### Alternation

<a> vowels in **Japan** /dʒəlpæn/ and **Japanese** /dʒæpəlnixz/ graphemes between < and > (angle brackets)

Japan-ese consists of Japan followed by ending -ese;

native speakers of E agree that two 'a' vowels of **Japan** different; first like 'a' of **a**, whereas second like the 'a' of **pan** (cf. **a pan**)

however, in **Japanese** each of the two 'a' vowels has *opposite quality;* they *alternate* – addition of **-ese** causes change in vowels of **Japan**.

Japan dʒə pæn (two syllables) and

Japanese dʒæ pə niːz/ (3 syllables – boundaries differently placed)

difference = systematic property of the L, and does not depend on tempo; such phenomena can be described in terms of processes. depending on *stress*:

## Japan dzə 'pæn

two syllables; str on the ultimate syll.

and

# Japanese dzæ pə nizz

3 syllables; major str on ULT SYLL. minor stress on ANTEPENULT (syll.) morphol. analysis phonol. analysis: *syllables* (recall:  $\neq$  word division)

photo-graph	ˈfoʊ tə graːf	10
photo-graph-er	fə 'tɒ <i>grə f</i> ə	010
photo-graph-y	fə 'to <i>grə f</i> i	010
photo-graph-ic	<sub>r</sub> foʊ tə <i>ˈgræ f</i> ik	201
photo-graph-ic-al-ly	<sub>,</sub> foʊ tə <i>ˈgræ f</i> ɪk(ə) li	201

phon-o-logy	fə	an	lə	dʒi	010
phon-o-logi-st	fə	αn'	lə	dʒɪst	010
phon-o-log-ical	af,	nə	αľ	dʒɪ kəl	201

the k in car and key /k/ - [k] vs. [k']

## **BROAD TRANSCRIPTION**

opposition /k/ vs. /b/ matters: e.g. car vs. bar – phoneme /k/ opposing /b/

## **NARROW TRANSCRIPTION**

opposition of **car**-type k vs. **key**-type k matters – [kaː] vs. [k'iː], i.e. [k] vs. [k']

some basic variations (apart from /k/ vs. /k'/)

/p/, /t/, /k/ pron'd with extra air puff = aspiration: [ $t^h$ ] tick [ $t^h$ Ik] attack [ $\theta^t$ t^hæk]

V's marked with a raised tilde to mark nasalisation: Vowel next to /m/, /n/,  $/\eta/$ :

ten /ten/ vs. Ted /ted/

/t/ & /d/ often pronounced in quick/weak way:
city ['sɪri] sanity ['sænəri] – flap or tap

## Syllabification

### Recall:

morpheme (unit of grammar/morphology) ≠ syllable (unit of phonology)

word division: a problem for writing; hyphens; (= unit of orthography)

word division =/= syllabification

word division: wintr-y centr-al Random House Webster's transcription: wintri sentrəl (ignored from now)

morphemes: wintr-y centr-al

syllables: wɪn.tri sen.trəl or? wɪnt.ri sent.rəl

Consonant cluster **-ntr-** problematic; three possibilities:

(i) wɪ.ntri (ii) wɪn.tri (iii) wɪnt.ri

but: while /wɪ/ in (i) is OK as onset, /ntri/ is illegal as coda;

two possibilities left:

(ii) wɪn.tri (iii) wɪnt.ri

Which is correct? –

Internal (i.e. English only) evidence (for cross-linguistic evidence see textbook)

in many dialects of English /t/ can be glottalized at *ends* of syllables (glottal stop instead):

can't do it /ka:n? du:1?/ don't write now /doun? rai? nau/

but
can turn /kæn tɜːn/ does not become \*/kæn ɜːn/
and

#### now:

if /t/ in wintry can be replaced with glottal stop, then it is in the coda in wint.ri

will try /wɪl traɪ/ does not become\*/wɪl ʔraɪ/

if /t/ in **wintry** can*not* be glottalized, then it must be in the onset in **win.tri** 

it can't be glottalized: so \*wint.ri but win.tri