# Journée d'étude « Rhotiques : l'invariant et ses avatars »

## Résumés des interventions

Université Paris 8 Date : 23 mars 2018

Lieu : Salle de conférences de l'UPS Pouchet, 61 rue Pouchet, 75017 Paris

### Phonetic variation in a phonological class: rhotic unit

Alexander CHABOT Université Côte d'Azur

There exists a phonological class known as rhotics, which is subject to great phonetic variability, both within and across languages. In fact, the variation in terms of place of articulation, mode, and manner is so great that no phonetic quality may be used as a criterion for identifying rhotics; instead, purely phonological terms are employed to capture a purely phonological generalization. This talk seeks to elaborate on what those phonological criteria are in order to provide a better understand of rhotics.

Following this, the argument that rhotics constitute clear evidence for a phonetically arbitrary phonological class; if such is the case for rhotics, then it may be the case for all of phonology. If so, then the question is why should rhotics, rather than say, obstruents, be subject to such expansive phonetic variation? The answer to this question lies not in phonology, but rather in the articulation of rhotic segments; rhotics are phonetically complex segments in which articulatory variation is especially pronounced due to physiological artifacts not present in other classes of sounds.

## Not as you R: Adapting the French r into Arabic and Berber

Mohamed LAHROUCHI CNRS & Université Paris 8

Many studies have been devoted to rhotic consonants, which aimed to establish a unity in their phonological behaviour, despite their high phonetic variability. In many languages, these consonants behave as a class whose phonological properties often revolved around the same set of features (see Hall 1997, Walsh Dickey 1997, Wiese 2001, 2011, among others). In this paper, we examine the adaptation of the French rhotic in Arabic and Berber. In loanwords borrowed from French, the uvular variant [ $\mathfrak{b}$ ] is systematically interpreted as a coronal tap, although Arabic and Berber have phonemic / $\mathfrak{f}$ / and / $\mathfrak{f}$ / (e.g. bureau [ $\mathfrak{b}$ y $\mathfrak{b}$ 0] > [ $\mathfrak{b}$ iru] 'office', train [ $\mathfrak{t}$  $\mathfrak{b}$ 6] > [ $\mathfrak{t}$ ræn] 'train', rasoir [ $\mathfrak{b}$ 8azwa $\mathfrak{b}$ 3] > [ $\mathfrak{t}$ 7azwar] 'shaver'). Two hypotheses will be considered in this respect: One which claims that the adaptation of loanwords is done by bilinguals who have access to the underlying form of the French rhotic (Paradis & LaCharité 2001), and the other which posits that the selection of the coronal tap at the expense of the velar fricative is determined by their featural makeup. One problem which might arise with the former hypothesis lies in forms adapted by uneducated people, arrived in France in the early 70s, who interpret the French uvular systematically as a coronal (e.g. [ $\mathfrak{b}$ 1]ouen > [ $\mathfrak{t}$ 1 y name', met[ $\mathfrak{b}$ 3] o [ $\mathfrak{t}$ 6 y subway', a[ $\mathfrak{b}$ 8] genteuil > [ $\mathfrak{t}$ 8 y name', place voltai[ $\mathfrak{b}$ 8] > [ $\mathfrak{t}$ 9 | [ $\mathfrak{t}$ 9 y name', place voltai[ $\mathfrak{b}$ 9 | [ $\mathfrak{t}$ 9 | [ $\mathfrak{t}$ 9 | [ $\mathfrak{t}$ 9 y name')] 'city name', place voltai[ $\mathfrak{b}$ 9 | [ $\mathfrak{t}$ 9 | [ $\mathfrak$ 

Within an element-based approach, we examine the melodic content of the coronal rhotic as opposed to the velar. Various phonological processes will be discussed in this respect, including r-deletion, /l/-change into [r] and spirantization (/q/ > [ $\gamma$ ]). These phenomena will prove interesting in determining the content of rhotics in Berber and Moroccan Arabic: /l/ change into [r] and /r/ deletion will be shown to follow the same lenition path, which consists in deleting one element in each segment: removing the closure element from the Tarifit Berber /l/ leads to [r] (e.g. /ul/ > [ur] 'heart', /xlf/ > [xrəf] 'replace'), while deleting the coronal element |R| from /r/ (and probably also the |A| element) results in compensatory vowel lengthening (e.g. /argaz/ > [a:jaz] 'man').

#### Phonological identity of Dutch rhotics: variationist and articulatory evidence

Koen Sebregts & Patrycja Strycharczuk Universiteit Utrecht University of Manchester

While the Dutch rhotic may be realised as a trill, tap, fricative or approximant, and at various places of articulation, its unity in terms of lexical contrast, i.e. as a single phoneme, is undisputed. However, questions remain as to the phonological status of its many allophones. Sebregts (2015) distinguishes between 20 variants of Dutch /r/, but it is unlikely these are all separate phonological objects. Instead, they may all be simply phonetic implementations of a single object, or there may be a restricted number of allophones with a special status, in the interface between phonology and phonetics. We examine to what extent particular allophones of Dutch /r/ behave according to their phonetic characteristics, and to what extent as part of a common category. Central to our argument is a study of /r/ (de)gemination in sandhi, i.e. derived coda-onset clusters of /r#r/ (Strycharczuk & Sebregts, submitted).

### Gothic r versus Old High German r: Implications from Phonological Patterning

Andrew KOSTAKIS
Universität Leipzig

Due to a sound change known as Gothic Lowering (GL), all instances of Gothic [e] and [o] were regular reflexes of \*[i] and \*[u], respectively, before the graphemes represented by <r>
and <h> (a dorsal fricative). I argue that this development indicates that Gothic <r>
and <h> were specified with vocalic height features. However, different feature models lead to two competing analyses of the change. On the one hand, <r>
and <h> can be marked with the SPE-like feature [high], whereby GL involves a dissimilation of the feature [low] (i.e. |a|), whereby GL is an assimilation of the [low] feature. Because there appear to be no data in Gothic that shed light on these ompeting analyses, I turn to a related language where <r>
old High German (OHG). In OHG, <r>
and <h> act as blockers of a process that involves the spreading of the feature [high]. I contend that this blocking effect can be accounted for by evoking the no-crossing constraint – but only if OHG <r>
and <h> are [high] sounds, and not [low] (|a|-like) sounds. If Gothic and OHG <r>
and <h> pattern as a natural class for the same reason – which is expected since they are regular reflexes of the same sounds, namely, PGmc \*[r] and \*[x] – it follows that GL was a dissimilatory process and that early Germanic rhotics were [high] rhotics.

## Word-initial rhotic avoidance: a typological survey

Laurence LABRUNE Université Bordeaux Montaigne et CLLE ERSS (CNRS)

In a number of languages of the world, liquid - and more specifically rhotic - consonants tend not to occur in the initial position of words. The purpose of this study is, first, to document word-initial rhotic avoidance cross-linguistically, and second, to investigate the reasons why rhotics should constitute poor word initials from a phonological perspective. This presentation will focus on the first of these two issues. The first part of the talk will present the results of a survey conducted upon a sample of 200 languages (based on WALS, Haspelmath 2005) in order to investigate rhotic phonotactic patterns in relation to word-initial avoidance. In the second part of the talk, I will discuss a number of representative cases, including Korean, Basque, Yidinj, Tucano, Ju/'hoan, Kaingang, Kanoê and Tommo So.

#### Positional factors in the distribution of rhotics

Rosangela LAI Università di Firenze

The behavior of rhotics, including their status in stop plus liquid clusters, has been thoroughly investigated in the CVCV framework (Lowenstamm 2003; Lai 2014; Scheer 2014; Carvalho 2017; Tifrit 2017, a.o.). In this work, assuming the tenets of the CVCV model (Lowenstamm 1996; Scheer 2004; a. o.), I will focus on the positional effects of Government and Licensing on rhotics. I will consider the various types of metathesis attested in Sardinian. I propose that the structural conditions required for the application of metathesis can be expressed in terms of the positional effects of Government and Licensing on liquids. The core proposal is that liquids always move from a relatively weak to a stronger position, the strength hierarchy of the positions being *initial* and *post-coda > coda > intervocalic*. I will focus on two diachronic metatheses that affected the word-internal stop-plus-liquid clusters (Molinu 1999; Lai 2014, 2015a, to appear). My claim is that in both cases, the landing site of the liquid was the strongest position available. Then, I will address one later phenomenon of metathesis (a residual synchronic metathesis) along similar lines, which applies to both rhotics in the coda position and in stop-plus-liquid clusters (Scheer 2014; Lai to appear).

#### Rhotics and Gemination: a doubly troubled relationship

Shanti ULFSBJORNINN *UCL – London* 

Bradley (2006), analyses the rhotic system of Dominican Spanish and concludes that the tap – trill contrast is not one based on an underling singleton/geminate contrast.

Bradley's analysis makes (Dominican) Spanish one of the large set of languages where trills are not underlying geminates. This set of languages notably contains a subset where rhotics are specially excluded from gemination. In these languages, rhotics either have their gemination blocked and compensated for (Tiberian Hebrew) or their geminated rhotics are converted into stops (Malayalam).

Rhotics eschew gemination, so the question becomes: In what domain/module should we place the explanation? The answer, I suggest, is always found in substantive factors (phonetic, diachronic). However, these explanations can have multiple levels, which doubly conspire against rhotic geminates. Interestingly there is a phonological condition on gemination, which is indirectly affected by the phonological natural class that rhotics are put in. Many languages limit geminates to obstruents and hard-sonorants and rhotics are, for substantive reasons, hardly ever put into this natural class. Therefore, these languages will systematically avoid geminate rhotics.

Said that, nothing formally stops the phonology from being able to represent trills as underlying geminates. For one example, I will argue that Bradley (2006) is incorrect to claim that Dominican Spanish doesn't have underlying rhotic geminates. I will show that Dominican Spanish has 4 underlying representations that correspond to its phonetic rhotics (including the geminate). Each one follows from the various configurations permitted by Strict CV phonology (Lowenstamm 1996) and the conditions stated in the Coda Mirror (Ségéral & Scheer 2001; Scheer & Ziková 2010). Moreover, in Dominican the place features of rhotics must be +Lic by a filled V position, which is curiously the same restriction on /s/. I will go onto show that this causes the antagonism between these two sounds more broadly in Spanish.