take a nominal form. Rather, they project a full CP and contain a *wh*-pronoun or null operator that moves to Spec CP – *wh*-agreement on T is an overt reflex of that movement with no subsequent nominal capping.<sup>12</sup>

What I would like to propose is that *-jig* and its absence relates to Aspect and more precisely to the telic versus atelic distinction. Evidence for such a proposal comes from observations made by Fairbanks (2009) who proposes that the discourse marker *mii* in Ojibwe has aspectual properties. It triggers the conjunct, and from the examples in (33), we see a clear distinction between a telic and a non-telic interpretation. Fairbanks (2009) calls (33b) “completive”, which I take to be the equivalent of “telic”. *Mii* is glossed as aspect by Fairbanks, but elsewhere in his dissertation it appears that, for him, it is the changed conjunct more generally that denotes telicity (in opposition with the independent and without the recourse to the particle *mii*). To quote (Fairbanks 2009:218): “Changed conjuncts have specific functions within sentence grammars: (1) showing completive aspect, and (2) functioning as nominalized verbs, or participles” (Fairbanks 2009, see also Nichols 1980:200) (the proposition in 2) cannot be on the right track, of course, if we follow the conclusions that I reached above). Fairbanks (2009).

- (33) a. *Iskigamide*  
 boil.down/INDEP  
 ‘It’s boiling down.’
- b. *Mii iskigamideg*  
 ASP boil.down.0/CONJ  
 ‘It’s boiled down.’ (Fairbanks 2009:92)

Note that these are non-*A'* contexts. In *A'* contexts, the aspectual distinction cannot be marked with a contrast between the use of the independent and the use of the conjunct, since in interrogative, relative and focus constructions

11. Valentine reports that variation between participle and conjunct occurs in relative clauses within individual speakers, therefore as pointed out by Johns (2008) we can assume it is not dialectal.

12. An alternative view is that of Johns (2008) where the contrast between the conjunct and the participial form is claimed to be derived from the distinction between proximate and obviative.

the independent is not possible (at least in Ojibwe – other Algonquian might behave differently, see Blain 1997): the conjunct must be used. I propose that in A' contexts, the aspectual distinction is encoded via the 'participial'/conjunct distinction. The participial might be taking on the role of the independent for interrogative, relative and focus contexts. In fact, it appears that speakers generally hesitate and accept either the conjunct or the participial form in questions and relative clauses when prompted and this is an indication that the current proposal is on the right track.

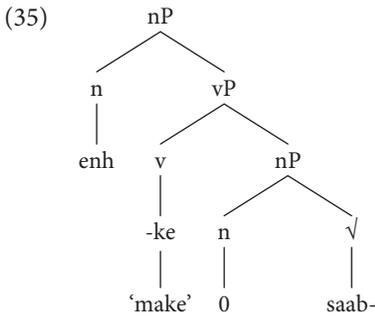
In sum, conjunct agreement corresponds to a +telic interpretation while the "participle" corresponds to a –telic interpretation. This is, of course, a hypothesis that needs to be verified fully (with fieldwork) and I leave the details of the analysis for a further study.

Before I conclude Section 3 and this paper, I should point out that there are clear cases where a verbal form has been nominalized. In contexts where the expression has become fixed we do see nominalizing morphology in addition to what looks like full clauses a priori. This is in contrast to the type of agent nominalization that was reviewed above and it shows that my proposal about agent nominalizations in Ojibwe is not an artefact of the analysis.

In Section 2, we saw that Ojibwe uses three nominalizers: *-w*, *-an* and *-win*. There is another nominalizer that is used in certain contexts: it is the case of *-enh* (or *-ens*). This is normally a contemptive suffix that can be used with nouns targeted for contempt (but also, paradoxically, it seems to be also used as a term of endearment). In many contexts, it can be used without a contemptive context: *ikwezenh* or *ikwezens* 'girl', *gwiwizens* 'boy', *gaazhagens* 'cat'. With this in mind, consider the following examples:

- (34) a. *esbikenh* 'spider'  
 b. *dekaashiinh* 'tourist'  
 c. *gekaanh* 'old person'  
 d. *geshkgwaasoonh* 'sewing machine' (Valentine 2011:514)

These nouns have a complex (verbal) structure. The noun *esbikenh* 'spider' comes from the verb *asabike* 'make a net' (VAI) which is itself formed of a noun *asab* 'net' and a light verb *v-ke* (on light verb *-ke*, see Mathieu 2013). The noun *dekaashiinh* 'tourist' comes from the verb 'be carefree, have fun' (VAI). The noun *gekaanh* 'old person' from the verb *gikaa* 'be elderly' (VAI) and the noun *geshkgwaasoonh* 'sewing machine' from the verb *gashkigwaaso* 'sew' (VAI). There is also Initial Change in the form of *-e* at the beginning of the verbal complex. Although literally, (34a) means literally 'the one that makes nets' we have a nominalizing morpheme that caps the verbal structure and turn it into a noun.



This is a different case from the cases where we see “participial” morphology. In this case, there is no CP projected. The *vP* is capped off by a nominal projection and the structure is a noun rather than a full clause.

#### 4. Conclusion

In this paper, I reviewed different kinds of nominalizations in Ojibwe. First, I discussed nominalizations that denote products, instruments and locations. I showed that despite their rich morphology (that is clearly verbal), the nouns in question are result nominals with no internal or external arguments. Second, I discussed agent nominalizations in Ojibwe. I discussed, in particular, the case of participial agreement and argued that agent nominalization in Ojibwe is a misnomer, since what we are dealing with is a full clause rather than a nominalization. The morphology that is dubbed ‘participial’ and is taken to be nominal in the traditional literature was argued to be aspectual and more precisely atelic; the idea being that conjunct morphology in relative clauses, questions and focus constructions denote telicity while ‘participial’ morphology denotes the absence of it. Finally, I showed that some cases of agent nominalizations are true cases of nominalization and that these stand in contrast with the former type where clearly no nominalization occurs.

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