Developing L2 pronunciation skills: goals and hurdles for online learning

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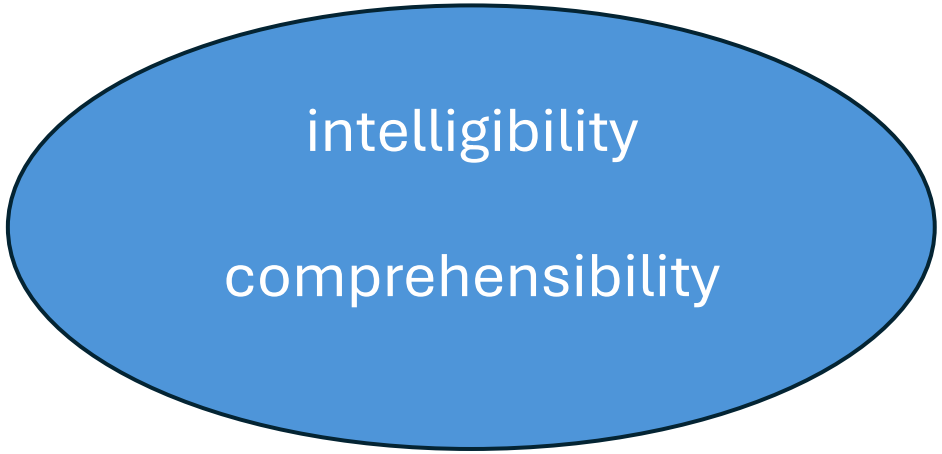
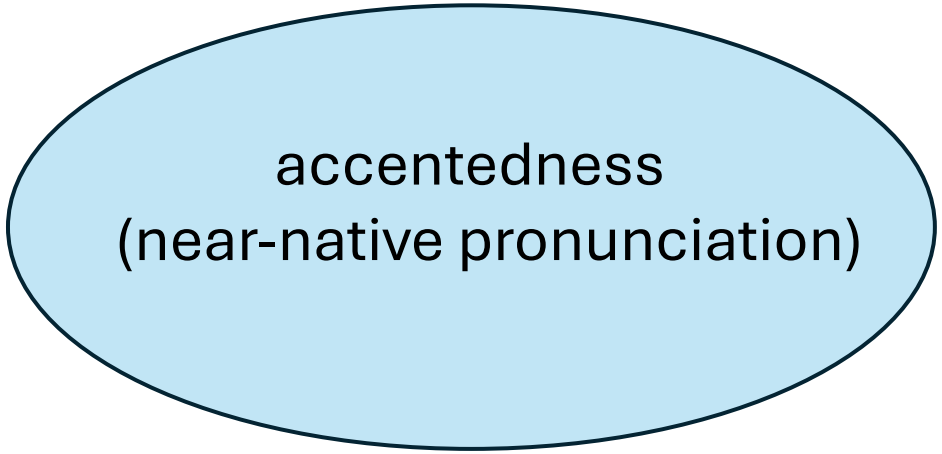
Goal of language learning

L2 researchers



Argument: Near-native pronunciation is unnecessary for good intelligibility and comprehensibility (Derwing & Munro, 1997) and unrealistic (Isaacs & Trofimovich, 2017).
Positive effect: acceptance of foreign accent in communication context.
Problem: Different deviations from a target pronunciation increase variability and lead to a greater cognitive load on listeners.

some language teachers and learners



Argument: Learners sometimes want to aim for near-native pronunciation (Timmis, 2002; Derwing, 2003; Levis, 2020).
Learners can achieve near-native pronunciation given enough input (Flege, 2018).
So why should we deny those learners who want to aim for near-native pronunciation this possibility?

Goals of language learning (proposal)

L2 researchers

intelligibility

comprehensibility

minimum level
in assessment

some
language teachers and learners

accentedness
(near-native pronunciation)

support / instruction
to those interested

Learners' success graded dependent on learning level, with grade A at highest level reflecting near-native pronunciation. Lower grade levels are acceptable.

Intelligibility/comprehensibility as a learning goal

Focus on intelligibility/comprehensibility reflected in Lingua Franca Core for English (Jenkins, 2000).

Despite its focus on intelligibility, not even variation that is part of outer circle variants like Indian English is accepted (e.g. the LFC requirement that word-initial voiceless plosives are aspirated disallows realisations like in tin ([[ɪn] instead of /t^{h}ɪn]).

Two problems present themselves for multilingual CAPT like CALST:

1. No Language Core has been developed empirically for other languages. It is far from trivial how to develop a language Core for other languages.
2. For practical purposes, CALST uses only one male and one female speaker. How can we find role model speakers whose pronunciation reflects the LFC?

Hurdles to language learning

cross-language interference

sounds (dependent on position)

clusters

word stress

word accents

and more

depends on combination of target (L2) and native language (L1)

Hurdles to language learning

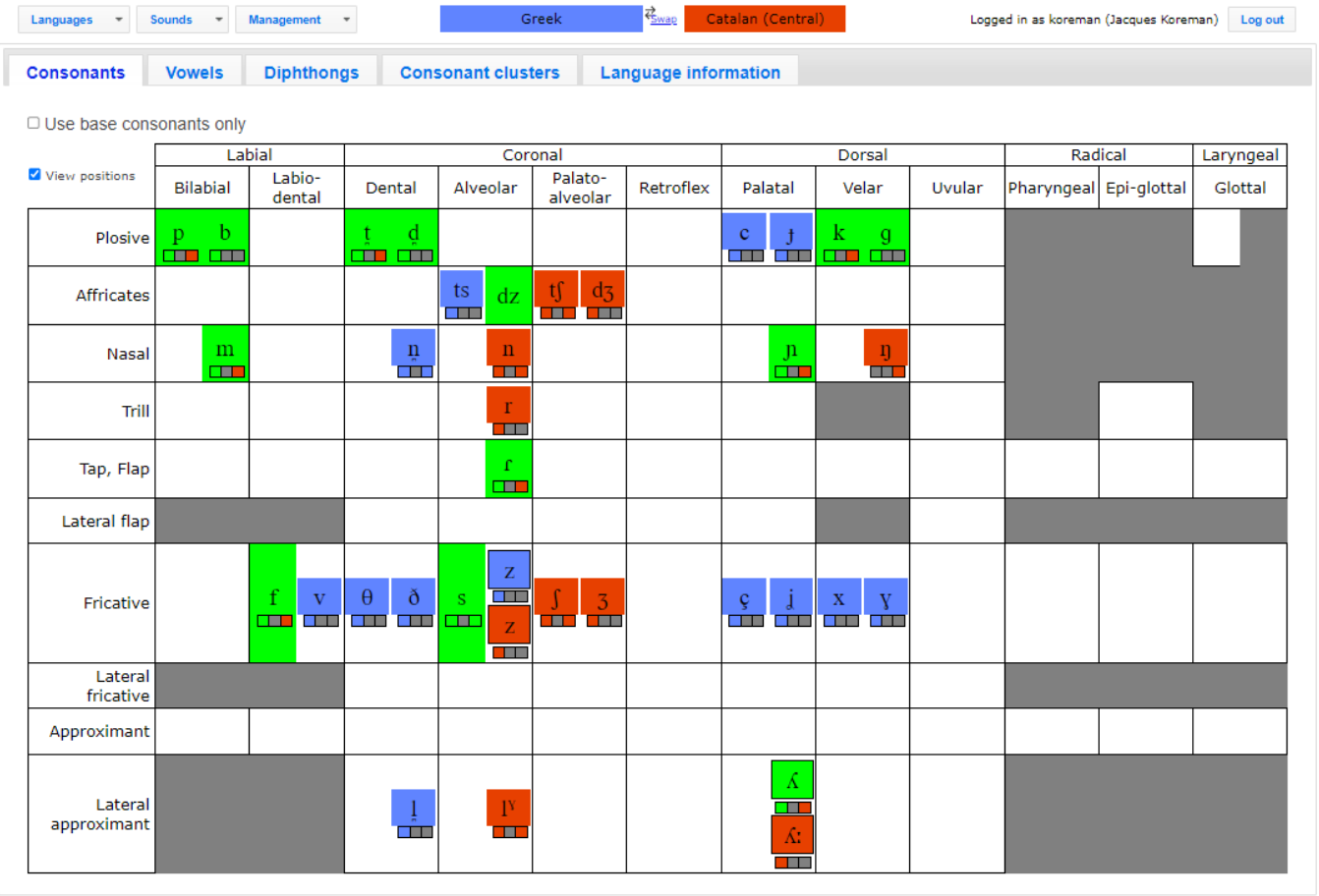
cross-language interference

sounds (position-dependent):	L1 transfer, also for known sounds in unfamiliar positions; differential substitution dependent on the learner's L1; position-dependent allophones
clusters:	repair strategies known but not always predictable. Epenthesis, particularly in clusters, will affect the rhythm negatively and may cause big problems for comprehensibility. The LFC (see later) allows reduction of syllable-final clusters, although this can decrease intelligibility (but it only mentions specific clusters that are often reduced also by native speakers)
word stress:	stress-deafness in learners whose L1 has no or fixed word stress
word accents:	difficult both for learner with L1s that do not have word accent but also for learners who do have accent
and more:	reduction, rhythm, coarticulation/assimilation, resyllabification, linking, …

depends on combination of target (L2) and native language (L1)

Solution in CALST

(Computer-Assisted Listening and Speaking Tutor)

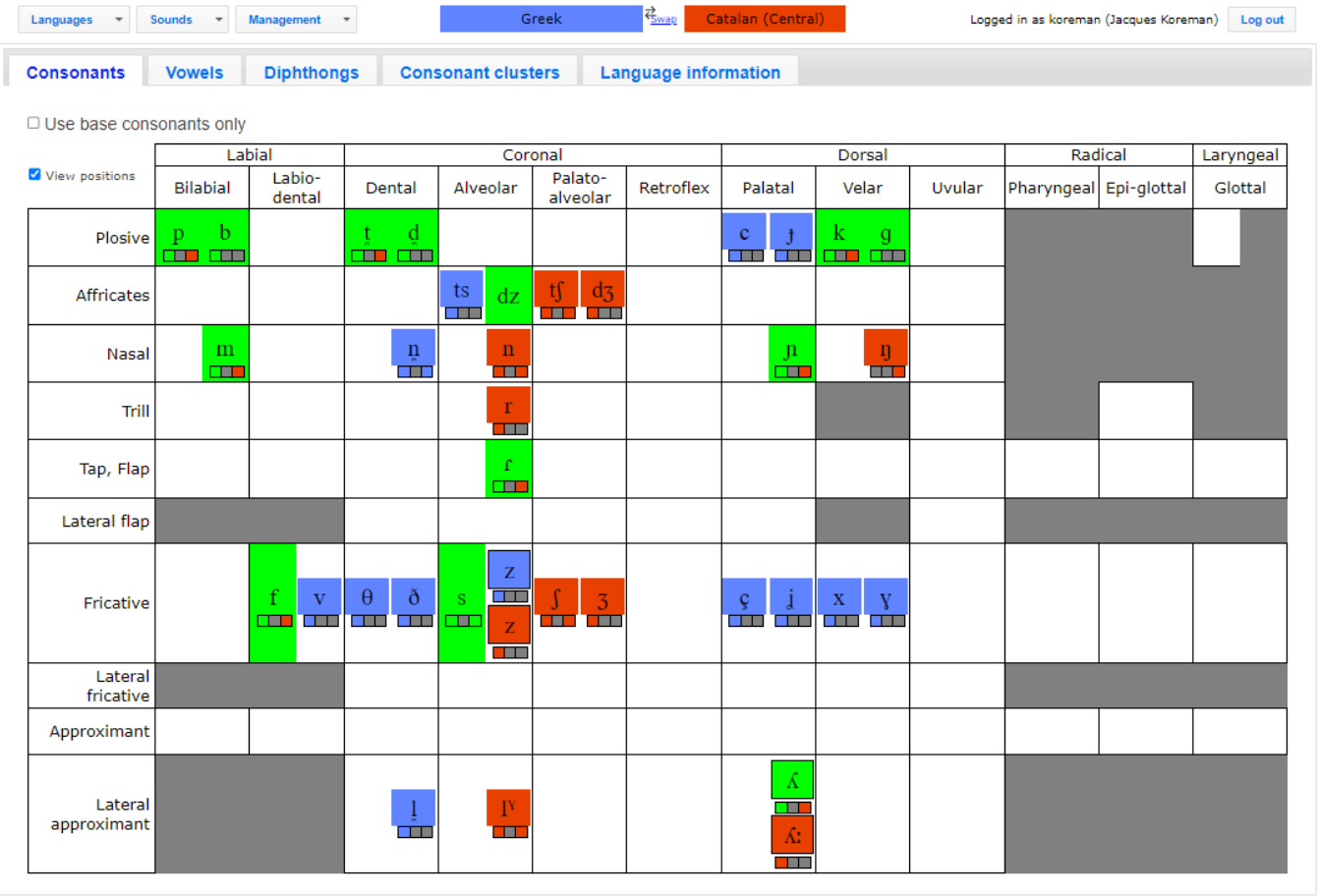


Exercises based comparison of languages in L1-L2*map*:

- consonants, vowels, and diphthongs
- based on UPSID, extended to 500+ languages
- added positional information and clusters for a few of the languages

Solution in CALST

(Computer-Assisted Listening and Speaking Tutor)



Colour coding: sounds on a blue background occur only in Greek, sounds on a red background occur only in Catalan; sounds on a green background occur in both languages.

All «red sounds» are connected with exercises in CALST (comparing them with all sounds in the target language which differ in exactly one IPA dimension + length).

The three squares under each sound represent onset, nucleus, and coda.

The figure shows for example that both languages have /f/, but it only occurs at the end of the syllable in Catalan. Greek learners of Catalan therefore get exercises for /f/ in the coda.

CALST exercises

Listen & Click 1: discrimination

Listen & Click 2: identification

Listen & Speak: pronunciation

Listen & Write: spelling

Try this out on https://pygmalion.hf.ntnu.no/ (not perfect because it is being reimplemented with improved functionalities), see also https://www.ntnu.edu/isl/calst

Reasons for languages in CALST

English	a widely spoken as a lingua franca by many speakers with a large range of L1s. We've only implemented SSBE (not ELF).
Norwegian	lacks an accepted standard pronunciation, therefore several dialects
Spanish	necessary for many migrants to be able to interact with authorities and integrate in host society (This was the goal of the easyRight EU-project.)
Catalan	difficult to practise because its speakers are bilingual (Catalan-Spanish) and speakers often accommodate non-native speakers by speaking Spanish

One more reason, not yet explored…

Two related reasons, really:

1. language documentation of pronunciation

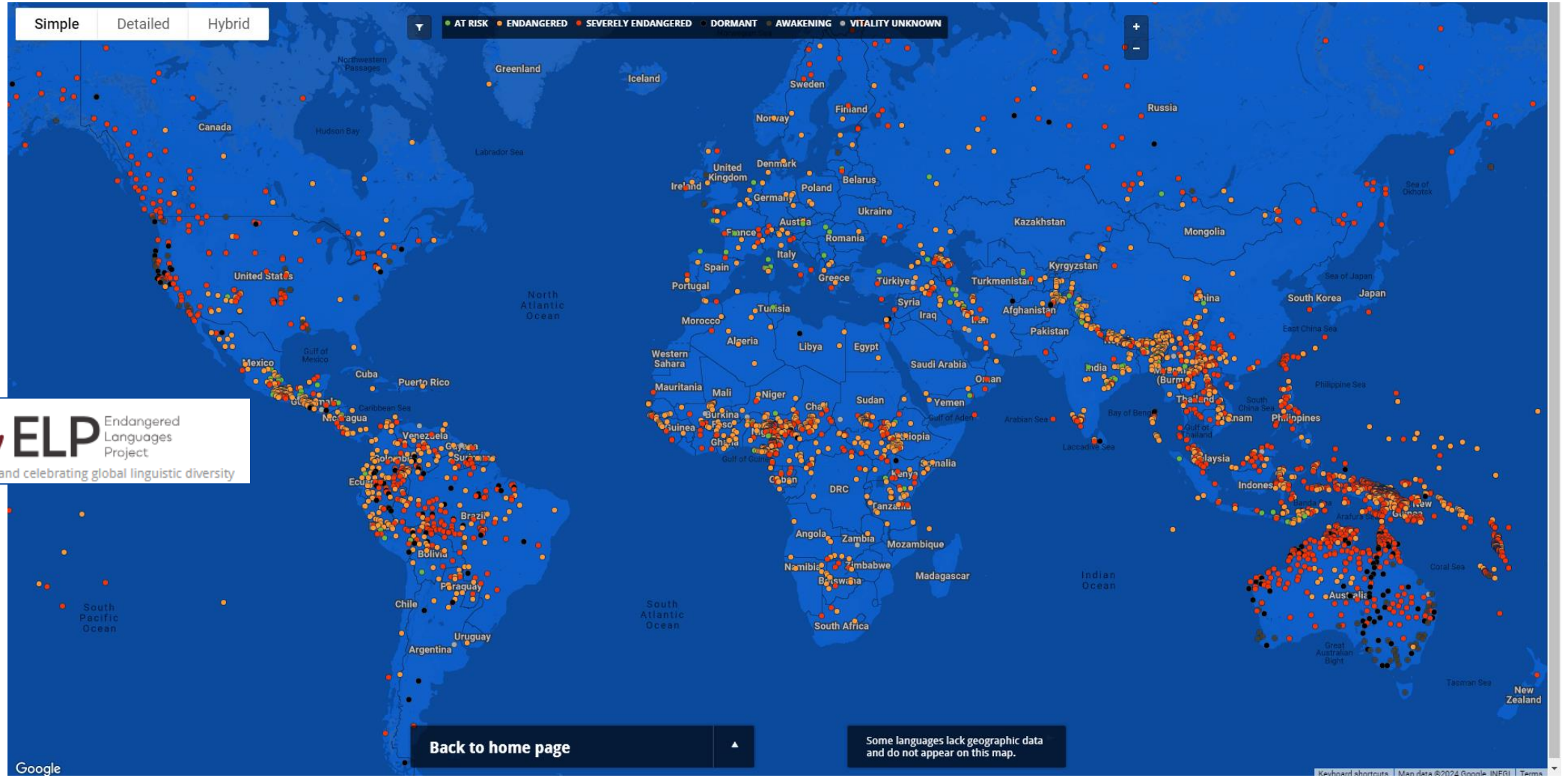
2. language revitalisation

In Norway: Sámi languages, also spoken in Sweden, Finland, and North-Western Russia: Lule Sámi, 650 speakers; North Sámi; Pite Sámi (unknown number of speakers); Skolt Sámi (350 speakers); Southern Sámi, 600 speakers); Yiddish

https://en.wikipedia.org/wiki/List_of_endangered_languages_in_Europe

...and many others

https://www.endangeredlanguages.com/



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See also CALST at https://www.ntnu.edu/isl/calst and L1-L2*map* at https://l1-l2map.hf.ntnu.no/

Thank you!