PhonLaF – Phonetic Online Material for Luxembourgish as a Foreign Language

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1 Introduction Phonetic material and learning methods for Luxemburgish as a foreign language (LaF) are rare. The aim of the on-going project PhonLaF is to develop an online platform to provide learners and teachers of LaF with various phonetic material.

Although Luxemburgish with its approx. 260,000 native speakers can be seen as a comparatively small-sized language there are two groups with a rather strong motivation to learn this language: i) there are many cross-border workers (approx. 140,000) from France, Belgium and Germany, and ii) Luxembourg has a rather high number of immigrants, predominantly from Portugal (more than 80,000 native speakers in Luxembourg). For these reasons there is a need to teach and to learn Luxembourgish starting from German, French and Portuguese as the main first languages.

Although the platform we are developing is still in the first phase of development a protoytpe can be found at http://phonlaf.uni.lu. It is realised with the content management system *plone*.

Three different *target audiences* for the platform were identified:
i) linguists, especially phoneticians/phonologists,
ii) teachers of LaF,
iii) learners of LaF.
Each of these groups has their own 'entrance' into the portal although it is open for everybody interested in phonetic aspects from a linguistic, teaching or learning perspective. The material provided includes orthographic and phonetically transribed written language as well as audio files and graphical illustrations. The approach of this project aims at pedagogical rather than technical innovations.

2 PhonLaF for Linguists

2.1 The core of this part is the representation of *the* sound inventory of Luxemburgish. Consonants and vowels are represented with IPA symbols in tables and diagrams similar to the 'Illustrations of the IPA' (IPA 1999) and the Journal of the IPA. Each sound segment is illustrated with several example words (not only one) in order to show the variance of letter-to-sound correspondences which can sometimes be quite complex and hence confusing for learners. For each selected word there are audio files of several speakers of standard Luxembourgish. This approach follows the one displayed in the eLAUT webpage of Saarland University (www.coli.uni-saarland.de/elaut).

It should be noted here that Luxembourgish can be seen as a language with a medium degree of standardisation (cf. Gilles 1999). The accent of the central area of Luxembourg (around Luxembourg city) is normally considered the standard variety. Although there are descriptions for local dialects a phonological description for *standard* Luxembourgish is as yet missing.

Table 1 represents the consonants, figure 1 the vowel diagrams of Luxembourgish.

	bilabial	labio-dental	alveolar	post-alveolar	alveolo-palatal	palatal	velar	uvular	glottal
plosives	p　b		t　d				k　g		
fricatives		f　v	s　z	ʃ　ʒ	ç		x		h
affricates			ts	tʃ					
nasals	m		n				ŋ		
glides	w		l			j			
trill								ʀ	

Table 1. Consonants of Luxembourgish. Notes: [w] is a labio-velar approximant, not included are [ʑ, ɣ] that appear only in a few words and [ʤ] in loanwords.
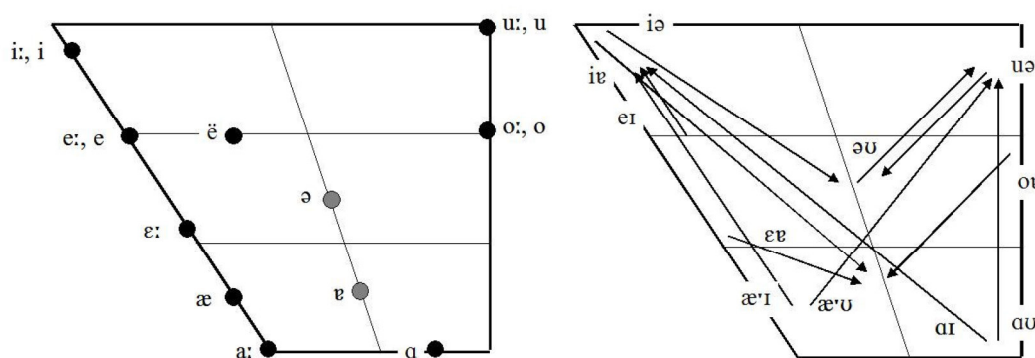

Figure 1. Monophthongs (left) and diphthongs (right) of Luxembourgish ("r"-diphthongs included). Vowels from French and German loanwords like [y:, y, ø:, œ:, ɛ̃, ã, õ, ɔɪ] are not included.

2.2 *Audio illustrations* are not only provided for the example words but also for connected speech. The Luxemburgish translation of the phonetic standard text "The Northwind and the Sun" is available in two versions: i) as a read aloud text (as usual in many phonetic studies), and ii) as a re-told version providing a more spontaneous form of unscripted speech. The text has the advantage for both the linguist and learner that the user is able to read synchronously with the speaker. The spontaneous narration more closely resembles speech styles found in everyday situations. Sound files are embedded in the webpage (standard shockwave flash plugin required). This avoids the known problems of having to i) install a further plugin and ii) open too many windows.

2.3 *Further material* is provided with links to online descriptions of the grammar of Luxembourgish, various lexicographic projects and a bibliography of linguistic studies dealing with Luxembourgish and the varieties in surrounding areas. There are also links to several online dictionaries with audio for each Luxembourgish entry.

3 PhonLaF for Teachers The needs and interests of teachers are only partially the same as those of linguists. Teachers usually consider linguistic material as a "quarry", i.e. they are often seeking material appropriate for their specific classes and individual students. In addition teachers are looking for (quick) overviews for their situations with various L1s. They do not usually have the time nor often the potential to access phonetic and phonological descriptions of sometimes 'exotic' languages along with audio examples.

3.1 The section on *didactic material* mainly consists of *minimal pairs* of the main problematic sound contrasts for learning Luxembourgish. In particular the rich vowel system (see figure 1) with a great number of diphthongs represents a source of complexity and confusion for French as well as German learners.

3.2 The section *L1 descriptions and contrastive phonetics* provides concise information about the segmental and the prosodic system for various languages such as French, Portuguese, German and English. The approach is similar to the one succesfully applied with "phonetik-international" (http://www.phonetik-international.de), an online portal with phonetic descriptions for more than 50 source languages for German as the target language (Hirschfeld et al. 2002-2008). For each language, descriptions are given of the vowel and consonant inventories, intonation, and sound-letter correspondences, along with didactic recommendations and the most frequent deviations to be expected.

3.3 A disadvantage of *written* descriptions of phonological systems is the missing audio 'picture', which might be negligible for scholars (although sometimes useful) but very important for practitioners. A promising approach to tackle this problem is the *speech accent archive* (http://accent.gmu.edu) of George Mason University (Virginia). The idea is that interested persons can listen to many foreign accented speech samples. For each of many non-native speakers a read-aloud version of the same text is available as an audio file with its corresponding phonetic transcriptions. Depending on the L1 of the non-native speaker general deviations are listed, such as "final devoicing". The orthographic version contains the *expected* deviations in one colour and the *realised* deviations in a different colour. This allows the listener/reader to monitor the theoretically known deviations for selected languages.

4 PhonLaf for Learners It is a truism that learners can show quite different interests in *what* they would like to learn and *how* they would like to achieve their individual goals. Thus, a commuter from France working in a shop will have a different approach than a teenager at school who has migrated from Portugal. They both have in common that they are unlikely to be interested in scholarly work nor in material developed for teachers. They are usually more interested in getting a *brief* and *quick* access to *only the most important features* to learn, preferably transmitted through multiple modalities with audio as the central channel.

4.1 Audio files of the words serve as carriers to demonstrate the most important phonetic problems to be expected. This also includes explanations of the writing system that also causes problems for some letters or combinations of them (see table 2).

Letter	*Sound*	*Luxembourgish word*	*Pronunc.*	*Sound*	*German analogy*	*Pronunc.*
<éi>	[eɪ]	schéin ('nice')	[ʃeɪn]	[ɑɪ]	Schein ('glow')	[ʃɑɪn]
<é>	[e]	Réck ('back (n)')	[rek]	[ɛ]	Reck ('high bar')	[rɛk]
<ë>	[ë]	Dëppen ('pot')	['dëpən]	[ɛ]	Deppen ('fools')	['dɛpn]

Table 2. Examples for problematic letters and their pronunciation in Luxembourgish and their realisation by German readers/speakers by virtue of orthographic analogy to the unknown diacritics.

4.2 For sound discrimination exercises minimal pairs are used, e.g. wannen ('to win') – wennen ('to turn') – wënnen ('to wind') – winnen ('to accustom') – Wonnen ('wounds') – wunnen ('to reside').

4.3 A good base to demonstrate differences in the phonetic realisation between source and target language is recordings of the many words with the same written form and meaning but with a different pronunciation (see table 3).

Word	Luxembourgish	German	French
Chef ('boss')	[ʃ**æ**f]	[ʃ**ɛ**f]	[ʃ**ɛ**f]
schwätzen ('to talk')	['**ʃw**ætsən]	['**ʃv**ɛtsn̩]	
Coup ('beat')	[k**ʰ**u]		[ku]

Table 3. Examples for "same word – different pronunciation". Each transcription is accompanied by an audio file as well as explicit hints to the differences, which are marked in bold in the transcription.

The instruction for an exercise looks as follows:
1. Compare the following audio examples of the same word spoken by a Luxembourgish, a French/Belgian and a German person.
2. Now listen to the audio file and decide whether the speaker was Luxembourgish, French/Belgian or German.
3. Listen to the phrase spoken by the Luxembourgish person, then imitate her or him. Look out for <xyz> .

Here, <xyz> denotes the problem to be expected for each phrase, depending on the first language of the user. For example, with "Moien!" (engl. "Hello!") it is important for learners with German as L1 to note that the second syllable clearly has a vowel – unlike Northern German "Moin". Learners with French as L1 must note that the second syllable is a vowel followed by a nasal consonant more like in French "moyenne" and unlike French "moyen". The French speaking person must also learn to stress the first syllable.

The exercises were developed with the open source software exelearning (http:// exelearning.org). Teachers can integrate parts of the learners' section for their teaching and can achieve so a basic level of interactivity between between learner and teacher.

5 Summary We have reported here on an ongoing project that aims to provide phonetic material for Luxembourgish as a foreign language via a website. Selected audio files help to illustrate the sound segmental as well as (parts of) the prosodic structure of Luxembourgish on the level of the word and partially above the word. To establish the online-portal several successful approaches from other web-based phonetic material were considered. Although the material can be used by everybody interested in Luxembourgish phonetics we aim to reach three different target audiences with particular 'entrances' in the portal: linguists, teachers and learners. We are currently preparing an evaluation on the technical level and on the content/ pedagogical level, taking into account the different target audiences and various source languages (first results to be reported at the conference). As a next step, we will develop exercises comprising stretches of speech longer than one or two words so that typical intonational features of Luxembourgish can also be made audible and visible.

References

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