LDTC Workshop 4
Language Documentation Training Center

Orthography and Sound Systems


## Writing your language

■ Orthography- a writing system specific to a language

- Why is it important to have an orthography?
- As we said in week one, a language that has not been documented is at risk of being lost forever
- Writing systems can create community cohesion
- Good or bad, a language with a writing system tends to be viewed with more respect

The sounds of the world

■ The IPA - International Phonetic Alphabet
■ a consistent way of representing the sounds of language

- Sea
- Stick

■ one-to-one correspondence between sounds and symbols

- Mix
- Choose
- like music, it should be accessible to anyone who has learned it


## The IPA Consonants

## The IPA Vowels

Close
CONSONANTS (PULMONIC)

|  | Bilabial | $\begin{aligned} & \text { Labio- } \\ & \text { dental } \end{aligned}$ | Dental | Alveolar | Post- $\begin{aligned} & \text { alveolar }\end{aligned}$ | Retroflex | Palatal | velar | Uvular | Pharyngeal | $\begin{array}{\|l\|l\|} \hline \text { Epi- } \\ \text { glotal } \end{array}$ | Glottal |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Nasal | m | m |  | n |  | $\eta$ | n | 〕 | N |  |  |  |
| Plosive | p b | ¢ do |  | t d |  | t d | c 1 | kg | q G |  | ? | $?$ |
| Fricative | $\phi \beta$ | f v | $\theta$ б | s z | $\int 3$ | sz | ç j | $\times 8$ | X ${ }_{\text {g }}$ | ћ $¢$ | H f | h 6 |
| Approximant |  | $v$ |  | 1 |  | l | J | 4 |  |  |  |  |
| Trill | B |  |  | r |  |  |  |  | R |  | я |  |
| Tap, Flap |  | v |  | r |  | ¢ |  |  |  |  |  |  |
| Lateral fricative |  |  |  | $\pm 3$ |  | $t$ | ¢ | 4 |  |  |  |  |
| Lateral approximant |  |  |  | , |  | l | $\kappa$ | L |  |  |  |  |
| Lateral flap |  |  |  | 1 |  |  |  |  |  |  |  |  |



## - <br> Sound Systems

- No one language has all of these sounds
- It is important to find out every sound that contrasts in your language
- The IPA chart is a tool to help linguists do just that
- Minimal Pairs are another tool


## Minimal Pairs

- Two words that differ by one sound, and have different meanings
- Examples: hat/at, bat/pat, fat/vat, cat/gat,
- This shows us that each one of those sounds is very important in a language, they are phonemes
- Different languages will contrast different sounds
- In English, the 'l' in 'leaf', and the 'l' in 'feel' do NOT contrast, but they sound very different
- But they might contrast in other languages!
- In English, the ' $f$ ' in 'leaf' and the ' $v$ ' in 'leave DO contrast
- But they might not in other languages


## Types of Orthographies

## Types of Orthographies

Logographic System
Basic principle：each morpheme has its own symbol
Unless you grow up with this tradition，it can be very hard to learn
To read a typical Chinese newspaper，you need to know around 6，000 symbols！

## Example

- 玉－＇jade’
- 爱－＇love’
- 下跌－＇fall＇
- 叶－＇leaf＇
- 落叶－＇falling leaves＇


## Syllabary

－Basic Principle：one symbol per syllable
－Depends on the syllable constraints of the language
－A syllable is made up of three basic parts
－onset（the consonants in the beginning）
－nucleus（the vowel in the center－the glue of a syllable）
－coda（the consonants in the end）

Example
－Japanese katakana， hirigana


## Types of Orthographies

－Alphabets－Basic Principle：one symbol per meaningful sound，or phoneme．
－Roman alphabet（ex：English，Italian）； Cyrillic alphabet（ex：Russian，Bulgarian）
a

$$
\begin{aligned}
& \text { а б в г д е ж з и й к л м н о п р } \\
& \text { C } \mathrm{T} \\
& \text { у ф х ц ч ш щ ъ ы ь э ю я }
\end{aligned}
$$

## What if you don＇t have an orthography？

－You can develop your own working orthography！
－Things to keep in mind when developing a working orthography：
－ 1 sound to 1 symbol is best
－Don＇t use letters you don＇t need
－Think about making your writing system computer－ compatible．Remember，non－standard symbols take longer to type，and all people who want to read and write about your language in the future may not have your same non－standard symbols installed on their computers．

Wrap-up

- Any interesting sounds, symbols used?

■ Any problems encountered?

- In your web template "Orthography"
- Write out each sound symbol with your mentor
- Try to find the IPA used for that sound
- Come up with an example word
- Every word should use the sound word-initially, unless that sound does not occur word initial
- Should be followed by the same vowel (ex, /a/)
- Should be the same number of syllables

- Questions?

■ Next week: Morphology and glossing

■ Thank you!

## Today’s activity

- Develop, or document, your language's orthography
- Use the minimal pairs exercise on your handout with your mentor

