

Day 3: More features and rule notation

- Natural and or common rules and or processes tend to show:

Assimilation	Dissimilation
Strengthening	Weakening

Q: What is going on in Zoque?

Zoque: spoken in Mexico (Wonderly 1951)

<i>pata</i>	'mat'	<i>ɲgyunu</i>	'you fell'
<i>tatah</i>	'father'	<i>sis</i>	'meat'
<i>tʰitʰy</i>	'little'	<i>šohšahu</i>	'they cooked it'
<i>cima</i>	'calabash'	<i>kama</i>	'cornfield'
<i>cehcu</i>	'he cut it'	<i>nas</i>	'earth'
<i>kunu</i>	'he fell'	<i>ñanah</i>	'his mother'
<i>kenba</i>	'he sees'	<i>kaŋ</i>	'jaguar'
<i>myandamu</i>	'you came'	<i>liŋba</i>	'he slashes'
<i>ʔiŋdʰoʔpya</i>	'he is sleepy'	<i>win</i>	'face'
<i>ñjehcu</i>	'you cut brush'		

Voiceless plosives	p	t, c	tʰ, č	k
Voiced plosives	b	d, dz	dʰ, ǰ	g
Fricatives		s	š	
Nasals	m	n	ñ	ŋ
Liquids		l, r		
Glides	w		y	ʔ, h

Q: What is going on in Papago?

Papago (Tohono O'odham): spoken in Arizona (Saxton & Saxton 1969)

<i>tatai</i>	'tendon'	<i>daswua</i>	'to pile'
<i>tamf</i>	'gums'	<i>dakpon</i>	'to slip'
<i>tatal</i>	'mother's younger brother'	<i>doadʒida</i>	'healing'
<i>tohnto</i>	'degenerate'	<i>doʔag</i>	'mountain'
<i>tokih</i>	'cotton'		
<i>todsid</i>	'to frighten'		
<i>tʃuagia</i>	'net bag'	<i>dʒuni</i>	'dried cactus fruit'
<i>tʃutʃul</i>	'chicken'	<i>dʒusukal</i>	'(lizard species)'
<i>tʃukma</i>	'dark'	<i>dʒuhki</i>	'rain'
<i>tʃiaposid</i>	'to brand'	<i>dʒigos</i>	'storm'
<i>tʃilwin</i>	'to rub'	<i>dʒiwikon</i>	'to scrape'
<i>tʃigitog</i>	'to think'	<i>dʒiwhiadag</i>	'arrival'
<i>tʃinig</i>	'to move the lips'		
<i>tʃikpan</i>	'work'		

Q: What is the distribution of vowels in Chitano (upper case are –voi)

Chatino: another language of Mexico (Gleason 1955)

<i>katá</i>	'you will bathe'	<i>siyú</i>	'juice'
<i>kisú</i>	'avocado'	<i>sulá</i>	'open!'
<i>kusuʔwá</i>	'you will send'	<i>tiyé</i>	'stomach'
<i>seʔé</i>	'place'	<i>laʔá</i>	'side'
<i>šIʔí</i>	'sad'	<i>loʔó</i>	'where'
<i>tAʔá</i>	'fiesta'	<i>ndikí</i>	'you are burning'
<i>tihí</i>	'water'	<i>nguší</i>	'tomato'
<i>tUʔwá</i>	'mouth'	<i>kíʔ</i>	'fire'
<i>kinó</i>	'sandal'	<i>háʔ</i>	'grass mat'

Q: What principles govern the light and dark l in Georgian?

Georgian (Robins and Waterson 1952)

(note: ł = L)

<i>łamazad</i>	'prettily'	<i>vxletʃʰ</i>	'I split'
<i>saxłfi</i>	'at home'	<i>tʃetʃxli</i>	'fire'
<i>kała</i>	'tin'	<i>zarali</i>	'loss'
<i>pepeła</i>	'butterfly'	<i>tʃoli</i>	'wife'
<i>kbiłs</i>	'tooth'	<i>xeli</i>	'hand'
<i>łxena</i>	'joy'	<i>kleba</i>	'reduce'
<i>ertʰxeł</i>	'once'	<i>leto</i>	'goal'
<i>xoło</i>	'however'		

Q: What is the distribution of aspiration for stops in Sierra Popoluca?

Sierra Popoluca (Elson 1947)

(tʰ is an alveolo-palatal stop)

<i>petʰkuj</i>	'broom'	<i>petta:pʰ</i>	'it is being swept'
<i>kekʰpaʔ</i>	'it flies'	<i>nikʰpaʔ</i>	'he goes'
<i>tʰu:kiʔ</i>	'turtle'	<i>kuj</i>	'wood'
<i>mokʰ</i>	'corn'	<i>hu:tʰ</i>	'where'
<i>ikapun</i>	'his barrow'	<i>tirtitʰ</i>	'mestizo'
<i>nipʰ</i>	'mouth'	<i>ikkaʔ</i>	'he killed it'
<i>makʰtiʔ</i>	'ghost'	<i>ho:ppaʔ</i>	'it rolls'
<i>tots</i>	'tongue'	<i>witʰpaʔ</i>	'he walks'
<i>petʰpaʔ</i>	'he sweeps'	<i>pikʰfiʔ</i>	'bow'

Q: What's going on with the vowels in Mohawk?

Mohawk (Postal 1968)

<i>wisk</i>	'five'	<i>ké:saks</i>	'I look for it'
<i>rayáthos</i>	'he plants'	<i>royóʔteʔ</i>	'he works'
<i>yékreks</i>	'I push it'	<i>í:raks</i>	'he eats it'
<i>raké:tas</i>	'he scrapes'	<i>nikanúhzhakeh</i>	'houses'
<i>rehyá:raʔa</i>	'he remembers'	<i>wahoyóʔdaʔ</i>	'he worked'
<i>rá:kas</i>	'he sees her'	<i>ranú:weʔs</i>	'he likes it'

Q: What are the three underlying vowels of Greenlandic Eskimo?
(in the data r is a uvular trill)

Greenlandic Eskimo (Schultz-Lorentzen 1945)

<i>ivnaq</i>	'bluff'	<i>qasaloq</i>	'bark'
<i>iperaq</i>	'harpoon strap'	<i>ikusik</i>	'elbow'
<i>imaq</i>	'sea'	<i>qilaluvaq</i>	'white whale'
<i>tuluvaq</i>	'raven'	<i>qatigak</i>	'back'
<i>itumaq</i>	'palm of hand'	<i>sakiak</i>	'rib'
<i>sava</i>	'sheep'	<i>ugsik</i>	'cow'
<i>nuna</i>	'land'	<i>orpiq</i>	'tree'
<i>ine</i>	'room'	<i>nerdloq</i>	'goose'
<i>nanoq</i>	'bear'	<i>marraq</i>	'clay'
<i>iseraq</i>	'ankle'	<i>iga</i>	'pot'
<i>isse</i>	'eye'	<i>igdlo</i>	'house'
<i>sermeq</i>	'glacier'	<i>sako</i>	'tool'

Q: What is going on in Kenyang with [k] and [q]?

Kenyang

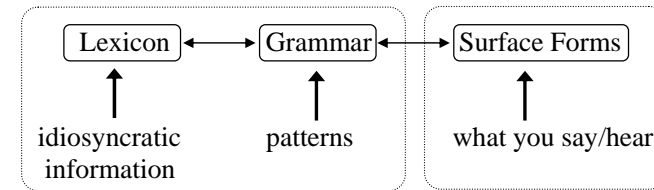
1. [enoq]	<i>tree</i>	7. [enoq]	<i>drum</i>
2. [eket]	<i>house</i>	8. [nčiku]	<i>I am buying</i>
3. [nek]	<i>rope</i>	9. [ekaq]	<i>leg</i>
4. [ngaq]	<i>knife</i>	10. [naq]	<i>brother-in-law</i>
5. [etəq]	<i>town</i>	11. [pəbrik]	<i>work project</i>
6. [ayuk]	(person's name)	12. [ndek]	<i>European</i>

Q: What is going on in Tojolabal?

Tojolabal

1. [kisim]	<i>my beard</i>	7. [sak]	<i>white</i>
2. [cak'a]	<i>chop it down</i>	8. [k'išin]	<i>warm</i>
3. [koktit]	<i>our feet</i>	9. [skuču]	<i>he is carrying it</i>
4. [k'ak]	<i>flea</i>	10. [k'uutes]	<i>to dress</i>
5. [p'akan]	<i>hanging</i>	11. [snika]	<i>he stirred it</i>
6. [k'a'em]	<i>sugar cane</i>	12. [ak']	<i>read</i>

Big picture: Analysis



Kasem is a language spoken in West Africa (Callow 1965)

	<i>singular</i>	<i>plural</i>	
<i>a</i>	bakada	bakadi	'boy'
<i>b</i>	sada	sadi	'grass mat'
<i>c</i>	mimina	mimini	'thin'
<i>d</i>	fala	fali	'white man'
<i>e</i>	tula	tuli	'granary'
<i>f</i>	kukuda	kukudi	'dog'
<i>g</i>	fana	fani	'knife'
<i>h</i>	čana	čani	'moon'
<i>i</i>	bakala	bakali	'shoulder'
<i>j</i>	kambia	kambi	'cooking pot'
<i>k</i>	pia	pi	'yam'
<i>l</i>	buga	bwi	'river'
<i>m</i>	diga	di	'room'
<i>n</i>	malaa	male	'chameleon'
<i>o</i>	kabaa	kabe	'slave'
<i>p</i>	zizaa	zize	'grass roof'
<i>q</i>	laŋa	le	'song'
<i>r</i>	naga	ne	'leg'
<i>s</i>	pia	pe	'sheep' (cf. 'yam')
<i>t</i>	babia	babe	'brave'
<i>u</i>	nanjua	nanjwe	'fly'
<i>v</i>	yua	ywe	'hair'
<i>w</i>	koga	kwe	'back'
<i>x</i>	čoŋa	čwe	'path'

Q: What are the morphemes involved here?

Q: What rules affect plural formation?

Q: Do the rules need to be ordered, if so how?