

The Faroese Rhotic and OL Clusters

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Data. Faroese has two rhotic sounds: [ɹ] and [r]. Despite some variations, related to the geographic area or the age of the speakers, both can be considered as the most standard r-sounds of Faroese (Petersen 2005; Þráinsson et al. 2012). [ɹ] and [r] stand in complementary distribution. The approximant [ɹ] has the widest distribution and can be considered as the default realisation of the rhotic. As shown in (1), it appears in word-initial (1a), word-final (1b) and word-medial (1c) position.

- (1) /ɹ/ as an approximant in Faroese
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|-----|---------------|------------|---------------------|-----|--------------|----------|-----------------|
| (a) | <i>renna</i> | [ˈɹɛnːa] | ‘run.INF’ | (b) | <i>hvørr</i> | [kʰvøːɹ] | ‘who.NOM.M.SG’ |
| | <i>roykti</i> | [ˈɹɔːkʰtɪ] | ‘smoke.IND.PST.SG’ | | <i>far</i> | [fɛaːɹ] | ‘vessel.NOM.SG’ |
| (c) | <i>oyra</i> | [ˈɔiːɹa] | ‘ear.NOM.SG’ | | | | |
| | <i>hoyrdu</i> | [hɔiːɹdɔ] | ‘listen.IND.PST.PL’ | | | | |

However, when the rhotic is included in a cluster with a stop, as illustrated in (2), the apical trill realisation [r] surfaces. Note that this type of cluster may appear word/morpheme-initially (2a) and word-medially (2b).

- (2) Vocalic length before OL in Faroese
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|-----|---------------|------------|-----------------|-----|---------------|--------------|--------------------|
| (a) | <i>gráur</i> | [ˈgrɔːvøɹ] | ‘grey.NOM.M.SG’ | (b) | <i>daprir</i> | [ˈdɛaːhpriɹ] | ‘sad.NOM.M.PL’ |
| | <i>skriva</i> | [ˈskriːva] | ‘write.INF’ | | <i>nakrir</i> | [ˈnɛaːhkriɹ] | ‘someone.NOM.M.PL’ |
| | <i>dríva</i> | [ˈdriːva] | ‘manage.INF’ | | <i>setrið</i> | [ˈseːhtri] | ‘seat.NOM.SG.DEF’ |

Interestingly, /stop+ɹ/ clusters do not block vocalic length at their left, as it is expected from consonantal groups in this language. In Faroese, vocalic length is positional (Þráinsson et al. 2012): a vowel is long if it is stressed and followed by one consonant at most, or when it is final (3a). If one of these requirements is not met, the vowel will appear short (3b).

- (3) Vocalic quantity in Faroese
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|-----|----------------|------------|-------------------|-----|---------------|-----------|---------------------|
| (a) | <i>lin-ur</i> | [liːnøɹ] | ‘soft.NOM.M.SG’ | (b) | <i>lin-t</i> | [liɲt] | ‘soft.NOM.N.SG’ |
| | <i>frek-ur</i> | [fɹeːhkøɹ] | ‘greedy.NOM.M.SG’ | | <i>frek-t</i> | [fɹɛːhkt] | ‘greedy.NOM.N.SG’ |
| | <i>tol-a</i> | [tʰøːla] | ‘endure.INF’ | | <i>tol-di</i> | [tʰɔldɪ] | ‘endure.IND.PST.SG’ |

The aim of this talk is two-fold. On the one hand, I focus on the phonological representation of the rhotic in Faroese: I will argue that the different phonetic realisations of the phoneme /ɹ/ imply different underlying configurations. On the other hand, this problematic leads to a more general proposal on the phonological representation of *liquids* as singletons but also in /obstruent+liquid/ clusters (henceforth OL). Indeed, in Faroese, /l/ exhibits a similar behaviour: when it is included in a cluster with a stop, vocalic length is not inhibited on the left.

OL clusters. Previous works in Government Phonology (Lowenstamm 2003; Scheer 2014) have pointed out the ambiguity of OL clusters. Two proposals are classically defended: (i) OL clusters are a strict succession of an obstruent and a liquid and have the same status as /obstruent+obstruent/ clusters (bipositional hypothesis), (ii) OL clusters are a specific configuration which makes them comparable to affricates. In other words, OL clusters are in fact obstruents with a liquid reflex, which can be dropped with no consequence on the obstruent (monopositional hypothesis).

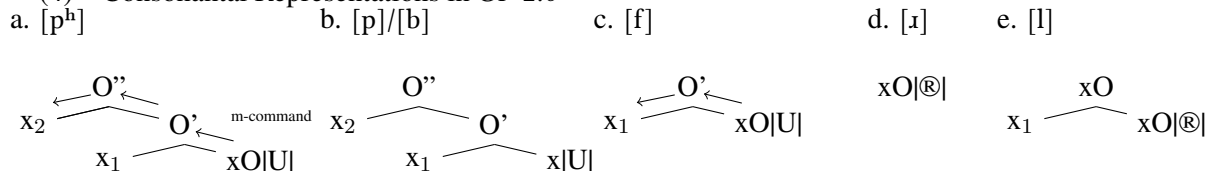
For the particular case of Faroese, both hypotheses are not completely satisfying: if the rhotic in OL clusters is exactly the same as a singleton /ɹ/, we expect the rhotic to have only one reflex, with no consideration for its left environment. On the other hand, the monopositional hypothesis implies that languages have two kinds of obstruents: [p,t,k] and [pʳ, tʳ, kʳ, pˀ, tˀ, kˀ]. Although it could correlate with the present data, such an analysis makes consonantal inventories particularly heavy.

The Structure of rhotic. In this talk, I argue that a third option is possible: OL clusters are indeed clusters and not complex obstruents – in /pr, tr, kl/, liquids are not only a reflex of the stop,

as in the monopositional hypothesis, but full-fledged segments. However, instead of occupying their own skeletal slot, as in the bipositional hypothesis, they can settle into the slot of another segment. This explains the “singleton behaviour” (i.e. no impact on the vocalic length, as shown in (2)) and avoids “overloading” the consonantal system.

This analysis is couched within the *Government Phonology 2.0* framework (Pöchtrager 2006), whose principal contribution is to give segments a *structured* internal layout with a head and complement positions (4).

(4) Consonantal Representations in *GP 2.0*



In stops, the head (xO) successively takes two complements (x₁ and x₂) and projects two levels (O', O''). The distinction between fricatives (4c) and stops (4a-b) relies on the number of projections. Aspiration relies on the mechanism of melodic-command which allows the head to “spread” the melodic content that it is bearing to a second position. Simply put: aspiration equates phonological length. The rhotic /ɹ/ (4d) does not project and consists of a head associated to melody. This peculiar status allows it to be taken as a complement by the head of a stop (position x₁ in (4a-b)). I propose a similar representation for /l/ (2e): more precisely, I propose an *adjunction structure* representation, that contains a head and a complement, but that does not project. It thus forms a more complex object (more complex than /ɹ/) but its final status is the same as /ɹ/. Accordingly, /l/ can also be hosted by a stop. Following this analysis, OL clusters do contain two distinct segments which receive each an interpretation, but since both segments are hosted in the same onset, the preceding vowel ‘detects’ only one consonantal structure at its right. I further argue that the Faroese rhotic’s interpretation depends on its position within the chain: if /ɹ/ is hosted in the structure of another onset and counts as a complement, it surfaces as a trill, if /ɹ/ stands on its own and occupies its own slot, then the approximant surfaces.

Extension. This “affricate-like” analysis can be further extended to some /obstruent+glide/ clusters, which also allow vocalic length at their left, as shown in (5). Note that the palatal sounds in (5) ([fj, ʃ]) are simple on the surface, but underlyingly, they correspond to clusters (/kj, tj, sj/), which can be reconstructed through comparative studies with Icelandic, Faroese’s closest sister language (Author 2016).

- (5) /kj, tj, sj/ clusters in Faroese
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|----------------|--------------|-----------------|
| <i>líkjast</i> | [ˈlɔi:ʃjast] | ‘ressemble.INF’ |
| <i>vitjan</i> | [ˈvi:ʃjan] | ‘visit.NOM.SG’ |
| <i>flesjar</i> | [ˈfle:ʃaɹ] | ‘reef.NOM.PL’ |

In *GP 2.0*, glides are structurally comparable to liquids, in the sense that they do not project and have a quite ‘simple’ internal structure. Accordingly, they also have to ability “sit” in another segment’s structure, namely in obstruents.

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