

Stress distribution in Italian verbs – E. Cavirani and M. Starke

The puzzle In Italian, stress placement is traditionally argued to be determined by an interaction between lexical stress and a default stress assignment algorithm that places stress on the penultimate syllable, which applies only when there is no lexical stress¹ (we mark lexical stressed vowels as â, and vowels that surface as stressed as ĭ):

Nouns				Verbs			
Unstressed roots		Stressed roots		Unstressed roots		Stressed roots	
mèt-a	‘aim’	metà	‘half’	invìt-a	‘she invites’	àbit-a	‘she inhabits’
mèrtf-e	‘goods’	merťĕ	‘mercy’	invit-erà	‘she will invite’	àbit-erà	‘she will inhabit’

These forms suggest that i) *met-*, *merť-*, *invit-* and the F.SG and 3SG.PRS.IND morphemes *-a* bear no lexical stress, and ii) the last vowel of *metà*, *merťĕ* and *-erà*, and the first of *àbit-*, *kàpit-* are lexically stressed, for the default stress assignment algorithm does not apply.

If the aforementioned verbal roots are followed by the INF or the 2PL.PRS.IND morpheme, stress surfaces on the theme vowel (TH) – i.e. on the penultimate vowel – in both types of verbs:

Unstressed roots		Stressed roots	
invit-à-re	‘to invite’	àbit-à-re	‘to inhabit’
invit-à-te	‘you.PL get married’	àbit-à-te	‘you.PL inhabit’

3SG.PRS.IND and INF/2PL.PRS.IND forms thus seem to suggest one thing and its opposite: in 3SG.PRS.IND forms, lexical stress overwrites default stress (*àbit-a*, **àbìt-a*, cf. *invìt-a*), whereas in INF/2PL.PRS.IND forms default stress overwrites lexical stress (*àbit-à-re/-te*, **àbit-a-re/-te*). This raises the following question:

Q1: why default stress surfaces in INF/2PL.PRS.IND but not in 3SG.PRS.IND?

In 3SG.PRS.IND and 3PL.PRS.IND forms, stress is lexically conditioned by the root, namely it falls on the root-final one if the root has no lexical stress, or the one that carries lexical stress.

Unstressed roots		Stressed roots	
invìt-a	‘she invites’	àbit-a	‘she inhabits’
invìt-a-no	‘they invite’	àbit-a-no	‘they inhabit’

In verbs with no lexical stress on the root, default penultimate stress surfaces only in SG forms. This is puzzling: since these roots carry no lexical stress, there seems to be no reason why stress should not shift on the morpheme *-a* in PL (**invit-à-no*; the corresponding e- and i-class verb forms display *-e* and *-o*, instead of *-a* – e.g. *defĭd-e* ‘she decides’, *defĭd-o-no* ‘they decide’ – suggesting that the *-a* morpheme is not TH). This raises the following question:

Q2: why default stress does not surface in 3PL.PRS.IND forms?

Note, finally, that in IMPF forms, stress falls on TH in 3PL (and 1,2,3SG) forms, but on the first vowel – *-a* – of the set of suffixes defining 2PL (and of the *-a* in 1PL *-a-mo*), no matter whether or not the root carries lexical stress.

Unstressed roots		Stressed roots	
invit-à-v-a-no	‘they used to invite’	àbit-à-v-a-no	‘they used to inhabit’
invit-a-v-à-te	‘you.PL used to invite’	àbit-a-v-à-te	‘you.PL used to inhabit’

This raises the following question:

Q3: why does TH attract stress in 3PL (and 1,2,3SG) forms, but not in 2PL (and 1PL forms)?

A solution We maintain that a straightforward answer to the questions above can be provided that builds on four main ingredients: i) both roots and morphemes can be lexically specified as *stress-inactive* or *stress-active*, namely they can bear a stressed vowel (or not) or be pre-/post-stressing, ii) the right-most stress-active morpheme suppresses the stress-activity of morphemes on the left, iii) there must be (only) one stress per cycle, i.e. each time an affix is concatenated, and iv) if no morpheme is stress-active, stress is assigned to the right-most vowel (in nouns too, cf. *mèt-a*) (see ² for a similar proposal). More precisely, assuming nanosyntax³, we maintain that stress assignment goes through the following derivational steps:

1. Merger and lexicalisation of the root
 - (a) If the root bears lexical stress, no default stress assignment
 - (b) If the root bears no lexical stress, assign stress to the final vowel
2. Merger of the next feature(s)
3. (Lexicalisation-driven) movement of the root across the last merged feature
4. Lexicalisation of the newly merged feature(s)
 - (a) If the newly added morpheme is stress-active, overwrite the stress of the previous cycle
 - (b) If the newly added morpheme is not stress-active, keep the stress of the previous cycle

We argue that, besides stress-active roots (e.g. *àbit-*), Italian features the stress-active morphemes shown in the table on the right.

All other morphemes are unstressed. This set includes the SG *-a* and the PL *-no* mor-

Pre-stressing	Stressed	Post-stressing
-te.2PL	-à.TH, -ì.TH, -è.TH	-er.COND/FUT

phemes we find in PRS/IMP.IND forms (we assume that 3p verbs are unmarked for PERSON). As shown in the following table, when such stress inactive morphemes are concatenated with the root, stress surfaces either on the position where it is lexically marked (*àbit-a*, *àbit-a-no*), or on the last vowel of the root (*invìt-a*, *invìt-a-no*). However, when the root is followed by TH, since the latter bear lexical stress, the stress of the previous cycle is overwritten (*invìt-à-v-a*, *àbit-à-v-a*, *invìt-à-v-a-no*, *àbit-à-v-a-no*, *invìt-à-te*, *àbit-à-te*). Finally, if TH is followed by another stress-active morpheme, e.g. by the pre-stressing 2PL *-te* marker, the stress introduced by TH is overwritten (*invìt-a-v-à-te*, *àbit-a-v-à-te*).

This system allows us to derive the stress distribution patterns displayed by Italian verbs with one single mechanism, i.e. one single grammar that applies iteratively to phonological domains that closely reflects the steps of the relevant morpho-syntactic derivation. This improves on previously proposed analyses that resort to Output-Output constraints¹, as well as on Stratal OT approaches, for it does not explode factorial typology (as OO), and it assumes only one grammar.

References ¹Krämer (2009). *The phonology of Italian*. Oxford: Oxford University Press. • ²Bogomolets (2020). *Lexical Accent in languages with complex morphology*. PhD dissertation, University of Connecticut • ³Starke (2010). Nanosyntax: A short primer to a new approach to language. *Nordlyd*

ROOT	TH	IMPF	SG	PL	2PL
invìt			-a		
àbit			-a		
invìt			-a	-no	
àbit			-a	-no	
invìt	-à	-v	-a		
àbit	-à	-v	-a		
invìt	-à	-v	-a	-no	
àbit	-à	-v	-a	-no	
invìt	-à				-te
àbit	-à				-te
invìt	-à	-v	-à		-te
àbit	-à	-v	-à		-te

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