

# The syntax of abstract and concrete finals in Ojibwe

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## 1. Introduction

Since the work of Bloomfield (1946), the linguistic literature treats Algonquian words as complex forms containing initials, medial and final suffixes. Initials and medials have concrete meaning while finals fall into two groups: one group is traditionally considered to merely determine parts of speech and their subclasses (abstract finals), whereas another group of finals (concrete finals) is claimed to add palpable meaning. In groundbreaking work, Denny (1978) argues that some of the abstract finals contained in inanimate intransitive Ojibwe verbs (VII) are less abstract than previously thought in that they express the aspectual class of the verb. It has been common in the generative Algonquian literature to treat these as instances of *v*, i.e. light verbs (see Brittain 2003 with examples from Western Naskapi, Menomini, Fox, and Plains Cree, Bruening and Rackowski 2001 for Passamaquoddy, Hirose 2001 for Plains Cree, and Quinn 2006 for Penobscot). In the same spirit, but in reverse, I argue in this paper that in Ojibwe a subset of concrete finals in animate intransitive Ojibwe verbs (VAI) are instances of *v*. One consequence that my analysis has is that the distinction between concrete and abstract finals is less strict than previously envisaged: both types of finals have palpable meaning, more for example than inflectional morphemes, but they are less specific than roots.

Although my account is similar to that of Brittain (2003) – especially in its capturing of the condition that every Algonquian stem has an initial, a fact well-established by Goddard 1990 – it is nevertheless different. First, because my paper focuses on Ojibwe; second, because I put forward an analysis according to which *concrete* finals are instances of *v* (for Brittain 2003, these are roots). Although a later paper by Branigan, Brittain and Dyck (2005) suggest that all final morphemes in Plains Cree *probably* [in their own words] originate in *v*, their claim is tentative and they do not provide a full-blown analysis. On my account, it is nevertheless not the case that all concrete finals are instances of *v*: only a subset qualifies. Finally, my proposal takes the distinction between primary and secondary derivations into account while it takes the light head analysis further and extend it to the case of *nP*.

Section 2 introduces the data on which my analysis is based (concrete finals with general meaning). Section 3 provides an analysis of Ojibwe finals. Section 4 concludes.

## 2. Concrete finals with general meaning

The arrangement of morphemes within a word in Ojibwe, and more generally in Algonquian languages, is often presented like it follows a strict template (cf. 1): an initial, a medial, and a final, with the latter sometimes surfacing as binary in that both a concrete and an abstract final can be present. All these elements combine together as verbal elements to form the verbal predicate (commonly described as stem) that is expressed. In the traditional literature, the assembly of words in Ojibwe is assumed to be lexical, i.e. pre-syntactic (Bloomfield 1946, Wolfart 1973, Rhodes 1976, Goddard 1979, Nichols 1980, Dahlstrom 1991).

(1)	<b>Initial</b> waap– white	<b>Medial</b> –aapikk– mineral	<b>Concrete final</b> –it– heated	<b>Abstract final</b> –ee PROCESS
	‘It [mineral] is white hot.’ (from Denny 1978:301)			

Whereas both the medial and the final positions are associated with particular limited categories (nominals and verbal/adverbial elements respectively), the left edge of the stem (represented by the initial) is associated with a larger set of syntactic categories. According to Brittain (2003), any category can fill that position in Algonquian, the only requirement being that an overt phonological string must be present at the level of Spell-out. We will see in Section 3, however, that not all categories can fill that position after all. In primary derivation, the left edge position can be filled by adjectival and adverbial elements while in secondary derivation the left edge position can be filled by nominal and verbal elements (Valentine 2001:333). (2) and (2) give examples of the type of categories that can appear in the left edge position of the stem (the form given is the animate form).

(2)	a.	mskozi red-be ‘be red’	Adjective + Final	}	Primary derivation
	b.	bmaashi along-sail ‘sail along’	Adverb/Preposition + Final		
(3)	a.	mshkikiwi medicine-be ‘be a medicine’	[Noun + Final] + Final	}	Secondary derivation
	b.	nbeshki sleep-addicted ‘be a sleepy head’	[Verb + Final] + Final		

Inflection can appear after the stem while pronominal clitics and preverbs (in that order) can surface before the stem as illustrated in (4). Elements in parentheses are optional in that they are present in some stems but not in others. While there may be at most one pronominal clitic prefix (these compete for a single position/slot at the C level, according to McGinnis 1995, but see Déchaine 1999 for an alternative analysis), there is apparently



## Mathieu

In the same spirit, I want to argue in this paper that a subset of concrete finals in animate intransitive verbs – those that have a general meaning – are instances of *v*. These elements are nevertheless clearly unlike roots in that their meaning is broader. For example, to pick one verb just mentioned, the item *-bizo* not only means ‘fly, drive’ (8a), but also ‘fall/plunge into water’ (8b), and in some cases even ‘tremble’, ‘shake’ or ‘shiver’ (8c).

- (8) *-bizo*
- a. **mnobzo**  
well-drive/run/fly  
‘drive well, run well, fly well (of mechanical devices)’
  - b. **bkobii**zo****  
into.water.fall/plunge  
‘fall/plunge into water’
  - c. **nning**zo****  
armpit-tremble  
‘tremble, shake, shiver’ (Valentine 2001:378)

The final *-ke* is also very general in the range of meanings it can have. The examples in (9) show that *-ke* can mean not only ‘make’, but that it can also signify ‘gather, catch, hunt, work with’, etc.

- (9) *-ke*
- a. **jiigke**  
fishers-hunt  
‘hunt fishers (the animal)’
  - b. **memengwaany**ke****  
butterflies-catch  
‘catch butterflies’
  - c. **semaan**ke****  
tobacco-work.with  
‘work with tobacco’ (Valentine 2001:419)
  - d. **mushkeegemene**ke****  
cranberries-gather  
‘he gathers cranberries’ (Wilson 1874:20)
  - e. **miikiwami**ke****  
house-make  
‘to make a house’ (Lemoine 1909)

Since, the semantic contribution of the final is weak, the role of the initial is important in determining the overall interpretation of the stem. However, as pointed out by Valentine, the meanings that stem from the combination of a root with a concrete final are not always entirely predictable from the nature of the noun referent. For example, (10) not only means ‘make a ball’, but also ‘play ball’.

- (10) **bkwaakdo**ke****  
ball-play/make  
‘make a ball, play ball’ (Valentine 2001:418)



## Mathieu

can take on the meaning of ‘cure’ as illustrated in (14f). One might think that in this case, one cures by way of speech (as in medicine men). In other words, these are very broad in meaning: *-mo* appears to refer to anything expressed by the mouth.

- (14) *-mo*
- a. **Nishnaabemo**  
Nishnaabe-speak  
‘to speak the Indian language, Nishnaabemwin’
  - b. **giiwnimo**  
untruth-speak  
‘to lie, speak untruth’
  - c. **nepaadoomo**  
incorrectly-speak  
‘to speak incorrectly’
  - d. **jaachaamo**  
burn-via oral means  
‘to sneeze’
  - e. **waasmo**  
sparkle-speak  
‘flash lightning, make lightning (of the Thunderers)’  
(Valentine 2001:395)
  - f. **noojimo**  
catch-via oral means  
‘to cure’ (On-line dictionary)

As in the case of *-ke*, the final *-mo* is used only in intransitive context. A different verb is used in transitive environments: *ganoozh* ‘speak’. This is illustrated in (15).

- (15) **gii-ganoon-igod**  
PAST-speak-to.her  
‘He spoke to her.’  
(Nichols 1988, Text VI: The Ugly Woman, p. 17)

Next, I consider the case of the final *-i* ‘have’ which combines with all sorts of nominals. It is akin to ‘have’ in English and ‘avoir’ in French. In (16a), it combines with *day* ‘dog’ to give ‘have a dog’, in (16b) it combines with *doodaabaan* ‘car’ to give ‘have a car’, in (16c) it combines with *nahaangshiim* ‘son-in-law’ to give ‘have a son-in-law’ while finally it combines with *wzhoonyaam* ‘money’ in (16d) to give ‘have money’.

- (16) *-i*
- |    |  |    |  |
|----|--|----|--|
| a. | <b>dayi</b><br>dog-have<br>‘have a dog’  | b. | <b>doodaabaani</b><br>car-have<br>‘have a car’                                     |
| c. | <b>nahaangshiimi</b><br>son.in.law-have<br>‘have a son-in-law’<br>(Valentine 2001:416) | d. | <b>wzhoonyaami</b><br>money-have<br>‘he/she has money’<br>(Resource Guide 2002:86) |

(17) illustrates the case of *-shki*, a verb of addiction which is used to indicate state or action, often with a negative flavour by merging with an underlying verb.

- (17) *-shki*                    **gtimishki**  
                                     lazy-addicted  
                                     ‘he/she is habitually lazy.’ (Resource Guide 2002:85)

The next case is that of *-kaazoo*, as illustrated in (18), a verb of pretend which is used to express the idea that someone is pretending to be or do something. This expression is not unlike French *faire + DP*, e.g. *faire l’enfant* (to pretend to be a child, literally ‘to make the child’).

- (18) *-kaazoo*                **binoojiinhkaazo**  
                                     child-pretend  
                                     ‘he/she pretends to be a child.’ (Resource Guide 2002:86)

To summarize Section 2. We have seen that word order in Ojibwe is traditionally taken to follow a morphological template. Although there is a traditional way of separating abstract finals on the one hand from concrete finals on the other, the differences between the two groups is not so clear. Many abstract finals have semantic import while many concrete finals are much less specific than roots, thus much more abstract in their denotation. The next section provides an analysis for these facts.

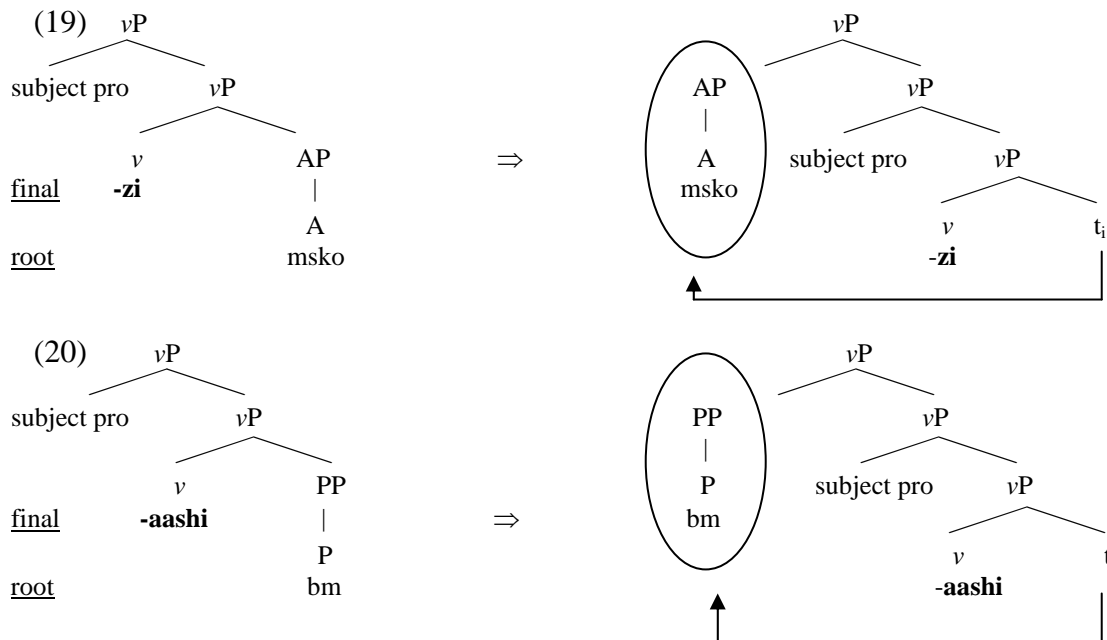
### **3. The analysis: Ojibwe finals are light verbs**

Grimshaw and Mester (1988) define two typical properties for light verbs: they are semantically deficient or ‘light’, in that they contribute semantics to the clause which are not very specific, and they are frequently either phonologically null or, if they are overt, act as a host for agreement and tense morphology. Light verbs have rather similar semantics across different languages. Typically when a language has only one light verb it is ‘do’ or ‘make’. On Butt’s (1995) proposal is that functionally, light verbs provide further information about the structure of the event such as duration or telicity. It looks like finals in Algonquian languages have many syntactic and semantic properties with light verbs. The difference between commonly studied languages on the one hand and Algonquian languages on the other is that the latter have many more light verbs available in their grammars than the former.

The aim of this section is to propose that not only abstract (cf. Brittain 2003), but also concrete finals in Ojibwe are instances of little *v*, i.e. light verbs. They take as complement a root, which for independent reasons have to raise to the left edge of the stem. My proposal for Ojibwe is thus similar to that of Hirose (2001) who builds his theory of complex predicate formation around the idea that finals in Plains Cree are instances of little *v*. Following his claims about Plains Cree, I argue that abstract finals carry information about (a)telicity in Ojibwe. On my analysis, concrete finals are divided into two classes: one class groups concrete finals that are instances of *v*, i.e. light verbs, while another gathers concrete finals that are roots.

Like Blain (1997), Déchaine (1999) and Branigan, Brittain and Dyck (2005), I assume that Algonquian languages are head-initial. The subject is base-generated in the specifier of *v* and takes the form of a pronoun (that can be either overt or null). Since the pronominal form is a clitic, it raises higher in the clause. I assume it raises and adjoins to  $C^0$  where, at PF, a single slot for pronominal forms in Ojibwe is represented (McGinnis 1995, but see Déchaine 1999 for a syntactic account). The subject and other thematic NPs can then be doubled by a lexical nominal which acts like a syntactic adjunct: Ojibwe is a head-marking language (cf. Jelinek 1984, Baker 1996).

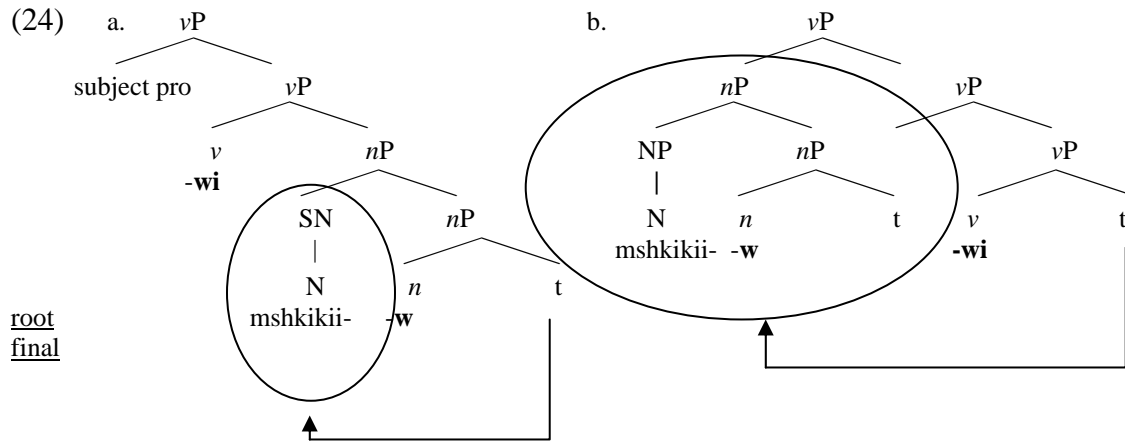
Let me now provide derivations for some of the examples that were introduced in Section 2. (19) gives the derivation for (2a) (adjective) while (20) is the derivation for (2b). In both these cases, we are dealing with primary derivation: the initial is a simplex form. In order to satisfy the left-edge/first position of *v*, the AP and the PP raise to the specifier position of *v* (this is what Brittain 2003 also proposes).



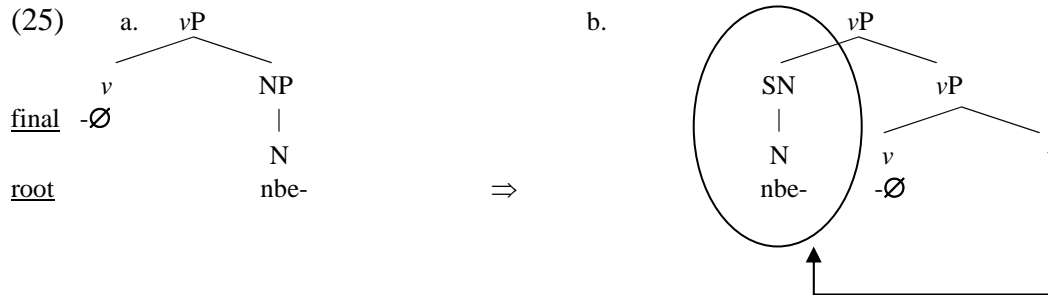
Cases like those in (2c) and (2d) are slightly more complicated in that they involve secondary derivation: the initial is a complex form. In order to account for the initials in these two cases, we need to introduce so-called nominalizers (Brittain 2003 does not provide a full-blown analysis of the difference between primary and secondary derivations, abstracting away from the dichotomy). Every noun contains a final, which we can assume to be an instance of *n*. The latter can for example be spelled-out as *-win* as in (21a) or *-gan* as in (21b). Clearly, final nominalizers are not simply category defining. They also have palpable meaning. The initial in (21a) and (21b) is the same (i.e. *nibaa*): what creates the meaning of ‘sleep’ for *nibaawin* is *-win* and the meaning of ‘bed’ for *nibaagan* is *-gan*.

- (21) a.    **nibaawin**                      b.    **nibaagan**  
           sleep-FINAL                    sleep-FINAL  
           ‘sleep’                            ‘bed’

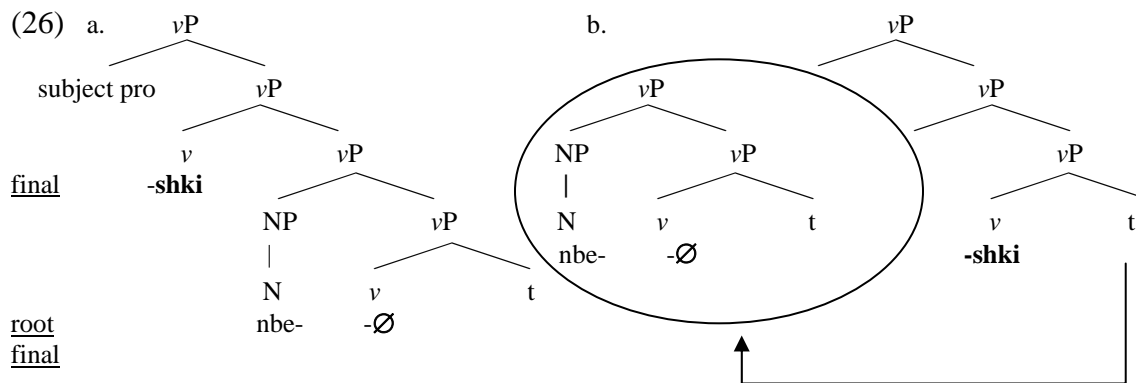




Next, I give the derivation for (3b). In this case a verbal form is created from a nominal form. The word *nbe* ‘sleep’ merges with a null *v* as in (25a) and then the NP raises to the outer specifier of *vP* as illustrated in (25b).



The next cycle involves the merging of the *vP* in (25b) with the final *shki* ‘addicted’ as in (26a). Then, the *vP* that was merged with *shki* raises to the outer specifier of the *vP* headed by *shki* as illustrated by (26b).

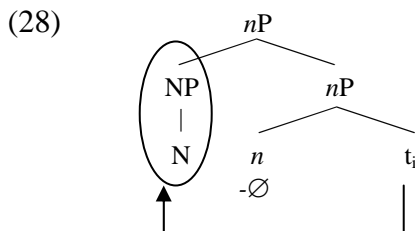


It must be noted that in all the examples that were introduced in this section the left edge of the stem is always phonologically realized. Whereas medials are optional, an Ojibwe word always consists of at least a final and an initial (see Goddard 1990 and Bloomfield 1957:12). Although there appear to exist a few counterexamples to this generalization, these exceptions turn out to be just an illusion. Valentine (2001:329) reports that a few

VAI finals involving motion can appear with or without an initial element and mentions in particular the case of *gwaashkni* ‘climb out [out of a vehicle], disembark’ (VAI) (Odawa dialect), which in fact can also occur in combination with initials as in *gjigwaashkni* ‘jump off [a vehicle], *bkobiigwaashkni* ‘jump into the water’. Wolfart (1973) also reports Plains Cree *oskiskweewew* ‘new woman’ which is taken to be a medial appearing without a final with the interpretation ‘he has a recent wife’ (he is newly married). Wolfart posits a zero initial in this case. However, the sole example in sec. 6.112 (and again in 6.2) that is claimed to be root-less can in fact be analysed as follows (Chris Wolfart, personal communication): *osk-* is a root and the stem as a whole can be taken either as tripartite (*osk-* + *-astimw-* + *-ê-*) or bipartite (*oskastimw-* + *-ê-*) structure. I conjecture that the case of *gwaashkni*, cited above, can be analyzed along these lines: it must be decomposable in such a way that an initial is in fact present. Thus, Goddard’s (1990) strict generalization according to which every stem has an initial is robust. In other words, the light verb need not be overt (light verbs are typically null, as already mentioned at the outset of the present section). When a light verb is not overt, *vP* is nevertheless projected with an empty lexical head.

Light nominals can also be null. I take nouns as those illustrated in (27) to involve a root + a null *n* (that may well simply be the null counterpart of the abstract nominalizer *-w* introduced earlier, cf. Valentine 2001:478, 480-481).

- (27) a.   nim           ‘dog’  
       b.   mik           ‘beaver’  
       c.   gaazhag       ‘cat’  
       d.   esban          ‘raccoon’



It should be clear at this point that one important contention made in this paper is that words in Ojibwe are built entirely in the syntax. More precisely, I take the predicate fronting operation in Ojibwe that occurs word-internally to be syntactic: the operation is indeed not only entirely productive, but also cyclic. Algonquian languages provide compelling evidence for one of the central tenets of Distributed Morphology (Halle and Marantz 1993, Marantz 1997). Roots are not lexically marked as verbs or nouns, and the addition of a final to a root is required to form such categories. In the type of languages to which Ojibwe belongs, derivational morphology is thus as regular as inflectional morphology. This goes against the traditional account of Algonquian word formation which views morphology as lexical/pre-syntactic with morphological templates Algonquian words must abide to.

Judging from the way words are formed in Ojibwe, I also conclude, following recent work by di Sciullo (2006), that phases are relevant at the word level. In particular, I conjecture that the *v* projections instantiated by the abstract finals under review in this

paper are strong phases. Every time a relevant XP or relevant xP undergo predicate raising, it passes through the edge of the phase (i.e. the specifier of  $vP$ ) creating a snowballing effect. The movement is triggered by a peripheral feature  $p$  that ensures convergence.  $nP$  is also a phase. Evidence for the phase status of  $vP$  and  $nP$  and of stems more generally in the Ojibwe language comes from the fact that there appears to be a pause between preverbs and the stem (Brittain 2003) as illustrated in with stems forming a prosodic domain (Brittain, Branigan and Dyck 2005).

(29) (Pronominal clitics) | (Preverbs) # | Stem | Inflection

I account for the fact that the left edge of the stem is necessarily filled in Ojibwe by proposing that root raising is triggered by an EPP feature on  $v$ . While languages like French or English have their EPP on  $T^0$ , Algonquian languages have their EPP on  $v$  (this is a parameter, which without doubt, can capture a constellation of related facts). When IP is projected, no specifier is thus created. The EPP is of the kind described by Holmberg (2000). Whereas the EPP on Chomsky's (2001) requires a specifier to be created, Holmberg's view of the EPP is stronger in that, not only does a specifier needs to be created, but it must also be filled by overt material. Accordingly, the EPP is split between a [D] feature that needs to be satisfied by a nominal or pronominal element and a [P] feature which requires a phonological matrix in the specifier of a given head. Suppose that in Ojibwe, the pronominal subject features that accompany the verb stem satisfy the [N] feature of  $v$  (Ojibwe does not have determiners, thus I assume that the relevant feature is simply [N]) while the [P] feature is satisfied either by an AP, a PP, an NP (+ $nP$ ), or a VP (+ $vP$ ). This is another way in which my analysis differs from that of Brittain (2003), since on her account the Probe does not appear to have Match properties, her claim being that all categories can satisfy the left-edge/first position constraint. The obligatory filling of the left edge of the stem is thus derived from an independently known mechanism Holmberg uses this version of the EPP to account for Stylistic Fronting in Icelandic and more precisely for the fact that in this language, the specifier of IP always needs to be filled.

Before this paper draws to a close, it must be mentioned that contrary to what happens in languages like Inuktitut (Johns 2005) and Nuu-chah-nulth (Wojdak 2005), in Ojibwe not all kinds of categories can be fronted to the left edge of the stem. For example, WH words cannot be fronted as shown by the contrast between (30a) and (30b). In Nuu-chah-nulth such elements can undergo root raising. Adjectives also front, whereas in Inuktitut and Nuu-chah-nulth proper names can raise to the left edge of the stem. This does not appear possible in Ojibwe (see Mathieu 2006 for details).

- (30) a. Ogonen            gaa-aabajitoowan?  
           what            PAST-use.2SG.VTI  
           'What did you use?'  
       b. \*Gaa-**ogonen**aabajitoowan?

Finally, whereas Inuktitut and Nuu-chah-nulth have dummy roots, in Ojibwe these elements are not available (see Mathieu 2006, again, for details). Thus, although similar root raising may take different forms depending on the language family.

#### 4. Conclusion

This article proposed the idea according to which in Ojibwe certain concrete finals – those which receive a general and non-specific meaning – are manifestations of *v*, i.e. light verbs, which take as complement a definite series of lexical categories. It was also proposed that the formation of words in Ojibwe is entirely productive and cyclic (via a process known as ‘snowballing’). A root must move to the left periphery of *v*. This movement is triggered by the presence of a split EPP feature on *v* that is divided into two parts: a feature [N] saturated by a pronominal element and a feature [P] satisfied by a category like NP or AP. Lastly, two phases were identified for Ojibwe: *v*P and *n*P. Each one of these categories contains a specifier through which a root XP can transit.

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Mathieu

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