

ERIC L. AMAZEEN, Ph.D.

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ADDRESS Department of Psychology
Arizona State University
P.O. Box 871104
Tempe, AZ 85287-1104

TELEPHONE (480) 727-7079

E-MAIL Eric.Amazeen@ASU.edu

EDUCATION

1996 Ph.D., University of Connecticut
1995 M.A., University of Connecticut
1991 B.A. with Honors, Franklin & Marshall College

POSITIONS HELD

2005 – present **Department of Psychology**
Arizona State University
Associate Professor

2010 – 2012 **Cognitive Science and Engineering (CSE) program**
Arizona State University
Affiliate Faculty

2001 – 2005 **Interdisciplinary Exercise Science Ph.D. Program**
Arizona State University
Assistant Professor

- 1999 – 2005 **Department of Psychology**
Arizona State University
Assistant Professor
- 1996 – 1999 **Faculty of Human Movement Sciences**
Vrije Universiteit, Amsterdam
Post-Doctoral Research Associate
- 1993 **Department of Psychology**
University of Connecticut
Lecturer
- 1991 – 1996 **Department of Psychology**
University of Connecticut
Research Assistant
- 1991 – 1993 **Department of Psychology**
University of Connecticut
Teaching Assistant

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| AWARDS & HONORS |
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- 1996 **Doctoral Dissertation Award**
University of Connecticut
- 1991 **Zeaman Award for Outstanding Graduate Student**
University of Connecticut
- 1991 **Brookshire Award for Excellence in Research**
Franklin & Marshall College
- 1990 **Howard Hughes Summer Research Fellow**
Franklin & Marshall College

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| GRANTS |
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- 2005 – 2008 **National Science Foundation** (\$261,837)
Acting on Perception: Weight Perception in Context (BCS-0518013)
 Principal Investigator
- 2001 – 2002 **Arizona State University — Faculty Seminar Series** (\$2500)
Dynamics of Perception, Action, and Cognition (DPAC)
 Co-Recipient
- 1997 **Nederlands Wetenschappelijk Organizatie (Dutch National Science Foundation)** (approx. US\$1400)
Travel Grant
 Recipient

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| PUBLICATIONS (* DENOTES STUDENT AUTHORS) |
|---|

JOURNAL ARTICLES

1. Schwartz, M., Amazeen, E.L., & Turvey, M.T. (1995). Superimposition in interlimb coordination. *Human Movement Science, 14*, 681-694.
2. Amazeen, E.L., Sternad, D., & Turvey, M.T. (1996). Predicting the nonlinear shift of stable equilibria in interlimb rhythmic coordination. *Human Movement Science, 15*, 521-542.
3. Amazeen, E.L., & Turvey, M.T. (1996). Weight perception and the haptic size-weight illusion are functions of the inertia tensor. *Journal of Experimental Psychology: Human Perception & Performance, 22*, 213-232.
4. Sternad, D., Amazeen, E.L., & Turvey, M.T. (1996). Diffusive, synaptic, and synergetic coupling: An investigation through inphase and antiphase coordination. *Journal of Motor Behavior, 28*, 255-269.
5. Amazeen, E.L. (1997). The effects of volume on perceived heaviness by dynamic touch: With and without vision. *Ecological Psychology, 9*, 245-263.

6. Amazeen, E.L., Amazeen, P.G., Treffner, P.J., & Turvey, M.T. (1997). Attention and handedness in bimanual coordination dynamics. *Journal of Experimental Psychology: Human Perception & Performance*, *23*, 1552-1560.
7. Riley, M., Amazeen, E.L., Amazeen, P.G., Treffner, P.J., & Turvey, M.T. (1997). Effects of temporal scaling and attention on the asymmetrical dynamics of bimanual coordination. *Motor Control*, *1*, 263-283.
8. Amazeen, P.G., Amazeen, E.L., & Turvey, M.T. (1998). Breaking the reflectional symmetry of interlimb coordination dynamics. *Journal of Motor Behavior*, *30*, 199-216.
9. Beek, P.J., & Amazeen, E.L. (1998). On the implications of Bernstein's analysis of dexterity for motor control. *Contemporary Psychology*, *43*, 345-346.
10. Turvey, M.T., Burton, G., Amazeen, E.L., Butwill, M., & Carello, C. (1998). Perceiving the width and height of a hand-held object by dynamic touch. *Journal of Experimental Psychology: Human Perception & Performance*, *24*, 35-48.
11. Amazeen, E.L. (1999). Perceptual independence of size and weight by dynamic touch. *Journal of Experimental Psychology: Human Perception & Performance*, *25*, 102-119.
12. Amazeen, E.L., Amazeen, P.G., Post, A.A., & Beek, P.J. (1999). Timing the selection of information during rhythmic catching. *Journal of Motor Behavior*, *31*, 279-289.
13. Amazeen, E.L., Amazeen, P.G., & Beek, P.J. (2001). Eye movements and the selection of optical information for catching. *Ecological Psychology*, *13*, 71-85.
14. Amazeen, P.G., Amazeen, E.L., & Beek, P.J. (2001). Coupling breathing and movement during manual wheelchair propulsion. *Journal of Experimental Psychology: Human Perception & Performance*, *27*, 1243-1259.
15. Kloos*, H., & Amazeen, E.L. (2002). Perceiving heaviness by dynamic touch: An investigation of the size-weight illusion in preschoolers. *British Journal of Developmental Psychology*, *20*, 171-183.
16. Amazeen, E.L., & Jarrett*, W. (2003). Role of rotational inertia in the haptic and haptic + visual size-weight illusions. *Ecological Psychology*, *15*, 317-333.
17. Oberle*, C.D., & Amazeen, E.L. (2003). Independence and separability of mass and volume in the size-weight illusion. *Perception & Psychophysics*, *65*, 831-843.

18. Amazeen, P.G., Amazeen, E.L., & Turvey, M.T. (2004). Symmetry and the devil. *Journal of Motor Behavior*, *36*, 371-372.
19. Amazeen, E.L., & Van Orden, G.C. (2004). Specificity in the global array is only one possibility. *Behavioral and Brain Sciences*, *27*, 887-888.
20. Naylor*, Y., & Amazeen, E.L. (2004). The size-weight illusion in team lifting. *Human Factors*, *46*, 349-356.
21. Amazeen, E.L., & DaSilva*, F. (2005). Psychophysical test for the independence of perception and action. *Journal of Experimental Psychology: Human Perception and Performance*, *31*, 170 – 182.
22. Amazeen, E.L., Ringenbach, S.D., & Amazeen, P.G. (2005). The effects of attention and handedness on coordination dynamics in a bimanual Fitt's law task. *Experimental Brain Research*, *164*, 484-499.
23. Glazebrook*, C.M., Dhillon*, V.P., Keetch*, K.M., Lyons, J., Amazeen, E.L., Weeks, D.J., & Elliott, D. (2005). Perception-action and the Muller-Lyer illusion: Amplitude or endpoint bias? *Experimental Brain Research*, *160*, 71-78.
24. Kloos*, H., & Amazeen, E.L. (2005). Building blocks of physical knowledge: Can children learn how two dimensions are correlated? *Advances in Psychology Research*, *38*, 79-91.
25. Carello, C., Kinsella-Shaw, J., Amazeen, E.L., & Turvey, M.T. (2006). Peripheral neuropathy and object length perception by effortful (dynamic) touch: A case study. *Neuroscience Letters*, *405*, 159-163.
26. Amazeen, E.L., DaSilva*, F., & Amazeen, P.G. (2008). Visual-spatial and anatomical constraints interact in a bimanual coordination task with transformed visual feedback. *Experimental Brain Research*, *191*, 13-24.
27. Valdez*, A.B., & Amazeen, E.L., (2008). Sensory and perceptual interactions in weight perception. *Perception & Psychophysics*, *70*, 647-657.
28. Valdez*, A.B., & Amazeen, E.L., (2008). Using 1/f noise to examine planning and control in a discrete aiming task. *Experimental Brain Research*, *187*, 303-319.
29. Valdez*, A.B., & Amazeen, E.L., (2009). Target dimension affects 1/F noise in aiming. *Nonlinear Dynamics, Psychology, and Life Sciences*, *13*, 369-392.

30. Valdez*, A.B., & Amazeen, E.L., (2010). Motor imagery may incorporate trial-to-trial error. *Journal of Motor Behavior*, *42*, 241-256.
31. Amazeen, E.L., Tseng*, P.H., Valdez*, A.B., & Vera*, D. (2011). Perceived heaviness is influenced by the style of lifting. *Ecological Psychology*, *23*, 1-18.
32. Fine*, J., & Amazeen, E.L., (2011). Interpersonal Fitts' Law: When Two Perform as One. *Experimental Brain Research*, *211*, 459-469.
33. Fine*, J.M., Gibbons*, C.T., & Amazeen, E.L., (2013). Congruency effects in interpersonal coordination. *Journal of Experimental Psychology: Human Perception & Performance*, *39*, 1541-1556.
34. Amazeen, E.L. (2014). Box shape influences the size-weight illusion during individual and team lifting. *Human Factors*, *56*, 581-591.
35. Fine*, J.M., Ward*, K.L., & Amazeen, E.L. (2014). Manual coordination with intermittent targets: Velocity information for prospective control. *Acta Psychologica*, *149*, 24-31.
36. Fine*, J.M., & Amazeen, E.L. (2014). Stabilizing perceptual-motor asymmetries during social coordination. *Human Movement Science*, 91-108.
37. Chen*, C-C, Ringenbach, S.D.R., Crews, D., Kulinna, P., & Amazeen, E.L. (2015). The association between a single bout of moderate physical activity and executive function in young adults with Down syndrome: A preliminary study. *Journal of Intellectual Disability Research*, *59*, 589-598. doi: 10.1111/jir.12163.
38. Fine*, J.M., Likens*, A.D., Amazeen, E.L., & Amazeen, P.G. (2015). Emergent complexity matching in interpersonal coordination: Local dynamics and global variability. *Journal of Experimental Psychology: Human Perception & Performance*, *41*, 723-737.
39. Stylianou*, M., Kulinna, P.H., van der Mars, H., Adams, M., Mahar, M., & Amazeen, E.L. (2015). Before-school running/walking club: Effects on elementary students' physical activity. *Research Quarterly for Exercise and Sport*, *86*, A87-A88.
40. Likens*, A.D., Fine*, J.M., Amazeen, E.L., & Amazeen, P.G. (2015). Experimental control of scaling behavior: what is not fractal? *Experimental Brain Research*, *233*, 2813-2821.

41. Stylianou*, M., Kulina, P.H., van der Mars, H., Mahar, M., Adams, M., & Amazeen, E. (2016). Before-school running/walking club: Effects on student on-task behavior. *Preventive Medicine Reports*, 3, 196-202. doi:10.1016/j.pmedr.2016.01.010. (Featured in *The Wall Street Journal*, <http://www.wsj.com/articles/exercise-before-the-bell-may-improve-young-childrens-focus-1471880893>)
42. Stylianou*, M., van der Mars, H., Kulina, P.H., Adams, M. A., Mahar, M., & Amazeen, E. (2016). Before-school running/walking club and student physical activity levels: An efficacy study. *Research Quarterly for Exercise and Sport*, 87, 334-341 DOI: 10.1080/02701367.2016.1214665. (Won the 2016 Research Quarterly for Exercise and Sport Writing Award.)
43. Waddell*, M.L., Fine*, J.M., Likens*, A., Amazeen, E.L., & Amazeen, P.G. (2016). Perceived heaviness in the context of Newton's 2nd law: Combined effects of muscle activity and lifting kinematics. *Journal of Experimental Psychology: Human Perception & Performance*, 42, 363-374.
44. Amazeen, P.G., & Amazeen, E.L. (2017). A systems approach to perception and action. *Ecological Psychology*, 29, 213-220.
45. Waddell, M.L., & Amazeen, E.L. (2017). Evaluating the contributions of muscle activity and joint kinematics to weight perception across multiple joints. *Experimental Brain Research*, 235, 2437-2448.
46. Waddell, M.L., & Amazeen, E.L. (in press, 2018). Lift speed moderates the effects of muscle activity on perceived heaviness. *Quarterly Journal for Experimental Psychology*

CHAPTERS IN EDITED VOLUMES

47. Amazeen, E.L. (1995). Experimental control of the nonlinear drift of coordination equilibria. In B.G. Bardy, R.J. Bootsma & Y. Guiard (Eds.), *Studies in perception and action, III*. Hillsdale, NJ: Lawrence Erlbaum Associates. pp. 33-36.
48. Amazeen, E.L. (1995). The size-weight illusion. In B.G. Bardy, R.J. Bootsma & Y. Guiard (Eds.), *Studies in perception and action, III*. Hillsdale, NJ: Lawrence Erlbaum Associates. pp. 407-410.

49. Amazeen, E.L. (1997). Effects of volume on perceived heaviness. In M. A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action, IV*. Hillsdale, NJ: Lawrence Erlbaum Associates. pp. 123-126.
50. Burke, M.M., & Amazeen, E.L. (1997). Object visibility and the inertia tensor as factors in the size-weight illusion. In M. A. Schmuckler & J. M. Kennedy (Eds.), *Studies in perception and action, IV*. Hillsdale, NJ: Lawrence Erlbaum Associates. pp. 249-252.
51. Amazeen, E.L., Amazeen, P.G., Post, A.A., & Beek, P.J. (1998). Timing the selection of visual information in rhythmic throwing. In B. Bril, A. Ledebt, G. Dietrich, & A. Roby-Brami (Eds.), *Advances in perception-action coupling*. pp. 85-89.
52. Amazeen, P.G., Amazeen, E.L., & Beek, P.J. (1998). The effect of experience on locomotor-respiratory coupling during wheelchair propulsion. In B. Bril, A. Ledebt, G. Dietrich, & A. Roby-Brami (Eds.), *Advances in perception-action coupling*. pp. 123-127.
53. Amazeen, P.G., Amazeen, E.L., & Turvey, M.T. (1998). Dynamics of human intersegmental coordination: Theory and research. In D. A. Rosenbaum & C. E. Collyer (Eds.), *Timing of behavior: Neural, computational, and psychological perspectives* (pp. 237-259). Cambridge, MA: MIT Press.
54. Amazeen, P.G., Amazeen, E.L., & Beek, P.J. (1999). Locomotor-respiratory coupling during manual wheelchair propulsion. In L.H.V. van der Woude, M.T.E. Hopman, & C.H. van Kemenade (Eds.), *Biomedical aspects of manual wheelchair propulsion: State of the art II* (pp. 202-207). Amsterdam: IOS Press.
55. Kloos*, H., & Amazeen, E.L. (2001). The size-weight illusion in preschoolers. In G.A. Burton & R.C. Schmidt (Eds.), *Studies in perception and action VI* (pp. 41-44). Mahwah, NJ: Lawrence Erlbaum Associates.
56. Ringenbach, S.D., Amazeen, P.G., & Amazeen, E.L. (2003). Frequency and amplitude are inversely related in circle drawing. In S. Rogers & J. Effken (Eds.), *Studies in perception and action VII* (pp. 41-44). Mahwah, NJ: Lawrence Erlbaum Associates.
57. Carello, C., Kinsella-Shaw, J., & Amazeen, E. (2005). Peripheral neuropathy and length perception by dynamic touch. In H. Heft & K.L. Marsh (Eds.), *Studies in perception and action VIII* (pp. 91-94). Mahwah, NJ: Lawrence Erlbaum Associates.

58. Waddell, M.L., Fine, J.M., Likens, A., Amazeen, E.L., & Amazeen, P.G. (2015). Muscle activity and lifting kinematics combine in the perception of weight by dynamic touch. *Studies in Perception & Action XVIII*. Taylor & Francis Group, LLC.

REFEREED ABSTRACTS

59. Owens, D.A., Amazeen, E.L., & Engstrom, R. (1992). Night myopia affects the contrast sensitivity function. *Investigative Ophthalmology and Visual Science (suppl.)*, 33, 1147.
60. Amazeen, E.L., Amazeen, P.G., Post, A.A., & Beek, P.J. (1998). Timing the selection of visual information for catching. *Journal of Sport & Exercise Psychology (suppl.)*, 20, 35.
61. Amazeen, P.G., Amazeen, E.L., & Beek, P.J. (1998). Locomotor-respiratory coupling in wheelchair propulsion. *Journal of Sport & Exercise Psychology (suppl.)*, 20, 40.
62. Amazeen, E.L., Amazeen, P.G., & Beek, P.J. (2000). Eye movements and the selection of visual information for catching. *Journal of Sport and Exercise Psychology*, 22, S14.
63. Amazeen, E.L. (2002). Independent perceptions for visual awareness and the control of action. *Journal of Sport and Exercise Psychology*, 24, S25.
64. DaSilva*, F. & Amazeen, E.L. (2004). Perceptual and motor dynamics interact in bimanual coordination. *Journal of Sport and Exercise Psychology*, 26, S62.
65. DaSilva*, F., Wechsler, N.E., McBeath, M., Sugar, T., Amazeen, E., Presson, C., & Koeneman, J. (2006). Improvements in upper-extremity motor-function in hemiparetics using robot-assisted repetitive motion therapy with video games. *Journal of Vision*, 6, 76a.
66. Amazeen, E.L., Tseng*, P.H., Valdez*, A.B., & Vera*, D. (2007). Effects of lifting on the perception of weight. *Journal of Sport and Exercise Psychology*, 29, S50-S51.
67. Valdez*, A.B., & Amazeen, E.L. (2008). Using 1/f noise to examine planning and control in a discrete aiming task. *Journal of Sport and Exercise Psychology*, 30, S136.

DISSERTATION

Amazeen, E.L. (1996). Are independent perceptions of weight and size possible by dynamic touch? *Doctoral Dissertation in Experimental Psychology, University of Connecticut.*

TEACHING ACTIVITY

UNDERGRADUATE COURSES

Introduction to Psychology (PSY 101)
Introduction to Psychology (PSY 101), Honors Section
Introduction to Psychology, General Laboratory
Introduction to Psychology, Honors Laboratory
Perception and Action (PSY 498)
Sensation and Perception (PSY 323)
Sensation and Perception, Laboratory

GRADUATE COURSES

Motor Control (PSY 591)
Perception and Action (PSY 591 & KIN 591)

SERVICE ACTIVITY

UNIVERSITY SERVICE

Committee of Review
Interdisciplinary Exercise Science Ph.D. program
Intercollegiate Athletic Department, football recruiting
University Senate

DEPARTMENT SERVICE

Appointments Committee, Chair
Awards Committee
College of Liberal Arts and Sciences Senate
Dynamics of Perception, Action, and Cognition (DPAC), co-founder

Faculty Evaluation Committee, Chair

Graduate Student Admissions

Graduate Studies Committee

Neuroscience Infusion Planning Committee

Probationary Review for Promotion and Tenure Committee

Technology Committee, Chair

JOURNAL EDITORIAL BOARDS

Journal of Experimental Psychology: Human Perception & Performance, Consulting
Editor, 2014-present