

Title: Music, singing voice and language learning: a literature review and some suggestions of use in the teaching of phonetics.

ABSTRACT:

The close functional (Patel, 2003; Peretz et coll., 2011), structural (Arleo, 2006; Szendy, 2009), phylogenetic (Brown, 2000; Mithen, 2005) and ontogenic (Brandt et coll., 2012; Cross, 2013) links between music and language have been studied by many disciplines. Some researches have shown the effects of music and singing on language acquisition, notably for phonetic integration (Schön et coll., 2008; Cornaz, 2014). Music may reinforce speech signal processing through a probable improved sensing of acoustic cues. Also, in spite of a number of differences, so much is shared indeed between singing-voice and speech, for instance in speech acoustics and voice-production physiology (Henrich, 2011) that the relevance of a sung approach is accounted for. Using music and singing in the teaching of native and foreign languages has proved a considerable asset, explaining the increasing attention borne to singing in class (Peretz & Kolinsky, 2009). In the case of second language (L2) French, course book authors tend to include that approach more frequently to enhance grammar, civilisation, lexicon... (for exemple: *J'apprends le français en chantant*, Deblende & Heuze, 1992 ; *Fluo*, Meyer-Dreux et coll., 2003 ; *Chante et découvre le français*, Vorger et coll., 2009). Nevertheless, having recourse to singing as a phonetic enhancer remains exceptional in foreign language courses.

As progressively demonstrated in field experiments and reported in the scientific literature, singing could be most useful in the remediation of proprioceptive, auditory and articulatory difficulties of the learners, as well as provide beneficial effects on memory, motivation and class atmosphere. Further examples of approaches on improving the phonetic competence from books on singing and on speech therapy are reviewed. A set of useful singing-voice exercises from diverse disciplines, focusing on segmental integration, such as the visual rendering of voice mechanisms, the vocalization of sounds, the perception and proprioception of phoneme accuracy and the example of a dedicated "nursery rhyme" as teaching material is included.

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Sandra CORNAZ is a French and Italian PhD in sciences of language and linguistics. Her research deals with Singing-Voice and the Acquisition of Phonetics in the learning of French as a Foreign Language. She initiated and coordinated the RJCP symposium in 2011 (Grenoble, 80 young researchers participated), and contributed to CEDIL 2010 and JEP 2012 among other academic conferences. She has been responsible for courses in infant language development, phonetics and general linguistics at the University of Grenoble. She is also a teacher of French as a Second/Foreign Language since 2003 and has worked in Botswana, China, Germany, Italy and France. To enhance speech perception and production, she uses French songs and the singing-voice. Sandra Cornaz is a member of INNOVA-Langues, an international project which aims at developing some original tools for the L2 teaching and learning. She regularly gives courses to foreign language teachers on how to use the singing-voice as well as theatre and drama expression in class. She has

belonged to various amateur choirs between 1993 and 2006. She also studied classical singing at the music conservatory in Grenoble for two years (2004-2006).

- Past degrees: M1-M2 in didactics of foreign and second languages, license in Italian, University general studies diploma in Italian and in philosophy

- Publications:

▪ Cornaz, S. & Fonio, F. (2014). Présentation et premiers résultats de la conception d'un référentiel de compétences en pratiques artistiques et apprentissage des langues. E-CRINI, 6, Nantes.

▪ Cornaz, S., Chovelon, C. & Jauneau-Cury, N. (2014). [La vocalise et la comptine au service de la didactique des langues. Utiliser et concevoir des comptines pour la correction phonétique, et les exploiter en enseignement-apprentissage de la phonétique.](#) E-CRINI, 6, Nantes.

▪ Cornaz, S. & Caussade, D. (2014). Musique, voix chantée et apprentissage : une revue de littérature et quelques propositions d'exploitation en didactique de la phonétique des langues. E-CRINI, 6, Nantes.

▪ Caussade, D., Cornaz, S. & Tisserand, C. (2014). La LSF pour apprendre le lexique d'une chanson en LE : une étude préliminaire. E-CRINI, 6, Nantes.

Cornaz, S., Henrich, N., Vallée, N. (2010). L'apport d'exercices en voix chantée pour la correction phonétique en langue étrangère : le cas du français langue étrangère appliqué à des apprenants italiens d'âge adulte. Les Cahiers de l'APLIUT. Phonétique / Phonologie. Vol. 1 De la théorie à la pratique. Vol. XXIX, n°2, Grenoble – France.

Cornaz, S., Henrich, N., Vallée, N. (2009). Peut-on utiliser le travail en voix chantée pour améliorer la correction phonétique segmentale en langue étrangère ? Le cas de locuteurs italiens apprenants de Français Langue Étrangère. Proceedings of *Rencontres Jeunes Chercheurs en Parole*. Avignon – France.

- Interests in AIRS: Having the chance to have participated to the 3th and 5th AIRS Annual Meetings, I would very much enjoy being able to share my advanced researches on the effects of singing voice on learning foreign languages (above all on phonetic perception and production) with the colleagues from diverse disciplines I got the chance to meet them again and with the ones I have not met yet. I would be very glad realizing new study research collaborations with AIRS members.

Diane CAUSSADE is a PhD student in Sciences of languages since 2013. She worked as a teacher of French as a Second/Foreign Language and intervened as a musician and as a music teacher in many countries (Austria, Bosnia and Herzegovina, Italy, France, Germany, Hungary, Portugal, Romania, Turkey, ...) since 2007. She studied musicology at the University of Strasbourg and music, in particular singing and violin, at the Conservatory of Strasbourg. She is also a member of *Jeunesses Musicales International* (International Musical Youth) and intervenes as a musician in schools, hospitals and social environments within the organization Ballade which aim is to create links between populations through ethno musics. Her PhD work concerns the study of gestures-hands coordination/synchronization in the Alzheimer's disease in speech and singing in collaboration with laboratories GIPSA-lab (CNRS), LIDILEM (Stendhal University), the CMRR (teaching hospital of la Tronche) and the LPNC (CNRS), supported by the SFR Foundation and the Cognition Pole.

- Past degrees: University diploma in psychopathology and clinic of voice, Master 2 in sciences of language, Master 1 in didactics of foreign and second languages, professional license in formation-accompagnement, University general studies diploma in musicology

- Current degree: PhD student in sciences of language, topic: Coordination/synchronization gestures-voice in Alzheimer's disease: evolution in speech and singing

- Publications:

▪ Caussade, D., Vallee, V., Henrich, N. & Colletta, J.-M. (2014). Coordination/synchronisation gestes-voix dans la démence de la maladie d'Alzheimer en voix parlée et chantée :

une étude de cas. Journées d'Etude sur la parole, Le Mans.

▪ Caussade, D., Cornaz, S. & Tisserand, C. (2014). La LSF pour apprendre le lexique d'une chanson en LE : une étude préliminaire. E-CRINI, 6, Nantes.

▪ Cornaz, S. & Caussade, D. (2013). Musique, voix chantée et apprentissage : une revue de littérature et quelques propositions d'exploitation en didactique de la phonétique des langues. E-CRINI, 6, Nantes.

- Interests in AIRS: As a musician myself, I have been very interested in the impact of music particularly on development, memory, learning and well-being, interests I share with the AIR project.