

## Prosodic constraints on syntax-prosody mapping: Evidence from Conamara Irish

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This paper discusses new data from Conamara Irish (CI) which investigates the role of prosodic (rhythmic) constraints on prosodic phrasing, and more specifically, looks at how speakers resolve conflicts between MATCH constraints calling for one-to-one correspondence between syntactic and prosodic constituents (Selkirk 2011) and prosodic well-formedness constraints. The data suggest that speakers are sensitive to both types of constraints, such that prosodic phrasing reflects the results of a direct interaction between them, as in an Optimality Theoretic framework. However, I argue that in CI, neither constraint type is privileged over the other, as would be expected if constraints are strictly ranked. Rather, the observed phrasing patterns reflect the effects of *cumulative markedness*, such that when choosing the prosodic phrasing for a given sentence, CI speakers opt in favour of structures that incur fewer total constraint violations, rather than those which privilege one constraint over another. These speakers appear to be sensitive to the relative markedness of possible prosodic structures in a global sense, providing evidence that speakers simultaneously attend to both prosodic and syntactic factors when making decisions about prosodic phrasing.

This claim is based on the results of a fieldwork production study, which investigated phrasing preferences for a set of basic clauses in a neutral pragmatic context for seven native speakers of CI, as evidenced by the distribution of phrasal pitch accents. The sentences (showing default VSO word order), vary the number of words in S and O between two lexical words (Noun+Adjective) and one (noun only), as in (1), to give a set of four minimally-contrastive sentences.

Syntactically, VSO sentences in CI have the structure [V[SO]], such that the S and O form a syntactic constituent distinct from the verb (McCloskey 1996). Assuming that prosodic domains may be recursive (Selkirk 2009, 2011; Ito & Mester to appear), we predict that MATCH constraints will prefer structures where prosodic phrasing preserves this constituency, as in (V(SO)). MATCH constraints compete with a prosodic constraint STRONG-START (Selkirk 2011), which disfavors structures with initial weak elements, like V in (V(SO)). This constraint prefers the phrasing ((VS)O), which phrases the verb with the subject, violating MATCH.

It was found that speakers agree in phrasing in most contexts, but show variation when there is no single candidate that is clearly optimal. As shown in the tableaux in (2), speakers uniformly produced those prosodic structures which incur the least number of total violations of MATCH and STRONG-START: in favour of MATCH in tableaux a and b, but in favour of STRONG-START in c. As for tableau d, the tied structures were equally well attested among speakers, suggesting that both candidates are available.

These results support the claim that prosodic phrasing is sensitive both to syntactic constituent structure (Match constraints) and prosodic well-formedness constraints. Moreover, the direct, global interaction between constraints typical of a weighted constraint framework, as observed in CI, suggests that neither type of constraint is privileged: attested phrasings represent the best possible compromise between preserving information about syntactic constituency and creating well-formed prosodic structure.

(1) Cheannaigh múinteoirí (banúla) málaí (bána).  
 bought teachers lady-like.PL bags white.PL  
 ‘(Lady-like) teachers bought (white) bags.’

(2) Competitions and winners in all four members of VSO paradigm (attested phrasings are indicated by ↷)

a. S and O are binary (N+A)

[V [[N A] [N A]]]	STRSTART	MATCH
a. ↷ (V ((NA) (NA)))	-1 (V!)	
b. (((VN)A) (NA))		-2

b. S is binary, O is non-binary

[V [[N A] N]]	STRSTART	MATCH
a. ↷ (V ((NA) N))	-1 (V!)	
b. (((VN)A) N)		-2

c. S in non-binary, O is binary

[V [N [N A]]]	STRSTART	MATCH
a. ↷ ((VN) (NA))		-1
b. (V (N (NA)))	-2 (V!N!)	

d. S and O are non-binary (variation)

[V [N N]]	STRSTART	MATCH
a. ↷ (V (NN))	-1 (V!)	
b. ↷ ((VN) N)		-1