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Writing Systems and Language Conservation

Week 4: Conservation, Orthographic Design, and Standardization

1 Goals for this Week

Here is what we will learn this week:

(1)   a.   Diasystems and language planning
      b.   Standardization: technology, politics, and linguistics
      c.   Auxiliary Systems
      d.   Introduction to Harvardese

2 Diasystems: Qur'anic Arabic

The Qur'an was originally written in the Meccan variety of Arabic, but at the time, the prestige dialect of Arabic was that of Eastern Arabic. To allow both the original Meccan pronunciation and the prestigious Eastern pronunciation both be salient in writing, Qur'anic Arabic orthography represents a **diasystem**, where both pronunciations are reconstructable form the written script.

Diasystem: a system (either conceptually as in a grammar, or in a written system) which encodes multiple related varieties of a language cluster in a way that displays their structural differences.

For instance, there is a sound in Meccan Arabic [eː], which merged with [aː] in Eastern Arabic. While [eː] could be represented with the same symbol as [j] in Meccan Arabic without confusion, the same could not be said of the merger in Eastern Arabic: as a compromise, Qu'ranic Arabic represents [j], [aː], and the [eː] (merged with [aː] in Eastern Arabic) as three distinct symbols.

Meccan Arabic		Eastern Arabic		Qur'anic Arabic
[j]	<ي>	[j]	<ي>	<ي>
[eː]	<ي>	[aː]	<ا>	<ى>
[aː]	<ا>	[aː]	<ا>	<ا>

Figure 1: Qur'anic Arabic as a Diasystem representing Meccan and Eastern Arabic

Some differences were derived only contextually, such as [ʔ], which was present in all positions in Eastern Arabic, but deleted in non-word initial position in Meccan Arabic. To distinguish the two sounds without deleting one, a diacritic hamza was added to the <ا> in non-initial positions.

Meccan Arabic		Eastern Arabic		Context	Qur'anic Arabic
[ʔ]	<ا>	[ʔ]	<ا>	Word initially	<ا>
∅	∅	[ʔ]	<ا>	Elsewhere	<أ>

Figure 2: Qur'anic Arabic as a Diasystem representing Meccan and Eastern Arabic in different contexts

In such orthographies, signs may represent **diaphonemes** rather than phonemes or phones.

Diaphoneme: an abstract phonological unit that identifies a correspondence between related sounds of multiple varieties of a language cluster. While phonemes are represented in /slashes/, diaphonemes are represented in ⫽double slashes⫽.

Spelling	Example	Phonemes		Diaphoneme
		Variety A	Variety B	
<aCe>	late	/eː/	/eː/	∥e∥
<ai>	wait		/ɛɪ/	∥ei∥
<eigh>	eight	/ɛɪ/		∥ex∥

Figure 3: Diaphonemic analysis of some vowels in Northern English varieties

3   Standardization, Colonization, and Decolonization

3.1   Scots

Scots (not to be confused with Scottish Gaelic) is a Germanic language spoken in the Lowlands of Scotland (numbers disputed: 1.5 million self-reported speakers), and a close sister language of English.

Scots and English diverged in the twelfth or thirteenth century. Until the 1600s, Early Scots dominated the Scottish political sphere, and had a relatively consistent orthography (Makars orthography) distinct from that of the Middle English spoken in neighboring England.

In 1603, James VI of Scotland accended to the English throne, and Scotland and England entered a personal union. In 1707, the Acts of Union were passed, merging Scotland and England as a single United Kingdom. These two events made English gradually replace Scots in official governmental use.

In the 1700s, the Scots Revival began, in which many Scottish authors and poets began to write in Scots rather than the now official English; however, rather than using the older orthography of the Makars, a newer orthography was used in which spellings were either taken from English spelling, or had the addition of markers to help non-Scots readers from understanding the material. This includes the **parochial apostrophe**, which denoted that a consonant existed in the English cognate of the Scots word.

English Equivalent	Makars Scots 1400–1600s	Revival Scots 1700–1800s	Scots Style Sheet 1947	Scots Leid Associe 1985
taken	tane	ta'en	taen	taen
with	wi	wi'	wi	wi
all	aw	aw	aa	aw
house	hous	house	hoose	houss

Figure 4: Different Spelling Conventions of Scots

Despite the revival, the new spelling conventions made Scots look to many as 'rustic' spellings of English, rather than representative of its own language, and made Scots' status as a language, in the political sense, unsupported, even by many Scots.

In the 1900s, several attempts to decolonize the Scots language were made. Almost all of these got rid of 'English friendly' spelling traditions of the Revival Scots conventions, such as the parochial apostrophe.

Many of these spellings aimed to be more phonologically consistent than previous orthographies, but this clashed with many traditionally established spellings, resulting in examples of exceptions for traditional spelling.

(2)   **Scots Leid Associe 1985 Spelling Rule for long /i/**
/iː/ in word initial or medial position will be spelled <ei> (eidiot, feinish, veisit), UNLESS
<ee> is firmly established (wee, een)

What do you think of the parochial apostrophe? Does the Anglicization of Scots orthography in the 1700s represent a diasystem, or something else? Do you agree with the use of 'traditional exceptions' in the case of many of the Scots Style Sheet and Scots Leid Associe conventions?

3.2   Patwa

Patwa (Jamaican Creole) is an English-based creole spoken primarily in Jamaica (3.2 million speakers). In Jamaica, the official language is English. Patwa exists on a dialect continuum with English, where multiple different registers/varieties between "pure" Patwa and Standard English are used by individuals given different contexts.

In a 2007 survey by the Jamaican Language Unit, it was found that 36.5% of Jamaicans were monolingual in Patwa. There has been an effort since 2002 to standardize Patwa such that official language materials may be established for use by non-speakers of English.

Before standardization, Patwa was written as a mixture of English spellings and simplified respellings of words.
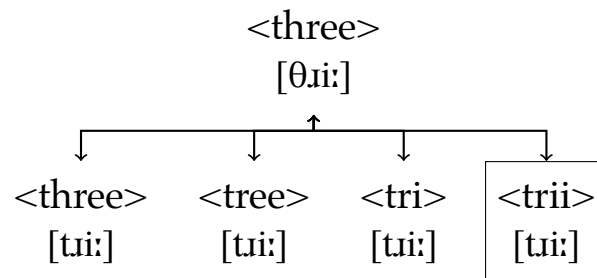
<three>
[θɹiː]

<three>   <tree>   <tri>   <trii>
[tɹiː]   [tɹiː]   [tɹiː]   [tɹiː]

Figure 5: Four possible written forms of the word [tɹiː] (three) in Patwa, including the official orthography <trii>.

Rather than representing the English cognates in any sense, the official orthography tries to represent pronunciation directly.

Not all varieties of Patwa sound the same though: Central Patwa drops all the [h] sound which exists in other varieties. This is reflected in the spelling: for central Patwa, the <h> is not written, while it is for other varieties.

How does Patwa spelling compare to the various Scots spelling systems? How are these systems affected by politics, history, cultural tradition?

3.3   Old Lisu/Fraser Alphabet for Lisu

Lisu is a Sino-Tibetan language spoken by around 940,000 people in southwestern China, northern Burma, Thailand, and India. A script was developed for it in 1915 by Sara Ba Thaw, a Karen preacher from Myanmar, and was later improved by the missionary James O. Fraser, hence the common name of the script, the Fraser Alphabet.

The script was invented for use by a typewriter, where the lower case letters are replaced by turned upper case letters. The result is a unicameral system which has more than 26 letters, all while being writable with a single typewriter.

B	[b]	P	[p]	ꓒ	[pʰ]	D	[d]	T	[t]	⊥	[tʰ]
G	[g]	K	[k]	ꓗ	[kʰ]	J	[dʑ]	C	[tɕ]	Ɔ	[tɕʰ]
Z	[dz]	F	[ts]	ꓥ	[tsʰ]	M	[m]	N	[n]	L	[l]
S	[s]	R	[ʒ]	ꓤ	[z]	ʌ	[ŋ]	V	[h]	H	[x]
ꓪ	[ɦ]	ſ	[f]	W	[w]	X	[ɕ]	Y	[ʐ]	ꓱ	[ɣɑ]

A	[ɑ]	∀	[ɛ]	E	[e]	Ǝ	[ø]	I	[i]
O	[o]	U	[u]	∩	[y]	˥	[ɯ]	ɑ	[ə]

Figure 6: The Fraser alphabet and it's corresponding pronunciations.

Why are there rotated letters, but no mirrored letters? What does flipping 180 degrees represent among the oral stop consonants? How does Lisu compare to Cherokee in terms of the using of Latin-inspired letters; would you consider Lisu its own script, or an addition to the Latin alphabet?

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3.4   Wôpanâak

Wôpanâak is an Algonquian language native to eastern Massachusetts, and is currently spoken by around 500 people.

During the 1600s, the missionary John Eliot created an orthography for Wôpanâak in order to write sermons and convert the native population to Christianity. The alphabet devised was used among the Wôpanâak community, but spelling tended to vary wildly, especially with influence from English spelling of Wôpanâak loans.

Wôpanâak went extinct in the 1800s, and stayed so until revitalization efforts lead by Jessie Little Doe Baird began in 1993. Jessie Little Doe Baird streamlined the Eliot orthography to give a more consistent and less ambiguous phonemic mapping.

Colonial			Modern			Colonial			Modern		
Letter	Values	Name	Letter	Values	Name	Letter	Values	Name	Letter	Values	Name
A a	/a/, /aː/, /ã/, /ə/	*a*	A a	/a/	*a*	N n	/n/, /~∅/	*en*	N n	/n/	*na*
			Â â	/aː/	*â*	O	/a/, /aː/, /ã/, /ə/	*o*			
B b	/b/, /p/	*bee*							Ô ô	/ã/	*ô*
C c	/k/, /s/, /ʃ/	*fee (see)*				ꝏ	/uː/, /wə/, /əw/, /ə/	*ꝏ*	8 8	/uː/	*8*
Ch ch	/tʃ/, /tʲ/, /tʲᵊ/	*chee*	Ch ch	/tʃ/	*cha*	P p	/p/	*pee*	P p	/p/	*pa*
D d	/d/, /t/	*dee*				Q q	/kʷ/, /k/	*kéuh*	Q q	/kʷ/, /k/	*qa*
E e	/iː/, /ə/, /∅/	*e*	E e	/ʲᵊ/	*e*	R r	/r/, /n/	*ar*			
			Ee ee	/iː/	*ee*	S s ſ	/s/, /ʃ/	*ef (es)*	S s	/s/	*sa*
F f	/f/, /p/	*ef*							Sh sh	/ʃ/	*sha*
G g	/g/, /k/, /dʒ/, /ʒ/	*gee*				T t	/t/	*tee*	T t	/t/	*ta*
H h	/h/, /∅/		H h	/h/	*ha*				Ty ty	/tʲ/	*tya*
I i	/ə/, /iː/, /aːj/, /aj/	*i*				U u	/uː/, /a/, /ə/	*u*	U u	/ə/	*u*
J j	/dʒ/, /ʒ/, /tʃ/, /tʲ/, /tʲᵊ/	*ji*				V v	/v/, /p/	*vf (uf), úph*			
K k	/k/	*ka*	K k	/k/	*ka*	W w	/w/	*wee*	W w	/w/	*wa*
L l	/l/, /n/	*el*				X	/ks/, /z/	*eks*			
M m	/m/, /~∅[/p/]/	*em*	M m	/m/	*ma*	Y y	/j/, /aj/, /aːj/, /iː/	*wy*	Y y	/j/	*ya*
						Z z	/z/, /s/	*zad*			
						Y (Þ) y (þ)	/θ~ð/, /t/				

Figure 7: A comparison of Colonial and Modern Wôpanâak orthography.

The merged 'double o' vowel was common enough in typesets at the time that it could be used (although it was often interchanged with <oo>). In the modern orthography, this letter is replaced with the letter <8>, the same as the arabic numeral. This form is unicameral and so is the same capitalized and lowercase.

How does the difference between Scots, Patwa, and Wôpanâak's speaking populations affect the consistency of orthography across users? How do Scots and Wôpanâak compare in terms of the legacy of older orthographies? What does the names of the letters in Wôpanâak say about their relation to English?

4   Auxiliary Systems: Niqqud

Niqqud is a system of diacritical signs which helped to denote vowels and distinguish ambiguous letters in Hebrew which came about in the Early Middle Ages.

Standard niqqud used as used today was developed for Tiberian Hebrew, the pronunciation of the Jewish community of Tiberias from 750–950 CE. As a result, many of the distinctions which existed then are no longer present.

אֻ	וּ	אֹ	אָ	אַ	אֶ	אֵ	אִ
קֻבּוּץ	שׁוּרוּק	חוֹלָם	קָמַץ	פַּתָּח	סֶגּוֹל	צֵירֵה	חִירִיק
kubbuts	shuruk	ḥolam	kamats	pataḥ	seggol	tsere	ḥirik
u	u	o	ah/oh	a	e	eh/ei	i
[u]	[u]	[o̞]	[ä/o̞]	[a]	[e̞]	[e̞]	[i]

אֳ	אֲ	אֱ	אְ
חֲטַף קָמָץ	חֲטַף פַּתָּח	חֲטַף סֶגּוֹל	שְׁוָא
ḥataf kamats	ḥataf pataḥ	ḥataf seggol	sh'va
o	a	e	e/"
[o̞]	[ä]	[e̞]	[e̞/Ø]

Figure 8: Niqqud and their modern Hebrew pronunciations.

There has been no push to restandardize niqqud for modern pronunciation, mainly due to its presence and use in religious documents for recitation.

Modern Israeli orthography of Hebrew rarely uses niqqud outside of dictionaries, poetry, and texts for children or immigrants. Instead, a different system for disambiguation has evolved called *ktiv maleh*, which uses additional *waw* and *yod* as matres lectionis, representing vowels.

How does niqqud compare to other kinds of orthographic markings such as the parochial apostrophe in Scots? In what way does the use of niqqud differ from the other case studies we have seen so far? Overall thoughts about politics, history, technology, and culture and their influences on writing systems?