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Palatalisation across the Italian Lexicon

1. Introduction. Italian palatalises velars /k,g/ to affricates [tʃ,dʒ] if followed by front vowels /i,e/, though at the morpheme boundary this rule misapplies in both nouns (Giavazzi 2012) and verbs. This irregularity has roots in the evolution from late Latin - which had an exceptionless palatalisation rule - to modern Italian, which, I argue, provides phonological and morphological cues to the learner as to how the rule applies seemingly irregularly. Verbs show normal palatalisation (1a), underpalatalisation (1b), and overpalatalisation (1c):

(1)   a. viŋ**ko** 'win$_{1SG}$'   b. pa**go** 'pay$_{1SG}$'   c. pja**tʃo** 'please$_{1SG}$'   (cf. pjakwi, 'please$_{1SG.PAST}$')
        vin**tʃi** 'win$_{2SG}$'   pa**gi** 'pay$_{2SG}$'   pja**tʃi** 'please$_{2SG}$'

Palatalisation in an inflected verb is conditioned by a base-derivative relation to the stressed segments in its infinitive. This is a development to theories of output-output faithfulness (Benua 2000) & prominence-conditioned faithfulness (Beckman 1999, Steriade 2001).

2. Palatalisation & verb families. There are consistent patterns within each Italian verb family: *-are* verbs never palatalise; *-ere* and *-ire* verbs display normal or overpalatalisation. Palatalisation results from contingent morpho-phonological properties - where stress falls and the vowel of the infinitive suffix. Three constraints derive nearly the entire paradigm series:

(2) ID(STRID) / ɕ́ (BD) :   Stressed *Base* (infinitive) segments retain stridency in *Derived* forms
            *KI :   Penalise velar - front vowel sequences
    ID(STRID) (IO) :   *Input* segments must match for stridency with *Output* correspondents

Normal palatalisation is only found in a subgroup of irregular *-ere* verbs that do not stress the infinitive suffix (Davis et al. 1987). Thus, in 'víntʃere' (to win), the relevant segment is unstressed, so BD faithfulness is not invoked, and the verb's derivatives palatalise normally:

(3) a.

/vink+o/	ID(STRI) / ɕ́ (BD)	*KI	ID(STRI) (IO)
☞ víŋ.ko			
vín.tʃo			*!
Base = Inf: vín.tʃe.re			

b.

/vink+i/	ID(STRI) / ɕ́ (BD)	*KI	ID(STRI) (IO)
víŋ.ki		*!	
☞ vín.tʃi			*
Base = Inf: vín.tʃe.re			

All other Italian verbs stress the infinitive suffix and proceed to misapply palatalisation in inflection. The entire *-are* paradigm underpalatalises as the infinitive, eg. 'pagáre' (to pay), stresses a [-strid] segment (4a). Overpalatalisation obtains in all but three forms of the regular *-ere* paradigm (see below). For 'pjatʃére' (to please), the relevant [+strid] segment is stressed, and so is retained in inflected forms, even if the suffix would not trigger palatalisation (4b).

(4) a.

/pag+i/	ID(STRI) / ɕ́ (BD)	*KI	ID(STRI) (IO)
☞ pá.gi		*	
pá.dʒi	*!		*
Base = Inf: pa.**gá**.re			

b.

/pjak+o/	ID(STRI) / ɕ́ (BD)	*KI	ID(STRI) (IO)
pjá.ko	*!		
☞ pjá.tʃo			*
Base = Inf: pja.**tʃé**.re			

The entire *-ire* paradigm palatalises. Most *-ire* verbs take an additional affix -isk- which may cause this (5a), but those that do not overpalatalise (5b), exactly as with 'pjatʃére' above.

(5)   a. far**tʃí**re → far**tʃí**sko   'to fill → 1.SG'   b. ku**tʃí**re → ku**tʃo**   'to sew → 1.SG'

3. Irregular forms. BD-faithfulness can be disrupted to cause reversion to normal palatalisation. Markedness accounts for the regular *-ere* forms that do not overpalatalise. These forms have suffixes with initial /w/, but the sequence [tʃw] is unattested in Italian.

(6)   *TʃW ›› ID(STRI)/ɕ́ (BD):   /pjak+wi/ → [pja**kwi**], *[pja**tʃwi**]   (Infinitive: pja**tʃé**re)

More irregular verbs also palatalise normally, eg. 'díre → di**ko**, di**tʃi**' (to say → 1,2SG). Due to suppletion, BD-correspondence is made impossible in these cases as the relevant segments are not present in the infinitive. Palatalisation then follows the lower ranked constraints.

4. The nominal domain. Giavazzi (2012) shows palatalisation in nouns & adjectives is stress-conditioned. It is blocked in phonologically prominent positions: within & immediately after the stressed syllable. This rule governs the M.PL *-i* and the verbalising suffix *-izzare*:

(7)   a. líriko (lyrical) → líri**tʃi**, lìri**tʃi**zzáre   b. antíko (antique) → antí**ki**, antì**ki**zzáre

These suffixes do not shift stress, but the rule also applies to the remaining relevant deverbal suffix *-ire*. This suffix never causes palatalisation as it reassigns stress to its vowel, making the preceding stem-final velar prominent enough to avoid neutralisation. In conjugation, these verbs underpalatalise before -isk- as is predicted: 'bjáŋko (white) → bjaŋ** kí**re → bjan**kí**sko'.

5. A lexical gap. Though *-are* verbs may have stem-final [tʃ/dʒ], eg. 'mandʒáre' (to eat), there are no *-ere* or *-ire* infinitives ending [-k/gere] or [-k/gire] except derivational *-ire* verbs. This gap is derived with the assumption that palatalisation misapplies due to BD-faithfulness; infinitives have no base of their own, so palatalise according to lower-ranked constraints.

6. A diachronic unification. This begs the question of why palatalisation in underived *-ire* & *-ere* verbs is not conditioned by stress. Save *-ire*'s use in derivation, these verbs form a closed class and are particularly irregular. I suggest that the form of these verbs was settled before palatalisation in Italian became stress-dependent, when the rule was exceptionless. As such, a speaker is aware of irregularity in this respect, but has a diagnostic to determine which verbs follow this diachronic rule: only verbs with no derivational base obey exceptional lexically indexed normal palatalisation. This approach is contra Krämer (2009), wherein exceptional constraints hold only by family - the speaker uses both phonology (stress) and morphology (presence of a base) to apply the rule. Additional constraints and final ranking then follow:

(8)   *KI[-BASE] : Penalise velar - front vowel sequences in forms without a derivational base
        *Kĭ : Penalise velar - front vowel sequences in prominently weak positions

(9) *KI[-BASE] ; ID(STRID) / ´σ (BD) ›› *Kĭ ›› ID(STRID) (IO) ›› *KI

*KI[-BASE] is responsible for palatalisation of *-ere* and *-ire* verbs with no base which should not otherwise palatalise. BD-faithfulness is most clearly observed in overpalatalisation of *-ere* verbs (1c) and underpalatalisation of *-are* verbs with antepenultimate stress: 'pratikáre (to practice) → práti**ki**'. The lower ranked constraints govern nouns, adjectives, & derived verbs.

7. Conclusion. Patterns of palatalisation in Italian are the result of the evolution of a rule conditioned by stress, but speakers are aware of the phonology of verb forms that entered the lexicon before this evolution. It is possible for the modern Italian learner to identify verbs which follow the earlier phonology: they have no derivational base. Misapplication of palatalisation found in verbal paradigms is due to a stress-dependent base-derivative constraint, and so stems from the form of the infinitive suffix, as derived above. If it is unstressed, the rest of the paradigm has normal application. If it is stressed, overapplication follows if the infinitive would trigger palatalisation, and underapplication if it does not.

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