On the count/mass distinction and the role of number in Ojibwe

Abstract. This paper has two aims: (i) to show that, contrary to what has been claimed in the literature, the mass/count distinction exists in Ojibwe; (ii) to show that since the language has no determiners or classifiers, and since partitive quantifier phrases are not available, number is systematically used as a divider of undivided stuff, providing compelling evidence for a recent idea put forward by Borer (2005), namely that number (Num) has a divider function.

1. Introduction

(1) "Or consider the Algonquian language Ojibway (Richard Rhodes 1990:153-4, and personal communications). Nouns which might be expected not to have a plural do in fact form plurals freely, interestingly with the unit reading and not with the sort reading. Thus mkwam ‘ice’ or ‘piece of ice’, mkwamiig (plural) ‘pieces of ice’. Rhodes is unable to find a noun that cannot be pluralized in Ojibway." (Corbett 2000:87)

(2) "In Ojibwa there is no grammatical distinction like the mass/count distinction of Indo-European. Thus mkwam can equally mean ‘ice’ or ‘a piece of ice’. Nbissh can mean ‘water’ or ‘an amount of water.’" (Rhodes 1990:153)

There are two ways of interpreting the data on Rhodes’ view:

• either there is simply no mass/count distinction in Ojibwe or
• all nouns are count.

Ojibwe is not the only Amerindian language which warrants these sorts of conclusions. It has been claimed first that all nouns are count in Hopi (Whorf 1939) and Lillooet Salish (Davis and Matthewson 1999), while Wiltschko (2007) has recently argued that there is no actual grammaticized mass/count distinction in Halkomelem Salish.

Aim of this paper: I show in this paper that there is a mass/count distinction in Ojibwe, and that the category Num is therefore projected in that language. Empirical findings from fieldwork point to the conclusion that not all nouns can be pluralized in Ojibwe: some mass nouns resist pluralization.

Analysis: The analysis I will give for the Ojibwe facts is based on Borer’s recent work on mass terms and the structure of the nominal domain. Borer (2005) proposes that all nouns in all languages denote undivided stuff, and are in need of being portioned out before they can interact with the count system. Ojibwe provides direct evidence for the idea that number is a stuff divider.

2. Ojibwe nominals from a typological perspective

In Ojibwe, there are no determiners resembling the English determiners the or a.

(3) semaa-n gii-miin-aa-wag giw kiwenziiy-ag gaa-bi-zhaaj-ig PAST(given-dir)-3PL those old.man-3PL PAST(conj)-come-go-3PL ‘The old men who had come were given tobacco.’ (Nichols 1988:77)

(4) w-gii-waabm-aa-n kwe-wan w-aawaatkohmaag-od 3-PAST-see-dir-3’ woman-3’ 3-wave.VTA-3’ ‘When he saw a woman wave to him.’ (Nichols 1988:40)

(5) ji-wii-yaamwaag-wenh moozhwaag-an FUT(conj)-FUT-have-3AGR scissors-0PL ‘if they have scissors.’ (Nichols 1988:54)

(6) abii:oji:nih-w-i-w child-be-AI-3 ‘He is a child.’ (Rhodes 1976:261)

The case of demonstratives:

(7) Bezhi gik inoo’amaagewi-kwe gii-gikinoo’amaage one/a certain teacher-woman PAST-teach.VAI Ojibwe-mong ingo-diba’igan endaso-giizhig naano-gon. Ojibwe-language one-hour each-day five-days A’aw Ojibwe-gikinoo’amaagewi-kwe that.3 Ojibwe-teacher-woman PAST-thus-be.aware.of-dir bezhi ogikinoo’amaagan-an bakaan inweni-d. one/a certain student-3’ differently articulating.VAI-3’ ‘A certain woman teacher taught Ojibwe for one hour a day, five days a week. The teacher of Ojibwe became aware of one of her students who spoke a different dialect.’ (Nichols 1988:24)

• The case of Ojibwe in relation to the Blocking Principle (Chierchia 1998)
• Is Ojibwe like Russian?

(8) a. Animate singular
   b. Animate plural
gwiizens gwiizens-ag
gi’n-giizhig boy boy-PL

(9) a. Inanimate singular
   b. Inanimate plural
wiikwaan wiikwaan-
hat hat-PL

Apart from clear similarities, there is, however, a crucial difference between Russian and Ojibwe.

(10) a. Ja kupil khleb (*khliby). I bought bread (*breads)
   b. Ja kupil 3 *(batona) khleba. I bought 3 *(loafs) of bread
   c. Na stole bylo neskoloko *(sortov) syra. on.the.table were several *(types of) cheese
   ‘I bought three loaves of bread.’
   ‘There were several types of cheese on the table.’ (Chierchia 1998:361)

What is noteworthy in Ojibwe is that no such quantifier phrases appear to be available.
(11) a.  mentaamen-ak  corn-AN.PL
    b.  penakesiken-ak  hard-shell corn-AN.PL
Context: Kekkina ke-koota-ettemekat necttaawekekink, ciissan, eeshshoonyan meskotissimink, enepenik, mentaamenak, penakesikenak, eniciimin.
'There will be everything that is raised: turnips, cabbages, beans, potatoes, Indian corn, hard-shell corn, peas.'
(Bloomfield 1957:196)

In languages like English and Russian, one well known property distinguishing mass from count nouns is that the former do not refer to a singular/plural distinction. The standard assumption is that exceptions to this generalization can be found only when the interpretation of mass nouns is coerced to that of (12): standard servings (12a), kinds (12b), or idiomatic expressions (12c) (an example from British English).

Chierchia (1998) claims that mass nouns cannot be pluralized because of the idea that they are lexicality/plural, and therefore pluralisation (as a semantic operation triggered by the noun of plural morphology) is not defined for such elements. More precisely, he assumes that a mass noun, such as furniture, will refer in a different manner to singular pieces of furniture, as well as to pluralities thereof. Thus, mass nouns are quite literally the neutralization of the singular/plural distinction. The extension of nouns like water is then analogous to that of nouns like furniture, the only difference being that what counts as a minimal portion of water is somewhat vague and may vary from context to context. Because mass nouns are already plural, pluralizing them makes no sense.

The Ojibwe facts in (11) may thus pose a problem for the idea that mass terms cannot be pluralized since they do not indicate any of the interpretations in (12). One word of caution is nevertheless necessary before a hasty conclusion is given from the kind of data introduced in (11). As the quotes in (1) and (2) make clear, words like mukwm ‘ice’ can mean both ‘ice’ and ‘piece of ice’ and nbiish ‘water’ ‘amount of water’. Words such as ‘corn’ and ‘hard-shell corn’ are in fact very similar to words like ‘ice’ and ‘water’ in that they are ambiguous between a mass and an individual reading. The fact that pluralization of ‘corn’ is possible simply indicates that more than one piece is involved in the event under description.

It is a distinctive feature of Ojibwe grammar that many words that are mass in English are in fact ambiguous in Ojibwe between a mass and an individual reading. In his very comprehensive Ojibwe grammar, Valentine (2001:182) reports that Ojibwe words that correspond to English mass nouns can be pluralized because they are divided into conventionalized units, such as pieces or servings (Valentine 2001:182). Ojibwe nouns can be used with plurals since they can refer to ‘a piece of X,’ or ‘a portion of X,’ such as miijin ‘food, a serving of food’, which has the plural miijin when referring to several servings. In English, portions of mass nouns can only be referred to by means of special quantifiers with partitive constructions, such as a drop of water, a grain of salt, or a slice of bread. These facts could be taken to mean that there is no count-mass distinction in Ojibwe. However, I will show that this conclusion would be too premature.

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The case of ‘corn’ in Ojibwe is reminiscent of the contrast between English and French where ‘furniture’ is mass in the former, but count in the latter (an meuble ‘one piece of furniture’/*a furniture, des meubles ‘pieces of furniture’/*furniture). However, it must be noted that the nominals in (14) are not only count, they are also mass (in French, meuble in the singular cannot be interpreted as mass, the mass term being a different lexical item, namely mobilier).

Pluralization of inanimate count nouns

(16) a.  akwaandaawan’anj  ‘ladder’  IN count
     b.  ishikwaandem’anj  ‘door’  IN count
     c.  makizin’anj  ‘moccasin’  IN count

The nominals in (17) are ambiguous in that they can be interpreted either as mass or as count.

(17) a.  gausheegun’anj  ‘Indian-rubber’  IN count/mass
     b.  mandahminishkoon  ‘straw/corn-straw’  IN count/mass
     c.  (a)kiin  ‘earth’  IN count/mass
     d.  manoomin’anj  ‘rice’  IN count/mass
     e.  ahiyishkiiin  ‘mud’  IN count/mass
     f.  bikwezhgan’anj  ‘bread’  IN count/mass
     g.  aasaakamig’oon  ‘moss’  IN count/mass

A word like bikwezhgan ‘bread’ (17f) in the singular means either ‘bread’ or ‘a portion/slice of bread’. The pluralization of bikwezhgan thus gives ‘slices of bread.’ Again, the nouns in (17) are not simply count, but they are also mass.
• Data taken from fieldwork

(18) a. bimide 'oil' IN mass
    b. (a)niibiishaaboo 'tea' IN mass
    c. doodooshaaboo 'milk' IN mass
    d. miskwi 'blood' IN mass
    f. aamoo-ziinzibaawad 'honey' IN mass
    g. bingwi 'sand' IN mass

These nominals cannot even be pluralized to mean 'kinds of', for example 'oils' as 'kinds of oil' (an observation that transpires in the quote introduced in (1) and which was confirmed by informants). These nouns are not ambiguous between the mass interpretation and the count reading. The word doodooshaaboo 'milk' cannot mean 'a portion of milk' and bimide does not mean 'a portion of oil', but only the mass interpretation is available.

• Analysis

Borer (2005) proposes that all nouns in all languages are mass, and are in need of being portioned out before they can interact with the count system. This portioning-out function, accomplished in languages like Chinese through the projection of classifiers, is accomplished in languages like English by the plural inflection as well as by the indefinite article. Thus, for Borer, plural inflection is classifier inflection. This accounts for the complementary distribution between classifier inflection and plural inflection which is now reduced to the fact that they are simply distinct instantiations of the classifier system (see also Doetjes 1997).

The idea that number is not about counting but about dividing undivided stuff is most apparent in English in the case of fractions. The noun 'apple' in systematically pluralized in (19) although there is only one apple involved in each case.

(19) 0.2 apples/*apple
    0.1 apples/*apple
    1.5 apples/*apple
    1.0 apples/*apple

In English, no classifier of the Chinese type is available, but instead quantifier partitive phrases are used. In (20) we see that the plural –s and quantifier partitive phrases in English are in complimentary distribution.

(20) a. three –s
    b. three portions of

My point is that Ojibwe provides direct evidence for the use of number as a mass divider. It is precisely because Ojibwe has no classifiers or determiners, and especially does not make use of partitive quantifier phrases, that plural marking (and number more generally) serves the purpose of dividing stuff that is otherwise undivided. Pluralizing a noun that is translated as mass in English creates a portion reading without the need of any extra quantifier phrase. Since the animate nouns in (14) are ambiguous it must be the case that two representations are needed. One where the noun is mass, and another where number creates the division necessary for interpreting the noun as count. This takes care of the fact that in Ojibwe a noun like maandaamin 'corn' in the singular can mean 'portion of corn':

(21) $\text{Cl}^0/\text{Num}^0 \emptyset$ (count/singular)

(22) maandaamin

The specifier of #P can be occupied by quantifiers of the type 'much' in English. In Ojibwe, special verbs of quantity (24), or the final –kaa (25), are used to express quantity with mass terms.

    abundant-VAI tobacco.AN.3SG
    'There is lots of tobacco.'
    b. Baatiin-ad wiiyaas.
    abundant-VII meat.IN.0SG
    'There is plenty of meat.'

(25) a. mide-kaa lots of oil (be oily)
    b. mezhoosh-kaa lots of hay

(26) maandaamin

It must be noted that maandaaminak, i.e. 'corn' in the plural, is not the equivalent of an English bare plural: it is individualized. Following Borer (2005), bare plurals are like mass
nouns in English in that they denote undivided stuff rather than plural entities (as in Chierchia 1998): they are unmarked for either mass or count. This means that bare plurals are not collections of individuals that already represent divided stuff: bare plurals are not a function of singulars, but rather follow from the role of the plural as ‘stuff divider’. In other words, individuals cannot be created by a dividing function: ‘apples’ as a bare plural does not consist of singular apples. In the case of maandaaminak we are dealing with individuals, which means that the noun must have raised higher than Spec-CIP/NumP, since bare plurals stop there in Borer’s system. I conclude that maandaaminak raises to Spec-#P.

(27) a. tsel kw’ets-i-exw te syigiyiq (Halkomelem Salish) 1SG see-trans-3O det snow.PL ‘I’ve seen a lot of snow.’ b. tsel kw’ets-i-exw te sipepiw 1SG see-trans-3O det ice.PL ‘I’ve seen a lot of ice.’ (Wiltschko 2007:4)

However, it must be noted that there is a crucial difference in interpretation between pluralized mass nouns in Salish languages and Ojibwe. Whereas in Ojibwe number serves the purpose of dividing undivided stuff, in Salish languages in most – if not all – cases it appears that the function of number is simply to denote a large amount of mass. In Ojibwe, this is not the interpretation that we get when mass nouns are pluralized. In order to get this interpretation, a special verb or a special final is used as seen in (24) and (25). In order to divide mass terms, Halkomelem Salish resorts to partitive quantifier phrases of the kind available in English. The element i’axwlì which literally means ‘small’ (28a) is used as such a phrase. An example is introduced in (28b).

(28) a. i’axwlì siyólih (Halkomelem Salish) piece of wood b. tsel kw’ets-i-exw (te) i’axwlì siyólih 1SG see-trans-3O det small wood i) ‘I saw a piece of wood.’ ii) ‘I saw a little bit of wood.’

Because partitive quantifier phrases are available in the language, number does not play the role it plays in languages like Ojibwe, i.e. it does not act as a stuff divider.

4. Conclusion

The aim of this paper was to show that the count/mass distinction exists in Ojibwe and that number serves the purpose of dividing undivided stuff. The role of number is thus crucial in that language. This is because there are no determiners, classifiers or partitive quantifiers phrases that can play the role of stuff dividers. The language provides direct evidence for the idea that in order to be counted, nominals must first be divided. They must be divided because they start out as denoting undivided mass. We have seen that whereas some nouns could be systematically pluralized, others could not. Words such as ‘oil’ or ‘milk’ cannot be pluralized in Ojibwe, a fact which seems to suggest, that the mass/distinction is grammaticalized in the language, contrary to what has been claimed before in the traditional literature.