ON DEVELOPING A WRITING SYSTEM FOR MICHIF*

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ABSTRACT

To date no satisfactory writing system exists for Michif, a bilingual mixed language deriving from Southern Plains Cree and Métis French. Michif differs phonologically from both Southern Plains Cree and to a lesser extent from Métis French. Differing local phonetic norms further complicate transcription. The various systems proposed before the present either derive from English, French, and/or Standard Cree and thus imperfectly fit Michif or else rely on phonetic notation, which excludes most nonspecialist readers, including native speakers. Additionally, diacriticals and phonetic symbols transmit badly on the internet, affecting web sites, email, and academic material. The system here is still under elaboration but is acrophonic and consistent. It addresses vowel length and nasalized vowels as well as liaison consonants, the treatment of schwa and its deletion, Cree vowel-deletion, and some adfixes.

RÉSUMÉ

Jusqu'à présent, il n'existe aucun système vraiment adéquat pour écrire en mitchif, langue mixte bilingue issue d'une part du cri (dialecte méridional des Plaines) et de la variété particulière du français vernaculaire parlée par les Métis de l'Ouest canadien. Mais le mitchif diffère phonologiquement du cri (dialecte méridional) et dans une moindre mesure du français métis. De plus, la diversité des normes phonétiques locales vient compliquer tout effort de transcription uniforme. Les divers systèmes qui ont été utilisés dans le passé s'inspirent soit de l'anglais, soit du français et/ou du cri standard; ceux-ci ne reflétant que partiellement la phonétique spécifique du mitchif ou alors ils utilisent une transcription phonétique, ce qui a pour effet d'exclure comme lecteurs potentiels tous les non-spécialistes, y inclus la plupart des locuteurs natifs de la langue. De plus, plusieurs des systèmes proposés utilisent des diacritiques; ceux-ci se propagent mal sur Internet, que ce soit les sites web, les courriels ou du matériel académique. Le système que nous proposons est encore en voie d'élaboration mais il est totalement acrophonique et a le mérite d'être cohérent et conséquent. Il tente de résoudre les problèmes que posent la longueur des voyelles et les voyelles nasales, ceux des consonnes de liaison, le traitement du schwa, l'effacement des voyelles cries et de certains affixes.

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1. Introduction

Developing a writing system for any language which has only had an oral tradition presents a particularly daunting challenge. Since such languages often exhibit a number of different local or regional pronunciations, lexical or grammatical norms, it is always relatively difficult to reach some sort of agreement as to which phonological, grammatical, or even sociolinguistic variety the writing system will reflect. Developing a writing system for a bilingual mixed language (Thomason 1997) such as Michif¹ is even more of a challenge since not only do such languages usually have multiple local norms, they also often have two relatively distinct phonologies, thereby posing an additional difficulty, particularly if the spelling system to be developed is an alphabetic one, alphabetic systems typically reflecting phonological inventories. In the case of Michif, the phonologies involved derive from but are not totally identical to the Southern Plains dialect of Cree and to Métis French, a unique dialect of Canadian French, historically spoken by the francophone Métis of Western Canada. As will be shown, the two phonological inventories differ in a number of aspects and the first challenge, then, is to find a simple and systematic way of representing both phonological systems, even before the problem of deciding on a particular norm is addressed.

In section 2, we first briefly describe the basic grammatical structure of Michif, where nouns and their associated determiners are typically from (Métis) French and verbs are massively from (Plains) Cree, all other grammatical categories being variably derived from either language. We then describe the two phonological systems involved, showing their differences and similarities, both as to their inventories and as to their specific rules. In section 3, we discuss a number of attempts at spelling Michif, showing some of the strengths and weaknesses of each system. We then propose a unified alphabetic inventory for the language (Papen 2004). Finally, in section 4, we review some of the problematic features of Michif and show how the proposed system attempts to solve them. We also point out a number of remaining problems that will have to be worked out if such a system is eventually to be adopted.

¹The term "Michif" reflects the Métis French pronunciation of "métif", which was the term used in French Canada up to the 19th century to refer to persons of mixed parentage. Its English equivalent was "halfbreed". It has since been replaced by the term "métis", used in both languages (with or without the acute accent) and variably pronounced [meti], [meti] or [metis]. In Métis French, /e/ and /o/ have merged with /i/ and /u/, respectively, and /t/ and /d/ before high front vowels affricate to /tʃ/ and /dʒ/. Michif is a bilingual mixed language; such languages are created in two-language contact situations where at least one of the two speaker groups involved are bilingual to a significant degree. In the resulting mixture, the linguistic material is easily separated according to the language of origin, in this case (Métis) French and (Plains) Cree. Moreover, there is little if any simplification in either component.

2. A BRIEF GRAMMATICAL SKETCH OF MICHIF

The language known as Michif is a bilingual mixed language, most probably developed in the border area of south-eastern Saskatchewan/south-western Manitoba (Touchwood Hills, Wood Mountain, Turtle Mountain, and the Grand Coteau of the Missouri areas) early in the 19th century by Métis buffalo hunters. Today, Michif is spoken in all three Prairie provinces of Canada, as well as in North Dakota and possibly in Montana, by approximately 1,000 speakers, all of whom are over 50 years of age. The existence of Michif, being very much an "insider's language", was unknown to non-Métis until the 20th century and the first attempts at describing its linguistic structure are relatively recent (Crawford 1973a, 1973b; Rhodes 1977). Since then, a number of descriptive studies have been published (Rhodes 1986; Papen 1987a, 1987b, 1987c, 1988, 2003a, 2003b, 2003c, 2005; Bakker 1989, 1990, 1991, 1997; Bakker and Papen 1996; Rosen 2000).²

As has been pointed out, the grammar of the language is roughly as follows: most nouns are from (Métis) French, the vast majority of verbs are from (Plains) Cree. Nouns appear with their appropriate French-derived determiners, although the plural indefinite article and the partitive articles are replaced by definite articles. Possessive determiners are nearly always from French but demonstratives are always from Cree, except in a few frozen expressions. Cree demonstratives are always accompanied by the appropriate form of the French definite article (awa la fille 'that girl' [singular animate feminine]), ûma la boîte 'that box' [singular inanimate feminine]). Cree demonstratives agree in gender (animate/inanimate), therefore French nouns are necessarily marked both for French masculine/feminine gender and for Cree animate/inanimate gender. Adjectives are always from French and are either pre- or post-posed, as in French. Pre-posed adjectives agree in (French) gender and number, post-posed adjectives do not (une petite/grande fille vs. une maison vert/blanc). Quantifiers are either from French or from Cree; numeral quantifiers, except for pêyak 'one', are always French. Interestingly enough, both Creeand French-derived quantifiers are always accompanied by a definite article (dix

²Many Métis do not restrict the term "Michif" to the mixed language being discussed here. For them, any language other than English spoken by Métis people is referred to as Michif. If absolutely required, a supplementary term can be added, such as "Michif French" to refer to what we are calling Métis French, "Michif Ojibwa" to refer to Saulteaux, and "Michif Cree" to the Cree-French mixture described here. As recently as 2001, Michif had been adopted by the Métis National Council as the official language of all the Métis people. Of course, for the MNC, only the historical Métis of Western Canada are "true" Métis.

³For the moment we use Standard French spelling for French-origin words, though the actual Michif pronunciation is not necessarily reflected by such spellings. For example, 'boîte', pronounced /bwat/ or /bwat/ in Standard French, is pronounced as /bwet/ in Michif. "Standard" Cree spelling is used, although we use the circumflex accent rather than the macron to represent a long vowel. From section 3 on, we use the spelling system that we are proposing for Michif.

les dindes 'ten turkeys', mihchêt le monde 'lots of people', etc.). French nouns can be modified by either French or Cree relative clauses and they can take a variety of Cree affixes, including the obviative suffix (on nouns referring to humans only), person-number prefixes and suffixes on kinship terms, etc. Cree alienable/inalienable possession distinctions are maintained even on French nouns (for example, kinship and body part terms obligatorily take a possessive determiner). Cree nominals also occur and these may take French determiners, but not obligatorily so. More recently, Michif has borrowed a great number of English nouns; these invariably take French determiners, implying that English-derived terms must also be attributed masculine or feminine gender and since these terms may also be determined by Cree demonstratives, which agree in Cree gender, English-derived nouns must also take on animate/inanimate gender.

Verbs are massively from Cree and maintain the typical Algonquian morphological paradigms, including the Inanimate Intransitive, Animate Intransitive, Transitive Inanimate and Transitive Animate stem classes, independent and conjunct orders, person/number prefixes and suffixes, including direct and indirect person markers. "The Michif verb seems to have the full derivational and compositional possibilities of the Plains Cree verb, with pre-verbs, object incorporation, voice and valency marking suffixes, agreement morphemes, etc." (Bakker and Papen 1997: 313). Cree verbs agree in gender not only with their subjects but also with their objects (for transitive verbs), and some verb stems also differ according to whether the object is animate or not (for example, wâpam- 'see someone', wâpah-t 'see something'). Some French- or English-derived lexical items can be used as verb stems and integrated into Cree verb morphology (la banque ê-ki-les-rob-er-ihk 'the bank that was robbed'; kî-le-fou-iw-iw ê-le-petit-iw-it 'he was crazy when he was small'), etc. Many copular constructions use the French copular verb être, conjugated for all persons and for Present, Past and Future tenses, but typically Cree constructions are also used (Une fille awa 'It/That is a girl'). A number of French adverbs, verbal and adverbial constructions have been reanalyzed as modal expressions, introducing a proposition in the conjunct order (Ca-prend ka-mîtshishouhk 'It's necessary to eat'; Encore kashkihtâyân chi-manâchihchikêyân' I wish I were able to save (money)'). The majority of prepositions come from French but both Cree prepositions and postpositions may also occur. Coordinating conjunctions are either French or Cree but complementizers are generally Cree. Both French and Cree negation occurs, although French-derived negators are not necessarily identical to nor do they function as their (standard) French counterparts. Finally, Michif syntax is closer to Cree than to French in that word order is mostly free and generally determined by pragmatic factors. Of course, increased French-derived content in a particular sentence also increases recourse to more typical (oral) French syntax.

2.1. Michif phonology

Since the Michif lexicon is made up of lexical items coming from either Cree or French, as well as items borrowed from other languages such as Ojibwa and En-

glish, it is not unexpected that the phonology contains two fundamentally distinct components, one for Cree-derived items, one for French-derived items. Tables 1 to 4 list the consonantal and vocalic phonemic inventories for both language components.

Some comments are in order. Readers familiar with (Standard) French will notice that the French-derived consonant and vowel phonemes are different from those of French in a number of respects. For example, Michif has two palatal affricate stops (/tʃ, dʒ/) which do not occur in Standard French. Diachronically, these affricates come from the affrication of dental stops before a high front vowel or palatal glide, much as in Quebec French, where the affrication is alveolar rather than palatal, however. Thus Standard French petit 'little, small' becomes [pitʃi] or [ptʃi] and dur 'hard' becomes [dʒyr]. Another historical source for affricates is that velar /k/ affricates to /tʃ/ before front vowels and the palatal glide, much as in Acadian French: coeur 'heart' becomes [tʃœr], coquille 'shell' becomes [kwɔtʃi], etc. 4

Whether these affricates have to be considered as phonemes or not is debatable. As mentioned below, high-mid vowels /e/ and /o/ have merged with /i/ and /u/, respectively. Most speakers of Michif will affricate /t, d/ before underlying high vowels, e.g. petit [pitfi] or [ptfi], but will maintain the stop articulation before underlying high-mid vowels that have been raised to high: été 'summer' is pronounced [iti] not *[itfi]. Michif has also maintained the so-called "aspirate-h" on words such as honte 'shame', haut 'high', hache 'axe', etc., where the /h/ is actually realized as a glottal fricative, rather than just a liaison inhibitor, as in Standard French.

The vowel phoneme inventory is relatively close to its Standard French counterpart. The front unrounded–rounded distinction of French is maintained, although the high-mid vowels /e/ and /o/ have merged with /i/ and /u/, respectively, and most speakers do not distinguish between /y/ and /ø/, except before /r/: jus 'juice' and jeu 'game' are pronounced alike (either [3y] or [3ø]) but where peur 'fear' is usually pronounced as [pør]. Michif has maintained the historical four nasal vowels, although their phonetic values are not those of Standard French: the front-mid nasal is lowered to /æ/ and the back-mid nasal is raised to /ő/ or even to /ű/. Standard French schwa /ə/ is maintained but its phonetic value varies between [ə], [i] and most often, [1]. In Michif, as in French, this vowel phoneme is deleted in a number of very specific phonological contexts and as we shall see in section 4, this gives rise to certain orthographic dilemmas.

The Cree-derived consonant phonemes are basically those of (southern) Plains Cree except that Plains Cree /c/ and /s/ are /tʃ/ and /ʃ/, as in other Cree dialects. The vowel system is identical to Plains Cree, maintaining a distinction of length for /i/, /u/ (or /o/) and /a/; /e/ is always long. Michif has developed two nasal vowels for the Cree component which are non-existent in Plains Cree but these are quite marginal, occurring in a very limited number of lexical items such as $ch\tilde{i}$ 'question marker' ([tfi]), $\tilde{u}hi$ and $n\hat{e}h\tilde{i}$) 'demonstrative determiner' ([$\tilde{u}hi$], [$ne:h\tilde{i}$]). These two

⁴Notice the diphthongization of /ɔ/ here. This comes from Métis French.

TABLE 1French-derived consonants

	Labial	Dento-alveolar	Palatal	Velar	Glottal
Stops	p, b	t, d	t∫, dʒ	k, g	
Fricatives	f, v	s, z	∫, ʒ		h
Nasals	m	n	n	ŋ	
Liquids		r, l			
Glides	w		j		

TABLE 2
French-derived vowels

Oral		Front	Front	Central	Back
		unrounded	rounded	unrounded	rounded
	High	i	y/ø	i	u
	Mid	ε	œ		Э
	Low	æ		a	α
Nasal	Mid		ã		õ/ũ
	Low	ã			ã

TABLE 3
Cree-derived consonants

	Labial	Alveolar	Palatal	Velar	Glottal
Stops	р	t	t∫	k	
Fricatives			Ĵ		h
Nasals	m	n			
Glides	w		j		

TABLE 4Cree-derived vowels

Oral		Front	Central	Back
	High long	i:		u:
	High short	i		u
	Mid	e		
	Low long		a:	
	Low short		a	
Nasal		ĩ		ũ

nasal vowels were probably borrowed from Saulteaux or possibly Eastern Plains Cree, which have nasal vowels (Bakker 1997). Moreover, long /e:/ followed by /n/ (as in ni-nishtuht- $\hat{e}n$ 'I understand') is variably realized as $[\epsilon:n] \sim [\tilde{\epsilon}:n] \sim [\tilde{\epsilon}]$, thus creating another (surface) nasal vowel.

Although allophonic variants usually do not have much influence on alphabetic writing systems, since letter symbols typically represent phonemes rather than allophones, in the Michif case, it turns out that some allophones of distinct Frenchand Cree-derived phonemes are similar, while those of some "identical" Frenchand Cree-derived phonemes are distinct. For example, the typical phonetic realization of Cree short /i/ is [1], while one of the allophones of French /i/ is also [1] (as in vite 'quick(ly)' [vɪt]) as is one of the allophones of the phoneme /i/ (as in le 'the' [l1]). On the other hand, Cree /a/ and French /a/ have quite distinct allophones: those of Cree-derived /a/ in closed final syllables, particularly before nasals, is [ɛ] (apiy-an '(that) you (sg.) sit' is pronounced [apiyen]); elsewhere, they range over [Λ] and [α], whereas the allophones of French-derived /a/ vary between [α] and [a] (Rhodes 1986). Similarly, Cree short /u/ is realized as [v] even in stressed open syllables whereas French-derived /u/ is always realized as [u] or [u:] in such positions. In non-final unstressed syllables, French-derived /u/ is invariably realized as [v], so the word couteau 'knife' is always [kutu(!)]. Vowel allophones in unstressed syllables in Michif may be quite different from those of stressed syllables. Generally, vowels in unstressed syllables tend to be lax and may have a rather large phonetic range. For example, unstressed French-derived /i/ ranges between [i] \sim [I] \sim [E], while French-derived $\langle \varepsilon \rangle$ ranges between $[\varepsilon]$, $[\varpi]$ and [a] (Rhodes 1986).

It seems quite obvious that although there are some similarities between the two inventories, in that both have identical voiceless stops (as well as the affricates), both have identical glides, both have a palatal and a glottal fricative, both share two nasal consonants, etc., they nevertheless remain fundamentally distinct. French-derived stops are both unvoiced and voiced, Cree-derived stops are unvoiced and may be pre-aspirated; the French component has more fricatives and nasals than the Cree; French has front rounded vowels, Cree has vowel quantity distinctions which French does not have, at least not phonologically. Both components have nasal vowels but these are frequent in the French component, quite marginal in the Cree component. These differences obviously create a problem for designing a simple spelling system.

On the other hand, certain phonological rules which apply to either the French or the Cree component actually make the two inventories more similar to each other than they would at first appear. For example, Cree non-stressed short high vowels are often deleted in both Cree and in Michif. An innovative Michif rule, which applies only to Cree-derived lexical items, although it does not operate in Plains Cree, voices stops when they occur after a nasal consonant. For example, the interrogative *tânitê* 'where' is pronounced [ta:nde:] (with high vowel deletion) and *pimipahtâ*- 'run' becomes [pimbasta:] (Cree pre-aspiration is often realized as [s] rather than [h] in Michif). The short /i/ of the first person prefix /ni/- is also usually

deleted, thus creating a nasal context for voicing a variety of stops in initial position (the initial /n/ also deletes in such a case), which is impossible in Plains Cree: ni-kî-wâshtahamaw-ik 'he beckoned me' becomes [gi:wɑ:ʃtahamawɪk], ni-sêkihiko-n- 'I am alarmed' becomes [ʒɛ:kihikun]. Thus the eventual symbols required to spell out the French-derived voiced stops can also be used for these Cree-derived voiced stop allophones of Michif.

Similarly, since nasal vowels occur even in Cree-derived items, whatever way French-derived nasal vowels are eventually spelled can also apply to Cree-derived nasal vowels. Finally, Cree makes a phonological quantity distinction for all vowels but /e/, which is always long. This must necessarily be indicated in the spelling. Standard French vowel phonemes do not contrast in length but vowels are phonetically lengthened in a variety of contexts; for example, all vowels are lengthened before the so-called "lengthening" consonants /R/, /v/, /z/, and /ʒ/, whenever these are stressed syllable codas. Nasal vowels are always long in closed syllables. In Canadian French, length distinctions have been maintained and even extend to non-final open syllables: niaiseux 'stupid' is usually pronounced [nje:zø]. Unfortunately, length in French-derived Michif vowels is still not well understood. For example, Bakker (1997) states that /u/ and /u:/ contrast in the following minimal pair: les choux 'the cabbages' [lifu] as opposed to lit chaud 'warm bed' [lifu:]. Our own data do not support this distinction.⁵ However, there is no doubt whatsoever that some French-derived vowels are definitely long (phonetically at least). Therefore, since length distinctions must be marked by the spelling for Cree-derived forms, whatever way this length is to be indicated can also be used to mark length on French-derived vowels, if need be. All of these phenomena superficially make the two components more similar than their separate phonologies would have one believe.

3. A SPELLING SYSTEM FOR MICHIF

In this section, we first briefly discuss previous attempts at spelling Michif, developed either by linguists or by non-specialists, and attempt to show their advantages and disadvantages. We then propose and discuss a new "unified" spelling system.

3.1. Previous attempts at writing Michif

As far as is known, linguists were the first to put Michif to writing. Rhodes (1977) was one of the first published grammatical descriptions of the language, but the transcriptions used are strictly phonetic. In a later article (Rhodes 2001), he uses modified "standard" Cree spellings and modified "standard" French spellings. For example, Cree /s/ and /c/ are always spelled <sh> and <ch> in order to reflect Michif pronunciation. Long vowels are indicated by a circumflex accent and even

⁵The Laverdure and Allard (1983) Michif dictionary also does not indicate a contrast on these two lexical items.

⁶Henceforth, angled brackets indicate a spelled form.

though Cree /o/ and /o:/ are usually realized as [v] and [u(:)] in Michif, he spells them as in Cree: <o> and <ô>. For French-derived items, he generally respects "standard" spelling, but with a number of innovations. For example, in Michif, so-called "liaison" (or latent) consonants are sometimes reanalyzed as an agglutinated initial consonant of the following noun. In Rhodes' system, these are attached to the noun with an apostrophe, as in <z'oiseau> 'bird'; the plural suffix is only marked if there is a pronunciation change: <le z'oiseau> 'the bird', <les z'oiseau> 'the birds' but <un n'animal> 'an animal' <deux z'animaux> 'two animals'. In Rhodes' system, written final obstruents are not pronounced, e.g. <tout> represents /tu/ but pronounced final obstruents are written with a following <e>, as in <toute> (/tut/). This gives rise to rather "un-French" spellings such as <aveque> 'with' (< Fr. avec). In Michif, French-derived words in <oi> (/wa/ in Standard French) are either pronounced [wɛ], as in [lwɛ] 'law', or [wa], as in [bwa] 'wood'; Rhodes uses the French spelling <oi> for the first and spells the second as <ou> oua(s)>.

Rhodes' writings are meant for an academic audience, usually familiar with traditional French spelling, so his spelling system generally poses no problem, since it is quite transparent. However, as a spelling system to be used by Michif speakers and learners, who are not necessarily knowledgeable in French or Cree, it is not ideal since it relies on the highly unsystematic orthography of Standard French. Moreover, it is not clear why Rhodes makes a distinction between final obstruents and final sonorants. According to him, final obstruents are never pronounced, even though they are spelled out. He does not overtly indicate how final (pronounced or unpronounced) sonorants are to be spelled but according to his texts, final pronounced sonorants are followed by <e>, as in <racine> 'root', <poêle> 'stove'', etc., and final unpronounced sonorants are indicated by an apostrophe, as in <fisi'>,8 but he spells 'night' <soir>, rather than <soire> and 'sister' is <soeur> rather than <soeure>.

In his book on Michif, Bakker (1997) sometimes uses a spelling system based on Standard French and Standard Cree, but mostly he uses rather precise phonetic notation, not necessarily those of the International Phonetic Association; for example, Cree /i/ is transcribed as <I> but French /ə/ (which is /i/ or /ı/ in Michif) is transcribed as <u>; long vowels are indicated by a colon, nasal vowels by a tilde; IPA [tf] is <č>, [3] is <ž>, etc. Again, Bakker's book is primarily addressed to linguists familiar with such notations and there is therefore no problem. But as a spelling system to be used by non-linguists, it is not practical and we shall say

⁷Notice here that the agglutinated consonant is different in the singular and plural forms: /n/ vs. /z/. In fact, these are the expected liaison consonants in Standard French. We deal with the problem of liaison in section 4.1. Even though Rhodes specifies that "there is no phonological marking of plurality" (p. 463), he is not consistent since he writes <les z'oiseaux> (p. 457) rather than the expected <les z'oiseau>.

⁸Rhodes does not spell 'gun' with a <u> in the initial syllable as in French <fusil> since in Michif there is a vowel harmony rule that delabialises initial /y/ to /i/ whenever there is an /i/ in the same word.

nothing further about it.9

In my own publications (see references), I have used a variety of spelling systems depending on the readership intended: more or less phonologically based transcriptions when addressing language specialists, more standardized French and Cree spellings when addressing non-specialists. Again, these are academic papers and the spellings used pose no problem for the readership implied but these orthographic systems are not suitable for writers (and readers!) in general, for the same reasons as given above.

Finally, the web-based *Studies in American Indian Literatures* has recently published a number of Michif stories, edited by Peter Bakker. In these stories he uses entirely Standard Cree and Standard French spellings (Cree vowel length being indicated by a circumflex rather than by a macron). These spellings do not faithfully reflect Michif phonology and are useful only for those with a knowledge of Cree and French.

More interesting, but more problematic, are the various attempts by non-specialists to write Michif. In the past two decades, quite a number of publications have been produced and as one would expect, the spellings systems used are quite varied. We shall briefly discuss some of the more problematic aspects of some of these systems.

The best-known and perhaps the most widely used system is the one developed in Laverdure and Allard (1983). This is the first and most complete dictionary of the language and is invaluable as a data base. Since the dictionary was destined for a mainly English-speaking readership, the spelling conventions used very much reflect those of the English language. It was also generally adopted by the Michif Language Program of the Manitoba Métis Federation in Winnipeg. A number of official texts from the Metis National Council use this orthography and Fleury (2000) as well Bakker and Fleury (2004) by and large follow the spelling conventions developed by Laverdure and Allard (1983). Table 5 shows some of the sound-to-letter correspondences for vowels used (we provide the Plains Cree and French lexical sources in parentheses, along with a gloss).

As one can immediately see, the spelling notations generally reflect typical English conventions. Thus many Cree-derived and French-derived vowels are rendered either as a vowel + glide or as a double vowel. This gives the impression that these vowels are diphthongized, which is not the case, neither for the Cree component nor for the French one. On the other hand, the sound-to-letter correspondences are relatively systematic, although not totally so, particularly for those vowel sounds which do not occur in English, such as /y/, $/\phi/$ or $/\phi/$ and which are variably spelled as <eu>, <ue> or <oe>. The use of <w> or <y> after vowels, to indicate that they are long, is unfortunate for another reason: both Cree and French

⁹Chapter 5 of Bakker (1997) provides a grammatical sketch of Michif. It is largely based on Bakker and Papen (1996) and uses the same orthographical conventions developed therein

TABLE 5
Some vowel sound-to-letter correspondences in Laverdure and Allard (1983)

Cree /a/ <a> Ex. awa (<awa) 'this'<="" td=""><td>French /a/ <a>, <ae> Ex. saprawn (<ça prend) 'it is necessary'; kapaeb (< capable) 'capable'</ae></td><td>Cree /o:/ <00> Ex. namoo (< namôy) 'not'</td><td>French /u/ <00>, <0u> Ex. roozh (< rouge) 'red', poul (< poule) 'chicken'</td></awa)>	French /a/ <a>, <ae> Ex. saprawn (<ça prend) 'it is necessary'; kapaeb (< capable) 'capable'</ae>	Cree /o:/ <00> Ex. namoo (< namôy) 'not'	French /u/ <00>, <0u> Ex. roozh (< rouge) 'red', poul (< poule) 'chicken'
Cree /a:/ <aw> Ex. tawnshi (<tânishi) 'when'</tânishi) </aw>	French /a/ <aw> Ex. shawr (< char) 'car'</aw>	Cree /o/ <ou> Ex. mitouni (< mitoni) 'very'</ou>	French /ɔ/ <o> Ex. bor (< bord) 'side'</o>
Cree /e:/ <ay>, Ex. mischayt, (< mihcêt) 'much'</ay>	French /ɛ/ <e> Ex. tawnpet (< tempête) 'storm'</e>	Cree /ī/ <een> Ex. cheen (< ci) 'interrogative marker'</een>	French /ē/ <aen> Ex. laenzh (< linge) 'cloth'</aen>
Cree /i:/ <ee> Ex. meena (<mina) 'and,="" again'<="" td=""><td>French /i/ <ee>, <i>Ex. feey(<fille) 'girl',="" 'windowpane'<="" (<="" td="" vitr="" vitre)=""><td>Cree /a/ + /j/ <y>, <uy>, <awy> Ex. waty, watawy (< -atay) 'stomach' kaykwuy (< kêkwây) 'something'</awy></uy></y></td><td>French /a/ + /j/ <y> Ex. baty (<bataille) 'battle'<="" td=""></bataille)></y></td></fille)></i></ee></td></mina)></ee>	French /i/ <ee>, <i>Ex. feey(<fille) 'girl',="" 'windowpane'<="" (<="" td="" vitr="" vitre)=""><td>Cree /a/ + /j/ <y>, <uy>, <awy> Ex. waty, watawy (< -atay) 'stomach' kaykwuy (< kêkwây) 'something'</awy></uy></y></td><td>French /a/ + /j/ <y> Ex. baty (<bataille) 'battle'<="" td=""></bataille)></y></td></fille)></i></ee>	Cree /a/ + /j/ <y>, <uy>, <awy> Ex. waty, watawy (< -atay) 'stomach' kaykwuy (< kêkwây) 'something'</awy></uy></y>	French /a/ + /j/ <y> Ex. baty (<bataille) 'battle'<="" td=""></bataille)></y>
Cree /i/ <i> Ex. ouschi (<ohci) 'out="" of'<="" td=""><td>French /ə/ <i> Ex. li (< le) 'the'</i></td><td>French /y/, /ø/ <eu> Ex. zeusk(< jusque) 'up to', deu (< deux) 'two'</eu></td><td>French /œ/ <eu>, <oe>, <ueu> Ex. shawnteur (< chanteur) 'singer', boer, bueur (< beurre) 'butter'</ueu></oe></eu></td></ohci)></i>	French /ə/ <i> Ex. li (< le) 'the'</i>	French /y/, /ø/ <eu> Ex. zeusk(< jusque) 'up to', deu (< deux) 'two'</eu>	French /œ/ <eu>, <oe>, <ueu> Ex. shawnteur (< chanteur) 'singer', boer, bueur (< beurre) 'butter'</ueu></oe></eu>

have vowel + glide combinations, such as *nipôpayin* 'it wilts', spelled as <nipoopayin> in the dictionary. Since Cree /e:/ is also spelled <ay>, the reader has no way of knowing whether this form is to be pronounced as /nipu:pe:in/ or as /nipu:pajin/. Also the use of <aw> is potentially confusing, as it can refer to a long /a:/ or to the sequence of two phonemes /aw/ (for which <ow> is also used).

The spelling—or more precisely the writing—convention used in Laverdure and Allard's dictionary is particularly unsystematic in dealing with the problem of "liaison" consonants and of elided vowels, discussed in the following section. It remains that this spelling system makes Michif look much more like English than it should and it does not really do justice to the phonological systems of either the Cree component or the French component. On the other hand, it does propose a more or less unified spelling convention for both components.

Another, quite different, system is that used by Flamand (2002) as well as in her translation of Murray (2001). It also attempts to unify the two phonological components without using English spelling conventions. A brief excerpt is shown in (1).

 "Eñ pichi pwasóñ dor niya ndayawaw, Lucky ishinikashó, noya maka wawéyatehitákoshiw, mochi papamátakaw pi méchiw soñ mañzhé," itwew Nicole.

"I have a goldfish named Lucky, but he can't do tricks, he just swims around and eats his food," said Nicole.

In Flamand's system, long vowels are indicated by the acute accent, but Creederived long /e:/ is written <e>, as in <wewepish6> (< wêwêpisô-w 'he/she swings'); 10 <é> is used to represent long /i:/. Nasal vowels are represented by a following <ñ->, while an oral vowel followed by a pronounced /n/ is spelled with a following <nn> as in <farinn> 'flour'; initially and between two vowels, a pronounced /n/ is spelled as a single <n>.

There are a number of inconsistencies in the system. For example <0>is said to represent "the short vowel sound of \underline{o} like the English words cook, book, took" (Flamand 2002: 5), but in the above example, 'goldfish' is spelled <pwasóñ dor>, where <0> actually represents Michif [o]. Elsewhere, this sound is rendered as <0e> (from English?), as in <doekteur> 'doctor'. Also, nasal vowels are sometimes spelled as if they were long (< \tilde{a} n̄>), sometimes as if they were diphthongized (< \tilde{a} n̄>) sometimes as if they were short (< \tilde{a} n̄>) and some nasal vowels are not even indicated by < \tilde{a} n̄>. There are, in fact, no contrastive length differences in Michif nasal vowels. Finally, the same nasal vowel phoneme can also be spelled in (at least) two different ways; for example, / \tilde{a} / is sometimes spelled as < \tilde{a} n̄>, sometimes as < \tilde{a} n̄>.

The consonant symbols are not particularly problematic, however Flamand does not indicate Cree pre-aspiration, which is unfortunate.

The major problem with this particular system is that it uses diacritics, either to indicate length (and/or vowel quality) or to indicate nasality. As such, the use of diacritics is not only quite acceptable but in fact quite widespread in the world's languages. Unfortunately, accents, particularly on some letters, and the use of the tilde, are not particularly practical in these computer-dominated times. Most keyboards (even those having a French layout) are not equipped to render acute accents on letters other than <e>. Thus, in order to type these symbols, it is necessary to resort to the special symbols function, which is quite time-consuming, requiring multiple clicks of the mouse. Moreover, diacritics do not travel very well on Internet, particularly in North America, and quite often what is reproduced, on e-mail or on web sites, is gibberish. Therefore, an ideal spelling system would be one where such diacritics are not required.

Another spelling system is used in a series of children's books published in the early 1990s (Pelletier 1992). Unfortunately, the spelling system is quite inconsistent and unsystematic. French words are often spelled according to Standard

¹⁰Notice also that final <6> is used to represent long /o:/ as well as the 3rd person AI ending -w. This is unfortunate as it obfuscates the Cree verb paradigm.

¹¹In fact, the acute accent is also (variably) used over the <r> symbol in order to indicate that it is not to be pronounced as in English but as in conservative Canadian French (a dental trill).

French spellings, such as <bois> (Fr. /bwa/) but not always, since one finds <jeun> for French 'jeune' (/ʒœn/) which in Michif is actually pronounced [ʒɛn]. Pseudo-French spellings are also used: <soure> for French soeur, <garcon> for French garçon, etc. Nasal vowels are never indicated. The Cree-derived forms are equally inconsistent. Vowel length is indicated by <h> after the vowel. This poses the problem by the fact that the symbol <h> is usually used to indicate pre-aspiration, but in Pelletier's system, pre-aspiration is simply not indicated. The dialect which is reflected in this series is somewhat different from the dialect(s) used in North Dakota, southern Saskatchewan and Manitoba in that initial /l/ is usually represented as /y/ (e.g. <l-ekol> 'school' is <ye khol> and initial /d/ is usually spelled as <t> <tah> for /dā/ (< Fr. dans) 'in', reflecting typically Cree pronunciation.

3.2. A unified Michif writing system

In this section, we propose a way of spelling and writing Michif which solves some of the problems that have been identified with the spelling systems currently being used. The proposed system is similar in many (if not most) regards to the established systems and as such it does not represent a radical departure. This still leaves some problems to be worked out, particularly as to how to write long and grammatically complex forms, usually of Cree origin. The proposed system is, for all intents and purposes, very much an on-going "work in progress".

The primary principle that the proposed system follows is the "one-to-one principle" where each symbol (or sequence of symbols) represents or refers to a single phoneme and each phoneme is always represented by the same symbol (or sequence of symbols).

The consonant symbols (Table 6) are quite straightforward and should not present any problems for either the writer or the learner. The symbols used are not new and are quite close to those used in languages such as English, French, and Cree.

Representing the vowels of Michif (Table 7) is more problematic than representing the consonants, because vowels are more intangible than consonants. As the above table shows, we do not use discritics to indicate vowel quantity or quality. We have recourse to the well-established tradition of using double vowels to indicate length, much as do Laverdure and Allard (1983), at least partly. The distribution of length on vowels, particularly for the French-derived vowels, is not completely understood and there seems to be quite a lot of inter-speaker variation. The quality and quantity values of some vowels differ according to whether the syllable rime is branching or not and whether it is stressed or not. Laxed vowels can occur in unstressed open or closed syllables (<suyii> 'shoe', <furshet>'fork') as well as in closed stressed final syllables (<zhunn> 'yellow'). Long vowels occur in fi-

¹²There seem to be a few cases where a short <u> occurs in an open final stressed syllable, as in <pu> 'skin' but in nearly every case, a long <uu> is also possible and, in fact, more likely.

TABLE 6
The consonant symbols

/p/ p pus 'inch', pachiihkee 'error' /t/ t tant 'aunt', taannshi 'hello' /k/ k katen 'doll', kiya 'you' /b/ b batuu 'boat', pimbahtaw- 'to run' /d/ d duu 'soft', taannde 'where' /g/ g galet 'pancake' /f/ f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /f/ sh shapuu 'hat', ashtaaw- 'to put' /z/ zh zhwen 'June',	Phoneme	Letter Symbol(s)	Examples
/t/ t tant 'aunt', taannshi 'hello' /k/ k katen 'doll', kiya 'you' /b/ b batuu 'boat', pimbahtaw- 'to run' /d/ d duu 'soft', taannde 'where' /g/ g galet 'pancake' /f/ f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /s/ sh shapuu 'hat', ashtaaw- 'to put'	/p/	p	pus 'inch', pachiihkee 'error'
/k/ k katen 'doll', kiya 'you' /b/ b batuu 'boat', pimbahtaw- 'to run' /d/ d duu 'soft', taannde 'where' /g/ g galet 'pancake' /f/ f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /s/ sh shapuu 'hat', ashtaaw- 'to put'	-	•	
/b/ b batuu 'boat', pimbahtaw- 'to run' /d/ d du 'soft', taannde 'where' /g/ g galet 'pancake' /f/ f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/k/	k	•
/d/ d duu 'soft', taannde 'where' /g/ g galet 'pancake' /f/ f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/b/	b	
/f// f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/d/	d	-
/f// f futruu 'mink' /v/ v vyeu 'old (masc.)' /s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/g/	g	galet 'pancake'
/s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	_	f	
/s/ s san 'hundred' /z/ z trez 'thirteen' /ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/v/	v	vyeu 'old (masc.)'
/ʃ/ sh shapuu 'hat', ashtaaw- 'to put'	/s/	S	
· · · · · · · · · · · · · · · · · · ·	/z/	z	trez 'thirteen'
· · · · · · · · · · · · · · · · · · ·	/ʃ/	sh	shapuu 'hat', ashtaaw- 'to put'
	131	zh	zhwen 'June',
	-	h	haesh 'axe', weepahikee- 'to sweep'
/hC/ hC pimuhtee- 'to walk'	/hC/	hC	pimuhtee- 'to walk'
/tʃ/ ch pichi 'little, masc.', uhchi 'out of'	/tʃ/	ch	pichi 'little, masc.', uhchi 'out of'
/dʒ/ j jis 'ten'	•	i	is 'ten'
/m/ m maten 'morning', maatuhk- 'to cry	/m/	m	maten 'morning', maatuhk- 'to cry'
/n/ n neu 'new', niya 'I, me'	/n/	n	-
/ŋ/ ng jeng 'boyfriend'	/ŋ/	ng	jeng 'boyfriend'
/p/ gn bengn 'doughnut'	/p/	gn	bengn 'doughnut'
/l/ l galet 'pancake'		ī	galet 'pancake'
/r/ r rwe 'king'	/r/	r	
/w/ w wii 'yes', peeyaaw- 'to come'	/w/	w	wii 'yes', peeyaaw- 'to come'
/j/ y iyer 'yesterday', kiya 'you'	/j/	у	iyer 'yesterday', kiya 'you'

nal stressed open or closed syllables (<kutuu> 'knife', <ruuzh> 'red'). ¹³ However, non-final vowels in open syllables can also be long as in <tuuruu> 'pemmican', but these usually vary with their short counterpart: <puurii> or <purii> 'rotten'. Since length distinctions need to be made for the Cree-derived vowels, and since long Cree-derived vowels are qualitatively different from their short counterparts, we extend this distinction to French-derived vowels, where for some vowels at least, the difference is in quality rather than in quantity. Thus, French-derived /a/, which we spell as <aa>, is qualitatively (and to some extent quantitatively) different from /a/, spelled <a>. In Michif, French-derived <aa> usually comes from French /a/, as in tard 'late' <taar>, bas 'stocking' <baa>, etc., but also from /a/ which is often denasalised, as in dans 'in' <daa>, manger 'food' <maazhii>, etc.

Even though Michif makes a distinction between /a/ and /a/, as does Canadian French, it also distinguishes these from /a/ (<ae>). Generally, /a/ occurs in non-

 $^{^{13}}$ The codas here are always the traditional French "lengthening" consonants (/r/, /z/, /ʒ/, and /v/).

/õ/ or /ũ/

on

Phoneme	Letter Symbol(s)	Examples	
Long /i:/	ii	itii 'summer', miina 'again'	
Short /i/, /i/	i	pichi 'little, masc.', akushi 'all right/enough'	
Long /e:/	ee	peer 'father' itweew- 'to say'	
/e/	e	itwel 'star', kwayesh 'right'	
Long /a:/	aa	braa 'arm', kiyaapit 'still'	
Short /a/	a	la 'the, fem.', awena 'who'	
Open /o/	0	kor 'body'	
Long /u:/	uu	tuuruu 'pemmican', yuutin 'it's windy'	
Short /u/	u	bush 'mouth', akushi 'all right'	
/ae/	ae	vizaezh 'face'	
/y/ or /ø/	eu	jeur 'hard', deu 'two'	
/œ/	oe	soer 'sister'	
/ĩ/	in	chin 'question marker'	
/ẽ/	en	dend 'turkey'	
/ã/	an	senkant 'fifty'	

TABLE 7
The vowel symbols

final unstressed syllables (<karem> 'lent', <tabaa> 'tobacco'); it can also occur in stressed closed syllables (<rizarv> 'reservation', <zhwal> 'horse', which varies with <zhwul>). The phoneme /æ/ occurs only in stressed closed syllables (<pyaes> 'dollar', <atraep> 'snare', <zaef> 'egg', etc.). It often varies with /a/, as in the words <saek> ~ <sak> 'bag', <saev> ~ <sav> 'salve', etc. For all of these reasons, we have maintained a spelling distinction between the three low vowels despite the fact that their phonological status is far from being established.

vyelon 'violin', onhin 'these (inan.)'

The proposed system uses <i> to spell two distinct French-derived phonemes: /i/ and /i/. The phonetic realization of these two phonemes can be identical, namely [1], as in <vit> 'quick', pronounced [vɪt], where the phoneme is /i/ or 'the (sg.)' variably pronounced [lɪ] or [li], representing the phoneme /i/. However while the phoneme /i/ never deletes, the phoneme/i/ does, in very specific contexts, similar to those where French schwa deletes, the reason being that <i> is the reflex of French schwa. Thus whereas the vowel of <vit> 'quick(ly)' or <jis> 'ten' never deletes, the initial vowel of <pichi> 'little' (< petit) or <dimen> 'tomorrow' (< demain) can in fact be deleted, just as in French. We shall discuss the deletion of schwa in the following section.

The spelling system proposed does not distinguish /y/ and /ø/ because these sounds are rarely contrastive in Michif, nor does it distinguish between / \tilde{o} / and / \tilde{u} /. There are two reasons for this. In the few Cree-derived words that have this back rounded nasal vowel, it is always pronounced as high ([\tilde{u}]); in French-derived words, it can be pronounced as either [\tilde{o}] or [\tilde{u}]. Since there are so few Cree-derived words containing this vowel, it seems unnecessary to add a special symbol, though

of course the spelling <un> is easily available.

As mentioned earlier, Cree-derived /a/ can have a number of allophones, ranging from $[\epsilon]$ in closed syllables to [a], $[\Lambda]$ and $[\alpha]$ elsewhere. Our spelling system will generally transcribe these as <a>, except for a few cases, always in closed syllables, where it will be spelled as <e>, as in <kwayesh> 'right', <nishtuhten> 'I understand', etc.

Finally, the problem of how to write nasal vowels has been solved in the following way: a single <n> following a vowel indicates that the vowel is nasal, the <n> itself not being pronounced: <san> 'hundred', <ven> 'twenty, wine', <mezon> 'house'. If an oral vowel is followed by a pronounced /n/, the nasal consonant will be spelled as a double <nn>, as in <lenn> 'wool', <kann> 'cane', etc. Notice that this applies only to <n>. The word for 'apple' would be spelled <pom>, not *<pomm>. Elsewhere, a written <n> is pronounced: <nwel> 'Christmas', <anii> 'year', etc. This solution is not without problems. For example, quite a number of Cree verb suffixes end in a pronounced /n/, for example -/naan/, -/aen/, -/yan/ -/aman/, etc. The spelling system we are proposing unfortunately obliges us to spell these endings with a double <nn>: <-naann>, <-aenn>, <-amann>, <-amann>, etc.

4. SOLVING SOME OF THE PROBLEMATIC FEATURES OF MICHIF

As we pointed out earlier, it is necessary to distinguish between a spelling system and a writing system. The former establishes sound-to-letter correspondences, the latter determines how actual words are to be spelled. In this section, we discuss some of the phonological and grammatical problems that Michif presents and how our writing system proposes to solve them. We also point out some of the outstanding problems that remain to be solved.

4.1. Liaison consonants

It is a well-known fact that in French, there are "latent" consonants which appear when a following word begins with a vowel or a glide, for example *deux copains* [døkop $\tilde{\epsilon}$] 'two pals' but *deux amis* [døzami] 'two friends', where the latent consonant is /z/, indicated by <x> in <deux>. A number of linguists (Rhodes 1977; Bakker 1997; Rosen 2000) have maintained that in Michif these latent consonants have been reanalyzed as being the initial consonant of the following word. In fact, a number of French-derived words which in French are vowel-initial do take a variety of initial consonants such as li nurs> \sim lurs> \sim 'the bear'. On the other hand, the majority of these so-called 'initial' consonants are identical to the latent consonant found in French. An analysis of more than half of the entries in the Laverdure and Allard (1983) dictionary shows that only about 15% of words which in French are vowel (or glide)-initial actually show an 'unexpected' consonant (Papen 2002). In other words, entries such as <aen namee> 'a friend' but zamee> 'friends' or <aen animal> 'an animal', zanimoo> 'the animals', which constitute the vast majority of such entries, do not constitute a reliable argument

This obviously poses a spelling problem, particularly for dictionary development. How should these words be spelled? With an initial consonant or with an initial vowel? And if with an initial vowel, how will the reader know which consonant to pronounce, if any, since this consonant is not necessarily the latent consonant expected in French? And in a dictionary, under which letter shall a given word be listed: under one of the many potential initial consonants or under the original initial vowel? For the entry for 'ear' for example, shall it be listed under <z> (<zarey>)? And for 'bear', shall it be listed under <l>, under <n>, under <z> or under <u>, or indeed under all of these?

Rhodes (2001) partially solves this problem by attaching the liaison consonant to vowel (or glide) -initial words separated by an apostrophe: <z'yeux> 'eyes', <n'ami> 'friend', etc. We believe this to be an unsatisfactory solution, since the apostrophe is traditionally used to indicate that a sound (or letter) has been elided. In fact, the writing system we are proposing uses the apostrophe for precisely that reason (see section 4.2). For agglutinated consonants, we prefer to link them to the nouns by a hyphen. Thus, 'ear' would be spelled as <z-arey>, 'eye(s)' as <z-yeu> and 'bear' as <l-urs>.\frac{15}{2} For an eventual dictionary, a word like <z-arey> would be listed under either <z> or <a>, with a cross-reference to the other variant.

¹⁴This initial consonant may be /z/ (from the French plural determiners), /n/ (from the French indefinite determiner) or /l/ (from the French definite determiner). The agglutination of these consonants is not particularly surprising since the phenomenon is quite common in a number of French-based Creole languages, but what is somewhat more unexpected is that at least one other consonant, namely /t/ also occurs, as in <enn tigliiz> 'a church', <aen twezuu> 'a (little) bird' (from Fr. petit(e)). As far as we know, this type of agglutination does not occur in French-based Creole languages or indeed in any vernacular French variety.

¹⁵We realize that choosing an initial <l> is somewhat arbitrary; however, that seems to be the consonant most often used. In the long run, local norms (or eventually a single "official" norm) will determine which consonant should be used.

4.2. Deletion of French-derived vowels

Another problematic area of Michif is the fact that in both Cree and French, vowels can be deleted in very specific circumstances. We shall briefly discuss three such vowel deletion contexts and propose possible spelling solutions. It should be pointed out that less is known about (Plains) Cree vowel deletion, and therefore vowel deletion in Cree-derived forms of Michif is not at present totally understood. We shall therefore limit our discussion to non-controversial aspects.

In French, there are basically two vowel deletion rules: schwa deletion and elision. Schwa deletion applies only to the schwa vowel /a/ and is subject to the so-called "rule of three consonants" while elision applies to a variety of vowels (most often /a/ but also /a/ and /i/) and serves particularly to avoid vowel hiatus. Both these rules seem to be productive in Michif, even though schwa does not have the same vowel quality as in French. In Michif, the vowel that behaves as French schwa, in that it can be deleted if it is followed by a consonant and preceded by a single pronounced consonant, is /i/, whose surface realizations vary from [i] to [a] but most often is [1] and which we spell as <i>i> For example, <pur dimen> 'for tomorrow' but <a d'men> 'till tomorrow', <en cheu d'rinaar> 'a foxtail' but <en r'naar> 'a fox', <en pik di bwaa> 'a woodpecker> vs <en biyuu d'bwaa> 'a log'. In every case schwa (<i>) is deleted whenever it is followed by a consonant and preceded by a single pronounced consonant, but it remains if it is preceded by more than one pronounced consonant.

The simplest and probably the most elegant solution would be to continue to write <i> even when it is not actually pronounced, much as in French spelling conventions, where <e> is regularly spelled out. However, at least for the moment, we think that showing the deletion of Michif schwa by the use of an apostrophe more closely respects the actual pronunciation. In any case, the apostrophe is required to indicate elision. The principle we follow is that if in Michif no form shows variation in the absence of schwa, schwa is not spelled out and the apostrophe is not used. Therefore words like <shmen> (< Fr. chemin) 'road', <smenn> (< Fr. semaine) 'week' <plot> (< Fr. pelotte) 'ball', etc. never show <i> since /i/ is never pronounced even if preceded by two pronounced consonants (as in <kat shmen> 'four roads'), even though in French all of these forms have schwa. We realize that indicating schwa deletion by the use of the apostrophe requires the writer to "know" that for a given word, schwa is not necessarily deleted, as in the examples above. This may turn out to be impractical, but for the moment we have no better solution.

In French, the final vowels /a/, /ə/ (and sometimes /i/) are elided in monosyllabic words preceding a vowel (or glide)-initial word: la maison but l'amie; le chien but l'animal, si nous but s'il, etc. This is also the case in Michif: <la pyaes> 'the dollar bill' vs. <l'arzhan> 'the money', 'the dog' vs. <l'animal> 'the animal'. We propose to indicate vowel elision by the use of the apostrophe as in the examples above, as well as in "N de N" nominal complexes such as <nos d'arzhawn> 'silver wedding anniversary', <taesh d'ankr> 'inkspot', <mal d'arey> 'earache', etc.

4.3. Deletion of Cree-derived vowels

Cree unstressed vowels are also deleted (or coalesced) in a number of varied contexts. For example, a short vowel preceded or followed by a long vowel will always delete and in a sequence of two short vowels, the second always deletes. But as Bakker and Papen (1997: 310) point out: "further research might reveal that the Michif rules differ somewhat from the Cree rules". One uncontroversial deletion (and insertion) rule is that /i/ of the first person subject prefix ni- is deleted when the verb is consonant initial. If it is vowel initial, a /t/ is inserted, thus triggering /i/ deletion. A sequence /n/ + obstruent results in the voicing of the obstruent and the deletion of /n/: ni-sheekih-iku -n 'it frightens me' is pronounced as [ʒe:ɪhɪkun], ni-peeht-een 'I hear (it)' is pronounced [be:hte:n]. The way these forms have been spelled in Michif varies from writer to writer. Laverdure and Allard (1983) spell them as <zhaykihikan> and
bayhtaen>, respectively; Flamand (2000) spells them as <nzhehikan> and <nbehven>.

The question of how to spell these forms begs the question as to how to spell person prefixes. Neither Laverdure and Allard (1983) nor Flamand (2002) are particularly systematic. Flamand attaches the person markers directly to verb stems (as in <nbethen> above), unless there is a tense or a pre-verb prefix, in which case, she attaches the person prefix to the tense or pre-verb form and treats them as independent words, as in <nka wétamawaw> 'I'll tell him/her'. We prefer to treat person markers as prefixes and propose to separate them from the verb stem by a hyphen. Even though /n/ of /ni-/ gets deleted as well as /k/ of /ki-/ '2nd person' when followed by any sequence beginning with /ki .../, for example ki-kishkeeht-een 'you know' is [kiske:hte:n], we nevertheless propose to maintain it in the spelling: ni-sheekih-iku-n would be <n'-zheekihikun>, and ki-kishkeeht-een would be <k'-kishkeehteen>. We would also link tense and pre-verbs to their stems with the use of the hyphen: ni-ka-wihtamaw-aw 'I will tell him/her' would be spelled as <n'ka-wihtamawaw>. We are well aware that this solution might not be ideal, but for the moment, we have no better suggestion.

4.4. Other problematic issues

We still have not addressed the issue as to whether the various verb conjugational suffixes (direct and inverse person markers, obviative, person agreement, plural, etc.) should be directly attached to the verb stem or linked to it with a hyphen: should we write <shipweechahuk> or <shipweechah-uk> 'Send them away', <ni-waapamik> or <ni-waapam-ik> 'He/she sees me>, etc.' Linking them with a hyphen has the advantage of breaking up longish verb forms. On the other hand, it is not evident that Michif speakers are able to consciously analyze the grammatical structure of their own language and might very well be unable to identify the various and numerous verb suffixes. This proposition also has the drawback of not being able to decide whether the direct inverse 3P-1P ending -ikunaanik should be spelled as <... iku-naanik> or as <... iku-naanik>, since, descriptively speaking,

the form can indeed by analysed as -iku + naanik.

Logically speaking, if verb suffixes were to be linked to their stem with hyphens, showing them to be what they truly are, namely suffixes, then perhaps all suffixes would have to be treated in the same way. This again raises the problem of whether native speakers are able to consciously analyse the inner structure of complex lexical or grammatical items. It also raises the question of whether only inflectional affixes should be treated this way or whether all affixes should be analysed. It should be noted here that Laverdure and Allard (1983) as well as Flamand (2002) always attach all verb endings directly to the verb root. For the moment, we tend to agree with these writers and not use hyphens to indicate suffixes.

On the other hand, we do propose to treat conjunct markers such as *ee-*, *kaa-*, *shi-* as prefixes and link them to the following verb form with a hyphen: <ee-kii-pakamaaaayaahk> '(that) we hit him/her/them', <kaaya chi-kishkeehtahk> 'so that he/she doesn't know', etc. ¹⁶ Laverdure and Allard's (1983) spelling of conjunct markers are quite variable; sometimes they spell them as if they were independent words, sometimes linking them directly to the following verb. Flamand (2002) usually treats them as independent forms, but she is not entirely systematic in doing so.

5. CONCLUSION

We are well aware that the system we are proposing here has not solved all of the problems that any person wishing to write in Michif will encounter. On the other hand, we believe that it is a major step forward since our conventions have a number of advantages: it is a "unified" system, which fundamentally uses the same sound-to-letter correspondences for both the Cree-derived and the French-derived forms. In this, our system continues the tradition established by Laverdure and Allard (1983) and especially Flamand (2002); the sound-to-letter correspondences are totally systematic in that they respect the "one-to-one" principle; they are not totally innovative since they adopt conventions that have traditionally been used to spell the language (double vowels for long vowels, <ch> and <j>for the affricates, the use of a following <n> to indicate vowel nasality, etc.) and the use of various diacritics has been avoided. We have also proposed a number of solutions to the writing of deleted vowels, both in Cree- and French-derived forms. Finally, we have addressed the problem of how to spell person marker, tense, mood, and other pre-verbal prefixes as well as the conjunct markers. For the moment, we have not totally solved the problem of how to write verb suffixes, particularly when these involve initial long vowels to be attached to verb forms with final long vowels.

¹⁶The decision not to separate verb suffixes from their verb stem results in potential sequences of four vowels as in the form <ee-kii-pakamaaaayaahk> '(that) we hit him/her/them' (ee-kii-pakamaa-aayaahk). This is probably unfortunate. In her translation of Murray (2001), Flamand uses an apostrophe to separate some verb suffixes from the verb. We have been using the apostrophe uniquely to show deletion and we are hesitant to use it for other purposes. Nevertheless, this might be an elegant solution to the problem.

We conclude this article by pointing out that Rita Flamand has recently modified her own spelling system in order to adopt the one we are proposing here with one important difference. It seems that our proposal for the spelling of nasal vowels (see section 3.2), which we admitted was not without problems, is indeed problematic for Michif speakers. According to Flamand (p.c.), they seem to have difficulty in distinguishing between single <n> to indicate that the preceding vowel is nasal but not when it is between two vowels. She has thus maintained the use of the tilde over the <n> to indicate that the preceding vowel is nasal, notwithstanding the problems of the use of diacritics which we pointed out earlier. It should also be added that if Flamand has adopted our overall "spelling" system, she has not adopted our "writing" system as such (use of the dash, of the apostrophe, etc.). Obviously, spelling and writing systems have to be practical, easy and useful for the eventual users; that is the primary goal and no matter how 'logical' they may be, in the final outcome, it is the native speakers of the language who have the final say.

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