

ROSARIO SIGNORELLO, PH.D.

CONTACT INFORMATION

Affiliation Laboratoire de Phonétique et Phonologie (LPP)
CNRS/Université Sorbonne Nouvelle, Paris 3
Address 19 Rue des Bernardins, 75005, Paris, France
Email rosario.signorello@gmail.com
Website <http://signorello.altervista.org>
Phone +33 6 95 51 19 36

EDUCATION

2010- 2014 U. Grenoble Alpes, France and U. Roma Tre, Italy
*Doctorate of
Phylosophy
(double
international
program)* GPA: Highest Honors of the Commitee · *Linguistics and Psychology*
Title: *La Voix Charismatique: Aspects Psychologiques et Caractéristiques Acoustiques*
Description: Collected and phonetically-aligned political speech corpora (2 genders, 4 languages, 10 speakers, 3 communication contexts). Developed methodology to obtain voice acoustic profiles to compare political speech across genders, cultures, and communication contexts. Developed the psychological tool "MASCharP" to measure charisma from human non-verbal behavior. Investigated cross-cultural influence of voice quality patterns in the perception of leaders charisma
Advisors: Prof. Didier DEMOLIN & Prof. Isabella POGGI

2008-2010 Université Stendhal, Grenoble 3, France
Master of Arts GPA: 17/20 · *Computational Linguistics*
Title: *La parole ne s'arrete pas aux mots : à la recherche d'indices de culture dans le backchannel audio-visuel*
Description: Human intercultural communicative behaviors in face-to-face interaction, particularly focused on audio-visual micro-events of backchannel.

2003-2007 Università degli Studi di Palermo, Italy
Bachelor of Arts GPA: 107/110 · *Languages and Technologies*
Title: *Wiki-learning. teoria ed applicazione del collaborative learning via internet*
Description: Collaborative learning theories and computer-supported on-line collaborative learning with wiki websites. Developed a "Wiki-Learning" wiki website [<http://wiki-learning.pbworks.com>] for collaborative on-line learning

WORK EXPERIENCE IN SCIENTIFIC RESEARCH

10/2016-2018 LPP, CNRS et U. Sorbonne Nouvelle, Paris 3
*Postdoctoral
Researcher in
Articulatory
Phonetics* (a) ANR project "ArtSpeech" for the development of articulatory phonetic synthesis to which I contribute with my scientific knowledge regarding the interaction between voice source and the speech sound articulators; (b) The investigation of the phonetics phenomena of the Ruund language; (c) Non-invasive (external-lighting and sensing) photoglottographic (ePGG) technique;
Ref.: Prof. D. DEMOLIN · +33 6 84 59 50 30 · didier.demolin@univ-paris3.fr

03/14-08/16 Head and Neck Surgery Dept., UCLA
*Postdoctoral
Scholar in
Voice Science* (a) Collaborated in developing the UCLA psychoacoustic perceptually-validated model of voice quality; (b) Impact of the interaction between vocal fold biomechanic variations and upper vocal tract resonances on the perception of voice quality; (c) Principal investigator of an international research project on the "Vocalizations in non-human primate leadership"; (d)

Physical modeling of vocal folds; (e) Collected political speech corpora in Mandarin Chinese, Korean, American English, American Spanish.

Ref.: Prof. Jody KREIMAN · +1 (310) 825 0736 · jkreiman@ucla.edu

Oct-Nov 2013 GIPSA-LAB, CNRS

Research associate

Collected articulatory, aerodynamic and physiological data of Vietnamese and Brazilian Portuguese speakers

Ref.: Prof. D. DEMOLIN · +33 6 84 59 50 30 · didier.demolin@univ-paris3.fr

TEACHING EXPERIENCE: UNIVERSITY LEVEL

2015 — 2016 University of California, Los Angeles, USA

Guest Lecturer in
Voice Sciences
(lecture given in
English)

Department of Musicology · Graduate level, 24 heures
Musicology 250: Voice Studies. Cours Topic: Voice and Race

2014 — 2015 University of California, Los Angeles, USA

Guest Lecturer in
Voice Sciences
(lecture given in
English)

Department of Musicology · Graduate level, 24 heures
Musicology 250: Voice Studies. Cours Topics: ontology, epistemology, and definitions of voice; voice meets notes, texts, and characters; vocal flexibility and vocal identity; performance, the exchange value of voice; voice perception, larynx dissection; voice across history and space; voice as marking geographic and/or cultural territory; Lacan on voice; post-human voices and singing as intermaterial practice.

2012 — 2013 Université Stendhal, Grenoble 3, France

Teaching Fellow in
Phonetics and
Phonology (lecture
given in French)

Department of Linguistics · Undergraduate classes
Introduction to phonetics and phonology including: Physiology of the vocal apparatus; Vocal source and vocal tract characterization; Speech production, acoustics, and perception; Phonological analysis and theories. Students majoring in Linguistics practice in production and perceiving all the sounds in the International Phonetic Alphabet with examples in endangered languages, learn about phonological importance of phonemes and of extra-linguistic uses of sounds.

2011 — 2012 Université Stendhal, Grenoble 3, France

Teaching Fellow in
General
Linguistics (lecture
given in French)

Department of Linguistics · Undergraduate classes
Provides an introduction to various sub-disciplines of Linguistics: Phonetics, Phonology, Morphology, Grammar, and Computational Linguistics. Students majoring in Linguistics and in other disciplines learn the basic concepts of linguistics

2011 — 2012 Université Stendhal, Grenoble 3, France

Teaching Fellow in
Informatics for
Humanities
(lecture given in
French)

Department of Technology-Enhanced learning · Undergraduate classes
Establishes the link between practical use of software like Microsoft Word, Excel, PowerPoint, and Access, as well as the languages like XHTML, XML and CSS with different disciplines in the Humanities (French, Foreign Languages, Visual Arts, Linguistics, Musicology).

2011 — 2012 Università degli Studi Roma Tre, Italy

Teaching Assistant
in Psychology
(lecture given in
Italian)

Department of Education · Undergraduate classes
Provides an introduction to the principal areas and concepts of psychology. Students majoring in Education Sciences learn basic concepts of experimental methodology in psychology. My contribution to this course was specifically on experimental methods to measure the perception of charismatic traits, personality, and emotional states in humans.

2010 — 2011 Université Stendhal, Grenoble 3, France

Teaching Fellow in
General
Linguistics (lecture
given in French)

Department of Linguistics · Undergraduate classes

Provides an introduction to various sub-disciplines of Linguistics: Phonetics, Phonology, Morphology, Grammar, and Computational Linguistics. Students majoring in Linguistics and in other disciplines learn the basic concepts of linguistics

2010 — 2011 Université Stendhal, Grenoble 3, France

Teaching Fellow in
Informatics for
Humanities
(lecture given in
French)

Department of Technology-Enhanced learning · Undergraduate classes
Establishes the link between practical use of software like Microsoft Word, Excel, PowerPoint, and Access, as well as the languages like XHTML, XML and CSS with different disciplines in the Humanities (French, Foreign Languages, Visual Arts, Linguistics, Musicology).

2009 — 2010 U. Pierre Mendès France, Grenoble 2, France

Tutor (class given
in French)

Department of Economics · Lab
Labs in information technology

2006 — 2007 Università degli Studi di Palermo, Italy

Tutor (class given
in Italian)

Department of Humanities · Lab
Provides knowledge in information technology tools in educational technology and on-line collaborative learning

PUBLICATIONS

Refereed publications and conference proceedings

*Acta Acoustica
united with
Acoustica*

Impact of vocal tract resonance on the perception of voice quality changes caused by varying vocal fold stiffness (2016, Vol. 102, p. 209-213).
Authors: **Signorello, R.**, Zhang, Z., Gerratt, B., and Kreiman, J.

*The Oxford
Handbook of Voice
Studies*

Voice in charismatic leadership (to appear). Edited by Nina Sun Eidsheim and Katherine L. Meizel.
Author: **Signorello, R.**

Interspeech 2013

The physiological use of the charismatic voice in political speech. In Proceedings of the 14th Interspeech, p. 987 - 991
Authors: **Signorello, R.**, Demolin, D.

ACII 2013

The perception of charisma from voice. a cross-cultural study. In Proceedings of the IEEE 2013 Humaine Association Conference on Affective Computing and Intelligent Interaction, p. 552 - 557
Authors: D'Errico, F., **Signorello, R.**, Demolin, D., and Poggi, I.

SocialCom 2012

How charisma is perceived from speech. In Proceedings of the ASE/IEEE International Conference on Social Computing, p. 435 - 440
Authors: **Signorello, R.** and Demolin, D.

GSCP 2012

Charisma perception in political speech: a case study. In Proceedings of the of the VIIth GSCP International Conference : Speech and Corpora, p. 343 - 348
Authors: **Signorello, R.**, D'Errico, F., Poggi, I., and Demolin, D.

AISC 2012

Le dimensioni del carisma. In Proceedings of the IX Convegno Annuale dell'Associazione Italiana di Scienze Cognitive, p. 245 - 252
Authors: D'Errico, F., **Signorello, R.**, and Poggi, I.

WACA 2010

A la recherche d'indices de culture et/ou de langue dans les micro-événements audio-visuels de l'interaction face à face In Proceedings of WACA, p. 69 - 76
Authors: **Signorello, R.**, Aubergé, V., Vanpé, A., Granjon, L., and Audibert, N.

Other Manuscripts

in review

The acoustics of the charismatic voices: biological abilities and cultural strategies
Author: **Signorello, R.**

in preparation

The perception of charismatic voices: biological abilities and cultural strategies
 Authors: **Signorello, R.**, Demolin, D., Poggi, I., and D'Errico, F.

INVITED SEMINARS

- IRIS** *Voice Quality and the Perception of Speakers' Social Attractiveness*. Institut des Systèmes Intelligents et de Robotique, CNRS (UMR 7222) & Université Pierre et Marie Curie, Paris 6. January 23, 2016, Paris, France.
 Invited by Pr. Mohamed Chetouani
- U. Paris 3** *Voice Quality and the Perception of Speakers' Social Image*. Laboratoire de Phonétique et Phonologie (LPP), CNRS (UMR 5267) & Université Sorbonne-Nouvelle, Paris 3. October 7, 2016, Paris, France.
 Invited by Dr. Rachid Ridouane
- USC** *Impact of Vocal Fold Biomechanic Variations on the Perception of Voice Quality*. University of Southern California, Department of Linguistics. January 25, 2015, Los Angeles, CA, USA.
 Invited at the PhonLunch event
- UCLA** *The charismatic voice: biological abilities and culturally-mediated strategies*. University of California, Los Angeles, Dept. of Integrative Biology & Physiology. April 6, 2015
 Invited by Prof. Stephanie A. White
- USC** *The Science of Charismatic Voices*. University of Southern California, Department of Linguistics. March 25, 2015, Los Angeles, CA, USA.
 Invited by Prof. Sandra Ferrari-Disner
- XXII PVC** *Acoustic characteristics of the charismatic voice*. Plenary session of the XXII Annual Pacific Voice Conference (East). April 12, 2014; Krakow, Poland.
 Invited by Dr. Krzysztof Izdebski, Conference Chair
- U. of Padova** *Aspetti psicologici del carisma e della leadership e strumenti per la descrizione del carisma in Italiano, Francese e Portoghese Brasiliano* (in Italian). Università degli Studi di Padova, Language and Communication Lab. May 7, 2013.
 Invited by Prof. Maria Grazia Busà
- U. of Padova** *Produzione della voce carismatica e percezione del carisma in Italiano, Francese e Portoghese Brasiliano* (in Italian). Università degli Studi di Padova, Language and Communication Lab. May 6, 2013.
 Invited by Prof. Maria Grazia Busà
- U. Montpellier 3** *La voix charismatique des leaders politiques : influence des caractéristiques acoustico-prosodiques sur l'audience* (in French). Université Paul-Valéry, Montpellier 3, Praxiling Laboratory, CNRS (UMR 5267). January 14, 2013.
 Invited by Dr. Melissa Barkat-Defradas

CONFERENCES PRESENTATIONS

- 171th ASA** The acoustics of charismatic voices in Korean political speech: A cross-gender study (2016). *The Journal of the Acoustical Society of America* 139 (4), 2123-2123. Poster presentation
 Authors: Rhee, N. and **Signorello, R.**
- 171th ASA** The voice acoustics of the 2016 United States presidential election candidates: A cross-gender study (2016). *The Journal of the Acoustical Society of America* 139 (4), 2123-2123. Poster presentation
 Authors: **Signorello, R.** and Rhee
- 171th ASA** Acoustics and perception of charisma in bilingual English-Spanish 2016 United States presidential election candidates (2016). *The Journal of the Acoustical Society of America* 139 (4), 2018-2018. Poster presentation
 Author: **Signorello, R.**

- 10th ICVPB Toward a psychoacoustic model of spectral noise in the voice source (2016).
Oral presentation
Authors: **Signorello, R.**, Rhee, N., Gerratt, B. R., and Kreiman, J.
- 11th PEVOC Fo and intensity in charismatic political speech: A cross-cultural study (2015).
Oral presentation
Authors: **Signorello, R.**, Demolin, D., Henrich-Bernardoni, N., Kreiman, J.,
Gerratt, B. R., and Zhang, Z.
- 169th ASA Sufficiency of a four-parameter spectral model of the voice source (2015). The
Journal of the Acoustical Society of America 137(4), 2266. Poster presentation
Authors: Kreiman, J., Gerratt, B. R., **Signorello, R.**, and Rastifar, S.
- 168th ASA The biological function of fundamental frequency in leaders' charismatic voices
(2014). The Journal of the Acoustical Society of America 136 (4), 2295-2295.
Poster presentation
Authors: **Signorello, R.**
- 168th ASA Impact of vocal tract resonance on the perception of voice quality changes
caused by vocal fold stiffness (2014). The Journal of the Acoustical Society of
America 136 (4), 2295-2295. Poster presentation
Authors: **Signorello, R.**, Zhang, Z., Gerratt, B., and Kreiman, J.
- 10th PEVOC The acoustic correlates of persuasive voice: a cross-language study (2013). Oral
presentation
Authors: **Signorello, R.** and Demolin, D.
- RJCP 2011 Indices de langue et de culture dans les micro-événements audibles et visibles
de l'interaction face à face (2011). Poster presentation
Authors: **Signorello, R.**, Aubergé, V., Vanpé, A., Granjon, L., and Audibert, N.
- Roma Tre 2011 Il carisma del corpo: caratteristiche acustiche della voce carismatica. Oral
presentation. X Giornate della Ricerca, Università degli Studi Roma Tre, Italy
Authors: **Signorello, R.**, Poggi, I., Demolin, D., and D'Errico, F.

PRESS COVERAGE

- UCLA Magazine *Siren Calling* Oct. 1, 2016
- CBS News *What can we learn from the way presidential candidates talk?* Politics, June 18, 2016
- The Washington Post *The vocal tricks political candidates use to sound like leaders.* Science, June 2, 2016
- NPR, Here & Now *How Trump, Clinton And Sanders Change Their Voices To Win [...].* May 27, 2016
- Los Angeles Times *In politics, its not what you say but how you say it [...].* Science, May 26, 2016
- American Institute of Physics *Charismatic speaking strategies of presidential candidates.* May 25, 2016
- The Atlantic *How to Sound Charismatic.* Science, May 25, 2016
- de Volkskrant *Clinton en Trump gebruiken exact dezelfde spreektechnieken.* Nieuws, May 25, 2016
- Forbes *What's The Right Voice For A Leader?* Leadership, May 24, 2015
- UCLA Newsroom *Got charisma? Look for it in your voice.* Health + Behavior, Jan. 21, 2015
- The Wall Street Journal *How to Train Your Voice to Be More Charismatic.* Health & Wellness, Dec. 1, 2014
- Le Monde *Le charisme vocal, objet de science.* Science & Medicine, Nov. 6, 2014
- The Independent *What makes a politician sound charismatic?* Science, Nov. 3, 2014
- BBC *Charismatic speakers manipulate their vocal frequency.* Science & Env., Oct. 29, 2014

<i>Science</i>	<i>Got charisma? Depends on your voice.</i> ScienceShot, Oct. 29, 2014
<i>The American Institute of Physics</i>	<i>The Science of Charismatic Voices.</i> Oct. 29, 2014
<i>Phys.org</i>	<i>The Science of Charismatic Voices.</i> General Physics. Oct. 29, 2014
<i>Radio France Intl.</i>	<i>Quand les politiques donnent de la voix.</i> Accents d'Europe, Nov. 28, 2014
<i>Radio France</i>	<i>Le Charisme.</i> France Culture, Apr. 7, 2014

PROFESSIONAL SERVICE

<i>Peer-reviewer, Organizer</i>	7ème Journées de Phonétique Clinique. June 29-30, 2017. Paris, France
<i>Peer-reviewer</i>	XXII Annual Pacific Voice Conference (East). April 11-13, 2014. Krakow, Poland
<i>Peer-reviewer, Organizer</i>	4th International Symposium in Rhotics, R-atics 2013. October 29-31, 2013. Bernin, France
<i>Peer-reviewer</i>	Workshop on Conflict and Communication. October 29-31, 2013. Rome, Italy
<i>Organizer</i>	Rencontre des Jeunes Chercheurs en Parole 2011. May 25-27, 2011. Grenoble, France

PROFESSIONAL SOCIETIES

<i>ASA</i>	Early career member of the Acoustical Society of America, since 2014
<i>ISCA</i>	Member of the International Speech Communication Association, since 2013

QUALIFICATIONS

<i>Voice, Speech</i>	UCLA voice analysis software (Inverse Filter, Sky, Synthesis), Praat scripting language, Audacity, SPPAS, VoiceSauce (MatLab), Phonedit
<i>Phonetics</i>	Voice and speech data collection methods: Acoustics, ultrasound, aerodynamics, electroglottography, electromyography, and non-invasive (external-lighting and sensing) photoglottographic (ePGG)
<i>Social Psychology</i>	Developer of the MASCharP (Multi-dimensional Adjective-based Scale of Charisma Perception); PsychoPy
<i>Statistical analysis</i>	R (psych, GPArotation, corpcor, smacof, cmdscale), SPSS
<i>Others</i>	Limesurvey, PHP, JavaScript, PERL, MySQL, Microsoft Access, XML, XHTML, CSS, L ^A T _E X, LyX, BibDesk, E-learning (Moodle, Rosetta Stone, Hot Potatoes), Adobe Acrobat Pro and Photoshop, Microsoft Office (Word, Excel, PowerPoint)

AWARDS

<i>Doctoral Scholarship</i>	2010-2013. Granted by the French Ministry of National Education and Research. Amount € 60.000
<i>AIRES Culturelles</i>	2011. Travel grant from the Université Stendhal, Grenoble 3. Amount € 1.200
<i>AIRES Culturelles</i>	2010. Travel grant from the Université Stendhal, Grenoble 3. Amount € 1.200

TEACHING EXPERIENCE: OTHER LEVELS

<i>Italian Teacher</i>	2008 — 2009 Private school Les Portes de Chartreuse Middle and high school classes · Voreppe, France
	2008 — 2009 Public school Jean Vilar

Italian Teacher Middle school classes · Echirolles, France
 2007 — 2008 Public international school Jean Jaurès
Italian Teacher Elementary school classes · Grenoble, France

EXTRACURRICULAR

Associations 2014 — 2015 Vice-president of the University of California, Los Angeles,
 Postdoc Society (SoPS)

Languages

ITALIAN	·	Mothertongue
SICILIAN	·	Mothertongue
ENGLISH	·	Fluent
FRENCH	·	Fluent
SPANISH	·	Basic
PORTUGUESE	·	Basic (simple words and phrases only)

Others Restaure antique bikes · Cross-country cycling · Volunteer and activist in
 bike workshops and associations

Over 10 years playing tenor saxophone. Proficiency in light orchestral music and
 Sicilian traditional music

Muay Thay · Hiking · Soccer · Snowboard

February 7, 2017