

Class 4: Non-prosodic analyses of Dutch and Italian

I. Italian

(1) Facts to be accounted for (see Class 3 handout for sources—mostly Nespor & Vogel, Peperkamp)

prefix₁ = disyllabic, prefix₂ = monosyllabic

claimed prosody	(stem) (stem)	(stem)-(stem) (unless both are bound)	(prefix ₁)-(stem)	(prefix ₂ (stem))	(clitic (stem))	(stem)	(stem-suffix)	((word) clitic)
C.V	no							
	(ba)(r a.per.to)			(di (s-u.gua.le))			(fa.mo.s-is.si.mo)	
primary stress as diagnosed by vowel length, legality of [ε] & [ɔ]	one per stem		one on prefix, one on stem	stem only				
	(s[ɔ]lita) (ménte)	(t[ɔ]sta)-(páne) (c[á:]po)-(p[ó:]polo)	([é]kstra)-(coniugále) (p[á:]ra)-(milit[á:]re)	(r[ɪ]-(sal[á:]re))			(t[ò]sta-tóre)	((teléfona)-me-lo)
raddoppiamento sintattico (Central & Southern)	yes			no				yes
	(tré) ([g:]réci)	(caffé)-([l:]átte)		(pre ([g]réci))				((dá) [m:]i)
intervocalic s-voicing (Northern)	no			no, unless resyllabification	no	yes		no
	(bella) ([s]era)	(pórta)-([s]igarétte)		(a-([s]ociále) (di[z]-uguale)	(la ([s]iréna))	(a[z]fílo)	(cau[z]-áva)	((telefonáti) [s]i)
s-assimilation	no			yes		yes		
	(bi[s]) (lungo)			(bi[z]-(lungo))		([zg]onfio)		

Miscellaneous

- Total nasal assimilation applies only with *in-*, *con-*.
- Gapping facts are uncertain. Possibly the prefixes *pro-*, *pre-*, *post-*, *multi-*, *micro-*, *super-*, and *iper-* can gap, but *in-* and *dis-* can't.
- Additional *s*-voicing data: Krämer (2003)¹ reports C__+V voicing with the *s*-final prefix *trans-*: *tran[z]-atlantico* 'trans-Atlantic', cf. *sen[s]o* 'sense'. Mennella 1989² has [s] for these examples.

¹ Martin Krämer (2003). Variation of s-voicing in two varieties of Italian. Ms., University of Ulster.

² Antonio Mennella (1989). *Dizionario di ortografia e pronunzia*. Milan: Armenia.

(2) Kiparskyan analysis—with rules or constraints (“rules” are in no particular order within each level)

	attach suffixes bound+bound compounding prefixed words treated as unitary start here
<i>Stem level</i>	syllabify stress vowel length mid-vowel neutralization s-voicing
	true prefixation other compounding
<i>Word level</i>	resyllabify secondary stress s-voicing', for resyllabified s only (would be consistent with Krämer's data) s-assimilation
	syntax: word concatenation
<i>Postlexical</i>	resyllabify phrasal stress rules raddoppiamento

(3) Stress

		t[ɔ]sta	pane	militare	t[ɔ]sta	tel[ɛ]fona
attach suffix					t[ɔ]statore	
<i>stem level</i>	syllabify	t[ɔ]s.ta	pa.ne	mi.li.ta.re	t[ɔ]s.ta.to.re	te.l[ɛ].fo.na
	stress	t[ɔ́]s.ta	pá.ne	mi.li.tá.re	t[ɔ́]s.ta.tó.re	te.l[ɛ́].fo.na
	V length	--	p[á:].ne	mi.li.t[á:].re	t[ɔ́]s.ta.t[ó:].re	te.l[ɛ́:].fo.na
	mid-V neutr.	--	--	--	t[ɔ́]s.ta.t[ó:].re	--
attach prefixes, compound		t[ɔ́]s.ta.p[á:].ne	p[á:].ra.mi.li.t[á:].re (how did <i>para-</i> get stressed?)			
syntax						te.l[ɛ́:].fo.na me lo

(4) Raddoppiamento (Central, South)

		caffè	latte	grec-	da
attach suffix				greci	
<i>stem level</i>	syllabify	caf.fe	lat.te	gre.ci	da
	stress	caf.fé	lát.te	gré.ci	dá
	V length	--	--	gré:.ci	--
attach prefixes, compound		caf.fé lát.te	pre gré:.ci		
<i>word level</i>	resyllabify	caf.fé.lát.te	pre.gré:.ci		--
	secondary stress	--	prè.gré:.ci		--
syntax					dá mi
<i>post-lexical</i>	resyllabify	--	--		dá.mi
	raddoppiamento (C, S)	caf.fé[l:]át.te	-- ([è] is only 2ary-stressed)		dá[m:]i

(5) s voicing (North)

		porta	sigarette	sociale	uguale	asilo	caus	telefona
attach suffix							causava	telefonati
<i>stem level</i>	syllabify	por.ta	si.ga.ret.te	so.cia.le	u.gua.le	a.si.lo	cau.sa.va	te.le.fo.na.ti
	<i>s</i> -voicing (N)	--	--	--	--	a.[z]i.lo	cau.[z]a.va	--
attach prefixes, compound		porta sigarette		a so.cia.le	dis u.gua.le			
<i>word level</i>	resyllabify	por.ta.si.ga.ret.te		a.so.cia.le	di.su.gua.le	--	--	--
	<i>s</i> -voicing' (N)	--	--	--	di.[z]u.gua.le	--	--	--
syntax								te.le.fo.na.ti si

(Or, have *s*-voicing at stem level only, but attach *s*-final prefixes before stem level and other prefixes after. That account can't generate Krämer's *tran[z]-atlantico* cases, though.)

(6) s assimilation

		bis	lungo	lungo	sgonfio
attach suffix					
<i>stem level</i>	syllabify	bis	lun.go	lun.go	sgon.fio
attach prefixes				bis lun.go	
<i>word level</i>	resyllabify	--	--	bis.lun.go	--
	<i>s</i> -assimilation	--	--	bi[z].lun.go	[z]gon.fio
syntax		bis lun.go			

(7) Questions and shortcomings to discuss

Main stress on disyllabic prefixes

Do they have to pass through the stem level?

Bracketing paradoxes

[[ri[suddivis]_Vione]_N 'resubdivision'—the morphology adds the prefix “first”, but this grammar adds the suffix first.

s-voicing is messy—applies in two different levels

Can it be improved?

II. Dutch

(8) Facts to be accounted for (see Class 2 handout for sources—mostly Booij)

prefix₂=prefixes lacking a full vowelprefix₁=prefixes that have a full vowelsuffix₁=suffixes that have a full vowel and are consonant-initial, plus *-achtig*suffix₂=the rest of the suffixes

	(stem)-(stem)	(prefix ₁)-(stem)	(stem)-(suffix ₁)	(prefix ₂)-(stem)	(clitic(stem))	(stem)	(stem-suffix ₂)	(stem-clitic)
C.V, with coda devoicing when applicable	yes					no		no, but can have devoicing
	(lan[t]).-(a.del)	(ont).-(er.v-en)	(roo[t]).-(ach.tig)				(ro.[d]-ig)	hon.[t] aan (some frequent Vs: he.[b] ik)
stress (B1995—many complications)	(strong)(weak)			((strong))		complicated		
	(lánd)-(àdel)	(ánti)-(hòuding) (except verbalizing suffixes: ont-móet)	(róod)-(àchtig)	(be-(ádem))				
syllabification of CC respects morpheme boundaries	yes							
	(lood).-(spet) vs. (loods).-(pet)							
ə → Ø / __ V	optional					*əV	obligatory	
	mod[ə]-opleiding	[bəantvordən]	[zeidə-axtəx]				(kade+en) → [kad_ən]	
long vowels “colored” before /r/	no					yes		
	(keu)-(ring)	(mee)-(reis-en)				(smeris)	(keur-ing)	
s → z / [+voice] __ + V	yes/optional					no		yes?(!)
	(men[z]).-(aap)	(mi[z]).-(oogst)	(ij[z]).-(achtig)			(ma[s]a)	(hij[s]-en)	het bo[z] in
degemination	optional?	optional	optional?			*C _i C _i	obligatory	
		(ver)-(rassen) → [ver:asən]					(groot-te) → [γrotə]	
t → Ø / C __ C (roughly)	optional					*CtC?	obligatory	
	(vracht)-(wagen)	(ont)-(ploff-en)	(zicht)-(baar)				(klacht-je)	
syllable-final coronal Cs count towards max. syll. weight?	no					unless final		don't know
	(heftst)-(kleuren)	(aarts)-(bisschop)	(koorts)-(achtig)					

superheavy syllables	OK?					if nonfinal, stress as compound if poss.	OK		
						(áal)(mòes) (expect àalmóes) (pín.ter)—t[ə]r can't be stressed	béem.d-en		
stem-final obstruent-liquid sequences	no?					no	OK if suffix begins with a vowel		
							(celebr-eer)		
C _i əC _i	OK					no	no—produces paradigm gaps		
	(formul[ə])-(lijst)						*(kal-[ə]ling)		
X-(A) Y-A gapping	OK						illegal		
	(wis)-__ en (natuur)-(kunde)	(in)-__ en (uit)-(voer)	(rood)-__ of (groen)-(achtig)				*absurd-__ en (banal-iteit)		
X-A (X)-B gapping	OK						illegal		
	(heren)-(schoenen) en __-(jassen)						*(be-(fiets-en)) of __-lop-en		
V ₁ V ₂ → ...	insert [ʔ] (or, less often, insert glide) for (word) (word) sequences in same IP, optionally insert glide					insert [ʔ]? (limited data)	<ul style="list-style-type: none"> • if V₁=a, V₂ main-stressed, insert [ʔ] • if V₁=a, V₂ not main-stressed, do nothing 		
							<ul style="list-style-type: none"> • if V₁=[ə], delete V₁ • if V₁=ə, block /n/-deletion or even insert <i>n</i> 		
							<ul style="list-style-type: none"> • else insert glide 		
	(zee)-(arend) = [zeʔarənt] or [zejarənt] de vlo)̩ [v](uit		(koe)-(achtig) [kuʔaxtəx] or [kuvaxtəx]			(je [ʔ](eet)) *(je [n](eet))	(pa[ʔ]élla) (cháos) (Édu[ɥ]ard)	zee+en [zejən]	(koch.t-e.n 't) (merkte 't) = [mæktət] or [mæktənət] (zie.[j] 't)

Miscellaneous

- Linking phonemes in compounds: (hon.[d]-e)-(brod) ‘dog’s food’, (hond-e)-__ en (katt-e)-(brood) ‘dog-(food) and cat-food’
- Some historically complex words act as a single domain for syllabification, and use glides for hiatus resolution: (tan.[d]arts), (re.[j]a.ge.ran)

(9) Kiparskyan analysis (again, rules or constraints; order within each level not crucial)

	<i>alternations/operations</i>	<i>phonotactics enforced (no repair—just gaps)</i>
	attach suffix ₂ some historically complex words start here some frequent verb+clitic combos start here	
<i>Stem level</i>	hiatus resolution through [ʔ], Ø, schwa deletion, and glide insertion degemination syllabify final devoicing r-coloring t-deletion stress	restrictions on syllable weight restriction on stem-final obstruent-liquid sequence *C _i əC _i
	attach prefixes attach suffix ₁ compound	
<i>Word level</i>	compound stress s-voicing (derived environments only) hiatus resolution through [ʔ] insertion	none?
	syntax: concatenate words	
<i>Postlexical</i>	resyllabify across word-clitic boundary optionally insert <i>n</i> at word-clitic boundary phrasal and higher stress optional degemination optional <i>t</i> -deletion optional glide insertion	none?

(10) Stem-level alternations

		rood,	rood	hond	zijde	kade
	attach suffix ₂		roodig			kadeen
<i>stem level</i>	resolve hiatus	--	--	--	--	kaden
	syllabify	.rood.	.roo.dig.	.hond.	.zij.de.	.ka.den.
	final devoicing	--	.roo.[t]ig.	.hon[t].	--	--
	attach suffix ₁	.rood.achtig (has <i>achtig</i> been syllabified?)			.zij.de.achtig	
	syntax			.hon[t]. aan		
<i>post-lexical</i>	resyllabify across word-clitic boundary			.hon.[t] aan		

(11) More stem-level alternations

		rassen	groot	ploffen	klacht	keu	ring	keur
attach suffix ₂			grootte		klachtje			keuring
stem level	degemination	--	groo[t]e	--	--			
	t-deletion	--	--	--	klachje			
	r-coloring	--	--	--	--	--	--	keuring
attach prefix ₁		ver.ra.ssen.		ont.plo.ffen				
compounding						keuring		

(12) Word-level alternation

		ijs	hij
attach suffix ₂			hijzen
stem level	syllabify	.ijs.	.hij.sen.
attach suffix ₁		.ijs.achtig	
word level	s-voicing	.ij[z].achtig	blocked by Strict Cycle Condition

(13) Stem-level phonotactics

Stem-level phonotactics

		heftst	kleur	“leftstme”	formula	lijst	kal
attach suffix ₂			kleuren				kaleling
stem level	syllabification	.heftst.	.kleu.ren	.leftst.me.	.for.mu.la.	.lijst.	.ka.le.ling.
	syll size limit; final coronal obstruents don't count	OK	OK	No! Crash.	OK	OK	OK
	*C _i əC _i	OK	OK	OK	OK	OK	No! Crash.
compound		.heftst.kleu.ren.		XX	.for.mu.la.lijst.		XX

(14) Hiatus resolution at various levels

		zee	arend	eet	zee	zie	vlo	uit
attach suffix ₂					zeeen			
stem level	resolve hiatus through [ʔ], Ø, schwa deletion, and glide insertion	--	--	--	zee[j]en	--	--	--
compound		zeearend						
word level	hiatus resolution through [ʔ] insertion	zee[ʔ]arend						
syntax				je eet		zie 't	vlo uit	
post-lexical	maybe [ʔ] insertion after schwas? (No data except for cliticized case)			je[ʔ]eet			--	
	optional glide insertion (obligatory for enclitic?)	zee[ʔ]arend ~ zee[j]arend				zie[j] 't	vlo [v] uit	

(15) Questions and shortcomings to discuss

Explaining affix classes

The prosodic account was able to explain why (except for *-achtig*) vowel-initial and full-vowel-less suffixes pattern as a group. Here, we must stipulate it.

Prefixes that act like p-words

How to explain compound-like stress on prefix₁ (with classes of exceptions)? (*ánti*)-(hòuding)
Must these prefixes (and maybe *-achtig*) to go through the stem level on their own?

Bracketing paradoxes (see B1995 p. 124)

on-grammatical-iteit ‘ungrammaticality’ = [[on [grammaticaal]_A]_A iteit]_N
Morphologically, the prefix attaches “first”.

Pseudocompounds

Can we derive the compound-like stress of monomorphemic (*áal*)(*mòes*), etc., as driven by syllable-weight phonotactics, etc., or must we say that it’s a learning error?

Gapping—How does it work?*Linking phonemes*

How do we get them to syllabify with the first element of a compound, and stay with it when the second member gaps?

Clitics

How do we get resyllabification to happen at word-clitic boundary, but not word-word boundary?

How do we account for hiatus resolution at word-clitic boundary? (From the data we have, I think we can’t tell how different it really is from at word-word or clitic-word boundary.)

(16) Voicing in clitics (B1995 ch. 8)—how can we account for it?*Enclitics*

Ik lee[s t]e krant ~ Ik lee[z d]e krant (</...s d.../)
I read the paper

o[p t]ie manier ~ o[b d]ie manier (</...p d.../)
in that way

Proclitics

’[k] ben ’[t] begint
I am it begins

(17) Contractions (B1995 ch. 8)—what to say?

dat ’k	→	[dɑk]	‘that I’
dat je	→	[dɑjə]	‘that you’
dat ze	→	[dɑsə]	‘that she’
dat we	→	[dɑvə]	‘that we’
moet ’k	→	[muk]	‘must I’
heb je	→	[hɛjə] ~ [hɛj]	‘have you’