Gender Universals in Oneida and Cree

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Abstract

In this paper, three of Greenberg’s universals (1961) that pertain to grammatical gender are examined in the context of Cree and Oneida grammars. The validity of universals relies on their observance by all languages. As North American languages were not included in the original formulation of Greenberg’s universals, studying Oneida’s and Cree’s methods of conformity strengthens both the universal itself and the theories behind each one. Each of these universals takes on a separate issue of functions and manifestations of grammatical gender. Universal #32 relates gender and number verb agreement; #31 relates gender agreement on verbs and adjectives and finally, #37 relates number and gender as they exist as noun classes in gendered language. For each universal I propose a theory as to why human language would like to follow such a pattern and what would be wrong or non-human about a language that does not follow it. These theories are rooted in the three main basic reasons for why universals are posited to exist: linguistic, psychological and anthropological. The peculiarities of Oneida and Cree genders, then, provide specific data to support these theories. Other noun classes which do not follow the universals are also included, providing a contrast to gender behavior and why it is unique.

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1. Introduction

Greenberg’s 1961 study of universals has become the starting point for much subsequent work on universals and what they are. However, relatively little attention has been devoted to why the universals proposed would make sense. There has been little to no theory as to why any given universal is important for a language to follow from a pragmatic point of view. This paper serves to fill that gap in regard to three of Greenberg’s universals: #31, #32, and #37. Based on the reasoning behind why universal patterns exist among human languages in the first place, combined with the basic assumption that language is a tool used to communicate observations about the world in which humans exist, this thesis describes likely reasons why gender in language always follows certain patterns. Cree and Oneida provide a backdrop for this discussion. Each language provides a different point of view from which to determine what makes gender pattern a certain way in respect to adjectives, verbs and number categories. In particular, other features of these languages do not pattern like gender, and this divergence solidifies the argument that the gender universals are based on how humans deal with a gender identification pragmatically, not only grammatically as a linguistic feature.

2. Universals of Language

2.1 Greenberg’s Forty-Five Universals of Language

In 1963, Joseph H. Greenberg proposed forty-five universals of human language. These universals were derived after an extensive study of thirty different languages and the common patterns that existed among them. These proposed universals pertain to most aspects of morphology and syntax including basic word order, question formation, ordering of adjective numerals and possessives and correlations between different types of agreement. Although since the time of publication some of the forty-five universals have been proven not to be truly universal (that is, there are exceptions to them) Greenberg’s work still provides a foundation for further work on linguistic universals in morphology and syntax. The sampling of languages used in the original study was based both on genetic and geographical
diversity and, in some cases, Greenberg’s prior experiences. The languages in the 1963 study included Basque, Welsh, Swahili, Hebrew, Hindi, Japanese, Maori (Greenberg 1966:75), to name a few. The thirty languages spanned several language families as well as some language isolates and covered all inhabited continents, except for one. No North American language was studied in Greenberg’s creation of his forty-five universals. This leaves a substantial gap and room for error in Greenberg’s predictions for how languages work because an entire continent of languages does not even factor into the discussion. Additionally, since Greenberg makes the claim that his forty-five statements are universally true for all human languages, his argument would benefit from the greater diversity and number of languages that North America offers. That Greenberg sought to make both genetic and geographic diversity factors in choosing his case languages is a testament to the importance of diversity in a typological study on universality. A universal is not proven universal until every language is shown to follow it so the more languages observed to follow a pattern, the better the case to claim that pattern is a universal. In short, “widespread (or universal) features are most apt to be important if they occur against a backdrop of diversity” (Hockett 1966:5).

This paper is an addition to Greenberg’s original study. Both Oneida and Cree are North American languages and each comes from a different language family. The observation of similar gender, number and person agreement patterns to those of Greenberg’s work in Oneida and Cree diversifies the languages following these patterns. Adding data from an entirely new continent thereby strengthens the theory for language universals in general and Greenberg’s theory in particular.

2.2 Linguistic Reasons for Universals

In 1976, Chomsky proposed his theory of Universal Grammar (UG), a concept that all natural languages share certain features. Cook sums up this theory by saying “All human beings share part of their knowledge of language; regardless of what language they speak, UG is their common inheritance” (Cook 1988:1). The theory of UG has direct connections to the positing of linguistic universals. If a UG does exist in each human’s brain, the universals might provide insight into what
exactly that UG looks like and how it functions. In the words of Cook “knowledge of language comes down to variations in a small number of properties” (Cook 1988:1). If linguists are able to isolate specific properties which all languages pattern after, the theory of UG would be not only validated but more specifically defined. A problem for the link between universals and a UG is that there are some so-called universals which are not truly universal, but are merely widespread tendencies. The question is whether or not these characteristics ought to be considered when modeling a UG. It may seem easy to completely rule them out, and in cases where there are several exceptions to a proposed universal, this is the proper course of action. However, cases may arise when a universal is contradicted only by one language or family of languages. It is sometimes then proposed that if this language or language family is extinct, then they should not be included when constructing a UG based on the world’s languages. However, this idea is sharply turned down by the fact that if everyone except English speakers died tomorrow, then English’s exact grammar would immediately become the UG, and this simply is not correct. So, widespread features cannot be deemed universal simply because no surviving languages contradict them. They might still provide valuable insight into how language works, even if they are not true universals and cannot be directly incorporated into the UG. Nevertheless, they should not still be held as universals, but as interesting facets of language. The distinction between widespread tendencies and true universals, then, is a crucial one for the fleshing out of the theory of UG. Since by pure definition, universals must be observed by every human language, the best way to move towards a UG is to test individual linguistic universals against each human language, living or dead. Only by isolating the true universals through typological study can linguists determine the full theoretical basis for building and uncovering a UG.

2.3 Psychological Basis for Universals

Researchers in fields besides linguistics have shown interest in language universals because language is part of the human experience. Psychologists in particular have formulated theories as to why linguistic universals may be critical to our ability to use and develop languages skills. The main basis for these proposals that language universals are imperative and more than just an interesting theory is the
Children are particularly adept at acquiring languages without formal instruction simply by being immersed in a community that has language. In particular, between the ages of approximately 2 and 10, the so called critical period, children can become fluent in a language much more rapidly than adults in the same situation; our ability to acquire languages seems to diminish progressively after this age. However, the rapidity with which children learn languages proficiently poses a problem. The daily speech that young children are exposed to does not provide a large enough sample of linguistic data for them to be able to accurately produce original speech acts, but they do so regularly as a natural part of their language learning. Psychologists have labeled this lack of adequate data the poverty of stimulus. The overwhelming evidence that children do, in fact, learn language despite the poverty of stimulus has caused psychologists to posit that there must be some internal, natural mechanism which all humans have which allows us to easily acquire language. It has even been proposed that a particular gene, \textit{FOXP2}, is encoded with information that allows humans, but not chimpanzees and other primates, to have the innate ability to learn languages and make jumps in the acquisition above and beyond the data they are presented with (Jackendoff and Pinker 2009:142). Though this theory of a language gene has met with some resistance from other psychologists (Müller 2009:229), the idea that humans have some instinctual tendencies that allow us, especially as children, to acquire language despite the poverty of stimulus remains strong. Regardless of where the scientific community believes this information is encoded, the fact that such information exists would suggest that language universals may be a part of that information. This means, for example, that if a child hears a particular word order for noun and adjective, that child can deduce the order of numeral and noun. If humans are equipped from birth with some basic patterns which all languages follow, then universals, these patterns, are not only interesting from a theoretical standpoint, but also mandatory from a practical viewpoint of language acquisition.
2.4 Anthropological Basis for Universals

The idea of a set of linguistic universals is also relevant to anthropological research in part, again, because language is a universal feature of the human experience. Language is the main way in which humans express their perceptions of the world they live in to other people. Although each individual may have a slight bias in his perception, people generally perceive the world through at least the same biologically based means and therefore it would not be surprising for all humans to then communicate their perceptions in a similar manner. Since language is the mode of communication most often used, it is realistic to believe that patterns would arise in the formation of language to reflect how people perceive the world. There are common human experiences, such as life and death, seeing and hearing, and others which must be expressed in all languages. The idea that language is strongly linked to perception can, however, be over emphasized to the point where Casagrande begins to argue that language universals validate the Whorfian hypothesis (Casagrande 1966:292-294). A more moderate approach to the connection between common human perception and common human language suggests that language is basically a tool, and in order for this tool to function properly, there must be certain specifications, the universals. “Hallowell calls attention to [the fact that] language universals…serve to orient the individual in a self-other dimension.” (qtd. in Casagrande 1966:281). The linguistic universals stem then not from any particular culturally imposed perceptions, but from more basic universally human perceptions of how the world around them is constructed in respect to broad categorical ideas like number. This is not to say that different cultures do not react to universal human experiences differently, only that all humans have shared experiences which arrive in our brains through the same media. From a more practical standpoint, Casagrande also argues that “in common sense terms the reality of a universal pattern is attested to by the fact that men can and do learn each other’s languages” (Casagrande 1966:281). If language ignored the basic fashion in which all humans perceived the world and was instead adapted to the human culture in which it developed, the acquisition of foreign languages would be substantially more challenging according to Casagrande. The argument for linguistic universals from an anthropological standpoint then is that, since all humans have perceptual regularities, and language serves as a tool to express these
perceptions, language too must have regularities, or universals governing it. A universal human experience leads directly to universal language features.

3. Gender Universals

3.1 Introduction to Gender Universals

Three gender universals in particular form the focus for this analysis of Cree and Oneida interaction with Greenberg’s universals. Retaining the original numbering, these are thirty-two, thirty-one and thirty-seven. Each of these universals makes a claim about gender and its interaction with number agreement on the verb, adjective agreement, and person respectively. These universals represent the three most basic ways gender marking interacts with constituents outside the gendered noun itself. Each universal’s interaction with each other universal also provides a strong practical basis for their existence and importance in developing patterns across the world’s languages.

3.2 Universal #32

Universal thirty-two deals with the intersection of number and gender agreement as they are marked on the verb. The original wording of this universal is:

(1) Whenever the verb agrees with a nominal subject or a nominal object in gender,
it also agrees in number.

Greenberg 1966:111

This means that, for example, if a noun’s feminine gender is marked in the verb, then that same noun’s singularity must also be marked. Universal 32 then implies a connection between a language’s desire to designate the gender of a noun and the need to designate the number.

From a practical viewpoint, this makes sense. A gender is a specific trait or attribute of an individual whereas number is a broader concept. Number can change depending on an individual’s circumstance; they can act alone or as part of a group, but gender will never change. Gender is a personal
trait whereas number is determined by outside factors as seen by the speaker. Said another way, gender is arbitrarily assigned to an individual by the conventions of the language whereas number is chosen by the speaker to orient participants in an utterance. If a person is alone, then they would be referenced as singular, with a group as non-singular. Therefore if a language requires specific, intrinsic knowledge about a noun, it follows that it would also want broader more general information. A language requiring gender agreement is, in this paper, referenced as knowledge heavy, it requires more specific or personal information; therefore, it is unsurprising that it also requires number. The reverse, however, is not true. If a language is not knowledge heavy, requiring number agreement, it is not expected that it must have gender agreement because gender is a deeper trait. In short, a deeper level of interest presupposes interest in all traits down to that deep trait, but interest in a shallow trait does not require deeper interest in deeper traits.

This distinction between knowledge heavy and knowledge light languages is the point expressed by universal 32 with especial respect to gender and number. Languages that have gender agreement with the verb assume that knowledge of gender requires preliminary knowledge of number and so requires this information to be marked as well as gender.

### 3.3 Universal #31

Universal 31 pertains to gender marking on verbs and adjectives and therefore has implications for the relationship between the constituents exhibiting marking, not what is being marked. The original wording of this universal is:

(2) If either the subject or object noun agrees with the verb in gender,

the adjective always agrees with the noun in gender.

Greenberg 1966:111

Unlike universal 32, which highlighted the differences between the two attributes being marked, gender and number, universal 31 focuses on the similarities between the constituents which carry gender markings, in this case verbs and adjectives. To unearth this commonality, a definition for both verbs and
adjectives is helpful. Verbs describe activities, accomplishments, achievements and states which their arguments participate in. Verbs can take multiple arguments although they don’t always necessarily have to, depending on the verb itself. Adjectives always describe the state of the noun, or occasionally clause, they modify and can take only one argument. The commonality between verbs and adjectives then, as seen through these two definitions, is that both take arguments. Both adjectives and verbs provide information about their noun arguments. It is not surprising that additional markers are often found on one or both of these constituents to specify number or, most relevant in this gender.

However universal 31 does more than specify that gender must be specified on one or the other; it requires that gender appear on the adjective if a gender marker appears on the noun. Therefore it is not enough to say that verbs and adjectives have a similar role and that’s why gender would appear in these places. One must also consider why languages would want an attribute to be marked in multiple locations as this universal requires. Languages’ interests in redundancies are also essential to understanding this universal. One such reason for a redundant marking is that languages allow for non-overt morphemes to carry meaning and also for one morpheme to carry multiple meanings. It is possible that a language would have a non-overt verb morpheme that distinguishes the gender of the subject as either neuter or feminine. In this case, including gender on any adjective applied to the subject adjective as well in a non-ambiguous way would clear up the issue of the subject’s gender. However, languages do allow for ambiguity and there is another important reason why redundancy occurs in language. Speakers are human, and therefore not perfect, and listeners are human and also, therefore, not perfect. Language accommodates for this. If a speaker mispronounces or in some way garbles the gender morpheme on one constituent, it is convenient for the listener’s sake to have a back-up gender marking on the adjective. Similarly, listeners do not always give their full attention to the speaker or are sometimes prevented from doing so, and so again a redundant marker makes understanding easier. For the sake of clear communication, both these factors are important in understanding redundancy in general and this universal in particular.

2 Comparative and superlative adjectives take multiple arguments; however, as the key here is how adjectives and verbs function similarly, not differently, this is not an issue for the reasoning used here behind universal thirty-one.
In summary, the shared role of verbs and adjectives is the reason why having a universal behind a language’s tendency to mark gender agreement on both verbs and adjectives is appropriate for human language. Marking gender in both places is a redundancy utilized for many reasons, included non-overt markings in some cases and failure on the part of the listener or speaker in others. If such a redundancy is to occur, the most reasonable places to store redundant information is on the two constituents with the shared role of relaying information about the noun because that is where a listener will look for such information.

3.4 Universal #37

Universal 37 makes a connection between gender and number. But instead of verbal agreement connections as in 32, 37 deals with how many genders a language has in singular as opposed to nonsingular numbers. The exact reading is:

(3) A language never has more gender categories in nonsingular numbers than in singular.

Greenberg 1966:111

So, if a language has two singular genders it cannot have more than two nonsingular genders, but it can have less than two. For example, if a language has feminine and masculine singular genders, it could have only one gender in the nonsingular which encompasses both masculine and feminine singulars, but it cannot have masculine, feminine and neuter nonsingular genders.

This requirement has connections to the argument for the reasoning behind universal 32, but also expands more upon the inherent quality of gender verses the surface quality of number. An individual, denoted by singular noun, has an inherent gender, whether that gender is biological or linguistically assigned is irrelevant; the noun will still have an inherent grammatical gender. Since any group or nonsingular is made up of multiple singulars, it follows that nonsingular nouns are governed by the traits of their members. A gender category cannot be created in grouping together members that do not have that gender. However, in the case of condensing genders in the nonsingular, in other words, having only one plural gender, this nonsingular gender is not making a distinction in personal genders of its members.
It neither creates nor erases gender, but simplifies it, respecting the fact that nonsingular nouns are composed of multiple singulats which individually have gender, but collectively lose some of this because gender is an individualistic trait.

Therefore, universal 37 makes explicit the fact that a gender of a singular may carry to the nonsingular when groups of the same gender combine and then, singular and nonsingular have the same number of genders. It also, however, predicts that languages will allow condensing of genders in the nonsingular and treat gender as a more specifically individual, or singular trait.

Each of these universals predicts certain treatments of the interaction of gender, verb and adjective agreement, and number. These predictions, though not yet unassailable, if proven true, will provide valuable insight into how humans choose to both perceive and describe their world through linguistic means.

3.5 Cree and Oneida and the Gender Universals

In assessing Cree’s and Oneida’s relevancies to the above universals, a certain method will be used. First, an evaluation of whether or not the language conforms to the predictions of the particular universal will be provided. There will then be a discussion of any problems the language might pose for the universals and a proposed solution to these problems. Additionally, if the language in question provides a gateway to explore aspects of the universal which are not explicitly defined in the universal itself but may be relevant to agreement, this aspect will be explored as well. Essentially, the evaluation of Cree and Oneida in respect to gender universals will deal not only with their direct conformity to the universal, but also will go beyond the statement of the universal to expose, if not solve, deeper concepts which the universal pertains to.
4. Cree Morphology

4.1 History of Cree

The Cree language is in fact more accurately described by the term dialect continuum. This dialect continuum consists of several Cree dialect varieties stretching from the Canadian Provinces of Alberta all the way to the very eastern edge of Quebec. The major dialects are Swampy Cree, Plains Cree, Woods Cree, and Moose Cree, in addition to many minor dialects not named here. For covering such a large geographical area, Cree dialects actually differ only slightly in their features (Carrol & Wolfart 1973:5). However, for the purposes of this paper, only Plains Cree will be used for example data. This keeps all data forms consistent with one another. Additionally, Plains Cree, along with Swampy Cree, accounts for about three-fourths of the Cree speaking population (Carrol & Wolfart 1973:6). Since there is no standard or most socially acceptable dialect of Cree, sheer numbers take precedence in choosing which dialect to use as an example in study.

In addition to being a dialect continuum, Cree belongs to the Algonquian language family. This family of languages also includes Ojibwa and Saulteau and is spoken in patches from the Rocky Mountains to the east coast of North America. Many Algonquian languages have already become extinct since their first contact with European languages, so it is therefore essential to include a sampling in a universality study now in order to preserve the greatest amount of diversity.

4.2 Cree Noun Morphology

Cree nouns are divided into two genders: animate and inanimate. Generally this distinction follows real world boundaries. This means that if something is living in the real world, it will have animate grammatical gender and if something is not living it will have non-animate grammatical gender. However, there are a few exceptions. The words for ‘snowshoe,’ ‘kettle’ and other common household items are included in the animate gender. The reverse, however, never occurs. An animate object in the real world, such as a duck, will never have grammatical inanimate gender.
In addition to gender, Cree also recognizes two numbers, similar to English. A noun is marked as either singular or plural. A noun’s uninflected form is its singular form; the singular affix is analyzed null as in (4)a. While the plural suffix is never non-zero, as in (4)b.

(4) a. napew-Ø \atim{-Ω}^\dagger

man-SG \quad dog-SG\dagger

‘man’ \quad ‘dog’

b. napew-ak \atim-wak

man-P.L.AN \quad dog-P.L.AN

‘men’ \quad ‘dogs’

Carrol & Wolfart 1973:17

As seen in the two words in (4)b, the plural can manifest itself in multiple ways. In this case, since both napewak, ‘men,’ and atimwak, ‘dogs,’ are both animate, the difference in the plural marker, -ak verses -wak is simply based on the phonological differences in the final sound of the noun stem and has no grammatical bearing; they are allomorphs. However, there is a difference in number marking between genders. The nouns in (5) are inanimate.

(5) a. minis-Ø \quad wawi-Ø

berry-SG \quad egg-SG

‘berry’ \quad ‘egg’

b. minis-a \quad waw-a

berry-P.L.ANA \quad egg-P.L.ANA

‘berries’ \quad ‘eggs’

Carrol & Wolfart 1973:29-30

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3 The phonetic equivalents of the orthography used for Cree can be found in Appendix B.

4 A full list of the abbreviations used in this paper can be found in Appendix A.
Comparing the data in (4) and (5) the general conclusion is that the singular nouns cannot be phonologically distinguished as animate or inanimate while the plural nouns can. Animate nouns have –<em>ak</em> as the plural suffix while inanimate nouns use –<em>a</em>.

There remains one more category which Cree nouns respect: obviation. This characteristic, designating which noun is closer, proximate, and which is farther away, obviate, is phonologically distinguishable only in animate nouns. The data in (4) exemplifies proximate singular and plural nouns. The proximate form is also the default when there is no comparison actively occurring. The obviate form however, is not distinguishable as singular or plural as in (6).

(6) *atim-wa*

<em>dog-AN.OBV</em>

‘dog(s) [over there]’

However, since the <em>w</em> in the suffix in (6) is phonologically required only because of this particular stem, the simple suffix –<em>a</em> is usually seen as the animate obviate marker. This overlaps with the plural suffix for inanimate nouns and so a distinction between the two suffixes must be made based on lexical knowledge of a particular noun’s gender.

In brief summary, Cree nouns inflect for three categories: gender, number, and obviation. The two genders of Cree are animate and inanimate, generally following living and non-living distinctions. The numbers respected are singular and plural, and the proximate/obviate distinction, designating relative distances is only overtly expressed for animate nouns. These noun suffixes are summarized in Table 1.

<table>
<thead>
<tr>
<th></th>
<th>Animate</th>
<th>Inanimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Singular</td>
<td>-Ø</td>
<td>-Ø</td>
</tr>
<tr>
<td>Plural</td>
<td>-(w)ak</td>
<td>-a</td>
</tr>
<tr>
<td>Proximate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Obviate</td>
<td>-wa</td>
<td></td>
</tr>
</tbody>
</table>

Table 1: Cree Noun Classes and Suffixes
5.3 Cree Verb Morphology

The Cree verb is highly inflected and can constitute an entire sentence in just one word. Additionally, there are four categories of verbs, distinguished by the gender of the noun they show agreement with and by their transitivity. Transitive verbs agree with the genders of their subject and object, and so two verb categories are inanimate object transitive and animate object transitive. Intransitive verbs, however, agree in gender with their subject noun and so remaining two verb categories are inanimate subject intransitive and animate subject transitive. Agreement is realized in either suffixes or circumfixes depending on the gender and number. Table 2 summarizes the animate affixes for intransitive verbs.

<table>
<thead>
<tr>
<th>Person</th>
<th>Singular</th>
<th>Gloss</th>
<th>Plural</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>First</td>
<td>( ni(t) - n )</td>
<td>I</td>
<td>( ni(t) - nan )</td>
<td>we (exclusive)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>( ki(t) - (na)nah )</td>
<td>we (inclusive)</td>
</tr>
<tr>
<td>Second</td>
<td>( ki(t) - n )</td>
<td>you (singular)</td>
<td>( ki(t) - naaw )</td>
<td>you (plural)</td>
</tr>
<tr>
<td>Third</td>
<td>( -w )</td>
<td>s/he(^5)</td>
<td>(-wak)</td>
<td>they</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>(-yiwa)</td>
<td>the other(s)</td>
</tr>
</tbody>
</table>

Table 2: Animate Gender Intransitive Verbal Affixes
Adapted from Carrol & Wolfart 1973:38

The consonants in parentheses appear only in certain phonological environments but do not change the function of the affix. For example, if the stem of the vowel begins with a vowel, then the \( t \) in all first and second person affixes are included. Additionally, there are two other phonological changes that may occur if the stem ends in a consonant. The first is that if the ending begins with a consonant, then an \( i \) is epenthesized as in (7).

\[
(7) \ ni + pimisin + n \rightarrow nipimisinin \text{ ‘I lie stretched out’}
\]

Carrol & Wolfart 1973:38

\(^5\) The animate third person agreement suffix is translated with the English gendered pronouns ‘she’ and ‘he,’ but this suffix may also refer to a noun that generally would be replaced by the pronoun ‘it’ in English but has animate gender in Cree.
The second rule is that, when the stem ends in a consonant, and the ending is only \(-w\), the ending is dropped. This is the case in (8).

\[(8) \text{ pimisin } + w \rightarrow \text{ pimisin ‘s/he lies stretched out’}\]

Carrol & Wolfart 1973:38

These same phonological rules hold for inanimate suffixes which are summarized in Table 3.

<table>
<thead>
<tr>
<th></th>
<th>Singular</th>
<th>Gloss</th>
<th>Plural</th>
<th>Gloss</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximate</td>
<td>(-w)</td>
<td>it</td>
<td>(-wa)</td>
<td>they/them</td>
</tr>
<tr>
<td>Obviate</td>
<td>(-yiw)</td>
<td>it (over there)</td>
<td>(-yiwa)</td>
<td>they/them (over there)</td>
</tr>
</tbody>
</table>

Table 3: Inanimate Gender Verbal Suffixes
Adapted from Carrol & Wolfart 1973:39

Transitive verbs have two different suffixes for animate participants in an action, one for when they are the object and one for when they are the subject of the sentence. The object suffix is \(-aw\) and its allophones for third person proximate. The subject suffix is \(-ik\) which has fewer allophones and does not express the proximate/obviate distinction. These suffixes appear inside the animate intransitive pronouns which are used on transitive verbs to designate the opposite role of the specific suffixes just discussed\(^6\). For example, in (9)a, \(-wak\) is agreeing with the subject because of the transitive object agreement marker \(-e\) (an allophone of \(-aw\)), but in (9)b that same suffix, \(-wak\), is agreeing with the object because of the transitive subject agreement marker \(-ik\).

\[(9)\]  
\[\text{ a. wapam-}e\text{-wak} \]
\[\text{see.IND.AN-3.AN.SG.OBJ-3.AN.PL} \]
\[‘\text{they see the other(s)}’\]

\[\text{ b. wapam-ik-wak} \]
\[\text{see.IND.AN-3.AN.SG.SBJ-3.AN.PL} \]
\[‘\text{the other(s) see(s) them}’\]

\(^6\) There are complications for this model when dealing with sentences including only first and second person participants; however, since these persons do not express gender, these complications will be passed over for the purpose of this paper.
The transitive third person agreement marker is translated as being obviate in (9) although the suffix does not explicitly demand this. This judgment of obviation is due to the presence of the intransitive third person. If the intransitive third person affix was instead first person, the judgment for the transitive suffix is the default proximate as in (10).

(10) a. *ni-wapam-a-nan*  
1.AN.PL-see.IND.AN-3.AN.SG.OBJ-1.AN.PL  
‘we (exclusive) see him/her’

b. *ni-wapim-iko-nan*  
1.AN.PL-see.IND.AN-3.AN.SG.SBJ-1.AN.PL  
‘s/he sees us (exclusive)’

As seen in (10), the allomorphs of the transitive animate markers, *-a- and -iko-*, retain their standard proximate meaning because there is no other third person marker to suggest otherwise.

Inanimate transitive markers work in much the same way, but the object marker is much more common as many inanimate nouns simply cannot perform actions pragmatically. Therefore only a brief discussion of the inanimate intransitive object marker is relevant for the subsequent gender universals discussion. The underlying phonological form of this suffix is *-am* as in (11).

(11)  
_wapaht-am-wak_  
see.IND.INA-3.SG.INA.OBJ-3.AN.PL  
‘they see it’

Comparing (11) with (9) and (10), there is a change in the verb stem which means ‘see (indicative).’ This change is based on the gender of the transitive suffix. In (9) and (10) the stem is animate, reflecting the animate gender of the transitive suffixes while in (11) the stem in inanimate, reflecting the gender of the transitive suffix there.
The verb morphology of Cree is complex and not completely described here. However, the
description of the verb and gender interaction is key to understanding how Cree interacts with
Greenberg’s gender agreement universals.

5.4 Cree and Universal 32

Universal 32 requires a verb to agree with a noun in number if it agrees with that noun in gender.
Cree mandates compliance with the universal by having a set of affixes that combine both gender and
number distinctions into one affix. For example, the circumfix ni(t) - - n not only designates that the
subject of the intransitive verb is singular, but also that it is animate. Combining number and gender into
one affix is Cree’s way of ensuring that every time the relative trait of number is marked on the verb, the
individualistic trait of gender will be as well. Cree, therefore, is a knowledge heavy language; it desires
not only the relative information of number but also the personal knowledge of gender to be marked on
the verb.

Cree takes this universal a step further in making the number and gender affix one and the same.
Cree’s adherence to this universal can never be questioned. This combination allows for no exceptions to
the universal; there can never be a verb on which only number is marked. Cree’s combinatorial manner of
accommodating universal thirty-two simplifies the connection that must be made between number and
gender marking in the Cree speaker, probably on the unconscious level. A Cree speaking child will never
learn to separate the need for gender marking on the verb from the need for number marking on the verb.
Cree accommodates for the anthropological basis for universals: language is a tool used by humans to
communicate and as such ought to on a very basic level reflect the common human experience. A child
learning Cree has already learned from experience that one must know more personal information about
an object or person to know its gender but that one can decide what number to use even from a distance
without personal knowledge of the gender(s). The speaker is always the determiner of number and so the
speaker always holds this knowledge, but gender is independent of speaker choice. So the speaker always
knows number he is himself determining it, but gender is more difficult to determine. Therefore if gender
is known, then number is known and can be expressed since this latter knowledge is contained in the mind of the speaker. It would then seem more natural for the way in which objects are referenced to include number if it includes gender since gender implies more intimate knowledge. It would not then, be hard for a child learning Cree, or another language which follows universal thirty-two with combined affixes, to comprehend why an affix which marks gender also marks number necessarily because they have seen from the world around them that personal gender knowledge allows for referential number knowledge as well.

In summary, Cree not only obeys universal 32, it conforms in a way that simplifies the thought process about when gender and number marking must be used. The single affix used for gender and number agreement means that when gender is marked, number is automatically marked as well; the speaker is forced to make a judgment decision on the appropriate number. This allows the learner of Cree, generally young children, to effortlessly combine their observations of how gender and number knowledge is acquired in the real world with how gender and number must necessarily be marked in their linguistic world in order for them to properly communicate with and about the world around them.

5.5 Cree and Universal 31

The existence of adjectives as a separate category from verbs in Cree is not definite; however, this paper will argue for the existence of adjectives as separate from verbs. Adjectives in Cree agree with the nouns they modify in a similar fashion as Cree verbs do: a final suffix is either an animate or inanimate marker. For example, there are two different forms of the word “blue” depending on whether it modifies an animate or inanimate noun.

(12) a. sipihkwaw
    ‘blue (inanimate)’

b. sipihkosiw
    ‘blue (animate)’

The “blue” in (12)a must always be used with an inanimate noun, such as a rock, while the “blue” in (12)b will always be used to modify an animate noun such as a bird. The combination of adjective with its modifying noun is exemplified in (13).
It is now important to note that the glosses for (13) a and b are given as full sentences instead of “white rock” and “white bird” for a and b respectively. This is because the original observation from above, that adjectives change their final suffix to mark gender just as verbs do, is not a coincidence. Adjectives always have the form of a verb when there is no other verb in the sentence (as in (13)).

This intersection of verb and adjective in Cree creates a problem for universal 37 which requires agreement in gender to be marked on the adjective if it is marked on the verb. There are two ways to approach this universal from the Cree viewpoint. The first is that Cree does not have any adjectives at all and that anything that English speakers would consider an adjective is really a verb. In this case the universal is not refuted but simply does not apply because Cree would be lacking a whole class, adjectives, which is essential to the universal. The second approach is that Cree does in fact have adjectives, but its treatment of them reflects the connection that verbs and adjectives share in modifying the noun and reflecting its gender as dictated by universal thirty-seven. This paper argues for the second interpretation of Cree grammar, although this point is far from being settled.

That Cree adjectives use the same element, a final suffix, to mark agreement as Cree verbs do strengthens the pragmatic reason behind universal 31: verbs and adjectives share the role of providing information about their argument nouns. Cree’s manner of dealing with this shared role is to essentially merge the two groups to create one large group with two subcategories, verbs and adjectives, which then both act in the same way with respect to gender agreement. As Oneida treats verbs and adjectives in a similar manner, universal 31 will be given further treatment later in this paper after Oneida has been introduced. Combining the discussion of the two languages will better facilitate this paper’s proposal that Cree (and Oneida) has adjectives separate from verbs.
5.6 Cree and Universal 37

Cree’s genders, inanimate and animate, exist in both singular and plural. It seems, therefore that there is not much room for discussion here because Cree follows the universal that there must no more genders in nonsingular than in singular. However, it is interesting to note that Cree has the additional category of obviation which is respected by its nouns. This distinction is made for animate nouns but not for inanimate ones. Additionally, obviate animate nouns cannot be distinguished as either singular or plural except through context. All obviate animate nouns have the suffix –a whether their number is singular or plural. This means that obviate animate nouns essentially have no number, at least not a number which is marked on the noun itself. The proximate-obviate distinction is made outside the realm of number distinction. The gender distinction, however, is made wholly within the realm of number distinction and is, in fact, governed by it. The reasoning behind a language allowing only fewer genders in the plural than the singular but not vice verse was, as stated above, that gender is often considered a very personal aspect of an individual which does not carry over to a group. It seems that obviation does not carry the same personal flavor. The position of an object is relative and changeable depending on the position of the speaker. Therefore unlike gender, it is not a personal designation but a subjective classification decided by speaker choice. Because of this subjective nature, obviation is not subject to the same restrictions as gender; it can exist outside the confines of number and does so quite easily in Cree. In short, gender has a special relationship with number which is not shared by all classifications of nouns. This uniqueness makes universal thirty-seven all the more important; it defines a unique interplay of number and gender which seems to tie into human perception rather than a simple function of being a class of noun.

The fact that obviation and gender do not correspond to number in the same way has important implications for the universality of language because, as stated above, it delves into language’s connection with perception. The anthropological desire for linguistic universals rests in the fact that universals might hint at a connection among all humans in how the world is ordered. Here there seems to be evidence that one of those orders is that gender is a state and a personal condition which is not as
relevant in non-singulars but that obviation is an external condition imposed by an observer, or more particularly, a speaker. The anthropological expectation for linguistic universals to reflect the most essential commonalities in human perception appears, therefore, to have some basis in actual data. In conclusion, that Cree’s genders adhere to universal thirty-seven juxtaposed to the different treatment of obviation is an essential point of consideration in the development of universal theories.

5. Oneida Morphology

5.1 History of Oneida

Oneida is a member of the Northern Iroquoian language family, which includes the Five Nations languages: Oneida, Seneca, Cayuga, Onondaga, and Mohawk. This family was one of the first to be documented in North America, as early as 1543 (Mithun 1979:150), but because of its speaker population being mostly located in the eastern parts of North America, it declined in speakers rapidly. Current Oneida speakers reside in Wyoming, New York State, near Syracuse, and most in London Ontario. Recent estimates put the number of speakers in Canada at about 200, while most speakers outside of Canada, about 50, live near Green Bay Wisconsin (Mithun 1979:151). Despite their currently varied locations, Oneida speakers’ original home was just south of Oneida Lake in New York State. They then moved first to a reservation in New York State itself, later to Wisconsin and finally to the Thames River-London Reserve in Canada. This staggered migration resulted in the current small communities where Oneida is still spoken today.

5.2 Oneida Pronominal Prefix Categories

Oneida has a system of pronominal prefixes, which generally recognizes person, gender and number classes. However, these classes do not always remain completely separate from each other in meaning, creating merged gender/person categories in some cases, especially in the designations of zero person and neuter.
The categories of person and number involve the least complication and mingling of categories. There are three numbers in Oneida: singular, dual, and plural for three or more participants. Although there is no mingled semantic meaning among these three categories themselves, there are genders which only appear in certain numbers, which will be addressed further on in the discussion. In addition to the number distinction, Oneida pronominal prefixes also recognizes person: first, second, third and zero. Although first, second and third persons carry recognizable meanings of speaker, addressed and additional participant or absent reference respectively, zero person is foreign to the English speaker. Zero person is used in Oneida in the case of no object of a transitive verb or no subject of an intransitive verb. The zero person pronominal prefix serves a similar purpose in an intransitive sentence as the ‘dummy it’ does in English. For example, the it in the sentence ‘It’s raining’ is a dummy because it has no referent noun; there is no noun which could replace it and make sense. A zero person pronominal prefix in Oneida serves the same purpose. For transitive sentences, however, the use of zero person is to indicate that there is no object. English does not mark the verb at all in this case such as in the sentence ‘The dog ate.’ This sentence, because there is no object of ate would in Oneida would be marked for a zero person object, indicating that there is no object, or at least that the object is not known.

The distinctions between different Oneida genders become more complex and less straightforward than the same distinctions in the categories of number and person. There are four basic genders in Oneida: masculine, neuter, feminine-zoic, and feminine-indefinite. The simplest gender is the masculine gender which encompasses singular male persons and male animals if their gender is known and dual and plurals which are a group of all masculine, mixed, or unknown genders. The neuter gender includes inanimate objects and abstract notions. In neuter pronominal prefixes, there is no distinction of singular and non singular. The zero person almost completely merges with the third person neuter as a lacking object or subject will never have a gender and is therefore indentified with neuter. There is only one phonological manifestation of zero person which is not identical to the pronominal prefix for a third

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7 There is a distinction made between non-singualrs and singualrs if the neuter gendered object is in motion; however, this distinction is made by a distributive suffix in the verb base, not by a change in pronominal prefix.
person neuter and therefore, though zero person is abbreviated in Oneida literature as \( z \), the designation \( n/z \), for the combined zero person and third person neuter is more frequently used and more accurate.

Oneida has two genders designated as feminine: the feminine-zoic and feminine-indefinite. These two genders differ in both the types of females they apply to and the extra members they encompass. The feminine-zoic can refer in the singular to any female person in addition to any definite animal which is not otherwise known to be male. The singular female persons in the feminine-zoic gender tend to be adults and active members of society This gender in the non-singular includes groups of all female persons, groups of animals regardless of gender and moving inanimate subjects and objects (Lounsbury 1953:51). A female included in this category is sometimes attributed the traits of being “large, awkward, aggressive and loud.” (Mithun 1999:100). The feminine-zoic also merges in very limited way with the already merged zero and neuter third person.

In contrast to the tendencies of the feminine-zoic, the feminine-indefinite gender is generally restricted to young girls and older ladies, although this restriction is not absolute. There is also the possibility that this is a more respectful way to refer to women and more flattering. Mithun claims that females described by using the feminine-indefinite gender are often also classified as “small, graceful, delicate, and well-mannered” (Mithun 1999:100). The feminine-indefinite can also be in reference to an indefinite person or people in general (this would be the equivalent of English somebody, a person, one) even when the person or persons referred to have a natural masculine gender. There are no plural or dual forms of feminine-indefinite pronominal prefixes; any singular which is feminine-indefinite takes the feminine-zoic in the non-singular, another merged category in Oneida pronominal prefix categories. The merged categories across Oneida pronominal prefix categories of gender, person and number create a unique basis for the study of the universals pertaining to agreement between these categories and the verb itself to which these prefixes are attached.

Because of the intricacy of Oneida’s noun classes, including three numbers, four genders and four persons, along with merging in some of theses categories, a chart detailing all of this data would be extensive and not particularly relevant for the universal arguments which are the main focus of the paper.
There are so many manifestations of the different combinations of pronominal prefix that the reader could not be expect to become familiar with them without extensive study. Therefore Oneida data will be extensively glossed in the universal discussion portion of this paper and the reader should look for the gender and number information to be the second morpheme glossed on the verb. For Oneida, morphological position is key to understanding the verb’s construction and thereby how gender is marked on it.

5.3 Oneida Verb Morphology

The verb in Oneida is composed of four layers which together can form an entire sentence from one word, although these simple sentences are often embellished with nouns. The four layers, starting at the front of the word are: pre-pronominal prefixes, pronominal prefixes, the verb base, and inflectional suffixes. The pronominal prefixes are described in depth in section 5.2 above and are most essential to the discussion of gender universals. However, general understanding of the entire verb construction makes the analysis of this particular segment more transparent.

The pre-pronominal prefixes are tense markers designating the verb as being present, future, aorist, or indefinite tense. The variations for each of these markers are extensive, and limited parts of this variation can be seen in Table 4.

<table>
<thead>
<tr>
<th>Paradigm for the Verb <em>ate-kh-uni</em>—<em>to eat</em></th>
<th>First Person Singular</th>
<th>Third Person Singular Feminine-Zoic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Present</td>
<td><em>ε-k-atekhunīfe?</em></td>
<td><em>ε-w-atekhunīfe?</em></td>
</tr>
<tr>
<td></td>
<td>PRS-1.SG-to eat</td>
<td>PRS-3.SG.FZ-to eat</td>
</tr>
<tr>
<td></td>
<td>I eat (a meal)</td>
<td>She eats (meal)</td>
</tr>
<tr>
<td>Future</td>
<td><em>κ-k-atekhunīf</em></td>
<td><em>κ-w-atekhunīf</em></td>
</tr>
<tr>
<td></td>
<td>FUT-1.SG-to eat</td>
<td>FUT-3.SG.FZ-to eat</td>
</tr>
<tr>
<td></td>
<td>I will eat</td>
<td>She will eat</td>
</tr>
</tbody>
</table>

An explanation of the orthography used for Oneida in this paper can be found in Appendix C.
The majority of variation found in the pre-pronominal prefixes is rooted in phonology, and the changes are based on the initial sound of the pronominal prefix. These pronominal prefixes are the second element of the verb stem and designate the subject and object of the verb.

The third element of the Oneida verb is the verb base. The verb base itself is divided into five morphemes, called positions. The first position is the reflexive position and can be filled by a semi-reflexive (middle voice), a reflexive, or an intensifier (considered slang in Oneida). The second position is the noun position and can be filled by any noun root, and empty morpheme, or a verb base with a nominalizing suffix. The third position is the verb position and may be filled by the verb stem itself, which comes in seven different forms including simple and complex versions. The fourth position is the case position which can be filled by one or more of two instrumental morphemes and a dative morpheme. Each of these morphemes may be used alone or with a distributive morpheme attached “to pluralize some aspect of the action described: the action itself, its object, its time or place, the instruments, or the dative referant” (Lounsbury 1953:82). The fifth and final position is the purposive position which can only be filled by one morpheme (and its allophones) and “correspond[s] exactly to...going and going to when used as auxiliary verbs in English, and, as in English, can be taken in the literal sense of being on the way to do something, or in the future-tense sense of being about to, or intending to do something” (Lounsbury 1953:83). The full linear progression of the verb base is summarized in Table 5 for quick reference.

<table>
<thead>
<tr>
<th>Aorist</th>
<th>waʔ-ka-tekhuní</th>
<th>u-tekhuní</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOR-1.SG-to eat</td>
<td>AOR.3.SG.FZ-to eat</td>
<td></td>
</tr>
<tr>
<td>I ate</td>
<td>She ate</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Indefinite</th>
<th>a-k-tekhuní</th>
<th>au-tekhuní</th>
</tr>
</thead>
<tbody>
<tr>
<td>INDF-1.SG-to eat</td>
<td>INDF.3.SG.FZ-to eat</td>
<td></td>
</tr>
<tr>
<td>for me to eat</td>
<td>for her to eat</td>
<td></td>
</tr>
</tbody>
</table>

Table 4: Partial Paradigm of *ate-kh-uni* ‘to eat’
Adapted from Lounsbury 1953:39
The final element in the verb is the inflectional suffix of which there are three classes. The first class is called the aspect conjugation class and recognizes three aspects: a perfective aspect, a punctual aspect, and a serial (seriated-punctual) aspect. The perfective aspect always represents a state, the punctual aspect “represents actions which take place at some particular point in time” (Lounsbury 1953:85) and the serial aspect “represent[s] actions which take place at repeated points in time…[this] correspond[s] to the ‘simple present’ form in English.” (Lounsbury 1953:85). Each of these aspects manifests in multiple forms depending the phonology of the verb base which directly precedes it.

Verbs with the serial aspect suffix, called serial stems, can take one of two additional suffixes. These serial stem suffixes are the second class of inflectional suffix. The first of these suffixes is the former past suffix which corresponds to the English used to as in ‘I used to walk my dog every day.’ The second serial stem is the continuative suffix. This suffix is roughly equivalent to adding the phrases every so often or from time to time to English future tense sentences.

Verbs with the perfective aspect suffix, called perfective stems, can take one of five additional suffixes. These suffixes form the third and final class of inflectional suffixes which is called the perfective stem suffixes. The five suffixes are the remote past suffix, the continuative suffix (to make the verb future or indefinite), the perfective serial suffix (to add a serial meaning to a perfective tense), the progressive
suffix, and the perfective plural suffix (only added to neuter perfective forms with a noun position filled with a noun root).

### 5.4 Oneida and Universal 32

As with Cree, Oneida merges number and gender into one affix, the pronominal prefix, which attaches to the verb in the second position. Oneida also, however, has a merging of person and gender in the case of the zero person and neuter. This is different from the other persons in that the zero person is confined to the neuter, it cannot exist outside of it in, for example, masculine. Zero person and neuter, however, are in one case distinguished indicating that Oneida does not hold person and gender to be as tightly bound together as gender and number. This is relevant in the “someone/some people” interpretation of zero person where number is not even known, therefore gender is not either.

(14) \(\text{wa}'-\text{utákn}\)

3-saw (it)

Somebody/Some people saw it

Lounsbury 1953:61

The pronominal prefix \(\text{wa}'-\) has no number and no gender distinctions and neither does any other morpheme in (14). This pronominal prefix carries only person information. Person, also being relevant to the speaker as obviation was in Cree, can also exist outside the confines of number whereas gender never can.

To have a morpheme that only specified gender with no other morpheme providing number would present a problem for universal 32 whereas having such a person morpheme works perfectly well pragmatically. There seem to be two basic groups of features which are marked for through verb agreement. There are personal, intrinsic properties assigned by language conventions such as gender, and there are referential properties assigned by speaker choice and situation, these include number, obviation as in Cree, and now also person as seen in Oneida. Although universals such as 32 draw connections and requirements between appearance of a personal trait and a referential trait, there is no universal proposed
by Greenberg which makes predictions of the appearance of one referential trait based on the appearance of another. This suggests that referential traits are completely independent of one another while a personal trait may dictate usage of referential trait agreement. Universal thirty-two in essence states that the personal trait of gender dictates the appearance of referential trait number in verb agreement. But no universal dictates number agreement based on person agreement. Not having such a universal makes pragmatic sense and is exemplified in (14). It is possible to imagine a situation in which a speaker would make an utterance using (14) and not knowing anything about the number of the subject of the sentence, only that someone or some people completed the action. Naturally occurring situations in which gender is known but not number are rare and often contrived in a way such that natural languages would not accommodate for such situations.

Oneida’s use of person without number adds to the schema of traits which can be interdependent and those which can stand alone. Gender agreement in Oneida follows universal 32 and cannot exist outside of number but person agreement can in specific instances. Oneida’s adherence in regard to gender and counterexample in regard to person provides insight into why universal thirty-two only applies to gender. It highlights the personal as opposed to referential distinction that appears as a product of language being used as a tool to reflect the world in which the speaker lives.

5.5 Oneida and Universal 31

Adjectives in Oneida, as adjectives in Cree, can either in actuality be the main verb, or are attached to the main verb of the sentence. Alternatively, adjectives in Oneida can also exist outside of the main verb to be used as a substantive adjective would be in English. This last usage is the form of the adjective ‘bad skinned’ in example (15)

(15) s-koń-hn-ąksA-ʔ

the one characterized by-3.SG.FZ-skin cloth rag-bad/to be bad-PERF

the bad skinned one

Lounsbury 1953:96
In (15), the adjective áksn ‘bad modifies the incorporated noun hn ‘skin,’ not an outside independent noun and the entire word stands for ‘a bad skinned feminine-zoic thing’ as the subject of a larger sentence seen in (16)

(16) sk̓h̓náksnʔ tehotaw̱n̓lyehátyeʔ

The bas skinned one was traveling along

Lounsbury 1953:96

Although in this case sk̓k̓náksnʔ is fulfilling a role that would translate to English as an adjective, this alone is not sufficient evidence to conclude that this construction in Oneida it is in fact an adjectival and not a specialized verb form. The more compelling evidence for the conclusion that Oneida has separate verbs and adjectives is that adjectives may attach to the end of a verb to modify a noun which it contains.

(17) t-ka-lut-ot-eʔ-kó

CISL-3.SG.FZ-tree-stand-PERF-big

There’s a big tree/ The big tree is standing there

Lounsbury 1953:96

In (17), the suffix kó is the adjective ‘big’ which modifies the contained noun lut ‘tree.’ A verb cannot attach to the end of another verb in this way. For example, (18) is ungrammatical in Oneida.

(18) *t-ka-lut-ot-eʔ-hsat∧

CISL-3.SG.FZ-tree-stand-PERF-to sit straddling it

There’s a tree straddling (the hill)/ The tree straddling the hill is standing there.

Adapted from Lounsbury 1953:96

Any Oneida morpheme which would translate as a verb in English cannot be attached to the end of a verb base to modify an incorporated noun, but a morpheme which is an adjective can do so. That Oneida has a distinction between these two groups of what otherwise both appear and behave as nouns solidifies the fact that Oneida has both verbs and adjectives, although the adjectives may sometimes take the form of a verb with full inflection.
Once the two categories of adjective and verb are solidified for Oneida grammar, the close connection between the two actually reinforces and validates universal 31. Because adjectives can take the form of verbs, and verbs are always marked for gender, then the adjective is always marked for gender and the universal is followed. Additionally, even when the adjective does not take a verbal form, it instead attaches to the gender-marked verb. Therefore, although it does not take an independent gender marker, the adjective is always part of a word that includes a morpheme marking gender and the universal is still obeyed. The similar description oriented role of both adjectives and verbs is reflected by the fact that in Oneida, there is only one subtle difference between the two groups. Their shared role is translated into a shared form in this language. To summarize, Oneida allow the adjective to appear in multiple forms, however; no matter if the adjective is itself an independent verb or if it is suffixed to another verb, it is always in the same word as a gender designating morpheme, fulfilling the prediction of universal 31.

5.6 Oneida and Universal 37

Oneida has four genders in the singular: neuter, masculine, feminine-indefinite and feminine-zoic. In the non-singular numbers of dual and plural however, Oneida only has three genders: neuter, masculine and feminine-zoic but no feminine-indefinite. Additionally, the feminine-zoic and neuter are often condensed into one gender category in both singular and non-plural. Therefore sentences like the one found in (19) are ambiguous.

(19) \( \text{wa}^2\text{-}k\text{-}\text{li}^\prime \text{wanu}^\ast \text{-}t\text{ú} \)

\( \text{AOR-3.SG.FZ/N-ask(for it)-PNT} \)

she/it asks for it.

Lounsbury 1953:56

Again, this merged category also appears in the plural, as in (15).

(20) \( \text{wa}^2\text{-}k\text{uti}^\prime \text{li}^\prime \text{wanu}^\ast \text{-}t\text{ú} \)

\( \text{AOR-3.PL.FZ/N-ask(for it)-PNT} \)

they (feminine or neuter) ask for it
Both (19) and (20) require context to determine whether the subject of the sentence is a woman/women or inanimate object(s)/idea(s). Even with this merged category, Oneida genders follow universal 37 and are more numerous in singular than in non-singular. Unlike Cree, though, Oneida actually has fewer genders in non-singular, not simply the same number. The gender that merges with another in non-singular is feminine-indefinite. The fact that one of the feminine genders is merged points to a connection between the personal aspect of gender and the relative aspect of number.

The feminine genders have specific traits associated with them. The feminine-zoic is generally used, in the singular, for larger, harsher women while the feminine-indefinite is used for women with a close relationship with the speaker or those who are delicate. These are traits that can be attributed to individuals; however, when speaking of a group of women, it is possible that not all the women will be either harsh and large or delicate and dear to the speaker. It is therefore practical for the language to dismiss these very personal gender categories in non-singular numbers. The females referred to in (19) (if the pronominal prefix is taken as feminine-zoic due to context, not neuter) are not constricted to being a group of all large women or all delicate women (though they could be); no overt assumption is made about their personal traits since they are in this instance part of a group.

The reason for choosing the feminine-zoic to use for all non-singular females seems to be purely arbitrary. It is also possible that since this has already become a sort of catch all category being merged with the neuter that adding another group to the mix is not hard; the listener is already prepared to listen to context to determine the natural gender of the referent. The final possibility for using feminine-zoic instead of feminine-indefinite for non-singular females is that the feminine-indefinite implies closeness to the speaker. Not only does feminine-indefinite provide personal information about its referent female, but it also tells the listener about that referent’s relationship to the speaker. This combination of very personal, individualistic information makes the feminine-indefinite a poor choice for a pan-female non-singular gender.
Regardless of why feminine-zoic is used in the plural instead of feminine-indefinite, the fact that both do not exist is telling to the nature of gender. It is a very personal attribute that does not always easily convert to the non-singular numbers. Oneida deals with the personal nature of its feminine genders in particular by using only one in the non-singular, avoiding the assigning of personal, individualistic traits to large groups of people.

6.0 A Final Word on Universal 31

The discussion of universal 31 in respect to Cree and Oneida was muddied by the fact that adjectives to not conclusively exist in either language. Oneida, however, seems to have a stronger case for adjective existence because of the ability of certain specific subset verbs, which would be adjectives in adjectival languages, to attach to the main verb. Cree on the other hand has no such special subset of verbs which in Oneida this paper deemed to be adjectives. Instead, anything that an English speaker would like to call an adjective is represented in verb form as in (21)

(21)  *piyesis wapiskisiw apiw*

*bird is.white.3SG.AN sits-3.sg.an*

‘The white bird sits.’

In (21) both *wapiskisiw* ‘white’ and *apiw* ‘sits’ are marked as verbs. There is the possibility that adjectives in Cree simply take the same endings as verbs and are undistinguishable because of this but there is no way to conclusively decide this.

Although adjective existence had not been conclusively proven for either Oneida or Cree and therefore universal 31 cannot be refuted or supported by these languages, the potential theory behind it can be. To recap, this paper proposes that verbs and adjectives are marked for gender because they are the two classes whose basic function is to provide information about the noun’s states, activities, accomplishments, and achievements and so the listener is predisposed to look in these two places for noun embellishment. The reason a universal linking verb and adjective agreement in human language is reasonable is rooted more in the two groups’ similarities than their differences. Cree and Oneida having
either completely or partially merged categories of adjectives and verbs intensifies these groups’ shared role almost to the point of making them indistinguishable. Even without defined adjective and verb categories, Oneida and Cree still provide valuable data with which to explore the theory of verbs and adjectives’ similarity of function which seems to be the theory behind universal thirty-one’s practical existence in human language.

7.0 Conclusion

Language is created by humans, our psychological predispositions for making observations about our world and our need and desire to communicate these observations to those around us. Therefore this tool, as it is universal to humans, must in some way have universal similarities of its own. This paper has posited that these universals are largely dependent on pragmatics and that languages following the universals are distinctly human in nature. Universal thirty-two accounts for humans observing and describing the things they see around them through inherent traits and referential traits, gender being among the former and number the latter. Universal thirty-one, however, focuses less on the differences between noun class traits and instead pertains to the similarity of the roles of adjectives and verbs and how language uses this as an advantage when placing redundant information. Finally, universal thirty-seven returns to the personal nature of gender assignment and how this assignment can be weakened, but not strengthened, when individuals become referenced as part of a group. Both Cree and Oneida conform to all three of these universals though they use different grammatical methods, and each language contains other traits, such as obviation in Cree and partially merged person and number in Oneida, which do not follow any of these universals. The conformance and divergence where expected allowed this paper to further discuss why certain behavior, such as that dictated by the universals in question, is imperative for gender but not for other features. Even where the conformity was weakest, in universal thirty-one, the wholly or partially merged classes of adjective and verb more closely supported rather than denied the importance of the universal. Because Cree and Oneida grammars uniquely follow the
 universals, global patterns in grammatical gender behavior rooted in the idea of language as a tool are made stronger in this broader universality.
Appendix A: Abbreviations

The following is a guide to the abbreviations used in this paper.

1 first person
2 second person
3 third person
ADJ adjective
AN animate
AOR aorist
CISL cislocative
DISTR distributive
DU dual
EXCL exclusive
F feminine
FUT future tense
FI feminine-indefinite
FZ feminine-zoic
INA inanimate
INCL inclusive
IND indicative
INDF indefinite
M masculine
N/Z merged neuter third person and zero person
N neuter
OBJ object
OBV obviate
<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PART</td>
<td>partitive</td>
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<tr>
<td>PERF</td>
<td>perfective aspect</td>
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<td>PL</td>
<td>plural</td>
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<td>punctual</td>
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<td>present</td>
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<td>PROX</td>
<td>proximate</td>
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<td>SBJ</td>
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<tr>
<td>SG</td>
<td>singular</td>
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<td>Z</td>
<td>zero person</td>
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Appendix B: Cree Orthography

The orthography traditionally used for Cree is not the same as the IPA but instead conventional for this particular language. Since this paper does not deal directly with phonology, this language specific orthography is used for the italicized Cree data instead of the IPA. The equivalent IPA characters are given here instead.

p-- /pʰ/
-p- /b/
--p /p/
t-- /tʰ/
-t- /d/
--t /t/
-k-- /kʰ/
-k- /g/
--k /k/
c-- or --c /ts/
-c- /ds/
m /m/
n /n/
s /s/
h /h/
i /i/ or /i/ e /aʊ/
a /ʌ/ or /o/ o /o/ or /o/ y /j/ w /au/
Appendix C: Oneida Orthography

Generally, the orthography used in Oneida data samples follows the IPA. Oneida is also represented phonemically in this paper, although there are in some cases multiple allophones of a given allophone. There are, however, to phonemes in Oneida which are represented with symbols that are not their IPA equivalent. The phoneme /j/ is represented by y and the phoneme /dʒ/ is always represented by j.
Bibliography


