

The Cycle and Lexical Phonology (sketch)

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Words from Icelandic and Catalan have presented cases that appear to show rule-ordering paradoxes (Kenstowicz, 1994).

Catalan

	‘grind’	‘sell’
3sg.	mol	bɛn
2sg.	mol-s	bɛn-s
1sg.	mol-k	bɛŋ
3sg. past	mul-íə	bɛn-íə

★ Provide a rule-ordering account of the above.

Now consider the forms below. Note that the underlying form of ‘twenty’ is assumed to be /bint/.

bint-ó	‘twentieth’
bin	‘twenty’
bim pans	‘twenty breads’
biŋ kaps	‘twenty heads’

★ What does this data say about the ordering of the rules you provided?

Sundanese

In Sundanese, nasalized vowels are predictable.

1. akar	‘root’	10. anõm	‘young’
2. abot	‘heavy’	11. luhur	‘high’
3. amĩs	‘sweet’	12. m̃h̃asiswa	‘student’
4. handap	‘light’	13. m̃ake	‘to use’
5. awon	‘bad’	14. m̃arios	‘to examine’
6. konẽj	‘yellow’	15. m̃iãk	‘to stand aside’
7. m̃h̃ir	‘skillful’	16. nĩĩr	‘to pierce’
8. m̃h̃eh̃ed	‘poor’	17. m̃h̃āl	‘to be expensive’
9. m̃erri	‘duck’	18. kum̃ah	‘how’?
		19. m̃alak	(hypothetical)

Now consider the data below which show singular and plural forms. The plural forms are infixed with either [-ar-] or [-al-] (do not worry about which for now) after the initial consonant.

singular	plural	
kusut	karusut	‘messy’
gətol	garətol	‘diligent’
combrek	calombrek	‘to dry’
nũgar	nālũgar	‘to dig up’
nĩĩs	nāriĩs	‘to cool oneself’
mōēkən	mārōēkən	‘to dry’

- ★ Does your current analysis make the right predictions? How can the infixation word formation process be organized with respect to the phonology to derive the plural forms?

Icelandic

Icelandic has a processes of [u]-epenthesis

dag+ur	‘day m.nom.sg.’	bæ+r	‘farm m.nom.sg.’
tek+ur	‘take 2/3sg.pres.ind.’	næ+r(ð)	‘reach 2/3sg.pres.ind.’

It also has a process of j-deletion.

bylj+ar	‘snowstorm gen.sg.’	krefj+i	‘request 2pl.’
bylj+ir	‘snowstorm nom.pl.’	krefj+a	‘request 3pl.’
bylj+i	‘snowstorm acc.pl.’	krefj+um	‘request 1pl.’
bylj+a	‘snowstorm dat.pl.’	kref	‘request 1sg.’
bylj+um	‘snowstorm dat.pl.’	kref+ur	‘request 2/3sg.’
byl	‘snowstorm acc.sg.’		
byl+s	‘snowstorm gen.sg.’		
byl+ur	‘snowstorm nom.sg.’		

★ What kind of relationship (interaction/ordering) are these two processes in?

Icelandic also exhibits a process of u-umlaut.

barn	‘child’	börn-um	dat.pl.
svangt	‘hungry’	svöng-u	dat.sg.
kall-a	‘I call’	köll-um	‘we call’

The data below suggests how u-umlaut interacts with u-epenthesis.

/harð+um/	hörðum	‘hard dat.pl’
/kalla+um	köllum	‘call 1sg’
/dag+r/	dagur	‘day nom.sg’
/hatt+r/	hattur	‘hat nom.sg’
/hatt+um/	höttum	‘hat dat.pl’

★ How do the two processes interact?

There is also a syncope process in Icelandic. While this process applies before case and derivational endings, it does not before the enclitic articles -inn and -ið.

	‘hammer’	‘acre’	‘head’	‘day’	‘kettle’	‘gods’
nom.sg.	hamar	akur	höfuð	dag+ur	ketil+l	regin
dat.sg.	hamr+i	akr+i	höfð+i	dag+i	katl+i	ragn-a
inf.	hamr+a					
dat.pl.		ökr+um			kötl+um	rögn+um
def.nom.sg.	hamar#inn	akur#inn	höfuð#ið	dag+ur#inn		

★ Now what does the analysis look like?

Lexical and Postlexical Components of Grammar

Processes (rules) can be lexical or post-lexical.

Lexical phonological rules apply after each morphological operation. Word formation rules (WFRs) and phonological rules don't have access to morphological information from previous operations. They only have access to the

Postlexical rules are automatic in the sense that they don't admit of lexical exceptions, and don't care about morphological information. Allophonic rules are postlexical because they can apply across the board and because they don't affect distinctive features.

0.1 Strict Cycle Condition

The idea is to allow lexical rules (at least those that change feature values, rather than filling in underspecified ones) to apply only to environments newly made, by either a morphological operation or a phonological rule in the same cycle. This phenomenon is known as *non-derived environment blocking* (NDEB).

Lexical phonology's attempts to deal with NDEB were always kind of a mess, and it's not clear we've done better since then, so rather than review the details of the proposals, here are two classic examples, Finnish and Sanskrit, from Kiparsky.

References

Kenstowicz, Michael. 1994. *Phonology in Generative Grammar*. Blackwell Publishers.