Ways of Writing

WAYS OF WRITING

1. WAYS OF WRITING

Transforming speech into writing can be done in three ways,

* putting the meaning of words on paper (or whatever material you want to write on);
* putting the pronunciation of words on paper;
* combining the preceding two ways.

In its simplest form, putting the meaning of a word on paper means drawing pictures of the things you want to communicate about. For instance, you draw a picture of the sun to represent the word "sun", and a picture of a star to represent the word "star". This is basically the idea behind, for instance, the Chinese writing system. Of course, writing would take forever if each word picture had to be accurate. But just a rough sketch will do. In fact, in the course of thousands of years the Chinese word pictures became sketchier and sketchier till finally most pictures were not really pictures any more but just groups of lines. Here are some examples.

	Ancient	*Modern*
sun	⊙	日
mountain		山
tree		木
rain		雨

(Source: Helfman 1967:46)

Groups of lines such as used by modern Chinese are called characters. Learning these characters is difficult. On the other hand, the characters, and picture writing in general, have the advantage of not being tied to a particular language. Writer and reader of the pictures or characters can understand each other even if they do not understand each other's spoken language.

As for putting the pronunciation of a word on paper, it can be done in many ways depending on the degree of accuracy wanted. Total accuracy can today be achieved with electronic devices converting speech into a kind of diagram that reveals even the individual voice characteristics of the speaker. Unfortunately diagrams of this kind are in practice not usable for exchanging messages. You have no choice but to use the traditional method of letters, each letter (or group of them) representing some part of the pronunciation of a word. Depending on how large or small this part is, the writing is called syllabic, phonetic, phonemic, or morpho-phonemic.

2. SYLLABIC WRITING

An example of syllabic writing is the system of the Cree Indians. Here is how the sound of the English question "Do you see me?" can be written in the Cree manner.

⊃	⊲	⊬	Γ
do	you	see	me

As you see, the sound of whole short words such as English "do", "you", "see", or "me", is considered one unit in the Cree system. Sound units of this large kind are called syllables. To write the English word "meet", use is made of the fact that the sound of this word consists of the syllable "me" (written ⌐) plus the sound of "t". Here, then, is how the word "meet" would be written,

⌐ C

The English word "mean" contains the sound of "me" plus the sound of "n". Here is how it can be written,

⌐ ⌐

Here is the English word "meek",

⌐ b

Here are also the words "seat", "seen", "seek" written in the Cree manner,

⌐ C   ⌐ ⌐   ⌐ b

In sum, the Cree system of writing works like the shorthand writing that used to be used in many offices. It works fast and economically. There are typewriters for the Cree system. The following points, however, are worth noting.

1. The Cree language has a short stock of syllables. Other languages, for instance English and many B.C. Indian languages, have a large one. Therefore the Cree system of writing would have to be enlarged by many marks if it were to be used for these languages.

2. The Cree system sacrifices logic to writing speed. Look at how the

English word "too" could be written with one Cree letter,

$$\supset$$

To write the sound of the English word "toot", the mark $\subset$ is added to represent the sound of "t". Thus,

$$\supset \subset$$

Now, you may argue that this word really begins and ends in the same sound. Logically, then, the word should be written with the same letter at the beginning and at the end, as is done in the traditional English spelling "toot". Something like

$$\supset \triangleright \subset$$

would represent the sound of "toot" more logically than does $\supset \subset$, granting that a bit of writing speed has to be sacrificed because there are now three letters rather than just two.

Once the sound of "toot" is written with three letters, we have abandoned syllabic writing and are into phonetic or phonemic writing.

3. PHONETIC WRITING

In phonetic writing each and every pronunciation detail of a word is put on paper to the extent that this is possible by using letters. Which letter stands for which sound in phonetic writing is established by international convention. Here are some (slightly simplified) examples from English.

conventional writing	phonetic writing
bat	[bæt]
bait	[bet]
bet	[bɛt]
beat	[bit]
bit	[bɪt]
bite	[bayt]
bot	[bɑt]
bought	[bɔt]
boat	[bot]
bout	[bawt]
boot	[but]
but	[bət]
right rite wright write	[ɹ̣ayt]
bang	[bæŋ]
bank	[bæŋk]

Phonetic writing is particularly useful when dealing with a language that has never been written before and/or that you have never heard before. When modern linguists began studying B.C. Indian languages they had no choice but to write phonetically, at least in the earliest stage of their research. Obviously, phonetic writing is cumbersome and difficult to type. Look for instance at the appearance of the Heiltsuk salutations meaning "Hello!" and "Are you OK?" in phonetic writing,

$$[h^{j}o\acute{v}]$$
$$[ʔ\acute{ɛ}ɪx^{j}s\acute{t}o\acute{v}(kx)^{o}\grave{a}]$$

Certainly for connected text you would like to have a way of writing which is more economical with letters and easier to type, while nevertheless accurately indicating the pronunciation of words. The solutions to this problem are phonemic writing and its more abstract version, morpho-phonemic writing.

4. PHONEMIC WRITING

What needs doing to arrive at a more workable way of writing is examining which pronunciation details of words can be grouped together as being variants of each other. Think of the "p" in English "pit" and "spit". In "pit" the "p" comes with an extra puff of air that gives the impression of a h-sound. In "spit" it lacks this puff of air. In phonetic writing "pit" therefore reads $[p^h\text{ɪt}]$ while "spit" reads $[\text{spɪt}]$ (ignoring certain further complications that do not matter here). But in everyday English writing we disregard the difference between phonetic $[p^h]$ and $[p]$ and write "p" for both. This accurately reflects the fact that the difference is not essential. That is, in short words such as "pit" the extra puff of air is a predictable consequence of "p" occurring word-initially, while in short words such as "spit" the absence of the puff of air is a predictable consequence of "p" occurring after initial "s". In sum, $[p^h]$ and $[p]$ are each other's pronunciation variant in words like English "pit", "spit". The technical term for a group of pronunciation variants is "phoneme". Once a phoneme has been identified you can dispense with the phonetic notation for the variants included in this phoneme. Instead you can simply have one letter stand for the whole phoneme, as illustrated by the "p" of "pit" and "spit".

An important technique for identifying phonemes is to look for small but nevertheless meaning differentiating sound contrasts in otherwise identical words. Examples of such contrasts are the words "bat", "bait",

"bet", and so on; see the list on page 6.

But not only do you have to identify phonemes if you want to write economically. You also have to decide which letters are going to represent them. In the case of English this may be a rather theoretical problem because this language has already been written for centuries. (How accurately in regard to pronunciation will be discussed in a following section.) With languages lacking a writing tradition, such as most native Indian languages, the selection of suitable letters for the phonemes has practical consequences and can be quite a task. Unlike the case of phonetic writing, there are now no international conventions to go by. For instance, the earlier mentioned Heiltsuk salutation written [hʲoʊ̆] phonetically, contains speech sounds belonging to altogether 4 different phonemes. Once you know this you can write these phonemes as /yáu/, /adp/, /x'yz/, or /cj8o/, to mention just a few possibilities. (Note that the slants (/ /) are a special kind of quotation marks indicating that the writing represents phonemes.) What really matters is using different letters for different phonemes while consistently using the same letter for the same phoneme. Otherwise the shape of the letters is not important. In case you do not mind spending a lot of money on special typewriters or printers, you could even use Greek letters and write [hʲoʊ̆] as, say, /ιᾶυ/ or /ξ÷ψχ/. Convenience is the guideline now.

It cannot be emphasized enough that a phoneme is not the same thing as one particular speech sound. It is a class of sounds. Consequently the letter representing a phoneme is not necessarily always pronounced in one particular way. Its pronunciation may depend on which letter precedes or follows. Think again of the letter "p" in English "pit" and "spit". It is pronounced differently in these words. Or take the letter "a" if Heiltsuk [hʲoʊ̆] and [ʔɛ́ɪxʲstóʊ̆(kx)°à] are written phonemically as /yáu/ and /híxstáuk°a/. This letter "a" is then pronounced differently before the letter "u" and at the end of a word. Pronouncing unfamiliar words in phonemic notation means applying rules of the

following kind,

   When seeing /.../ preceded (followed) by /.../, pronounce [...].

Inversely, writing unfamiliar words phonemically means applying rules
of the following kind,

   When hearing the sound of [...] preceded (followed) by that of
   [...], write /.../.

5. MORPHO-PHONEMIC WRITING

   Phonemic writing may be more elegant and economical than phonetic
writing, but like the latter it is still typically a technique serving
the interest of the writer, more particularly of a writer who does not
really know the language concerned (think of a field linguist) or whose
language has no traditional spelling system. Phonemic writing is not
particularly concerned with efficiently getting a message across to the
reader. Like phonetic writing it so-to-speak assumes that reading is a
matter of "sounding out" words. However, in reality only poor readers,
beginning readers, or readers of difficult or poorly visible print
resort to sounding out. An experienced reader is normally capable of
"taking in" entire lines and even larger pieces of text. This suggests
that such a reader's brain works in two directions. Rather than just
integrating letters into ever larger units (words, phrases, sentences,
paragraphs), it also integrates scattered clues to the grammatical
structure of an entire text fragment into an abstract pattern which it
tries to fill in with detailed information. Whatever the exact mechan-
ics of reading, a compromise is possible between the writer's need for
clear, rigorous rules to connect sound with letters, and the experienced

reader's lack of a need to follow all these rules in opposite direction
to get to the meaning of the writing. The phonemic notation of a text
can be augmented by clues to its grammatical organization. We are then
into morpho-phonemic writing. The devices that can be used include such
familiar things as spaces between words (in spoken language there are not
really pauses between words!), capitalization, commas, periods, and other
punctuation marks. In addition, prominence can be given to the grammat-
ically relevant parts of words. The Heiltsuk language provides good ex-
amples of this latter which can be understood even if you do not know
the language. Look at the following items,

(1) ṕála   "to work"
(2) ṕálasu   "you work"
(3) dńkⱡayáinux̌v   "good at fishing with the seine"
(4) dńkⱡayáinux̌vsu   "you are good at fishing with the seine"
(5) ṕálaⱡ   "going to work"
(6) ṕálaⱡsu   "you will work"

These and very many other examples indicate that /su/ means "you". Note
that whereas English "you" is a word, Heiltsuk /su/ can only occur as
part of a word. In this regard Heiltsuk /su/ is like "ed" in English
"floated", "seated". Now look at the following examples,

(7) ⱡíiⱡks   "storekeeper"
(8) ⱡíiⱡčú   "you are a storekeeper"
(9) ṕálagvuⱡ   "to have worked (some time ago)"
(10) ṕálagvuⱡčú   "you worked (some time ago)"

Item (8) features /č/ where the previous examples would make you expect
/ss/ (final /s/ of /ⱡíiⱡks/ plus initial /s/ of /su/). Item (10) features
/č/ where you would expect just the single /s/ of /su/. This presence of
/č/ in (8) and (10) makes it harder for the reader to recognize at a
glance that a word part meaning "you" is involved. However, /č/ is a

peculiar kind of phoneme because it is always the result of joining
something beginning in /s/ (such as for instance /su/) to something
ending in /s/ or /ł/ (or certain other phonemes which need not be
mentioned here). In addition, no phonemically written word features
/ss/ or /łs/. Therefore we can safely depart from phonemic writing
and create words with /ss/ or /łs/ by substituting one of these pho-
neme sequences for /č/, as the grammatical structure of the word con-
cerned demands. Thus, we replace the phonemic spellings (8) and (10)
by the following morpho-phonemic spellings,

(8') ƛiɬkssu
(10') palagvuɬsu

    This, however, is only the beginning. By trying to write word parts
with the same meaning in the same way as long as this does not cause
unclarity about the pronunciation of a word, morpho-phonemic writing
can end up looking quite different from phonemic writing. Let the fol-
lowing Heiltsuk examples suffice.

	phonemic spelling	morpho-phonemic spelling
(1)	pala	$ph\|(h)-l^h$
(3)	dṇkƛayáinuxv	$dn\|(k)\frac{8}{}*ƛ\|-h*\overset{⑦}{y}\|+ynwx°$
(5)	palaƛ	$ph\|(h)-l^h\|\#ƛ°$
(7)	ƛiɬks	$ƛy\|-l8ks$
(9)	palagvuɬ	$ph\|(h)-l^h\|\#g°\|\#\overset{⑦}{w}ɬ$
(11)	dṇkƛai	$dn\|(k)\frac{8}{}*ƛ\|-h*\overset{⑦}{y}$
(12)	qpai	$qp\|-h*\overset{⑦}{y}$
(13)	bṇalaƛi	$bn\|(h)-l^h\|\frac{8}{}ƛ\|-h*\overset{⑦}{y}$

The meaning of (1) - (9) has been stated above and that of (11), (12),
and (13) is "to fish with the seine", "to capsize", and "close to some-
thing on the water", respectively. The morpho-phonemic spellings look
forbidding when you see them for the first time, and regardless of

whether or not you speak Heiltsuk, connecting them with a particular
pronunciation takes more time to learn than phonemic spellings. Never-
theless, the connection between morpho-phonemic spelling and pronunci-
ation is systematic (we cannot demonstrate this in these few pages).
That morpho-phonemic spelling gives the reader better visual clues to
the meaning of a word than does phonemic spelling is illustrated by the
fact that examples (3), (11), (12), and (13) all feature one and the
same part -h*ẙ (which means "on the water") in morpho-phonemic spell-
ing, but quite a variety of forms, namely /ay̓/, /ái/, /ái/, and /i/,
respectively, in phonemic spelling. You could say that morpho-phonemic
writing helps the reader by taking a carefully measured step in the
direction of the Chinese way of writing talked about in pages 2 and 3.

6. COMBINATIONS OF PICTURE WRITING AND SOUND WRITING

The connection between letters and pronunciation may lose its system-
atic character, in which case we are a step closer still to the Chinese
way of writing. Examples are the writing systems of many modern lan-
guages. English is a particularly bad case. Look at the following
four words,

<div align="center">

right

rite

wright

write

</div>

They all sound exactly the same. The reason that they are written dif-
ferently is historical. Centuries ago these words were pronounced dif-
ferently and their spelling was a more or less reliable pronunciation
guide. Then the English language changed to the effect that these four
words came to sound the same. Their spelling, however, did not change.

Today their spelling difference is perhaps of some use to an experienced reader but otherwise comparable to replacing the one spelling "bank" by "banke", "wbanke", and "wbanhk" because "bank" has three different types of meaning. Here are some more examples of words written differently in English but pronounced identically,

pane – pain	be – bee
rain – rein – reign	we – wee
bare – bear	by – buy
cite – site – sight	in – inn
eye – I	no – know
so – sew	nit – knit

Inversely, there are in English words that sound different but are spelled identically, for instance

live (as in "live music") – live (as in "to live")
read (as in "you read") – read (as in "he read")
wound (as in "a wound")   – wound (as in "he wound up")

There are countless other examples of the lack of systematic connection between spelling and pronunciation in modern English. The modern English way of writing has little concern for the writer and is difficult to learn.

7. PSEUDO-WRITING

A knot tied in a handkerchief is one of the aids to memory people may resort to when having to remember an appointment or instruction. A string of letters is likely to be used as an aid to memory by people who are literate in one language but want to remember certain words of another language they just happen to hear or maybe speak themselves but

cannot write. An example of strings of letters as mere aids to the
memory is the list of Heiltsuk words published in 1846 by John Dunn, a
member of the Hudson's Bay Company.

chù-quer	i-láh-la	kyke
u ́ucuc	whéaley	kiárlah
cáh-millah	art ́-lum	cuntólum
coó-shils	clúc-a-bar lah	kusseú
e ́-mas	ált-com	thul
cu ́n-ham	séar	choónoc
cooc ́-o-lot	cutío	chim chim ar chetar
noó -noo	kiárla	chim chim ar còume
ee ́gh-pah	pooequiálla	marlúke
umph ́-sah	kilwah	utúck
tsuck	kícus	cacloúth

From the spelling of these words it is impossible to tell how they real-
ly sound in Heiltsuk. However, the author of the list gave English
translations too. Through these it can be figured out what he was try-
ing to put on paper. Take for instance the last three words. They de-
note the numbers "two", "three", and "six", respectively. Here is how
they are written phonetically, phonemically, and morpho-phonemically.

John Dunn's spelling	phonetic spelling	phonemic spelling	morpho-phonemic spelling
marlúke	[màʔʌ́lú(kx)°]	/máḷúkv/	{mhɫ|≠wk°}
utúck	[hʲutú(kx)°]	/yúdúkv/	{ywd|-x°|≠wk°}
caclouth	[q́ʌ(tɬ)ʼóʊ̌(kx)°]	/q́ʌ́aukv/	{q́ʌh|≠wk°}

There is no system in John Dunn's notations. For no apparent reason
the same sound is now rendered with one letter or letter combination,
now with another. Take the above three words. He writes them with
"ke", "ck", and "th" at the end although, as the phonetic and phonemic

spellings show, the words end in the same sound. Notations like John Dunn's have been used by many traders, missionaries, and also Indians themselves. Typically the notations concern individual words, standard phrases, and prayers, but not a story, conversation, or any text too long and complicated to be known by heart. The notations are pseudo-writing. They look like writing because letters are used, but are not real writing because no one, not even their authors themselves, could tell their pronunciation and meaning without the help of additional clues such as order, position on the page, or commentary written in English.

WORKS CONSULTED

Bolinger, Dwight
1975^2 Aspects of Language, New York etc.

Dunn, John
1846   History of the Oregon Territory, London

Helfman, Elizabeth S.
1967   Signs and Symbols Around the World, New York: Lothrop, Lee, and Shepard Co.

Hess, Thom
1984^2 Morphophonemic Spelling for Pedagogical and Other Practical Purposes, Papers of the XIX International Conference on Salishan and Neighboring Languages, University of Victoria

Ruhlen, Merritt
1976   A Guide to the Languages of the World (available from Language Universals Project Stanford University)