

Elliot Lee Saltzman, PhD
Boston University

Education:

Bachelor of Arts
Harvard College
Psychology
(June/1970)

Doctor of Philosophy
University of Minnesota
Developmental Psychology
(June/1979)

Employment and Positions Held:

Research Fellow
Department of Cognitive and Neural Systems, Boston University
Boston, MA
(from Sept. 1996 to 2011)

Associate Professor
Department of Physical Therapy and Athletic Training, Boston University
Boston, MA
(from Sept. 1996 to present)

Assistant Professor in Residence
Department of Psychology, and Center for the Ecological Study of Perception and Action, University of Connecticut
Storrs, CT
(from 1985 to present)

Research Scientist
Haskins Laboratories
New Haven, CT
1981-present

Postdoctoral Fellow (National Institute of Child Health and Human Development)
Department of Kinesiology, University of Washington
Seattle, Washington, and Haskins Laboratories, New Haven, CT
(from 1979 to July 1982)

Affiliate Assistant Professor
Department of Kinesiology, University of Washington
Seattle, WA
(from 1976 to 1981)

Predoctoral trainee (National Institutue of Child Health and Human Development)
Institute of Child Development and Center for Research in Human Learning, University of Minnesota
Minneapolis, MN
(from 1972 to 1976)

Part-time research assistant to Dr. Jean Berko-Gleason and Dr. Elliot G. Mishler
Laboratory in Social Psychiatry, Harvard Medical School and Massachusetts Mental Health Center
Boston, MA
(from 1971 to 1972)

Full-time research assistant to Dr. Torsten Wiesel
Department of Neurobiology, Harvard Medical School
Boston, MA
(from 1970 to 1972)

Peer Reviewed Publications:

- Loverro, K. L., Saltzman, E., Hasselquist, L., & Lewis, C. L. (2018). Local dynamic stability is affected by soldier-relevant torso loads and gait speeds. *Medicine and Science in Sports and Exercise*, 50 (5; Supplement) [Abstract].
- Espy-Wilson, C., Tiede, M., Mitra, V., Sivaraman, G., Saltzman, E., & Goldstein, L. (2018). Speech inversion using naturally spoken data. In F. Cangemi, M. Clayards, O. Niebuhr, B. Schuppler, & M. Zellers, (Eds.). *Rethinking reduction: Interdisciplinary perspectives on conditions, mechanisms, and domains for phonetic variation*. Berlin: De Gruyter Mouton.
- Nalepka, P., Kallen, R. W., Chemero, A., Saltzman, E., & Richardson, M. J. (2017). Herd those sheep: Emergent multiagent coordination and behavioral mode switching. *Psychological Science*, 28 (5), 630-650.
- Nalepka, P., Lamb, M., Kallen, R. W., Saltzman, E., Chemero, A., & Richardson, M. J., (2017). First step is to group them: Minimal model validation for human multiagent herding in a less constrained task. In: G. Gunzelmann, A. Howes, T. Tenbrink, & E. Davelaar, (Eds.). *Proceedings of the 39th Annual Meeting of the Cognitive Science Society (CogSci-2017)*. London, UK. Pp. 2784-2789.
- Mitra, V., Sivaraman, G., Nam, H., Espy-Wilson, C., Tiede, M., & Saltzman, E. (2017). Hybrid convolutional neural networks for articulatory and acoustic information based speech recognition. *Speech Communication*, 89, 103-112.
- Stein, P., Saltzman, E., Holt, K. & Sternad, D. (2016), Is failed predictive control a risk factor for focal dystonia?. *Movement Disorders*, 31 (12; Dec), 1772–1776. doi:10.1002/mds.26818
- Richardson, M. J., Kallen, R. W., Nalepka, P., Harrison, S. J., Lamb, M., Chemero, A., Saltzman, E., & Schmidt, R. C. (2016). Modeling embedded interpersonal and multiagent coordination. In *Proceedings of the 1st International Conference on Complex Information Systems (COMPLEXIS 2016)*, pp. 155-164.
- Sivaraman, G., Mitra, V., Tiede, M., Saltzman, E., Goldstein, L., & Espy-Wilson, C. (2015). Analysis of coarticulated speech using estimated articulatory trajectories. In *Proceedings of the 16th International Conference on Spoken Language (Interspeech 2015)*, Dresden, Germany.
- Sivaraman, G., Mitra, V., Nam, H., Saltzman, E., & Espy-Wilson, C. (2015). Augmenting acoustic phonetics with articulatory features for phone recognition. *Journal of the Acoustical Society of America*, 137 (4; Pt.2), 2302 [Abstract].
- Saltzman, E., & Caplan, D. (2015). A graph-dynamic perspective on coordinative structures, the role of affordance-effectivity relationships in action selection, and the self-organization of complex activities. *Ecological Psychology*, 27 (4), 300-309. DOI:10.1080/10407413.2015.1086228.
- Richardson, M. J., Harrison, S. J., Kallen, R. W., Walton, A., Eiler, B. A., Saltzman, E., & Schmidt, R. C. (2015). Self-organized complementary joint action: Behavioral dynamics of an interpersonal collision-avoidance task. *Journal of Experimental Psychology: Human Perception & Performance*, 41(3), pp. 665-679.

- Ren, X., Salazar, R., Nearing, S., Roy, S., Ellis, T. D., Saltzman, E., & Cronin-Golomb, A. (2015). Veering in hemi-Parkinson's disease: Primacy of visual over motor contributions. *Vision Research*, 115 (Part A), 119–127.
- Mitra, V., Sivaraman, G., Nam, H., Espy-Wilson, C. Y., & Saltzman, E. (2015). Channel and noise robustness of articulatory features in a deep neural net based speech recognition system. *Journal of the Acoustical Society of America*, 137 (4; Pt.2), 2301 [Abstract].
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Peer Reviewed Scientific and Professional Presentations:

- Loverro, K. L., Saltzman, E., Hasselquist, L., & Lewis, C. L.
Local dynamic stability is affected by soldier-relevant torso loads and gait speeds. Poster presented 65th Annual Meeting of the American College of Sports Medicine (ACSM), Minneapolis, MN.

June 2018

Saltzman, E.

Goal-directed actions as acting-perceiving events: Their structure and dynamics. Invited talk
Department of Linguistics, University of Southern California, Los Angeles, CA
April 2018

Chen, W-R., Saltzman, E., Nam, H., & Kang, J.

Benign vs. destructive variability in speech production: An uncontrolled manifold approach. Poster presented
Language Fest, University of Connecticut, Storrs CT.
April 2018

Nalepka, P., Lamb, M. Kallen, R. W., Saltzman, E., Chemero, A., & Richardson, M. J.

First step is to group them: Minimal model validation for human multiagent herding in a less constrained task. Poster presented
39th Annual Conference of the Cognitive Science Society (CogSci-2017), London, UK
July, 2017

Saltzman, E.

Goal-directed actions as acting-perceiving events: Their dynamics and structure. Invited talk
Events In Language (EvIL) workgroup, Department of Psychology, Harvard University, Cambridge MA
May 2016

Saltzman, E.

The dynamics and structure of goal-directed actions (Acting-perceiving events). Invited Discussant Paper
Workshop on Events in Language and Cognition–2016, held in conjunction with the 29th Annual CUNY Conference on Human Sentence Processing, Gainesville FL.
March 2016

Sivaraman, G.1, Mitra, V., Tiede, M., Saltzman, E.4, Goldstein, L., & Espy-Wilson, C.

Analysis of coarticulated speech using estimated articulatory trajectories. Paper presented
16th International Conference on Spoken Language (Interspeech 2015), Dresden, Germany
September 2015

Sivaraman, G., Mitra, V., Nam, H., Saltzman, E., & Espy-Wilson, C.

Augmenting acoustic phonetics with articulatory features for phone recognition. Poster presented
169th Meeting of the Acoustical Society of America, Pittsburgh, PA
May 2015

Mitra, V., Sivaraman, G., Nam, H., Espy-Wilson, C. Y., & Saltzman, E.

Channel and noise robustness of articulatory features in a deep neural net based speech recognition system. Poster presented
169th Meeting of the Acoustical Society of America, Pittsburgh, PA
May 2015

Eiler, B. A., Kallen, R. W., Harrison, S. J., Saltzman, E., Schmidt, R. C., & Richardson, M. J.

Behavioral dynamics of a collision avoidance task: How asymmetry stabilizes performance. Paper presented
38th Annual Conference of the Cognitive Science Society, Pasadena, CA
July 2015

Saltzman, E., & Caplan, D.

Parallels between the dynamics of coordinative structures serving physical manipulation and social communication functions: Grounding agents in their environments, complex affordances, compositionality, and action grammars. Paper presented
conference on Finding Common Ground: Social, Ecological, & Cognitive Perspectives on Language Use, University of Connecticut, Storrs CT
June 2014

Sivaraman, G., Espy-Wilson, C., Mitra, V., Nam, H. & Saltzman, E.
Analysis of acoustic to articulatory speech inversion for natural speech. Poster presented
168th Meeting of the Acoustical Society of America, Providence, RI
October 2014

Nam, H., Shadle, C. H., Tiede, M., Saltzman, E. & Whalen, D. H.
Secondary gestures for consonants: An electromagnetic articulometer study of troughs. Poster presented
167th Meeting of the Acoustical Society of America, Providence, RI
May 2014

Mitra, V., Sivaraman, G., Nam, H., Espy-Wilson, C., Saltzman, E.
Articulatory features from deep neural networks and their role in speech recognition. Paper presented
2014 IEEE International Conference on Acoustics, Speech, and Signal Processing (ICASSP-2014),
Florence, Italy
May 2014

Young, D. S., Stein, P. J., Dennerlein, J. T., Hsu, W.-H., Faber, G., & Saltzman, E. L.
The effect of precision requirements in violin bowing tasks on torque loading of the bowing arm: an inverse dynamic analysis. Poster presented
9th International Conference on Progress in Motor Control (PMC-IX), McGill University, Montreal, Quebec, Canada
July 2013

Richardson, M.J., Kallen, Harrison, S. J., Saltzman, E., & Schmidt, R. C.
Behavioral dynamics of joint-action and social movement coordination. Paper presented
17th International Conference for Perception and Action XVII, Lisbon, Portugal
July 2013

Saltzman, E.
Graphs and their dynamics in action and perception. Invited talk
Department of Psychology, University of Cincinnati, Cincinnati OH
November 2012

Saltzman, E. & Holt, K.
A graph-dynamic perspective on movement forms. Invited paper
Guy van Orden UConn Workshop on Cognition and Dynamics, VII, University of Connecticut, Storrs, CT
August 2012

Saltzman, E.
Temporal Patterning in Speech Production: An Articulatory Phonology and Task-Dynamic Approach. Invited talk
Department of Communications Disorders, Tel-Aviv University, Tel-Aviv, Israel
June 2012

Saltzman, E. & Holt, K.
Movement forms: A graph-dynamic perspective. Invited paper

XVIII Biennial International Conference on Infant Studies as part of the pre-conference session on "Realism to Relevance: An Ecological Approach to Perception, Action, and Cognition (A Festschrift to Honor the Scientific and Mentoring Contributions of Herbert L. Pick, Jr.)", Minneapolis, MN
June 2012

Saltzman, E., Stein, P., Young, D., Dennerlein, J., Kluzik, J., Nam, H., Mitra, V., & Hsu, W.-H.
Violin bowing: Implications of sensorimotor redundancy and task precision for development of upper extremity musculoskeletal disorders. Invited paper
6th Conference of the Research Institute for Health and Medical Professions, Ono Academic College, Or-Yehuda, Israel
June 2012

Monaghan, G., Lewis, C. L., Hsu, W.-H., Saltzman, E., Hamill, J., & Holt, K.G.
Forefoot orientation angle determines duration and amplitude of pronation during walking. Paper presented
36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL
August 2012

Caron, R. R., Wagenaar, R. C., Lewis, C. L., Saltzman, E., and Holt, K. G.
Vertical trajectory of center of mass maintained with increased vertical stiffness while carrying load. Paper presented
36th Annual Meeting of the American Society of Biomechanics, Gainesville, FL
August 2012

Mitra, V., Nam, H., Espy-Wilson, C. Y., Saltzman, E., & Goldstein, L.
Robust speech recognition with articulatory features using Dynamic Bayesian Networks. Paper presented
162nd Meeting of the Acoustical Society of America, San Diego, CA
Oct.-Nov. 2011

Stein, P., Young, D., Dennerlein, J., Kluzik, J., Nam, H., Mitra, V., Hsu, W.-H., & Saltzman, E.
Violin bowing: The use of redundancy in the mapping between mechanical and acoustic task-spaces by expert violinists. Poster presented
8th International Conference on Progress in Motor Control (PMC-XII), University of Cincinnati, Cincinnati OH
July 2011

Tiede, M., Goldstein, L., Mooshammer, C., Nam, H., Saltzman, E., & Shattuck-Hufnagel, S.
Head movement is correlated with increased difficulty in an accelerating speech production task. Paper presented
9th International Seminar on Speech Production (ISSP-11). Montreal, Quebec, Canada
June 2011

Mooshammer, C., Tiede, M., Dhillon, R., Goldstein, L., Nam, H., & Saltzman, E.
Towards a quantification of Peggy Babcock: The role of syllable position in speech errors. Paper presented
9th International Seminar on Speech Production (ISSP-11). Montreal, Quebec, Canada
June 2011

Mitra, V., Nam, H., Espy-Wilson, C. Y., Saltzman, E., & Goldstein, L.
Gesture-based dynamic Bayesian network for noise-robust speech recognition. Poster presented
36th International Conference on Acoustics, Speech, and Signal Processing, (ICASSP-11). Prague, Czech Republic
May 2011

Mitra, V., Nam, H., Espy-Wilson, C. Y., Saltzman, E., & Goldstein, L.

Speech inversion: Benefits of tract variables over pellet trajectories. Poster presented
36th International Conference on Acoustics, Speech, and Signal Processing, (ICASSP-11). Prague,
Czech Republic
May 2011

Saltzman, E.
Invariance and variability in sensorimotor coordination and control: A visual approach. Invited talk
Haskins Laboratories 75th Anniversary Speaker Series presented at Haskins Laboratories, New
Haven CT
April 2011

Saltzman, E.
Speech production: An articulatory phonology and task-dynamic framework. Invited talk
Hearing Research Center, Boston University, Boston MA
February 2011

Nam, H., Mitra, V., Tiede, M., Espy-Wilson, C. Y., Hasegawa-Johnson, M., Saltzman, E. & Goldstein,
L.
Automatic gestural annotation of the U. Wisconsin X-ray Microbeam corpus. Poster presented
Workshop on New Tools and Methods for Very-Large-Scale Phonetics Research, University of
Pennsylvania, Philadelphia PA
January 2011

Saltzman, E.
Tutorial on task dynamics and articulatory phonology. Paper presented
10th Conference on Theoretical Issues in Sign Language Research (TISLR-10) as part of special
session on "Kinematics, dynamics and computer animation of American Sign Language: New
developments in sign phonetics". Purdue University, West Lafayette, IN
October 2010

Nam, H., Tyrone, M., Saltzman, E., Goldstein, L., & Mathur, G.
Applying Articulatory Phonology to Movement in American Sign Language. Poster presented
12th Conference on Laboratory Phonology (LabPhon-12), Albuquerque, NM
July 2010

Mooshammer, C., Tiede, M., McClure, S., & Saltzman, E.
The time course of competition. Poster presented
12th Conference on Laboratory Phonology (LabPhon-12), Albuquerque, NM
July 2010

Tyrone, M. E., Nam, H., Saltzman, E., Mathur, G., & Goldstein, L.
Prosody and movement in American Sign Language: A Task-Dynamics approach. Paper presented
5th International Conference on Speech Prosody (Speech Prosody 2010), Chicago IL
May 2010

Nam, H., Mitra, V., Tiede, M., Saltzman, E., Goldstein, L., Espy-Wilson, C., Hasegawa-Johnson, M.
A procedure for estimating gestural scores from natural speech. Paper presented
11th International Conference on Spoken Language (Interspeech 2010), Makuhari, Japan
May 2010

Mitra, V., Nam, H., Espy-Wilson, C., Saltzman, E., & Goldstein, L.
Robust word recognition using articulatory trajectories and gestures. Paper presented
11th International Conference on Spoken Language (Interspeech 2010), Makuhari, Japan
May 2010

Nam, H., Mitra, V., Tiede, M. K., Saltzman, E., Goldstein, L., Espy-Wilson, C., & Hasegawa-Johnson, M.

A procedure for estimating gestural scores from articulatory data. Poster presented
159th Annual meeting of the Acoustical Society of America, Baltimore MD
April 2010

Mitra, V., Nam, H., Espy-Wilson, C. Y., Saltzman, E., & Goldstein, L.

Machine learning strategies for recovering speech articulatory trajectories and gestures from speech.
Invited paper presented
159th Meeting of the Acoustical Society of America, Baltimore MD
April 2010

Tyrone, M., Nam, H., Saltzman, E., Goldstein, L., & Mathur, G.

Modeling linguistic movement in American Sign Language. Poster presented
15th Biennial Conference on Motor Speech, Savannah, GA
March 2010

Tiede, M., Goldstein, L., Mooshammer, C., Nam, H., & Saltzman, E.

Head movement correlates with increased effort in an accelerating speech production task. Poster presented
15th Biennial Conference on Motor Speech, Savannah, GA
March 2010

Zhuang, X., Nam, H., Hasegawa-Johnson, M., Goldstein, L., & Saltzman, E.

Articulatory phonological code for word classification. Paper presented
10th International Conference on Spoken Language (Interspeech 2009), Brighton, UK
September 2009

Mitra, V., Nam, H., Espy-Wilson, C., Saltzman, E., & Goldstein, L.

Noise robustness of tract variables and their application to speech recognition. Paper presented
10th International Conference on Spoken Language (Interspeech 2009), Brighton, UK
September 2009

Ghosh, P. K., Narayanan, S. S., Divenyi, P., Goldstein, L., & Saltzman, E.

Estimation of articulatory gesture patterns from speech acoustics. Paper presented
10th International Conference on Spoken Language (Interspeech 2009), Brighton, UK
September 2009

Goldfield, E., Holt, K., & Saltzman, E.

Information and dynamics as foundations for assistive devices. Paper presented
symposium on Informational Guidance and Distributed Control in the Design of Assistive Devices
15th International Conference on Perception and Action (ICPA-15), University of Minnesota,
Minneapolis, MN
July 2009

Saltzman, E. & Holt, K.

Affordances, effectivities, coordinative structures: A graph- and task-dynamic framework. Paper presented
15th International Conference on Perception and Action (ICPA-15), University of Minnesota,
Minneapolis, MN
July 2009

Saltzman, E.

Overview of dynamics and graphs. Invited paper presented
Workshop on Development of Language-related Systems in the First Five Years of Life: Seeds of Risk. University of Southern California, Los Angeles, CA

May 2009

Goldstein, L., Nam, H., & Saltzman, E.

An embodied theory of the syllabic organization of speech. Paper presented
2nd Alice V. and Dave H. Morris International Symposium on Language and Communication:
Language, Cognition and Motor Control, Stony Brook, NY
May 2009

Saltzman, E.

Coupled oscillators in speech production. Invited paper presented
Conference on Brain Rhythms in Speech Perception and Production, Cambridge, MA
November 2008

Saltzman, E.

Task-dynamic modeling of supra-gestural structure in articulation.
Invited talk presented at the Massachusetts General Hospital Voice Center, Boston MA
November 2008

Nava, E., Goldstein, L., Nam, H., Proctor, M., & Saltzman, E.

Modelling prosodic rhythm: Evidence from second language speech. Poster presented
156th Meeting of the Acoustical Society of America, Miami, FL
November 2008

Zhuang, X., Nam, H., Hasegawa-Johnson, M., Goldstein, L., & Saltzman, E.

The entropy of the articulatory phonological code: Recognizing gestures from tract variables. Paper
presented
9th International Conference on Spoken Language (Interspeech 2008), Brisbane, Australia
September 2008

Saltzman, E., Nam, H., Krivokapic, J., & Goldstein, L.

A task-dynamic toolkit for modeling the effects of prosodic structure on articulation. Invited Keynote
Address
4th International Conference on Speech Prosody (Speech Prosody 2008), Campinas, Brazil
May 2008

Saltzman, E.

Inter-unit Timing: Pattern, Stability, and Hierarchy. Invited talk
Department of Physical Therapy, Universidade Federal de Minas Gerais, Belo Horizonte MG, Brazil
May 2008

Saltzman, E.

A task-dynamic toolkit for modeling the effects of prosodic structure on articulation. Invited talk Hearing
Research Center, Boston University, Boston MA
April 2008

Goldstein, L., Nam, H., Saltzman, E., & Chitoran, I.

Coupled oscillator planning model of speech timing and syllable structure. Paper presented
Special Session on Coordination of Speech Gestures. Joint meeting of the International Symposium
on Phonetic Frontiers (ISPF 2008) and the 8th Phonetic Conference of China (PCC 2008), Beijing,
China
April 2008

Goldstein, L., Nam, H., Saltzman, E., Kulshreshtha, M., Root, L., & Best, C.

Distributional structure of tongue tip articulations and category acquisition. Paper presented
11th Conference on Laboratory Phonology (LabPhon-11), Wellington, New Zealand
July 2008

Nam, H., Saltzman, E., Krivokapic, J., & Goldstein, L.
Modeling the durational difference of stressed vs. unstressed syllables. Paper presented
Special Session on Coordination of Speech Gestures. Joint meeting of the International Symposium
on Phonetic Frontiers (ISPF 2008) and the 8th Phonetic Conference of China (PCC 2008), Beijing,
China
April 2008

Saltzman, E. with L. Goldstein
A coupled oscillator model for planning intergestural timing in speech production. Invited talk
Department of Linguistics, University of Southern California, Los Angeles CA
November 2007

Saltzman, E. with L. Goldstein & H. Nam
Coupled oscillator model of planning speech timing.
Invited talk presented at Haskins Laboratories, New Haven CT
October 2007

Saltzman, E., Goldstein, L., Holt, K., Kluzik, J., & Nam, H.
Gait Wheels and Foot Cycles: A Parallel between the Dynamics of Locomotion and Speech. Poster
presented
11th Conference on Cognitive and Neural Systems, Boston, MA
May 2007

Lahav, A., Saltzman, E. & Schlaug, G.
Auditory operations of the mirror neuron system: Action recognition network while listening to newly-
acquired actions. *Paper presented*
59th Annual Meeting of the American Academy of Neurology (AAN), Boston, MA
May 2007

Lahav, A., Eldridge, M. Saltzman, E. & Schlaug, G.
Audiovisual feedback improves motor learning and pitch recognition. Poster presented
Annual Conference of the Cognitive Neuroscience Society (CNS). New York, NY
May 2007

Saltzman, E., Nam, H., & Goldstein, L.
Intergestural timing in speech production: The role of graph connectivity. Poster presented
Dynamics Days 2007: International Conference on Chaos and Nonlinear Dynamics, Boston, MA
January 2007

Saltzman, E.
Dynamics of Speech Timing. Invited talk
Brown Bag Professional Exchange Lecture Series, Sargent College, Boston University, Boston, MA
October 2006

Lahav, A., Saltzman, E., & Schlaug, G.
The action behind the scenes: what happens in your brain when you listen to music you know how to
play. Paper presented
International Conference of Music Perception and cognition (ICMPC), Bologna, Italy
August 2006

Lahav, A., Gorman, M., Betke, M., & Saltzman, E.
The Virtual Music Maker: an interactive human-computer interface for physical rehabilitation. Paper
presented
International Conference of Music Perception and cognition (ICMPC), Bologna, Italy
August 2006

Lahav, A., Eldridge M., Schlaug, G. & Saltzman, E.
The role of visual feedback in piano learning and pitch encoding. Poster presented
International Conference of Music Perception and cognitions (ICMPC), Bologna, Italy
August 2006

Nam, H., Saltzman, E., & Goldstein, L.
Dynamical modeling of suprasegmental timing. Poster presented
10th Conference on Laboratory Phonology. Paris, France
June 2006

Goldstein L., Nam, H., & Saltzman, E.
A coupled oscillator model of speech production planning. Paper presented
5th International Conference on Speech Motor Control, Nijmegen, The Netherlands
June 2006

Lahav, A., Saltzman, E., & Schlaug, G.
Action listening: the sound of music activates motor representations of actions. Poster presented
Cognitive Neuroscience Society (CNS). San-Fransisco, CA
April 2006

Nam, H., Goldstein, L., & Saltzman, E.
A coupled oscillator model of intergestural timing within syllables. Poster presented
Joint 150th Meeting of the Acoustical Society of America/Noise-Con, Minneapolis MN
October 2005

Goldstein, L., Nam, H., & Saltzman, E.
Emergence of syllable structure from a coupled oscillator model of intergestural timing. Paper
presented
Workshop on Phonology and Complex Adaptive Systems. University of Lyon, Lyon, France
August 2005

Lahav, A., Saltzman, E., & Schlaug, G.
The power of listening: Auditory-motor conditioning in non-musicians. Poster presented
The Neurosciences and Music II: From Perception to Performance. Leipzig, Germany
May 2005

Keller, P. E., Saltzman, E., & Repp, B. H.
Polyrhythm production is affected by cognitive as well as motor constraints. Poster presented
The Neurosciences and Music II: From Perception to Performance. Leipzig, Germany
May 2005

Saltzman, E.
A task-dynamics approach to human movement. Invited paper
symposium on Dynamics of normal and disordered human movement, at the XVth Congress of the
International Society of Electrophysiology & Kinesiology (ISEK-2004), Boston University, Boston MA
June 2004

Kubo, M., Buzzi, U., Holt, K. G., Saltzman, E., & Ulrich, B. D.
Kinetics of walking: Dynamic resources use changes across development and between children with
and without DS. Invited paper
symposium on Modeling Strategies for Utilizing Dynamic Resources Over Development Time
(Organizer: B. D. Ulrich), at the 2004 Conference of the North American Society for the Psychology of
Sport and Physical Activity (NASPSA-2004), Vancouver, BC, Canada
June 2004

Holt, K. G., Saltzman, E., Ho, C. L., Kubo, M., Buzzi, U., & Ulrich, B. D.
Modeling: Developmental approach uncovers changes in underlying strategies. Invited paper
symposium on Modeling Strategies for Utilizing Dynamic Resources Over Development Time
(Organizer: B. D. Ulrich), at the 2004 Conference of the North American Society for the Psychology of
Sport and Physical Activity (NASPSPA-2004), Vancouver, BC, Canada
June 2004

Nam, H., Goldstein, L., Saltzman, E., & Byrd, D.
TADA: An enhanced, portable TAsk DynAmics model in MATLAB. Poster presented
147th Meeting (& 75th Anniversary Meeting) of the Acoustical Society of America, New York NY
May 2004

Saltzman, E.
Dynamics of gestures: Temporal patterning. Invited paper
Debates in Dynamics III Workshop, Penn State University, State College PA
May 2004

Saltzman, E.
Dynamics of gestural timing in speech: Prosodic and syllabic influences. Invited paper
WAVE workshop (Wakayama workshop on Auditory and Vocal rEsearch), Wakayama, Japan
April 2004

Saltzman, E.
Dynamics of intergestural timing: Prosodic and syllabic influences. Invited paper
18th International Congress on Acoustics (ICA-2004), Kyoto, Japan
April 2004

Saltzman, E.
Temporal aspects of articulatory control. Invited paper
Eurospeech 2003 - Switzerland: 8th European Conference on Speech Communication and
Technology. Geneva, Switzerland
September 2003

Saltzman, E.
System graphs and their dynamics: Implications for acting and perceiving. Invited paper
Progress in Motor Control: Motor Control and Learning. Caen, France
August 2003

Nam, H., & Saltzman, E.
A competitive, coupled oscillator model of syllable structure. Paper presented
ICPhS-15: 15th International Congress of Phonetic Sciences. Barcelona, Spain
August 2003

Saltzman, E. & Löfqvist, A.
Microanalysis of perturbation-induced temporal changes in repetitive and discrete utterances. Poster
presented
1st Pan-American/Iberian Meeting on Acoustics 139th Meeting of the Acoustical Society of America,
Cancun, Mexico
December 2002

Saltzman, E.
Prosodic boundary-adjacent lengthening viewed as clock-slowness. Invited talk
MIT Speech Group Seminar Series, MIT Speech Communication Group, Research Laboratory of
Electronics, Massachusetts Institute of Technology, Cambridge, MA
November 2002

Saltzman, E.
Online modulation of temporal patterning in speech production.
PAW (Perception-Action Workshop) Seminar Series, Center for the Ecological Study of Perception and Action, Department of Psychology, University of Connecticut, Storrs, CT
November 2002

Saltzman, E.L.
Temporal aspects of gestural control. Invited paper
NATO Advanced Study Institute 2002: Dynamics of Speech Production and Perception. Il Ciocco, Italy
July 2002

Saltzman, E.L.
A task-dynamic model with a focus on two spatial reference systems. Invited paper
NATO Advanced Study Institute 2002: Dynamics of Speech Production and Perception. Il Ciocco, Italy
July 2002

Saltzman, E.L.
Nonlinear dynamics of temporal patterning in speech. Invited paper presented
symposium on Self-organizing and programming conceptions of timing: A rapprochement at the 2002
Conference of the North American Society for the Psychology of Sport and Physical Activity
(NASPSPA 2002). Baltimore, MD
June 2002

Saltzman, E.L.
Visualizing dynamical and statistical aspects of movement. Invited Keynote Address
2002 Conference of the North American Society for the Psychology of Sport and Physical Activity
(NASPSPA 2002). Baltimore, MD
June 2002

Tsao, C., Fetters, L., & Saltzman, E.L.
Spontaneous motor activity of young infants born premature with and without white matter disease.
Poster presented
International Conference on Infant Studies (ICIS 2002). Toronto, Ontario, Canada
April 2002

Figueiredo, E. M., Fetters, L., Saltzman, Wagenaar, R., & Giphart, J.E.
Movement sequencing coordination of children born very low birth weight with white matter disease.
Poster presented
International Conference on Infant Studies (ICIS 2002). Toronto, Ontario, Canada
April 2002

Chen, Y., Fetters, L., Saltzman, E.L. & Holt, K.G.
Effects of constraints on the emergence of kicking in young infants. Poster presented
International Conference on Infant Studies (ICIS 2002). Toronto, Ontario, Canada
April 2002

Saltzman, E., & Byrd, D.
Accommodating underlying invariance and surface variability at phrasal junctures. Invited paper
CREST Workshop on Speech Motor Control and Modeling, Sapporo, Japan
September 2001

Saltzman, E., Kubo, M., & Tsao, C.-C.
Frames of reference in speech and non-speech motor control: A task-dynamic perspective. Paper
presented
11th International Conference on Perception and Action (ICPA XI). University of Connecticut, Storrs,
CT

June 2001

Figueiredo, E. M., Tsao, C.-C., McSweeney, D., Chen, Y.-P., Tucker, C., Saltzman, E., & Fetters, L. Kinematic analysis of quiet standing and PLM-test of premature infants at 36 months of age. Poster presented conference on Motor Development and Learning in Infancy. Amsterdam, The Netherlands June 2001

Chen, Y., Fetters, L., Holt, K.G., & Saltzman, E.L. Effect of a contingent mobile reinforcement on the emergence of leg movements. Poster presented conference on Motor Development and Learning in Infancy. Amsterdam, The Netherlands June 2001

Chen, Y., Fetters, L., Holt, K.G., & Saltzman, E.L. Effect of a contingent mobile reinforcement on the emergence of leg movements. Poster presented XVth Annual Conference of the International Society for Postural and Gait Research (ISPG 2001). Maastricht, The Netherlands June 2001

Figueiredo, E. M., Tsao, C.-C., McSweeney, D., Chen, Y.-P., Tucker, C., Saltzman, E., & Fetters, L. Kinematic analysis of quiet standing of premature infants at 36 months of age. Poster presented American Physical Therapy Association, Combined Section's Meeting 2001. San Antonio, TX February 2001

Tsao, C., Fetters, L., Tucker, C., Saltzman, E., & Tronick, E. Z. Signal analysis for the quantification of limb movements of infants exposed to polydrugs. Poster presented International Conference on Infant Studies (ICIS 2000). Brighton, England July 2000

Saltzman, E. & Byrd, D. Demonstrating effects of parameter dynamics on gestural timing. Poster presented 139th Meeting of the Acoustical Society of America, Atlanta, GA June 2000

Saltzman, E. Invited chairperson for session on Modeling speech processing and production. 139th Meeting of the Acoustical Society of America, Atlanta, GA June 2000

Saltzman, E. with D. Byrd What's Dynamic about Dynamics: Underlying Invariance & Surface Variability in Speech Production. Department of Linguistics, University of California, Los Angeles, CA May 2000

Saltzman, E. Nonlinear dynamics of temporal patterning in speech. Department of Kinesiology, University of Maryland, College Park, MD November 1999

Saltzman, E. Invited participant in Modeling Action and Perception: Debates in Dynamics, symposium at the 2nd International Conference on Progress in Motor Control (PMC-II): Structure-Function Relations in Voluntary Movements, Pennsylvania State University, State College, PA August 1999

Saltzman, E.
Central and peripheral processes in speech production.
Dynamics of Timing in Action and Perception, a satellite workshop of the 2nd International Conference on Progress in Motor Control (PMC-II): Structure-Function Relations in Voluntary Movements, Pennsylvania State University, State College, PA
August 1999

Saltzman, E., & Byrd, D.
Dynamical simulations of a phase window model of relative timing. Poster presented
XIVth International Congress of Phonetic Sciences, San Francisco, CA
August 1999

Saltzman, E.
Invited chairperson for session on Production: The organization of articulation.
XIVth International Congress of Phonetic Sciences, San Francisco, CA
August 1999

Saltzman, E.
Nonlinear dynamics of temporal patterning in speech production. Invited paper
Dynamics of the Production and Perception of Speech, a satellite symposium of the XIVth International Congress of Phonetic Sciences, San Francisco, CA
July 1999

Saltzman, E.
Task dynamics. Paper presented
symposium on Dynamics of Movement Disorders: Implications for Evaluation and Treatment. Scientific Conference of the American Physical Therapy Association (APTA), Washington, D.C.
June 1999

Saltzman, E., & Mitra, S.
A task-dynamic approach to gestural anticipation in speech: A hybrid recurrent network. Poster presented
Joint Meeting of the 16th International Congress on Acoustics and the 135th Meeting of the Acoustical Society of America, Seattle, WA
June 1998

Saltzman, E.
Directions for speech research. Invited paper
Haskins Laboratories In-House Conference on Speech Research, Dwight Hall, Yale University, New Haven, CT
May 1998

Jonsdottir J., Fetters L., Tronick E., Saltzman E. & Tucker C.
Motor behavior of premature infants. Poster presented
Combined Sections Meeting of the American Physical Therapy Association, Boston, MA
February 1998

Saltzman, E.
Intergestural sequencing in speech: Dynamics of gestural anticipation.
Neuromuscular Research Center, Boston University, Boston, MA
December 1997

Saltzman, E.
A task-dynamic approach to gestural anticipation in speech: A hybrid recurrent network
Department of Cognitive and Linguistic Sciences, Brown University, Providence, RI
November 1997

Saltzman, E.
The roles of state-, parameter-, and graph-dynamics in the development of coordination.
symposium on The development of coordination at the Ninth International Conference on Perception
and Action, University of Toronto, Scarborough, Ontario, Canada
July 1997

Saltzman, E., & Mitra, S.
A recurrent network for the sequencing of speech gestures. Paper presented
Ninth International Conference on Perception and Action, University of Toronto, Scarborough, Ontario,
Canada
July 1997

Byrd, D., & Saltzman, E.
Distinguishing multiple prosodic boundaries in articulation. Paper presented
1997 Annual Meeting of the Linguistic Society of America, Chicago, IL
January 1997

Byrd, D., & Saltzman, E.
Distinguishing multiple prosodic boundaries in articulatory kinematics and dynamics. Poster presented
Third Joint Meeting of the Acoustical Society of America and the Acoustical Society of Japan,
Honolulu, HI
December 1996

Saltzman, E.
Dynamics of intergestural timing in speech production.
School of Physical and Occupational Therapy, McGill University, Montreal, Quebec, Canada
October 1996

Saltzman, E.
Phase-resetting and rhythmic pattern generation in speech production. Paper presented
Role of Rhythm in Cognition Symposium at the Eighteenth Annual Conference of the Cognitive
Science Society, La Jolla, CA
July 1996

Saltzman, E., Löfqvist, A., and Mitra, S.
“Clocks” and “glue”—Global timing and intergestural cohesion. Paper presented
Fifth Conference on Laboratory Phonology, Evanston, IL
July 1996

Byrd, D., Narayanan, S., Kaun, A., & Saltzman, E. (1996,
Phrasal influences on articulatory detail. Paper presented
Fifth Conference on Laboratory Phonology, Evanston, IL
July 1996

Rubin, P. E., Saltzman, E., McGowan, R., Goldstein, L., Tiede, M., & Browman, C. (1996;
CASYS and extensions to the task-dynamics model. Paper presented
First ESCA Tutorial and Research Workshop on Speech Production Modeling, Autrans, France
May 1996

Saltzman, E.
Dynamics and coordinate systems in skilled activity.
Department of Kinesiology, Pennsylvania State University, State College, PA
April 1996

Saltzman, E.

Task-dynamics: Relative timing among action units.
Department of Kinesiology, Pennsylvania State University, State College, PA
April 1996

Saltzman, E.
Studying movement: Why dynamics?
Department of Physical Therapy, Boston University, Boston, MA
March 1996

Saltzman, E.
Task-dynamics: Data and theory.
Department of Physical Therapy, Boston University, Boston, MA
March 1996

Saltzman, E.
Intergestural timing in speech production: Data and modeling. Paper presented
XIIIth International Conference of Phonetic Sciences (ICPhS 95), Stockholm, Sweden
August 1995

Saltzman, E., Löfqvist, A., Kinsella-Shaw, J., Rubin, P., & Kay, B.
Phase resetting in speech. I. Repetitive utterances. Poster presented
127th meeting of the Acoustical Society of America, Cambridge, MA
June 1994

Löfqvist, A., Saltzman, E., Kinsella-Shaw, J., Rubin, P., & Kay, B.
Phase resetting in speech. II. Discrete utterances. Poster presented
127th meeting of the Acoustical Society of America, Cambridge, MA
June 1994

Saltzman, E.
Dynamics of intergestural phasing in oral-laryngeal coordination.
Advanced Telecommunications Research Institute (ATR), Human Information Processing Research
Laboratories, 2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto 619-02, Japan
March 1994

Saltzman, E.
Sequential dynamics of oral-laryngeal coordination.
Center for Adaptive Systems, Boston University, Boston, MA.
McGowan, R. S., & Saltzman, E. L.. (1993; May). Incorporating aerodynamic and laryngeal
components into task dynamics. Paper presented at the Third Seminar on Speech Production, Old
Saybrook, CT.
November 1993

Hogden, J., Lofquist, A., Gracco, V., Oshima, K., Rubin, P., & Saltzman, E.
Inferring articulator positions from acoustics: an electromagnetic midsagittal articulometer experiment.
Paper presented
126th meeting of the Acoustical Society of America, Denver, CO
October 1993

Hogden, J., Saltzman, E., & Rubin, P.
July 1993
Tracking moving objects with unsupervised neural networks. Paper presented
World congress on Neural Networks: 1993 International Neural Network Society Annual Meeting,
Portland, OR

Saltzman, E., Shaw, R., & Turvey, M.T.

March 1993

Intentional constraints on perception and action. Invited paper presented
Workshop on Intention in Action and Animation, Department of Computer and Information Science,
University of Pennsylvania, Philadelphia, PA

Saltzman, E., Löfqvist, A., Kinsella-Shaw, J., Rubin, P., & Kay, B.

A perturbation study of lip-larynx coordination. Paper presented
International Conference on Spoken Language Processing (ICSLP '92), Banff, Alberta, Canada
October 1992

Saltzman, E.

Dynamics of speech production. Invited paper presented
session on Dynamics in the Control and Coordination of Action, 14th Annual Meeting of the Cognitive
Science Society, Indiana University, Bloomington, IN
July 1992

Saltzman, E.

Nonlinear dynamics and sensorimotor coordination: A minicourse.
Center for Research in Learning, Perception, and Cognition, University of Minnesota, Minneapolis,
Minnesota.
July 1992

Saltzman, E.

Dynamics of gestural patterning in speech motor control.
Research Institute of Logopedics and Phoniatics, Faculty of Medicine, University of Tokyo, Tokyo,
Japan.
April 1992

Saltzman, E.

Dynamics of intergestural phasing in repetitive and discrete speech utterances.
Advanced Telecommunications Research Institute (ATR), Human Information Processing Research
Laboratories, 2-2, Hikaridai, Seika-cho, Soraku-gun, Kyoto 619-02, Japan.
March 1992

Saltzman, E.

Intergestural phasing in discrete and repetitive utterances: A dynamical perspective. Invited paper
presented
2nd Annual NEST (New England Sequencing and Timing) Meeting, Department of Psychology,
University of Massachusetts, Amherst, Massachusetts.
January 1992

Saltzman, E.

Motor Control. Invited paper presented
Conference on Dynamic Representations in Cognition, Indiana University, Bloomington, IN.
November 1991

Saltzman, E.

Dynamics of intergestural timing. Invited paper presented
EUR-ACCOR Symposium on Coarticulation, Venice, Italy.
October 1991

Saltzman, E.

Dynamics of coordinated movement. Paper presented
25th Reunion of the Center for Research in Learning, Perception, and Cognition, University of
Minnesota, Minneapolis, Minnesota.
September 1991

Saltzman, E., Kay, B., Rubin, P., & Kinsella-Shaw, J.
Dynamics of intergestural timing. Paper presented
Symposium on Current Phonetic Research Paradigms: Implications for speech motor control, Institute
of Linguistics, University of Stockholm, Stockholm, Sweden.
August 1991

Sternad, D., Turvey, M. T., & Saltzman, E.
Toward a study of the dynamics of serial order. Poster presented
VIth International Conference on Event Perception and Action. Amsterdam, The Netherlands.
July 1991

Saltzman, E.
Dynamics of gestural patterning.
Department of Psychology, Queens University, Kingston, Ontario, Canada.
April 1991

Saltzman, E.
Temporal patterning in limb and speech movements.
McDonnell-Pew Center for Cognitive Neuroscience at MIT Colloquium Series, Department of Brain and
Cognitive Sciences, Massachusetts Institute of Technology, Cambridge, MA.
April 1991

Gracco, V. L. & Saltzman, E. L.
Experimental levels in the analysis of articulatory movements: Implications for speech motor control.
Invited presentation
Focus Session on Speech Communication: Issues in the Analysis of Articulatory Movement, 121st
Meeting of Acoustical Society of America, Baltimore, Maryland.
April 1991

Saltzman, E.
General theories of motor control; A motor control account of speech. (1990;
Guest lectures presented as part of course Studies in Normal and Abnormal Speech Motor Control
Program in Speech and Hearing Sciences, Graduate School and University Center, City University of
New York.
October 1990

Saltzman, E.
Biomechanical and haptic factors in the temporal patterning of limb and speech activity. Paper
presented
International Conference on Sequencing and Timing of Movement, NIAS, Wassenaar, The
Netherlands
June 1990

Saltzman, E.
The task dynamic model in speech production. Paper presented
Second International Conference on Speech Motor Control and Stuttering, University of Nijmegen,
Nijmegen, The Netherlands.
June 1990

Saltzman, E. L.
Task dynamics and the production of speech. Invited paper presented
Central Ohio Chapter of the Acoustical Society of America, Ohio State University, Columbus, Ohio
April 1990

Saltzman, E.

On speech production. Paper presented
5th International Conference on Event Perception and Action, Miami University, Oxford, Ohio
July 1989

Saltzman, E.
Dynamics of skilled movement. Invited paper presented
Annual Conference of the North American Society for Psychology of Sport and Physical Activity
(NASPSPA), Kent State University, Kent, Ohio
June 1989

Turvey, M.T., Saltzman, E., & Schmidt, R.C.
Dynamics and task-specific coordinations. Invited paper presented
NSF Workshop on the Mechanics, Control, and Animation of Articulated Figures, MIT Media Lab,
Massachusetts Institute of Technology, Cambridge, MA
April 1989

Saltzman, E., Goldstein, L., Browman, C., & Rubin, P.
Modeling speech production using dynamic gestural structures. Invited presentation
Focus Session on Measurement and Modeling of Speech Articulations and Articulators, 116th Meeting
of Acoustical Society of America, Honolulu, Hawaii
November 1988

Saltzman, E., Goldstein, L., Browman, C., & Rubin, P.
Dynamics of gestural blending during speech production. Poster presented
1st Annual Conference of the International Neural Network Society, Boston, MA
September 1988

Saltzman, E.
Dynamics of coordinated movement.
Center for Nonlinear Studies, Los Alamos National Laboratory, Los Alamos, NM
April 1988

Harris, K. S., Alfonso, P. J., Baer, T., Bell-Berti, F., Browman, C., Goldstein, L., Lofqvist, A., Munhall,
K. G., Raphael, L. J., Saltzman, E., Bateson, E., Boyce, S., & Krakow, R.
The gestural organization of speech. Miniseminar presented
1987 American Speech-Language-Hearing Association Annual Convention, New Orleans, LA
November 1987

Saltzman, E., Rubin, P., Goldstein, L. & Browman, C.
Task-dynamic modeling of interarticulator coordination. Poster presented
114th Meeting of the Acoustical Society of America, Miami, FL
November 1987

Fowler, C. A., Munhall, K., Saltzman, E., & Hawkins, S.
Acoustic and articulatory evidence for consonant-vowel interactions. Paper presented
112th Meeting of the Acoustical Society of America, Anaheim, CA
December 1986

Browman, C. P., Goldstein, L., Saltzman, E., & Smith, C.
GEST: A computational model for speech production using dynamically defined articulatory gestures.
Paper presented
112th Meeting of the Acoustical Society of America, Anaheim, CA
December 1986

Kay, B. A., Kelso, J. A. S., Saltzman, E. L., & Schoner, G.

The space-time behavior of single and bimanual rhythmical movements: Data and a limit cycle model.
Poster presented
16th Annual Meeting of the Society for Neuroscience, Washington, D. C.
November 1986

Saltzman, E.
Gestural orchestration and coproduction in speech motor control.
Department of Kinesiology, University of California Los Angeles, Los Angeles, CA
February 1986

Saltzman, E.
A task dynamic model of interarticulator coordination during speech gestures.
Neurological Sciences Institute, Good Samaritan Hospital, Portland, OR
November 1985

Saltzman, E.
Task dynamics and skilled limb movements.
Department of Kinesiology, University of California Los Angeles, Los Angeles, CA
November 1985

Kelso, J.A.S., Saltzman, E., & Tuller, B.
Speech production from a dynamical perspective. Invited plenary presentation
3rd International Conference on Event Perception and Action, University of Uppsala, Uppsala, Sweden
June 1985

Saltzman, E.
Skilled sensorimotor behavior: a task dynamic approach.
Department of Psychology, Interfaculty of Human Movement Science, The Free University,
Amsterdam, The Netherlands
October 1984

Saltzman, E.
A task dynamic approach to limb and speech action patterns. Invited paper presented
conference on the Generation and Modulation of Action Patterns, Center for Interdisciplinary Research
(ZIF), University of Bielefeld, Bielefeld, Federal Republic of Germany
October 1984

Saltzman, E. with Browman, C. P.
Dynamical modeling of speech gestures.
Division of Linguistics and Speech Analysis, Bell Laboratories, Murray Hill, NJ
June 1984

Saltzman, E.
A task dynamic approach to speech production. Invited paper presented
5th Meeting of the International Society for Ecological Psychology, Trinity College, Hartford, CT
May 1984

Kelso, J. A. S., Bateson, E. V., Saltzman, E. L., & Kay, B.
A dynamic analysis of reiterant speech production. Invited paper presented
107th Meeting of the Acoustical Society of America, Norfolk, VA
May 1984

Browman, C. P., Goldstein, L., Kelso, J. A. S., Rubin, P., & Saltzman, E.
Articulatory synthesis from underlying dynamics. Paper presented
107th Meeting of the Acoustical Society of America, Norfolk, VA
May 1984

Saltzman, E.
A task dynamic approach to skilled limb movements.
Department of Psychology, Massachusetts Institute of Technology, Cambridge, MA
March 1984

Saltzman, E. with Kelso, J. A. S.
Principles of cooperativity in muscle-joint ensembles.
Lecture series presented
Department of Physical Education, Teacher's College, Columbia University, New York, NY
January 1984

Saltzman, E.
A task dynamic framework for sensorimotor actions.
Department of Psychology, Brandeis University, Waltham, MA
December 1983

Saltzman, E.
Task specific units of coordination and control. Invited paper presented
10th Annual Forum of the Society for Behavioral Kinesiology, Boston University, Boston, MA
September 1983

Saltzman, E.
Coordinate transformations in sensorimotor integration: Limb movements. Invited paper presented
4th Engineering Foundation Conference on Biomechanics and Neural Control of Movement, New
England College, Henniker, NH
July 1983

Saltzman, E., & Kelso, J. A. S.
A dynamical approach to coordinated action. Part II: Task dynamics. Invited paper presented
2nd International Conference on Event Perception, Vanderbilt University, Nashville, TN
June 1983

Kelso, J. A. S., & Saltzman, E.
A dynamical approach to coordinated action. Part I: Concepts and data. Invited paper presented
2nd International Conference on Event Perception, Vanderbilt University, Nashville, TN
June 1983

Saltzman, E.
A task dynamic approach to skilled actions.
Speech Motor Control Laboratories, Waisman Center, University of Wisconsin, Madison, WI
April 1983

Saltzman, E.
Speech motor control: Review and update. Invited paper presented
23rd Annual Convention of the New York State Speech-Language-Hearing Association, Ellenville, NY
April 1983

Saltzman, E.
Recent approaches to the study of coordinated actions. Invited paper presented
9th International Symposium of the Collegium Medicorum Theatri, New York, NY
June 1982

Saltzman, E.
Spatially oriented sensorimotor tasks: A physiological and behavioral analysis.
Department of Psychology, University of Connecticut

May 1982

Saltzman, E., & Kelso, J. A. S.

Toward a dynamical account of motor memory. Invited paper presented
Conference on Memory and Control in Motor Behavior, Louisiana State University, Baton Rouge, LA
February 1982

Saltzman, E.

A levels of representation approach to sensorimotor coordination.
Department of Psychology, University of California, San Diego
June 1980

Saltzman, E.

The degrees of freedom problem in sensorimotor coordination: A synergy matrix solution. Invited
paper presented
1st Joint Meeting of the Psychometric Society and the Society for Mathematical Psychology. Hamilton,
Ontario
August 1978

Saltzman, E.

Lateral stimulus-response and response-response compatibility effects in the upper and lower limbs.
Paper presented
conference of the Western Psychological Association, Seattle, WA
April 1977

Saltzman, E.

Stretch reflex probing during reaction time tasks: An investigation of relationships between motor
physiology and human performance. Paper presented
conference of the American Alliance for Health, Physical Education & Recreation, Seattle, WA
March 1977

Saltzman, E.

Environmental modulation of volitional and reflex motor interactions.
Department of Kinesiology, University of Washington
December 1976

Pick, H., & Saltzman, E.

Modes of perception: Some subjective observations on objective modes and some objective
observations on subjective modes. Paper presented
S.S.R.C. Modes of perception workshop, Minneapolis, MN
June 1975

Funded/In Review Grant Activity:

P.I.

\$114,678

Modeling the Behavioral Dynamics of Social Action and Coordination
5/25/2013 – 04/30/2018 University of Cincinnati

P.I.

\$52,627

Multilingual Gestural Models for Robust Language-Independent Speech Recognition
10/01/2012 – 09/30/2017 National Science Foundation

Current/Active Research Activity:

P.I.

Unifying phonology and semantics in spoken word recognition: A network science approach
University of Connecticut (grant)

P.I.

Collaborative Research: Prosodic structure: an integrated empirical and modeling investigation
National Science Foundation (grant)

Membership in Scientific/Professional Organizations:

Cognitive Science Society
(from 1996 to present)

European Speech Communication Association
(from 1996 to present)

International Society for Ecological Psychology
(from 1984 to present)

International Neural Network Society
(from 1988 to present)

Linguistic Society of America
(from 1997 to present)

Society for Chaos Theory in Psychology & Life Sciences
(from 1998 to present)

Consultative and Advisory Positions Held:

External Reviewer for Ph.D. dissertation
Department of Psychology, University of Connecticut, Storrs CT
(2009)

External Reviewer
Ph.D. dissertation, Department of Linguistics, Yale University, New Haven CT
(2007)

Ad hoc Journal Reviewer
Cognitive Science
(from 2004 to present)

External Reviewer for Ph.D. dissertation
Faculty of Humanities, University of Tampere, Tampere, Finland
(2004)

Ad hoc Journal Reviewer
Human Movement Science
(from 1998 to present)

Ad hoc Journal Reviewer
Brain Research
(from 1997 to present)

Ad hoc Journal Reviewer
Journal of Speech and Hearing Research
(from 1997 to present)

Ad hoc Journal Reviewer
Physica D
(from 1995 to present)

Associate Advisor for Ph.D. dissertation
Department of Psychology, University of Connecticut, Storrs, CT
(1995)

Associate Advisor for Ph.D. dissertation
Department of Speech and Hearing Sciences, The City University of New York, New York, NY.
(1994)

Ad Hoc reviewer
Journal of Motor Behavior
(from 1991 to present)

Ad hoc Journal Reviewer
Cognition
(from 1990 to present)

Ad hoc Journal Reviewer
Developmental Psychology
(from 1990 to present)

Ad hoc Journal Reviewer
Developmental Psychobiology
(from 1989 to present)

Ad hoc Journal Reviewer
Journal of Experimental Psychology: General
(from 1989 to present)

Ad hoc Journal Reviewer
Journal of Neurophysiology
(from 1989 to present)

Ad hoc Journal Reviewer
Ecological Psychology
(from 1988 to present)

Ad hoc Journal Reviewer
Psychological Review
(from 1988 to present)

Ad hoc Grant Reviewer
AFOSR, Donaghue Foundation, Fonds FCAR (Canada), Ford Foundation, NSERC (Canada), NIH,
NSF
(from 1988 to present)

Associate Advisor for Ph.D. dissertation
Department of Psychology, University of Connecticut, Storrs, CT
(1986)

Ad hoc Journal Reviewer
Science
(from 1984 to present)

Associate Journal Reviewer
The Behavioral and Brain Sciences
(from 1983 to present)

Associate Advisor for Ph.D. dissertation
Department of Communication Sciences, University of Connecticut, Storrs, CT
(1983)

Ad hoc Journal Reviewer
Cognitive Psychology
(from 1982 to present)

Consulting Journal Editor
Journal of Motor Behavior
(from 1981 to 1991)

Community Service:

Member of Scientific Review Committee
18th Annual Conference of International Speech Communication Association (Interspeech 2017),
Stockholm, Sweden
(August 2017)

Member of Scientific Review Committee
17th Annual Conference of International Speech Communication Association (Interspeech 2016), San
Francisco CA
(September 2016)

Member of Program Committee
1st Events in Language and Cognition Workshop (ELC-2016), Gainesville FL
(March 2016)

Member of Scientific Review Committee
15th Annual Conference of International Speech Communication Association (Interspeech 2014),
Singapore
(September, 2014)

Member of Scientific Review Committee
14th Annual Conference of International Speech Communication Association (Interspeech 2013),
Lyon, France
(August 2013)

Member of Scientific Review Committee
5th International Conference on Speech Prosody (Speech Prosody 2010), Chicago, IL
(from 2009 to 2010)

Member of Scientific Review Committee
3rd Conference on Phonetics and Phonology in Iberia [PaPI'07], Braga, Portugal
(June 2007)

Member of Motor Speech in Adults and Children Organizing Committee
2003 Annual Meeting of the American Speech and Hearing Association (ASHA), Chicago, IL
(2003)

Invited member of Workshop on Debates in Dynamics, sponsored by the Santa Fe Institute
Department of Kinesiology, Pennsylvania State University, State College, PA

(from December 7 to 11, 2000)

Invited member of Workshop on Dynamics of Timing in Action and Perception
satellite workshop of the 2nd International Conference on Progress in Motor Control II: Structure-
Function Relations in Voluntary Movements, Pennsylvania State University, State College, PA
(from August 16 to 19, 1999)

Invited member of the Research Group on Perception and Action
Center for Interdisciplinary Research (ZIF), University of Bielefeld, Bielefeld, Federal Republic of
Germany
(from October 12 to November 12, 1984)

Services to the University/College/School on Committees/Councils/Commissions:

Boston University

2010

Judges Panel for BU Scholars Day (Graduate Student Science and Engineering Day)

Boston University

2006

Charles River Campus Institutional Review Board (CRC-IRB)

Boston University

2001, 2000, 1999

Associate Advisor for Ph.D. dissertations for Department of Cognitive and Neural Systems students

Sargent College

2008

Chair, Dudley Allen Research Fund Committee

Department of Physical Therapy & Athletic Training

2018

Ph.D. Admissions Review (Program in Rehabilitation sciences, Specialization in Movement
Science)

Department of Physical Therapy & Athletic Training

2018, 2015, 2013, 2012, 2009, 2008, 2007, 2006, 2005, 2003, 2001

Associate Advisor for Ph.D. dissertations for Rehabilitation Sciences students

Department of Physical Therapy & Athletic Training

2016

Primary Advisor for Ph.D. dissertation for Rehabilitation Sciences student

Department of Physical Therapy & Athletic Training

2001, 1999, 1997

Associate Advisor for Ph.D. dissertations, Department of Physical Therapy.

Current Teaching Responsibilities in the Entry-Level for the Academic Year of Site Visit:

Fall 2018:

SAR PT550 Scientific Basis of Human Movement (2 credits)

Primary Instructor