

BETH ADELSON
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Education

Yale University, Research Scientist. Department of Computer Science. 1983-5.
Harvard University, Ph.D. Cognitive Psychology. Course work in Computer Science. 1983.

Research Areas

- Buddhist Studies: Text translation for teaching contemporary meditation
Teaching meditation for everyday contentment & for life decisions; loss & physical pain
- Cognitive science: Theories of Complex Problem-Solving
- Collaborative Problem-Solving: Principled Negotiation
- Human-centered system design: Conflict Resolution & Educational technology
- Women's studies: Development of professional identities
Gender equity in education Interaction of public and private identity

Professional Appointments

Founder and Head Teacher. 24th St. Sangha. 2014-present.
Senior Meditation Teacher:
Philadelphia Meditation Center; Springboard Sangha. 2014 - present.
Rutgers University. Professor Emerita. Psychology & Computer Sciences. 2007-present.
Rutgers University. Associate Professor. Psychology & Computer Sciences. 1993-2007.
Rutgers University. Assistant Professor. Psychology & Computer Sciences. 1991-1993.
Tufts University. Assistant Professor. Department of Computer Science. 1986-1991.
Yale University. Research Scientist. Department of Computer Science. 1983-1986.
Harvard University. Teaching Fellow. Department of Computer Science. 1981-1983.

Related Professional Appointments

concurrent with Rutgers appointment

Franklin Institute's Committee on Science and the Arts. 1999-2017.
Chair, Computer and Cognitive Science cluster: Academic years 2003-2005.
Member, Executive Committee of ACM/SIGCHI, the international professional society for the field of Computer Science. 1991-1995.

concurrent with Tufts appointment

MIT. Visiting Faculty. AthenaMuse Software Consortium. 1990-1.
MIT. Visiting Scientist. Sloan School, Center for Coordination Science. 1990-1.
Carnegie Mellon University. Visiting Faculty. Engineering Design Research Center. 1989-1990.

concurrent with Yale appointment

National Science Foundation. Associate Director. Information Science Program, Division of Computer and Information Science and Engineering. Responsible for advising NSF on support for cognitive science and organizing & managing a \$4M/year program. 1985-6.

Current Work

Dr. Beth Adelson teaches both Theravadan and Tibetan forms of Buddhist meditation. She believes that these practices were designed to make people happy and effective in everyday life. Her group & private classes are structured to lead to that result.

In order to create meditations that are helpful in today's society, she has engaged in a comparison of the major translations of original Buddhist teachings. This has resulted in her creating versions of the original teachings & practice instructions that use contemporary rather than archaic language while bringing out the original meanings in ways resonant with contemporary society.

Her teaching addresses issues of contentment in everyday life as well as concerns around: acute and chronic pain; resting with, rather than giving in to cravings even in the face of fear & pain; physical & emotional change & loss.

Dr Adelson's students' life changes result from her creation of meditations which generate support & contentment even during difficult times.

How Dr. Adelson came to this work

Beth Adelson was trained as a dancer at the Alvin Ailey and Martha Graham studios in NYC. In conjunction with this work, she first sat with Suzuki Roshi in 1970 and began her yoga practice.

She was then trained as a cognitive scientist at Harvard University; her subsequent research on the effects of meditation was endorsed by the Dalai Lama

https://www.crab.rutgers.edu/~adelson/hhdl_endorsement.JPG. The Dalai Lama wrote "I believe that this research project has the potential to be of significant benefit for advancing scientific understanding of the effects of meditation on attention... as well as in showing that traditional Buddhist meditative practices can be extremely effective in alleviating the inner causes of suffering and bringing forth the potentials of human consciousness in today's world."

Following this project, seeing the Dalai Lama's understanding of meditation's potential contributions Dr. Adelson set out to teach meditation. She spent seven years in Buddhist retreat. Her retreat teachers include: Arnell, Salzburg, and Boorstein; Tsultrim Allione; and Roshis Shunryu Suzuki, Joan Halifax and Jan Chozen Bayes. Adelson took refuge with Garchen Rinpoche; and in 2012, in order to begin teaching meditation, took the Bodhisattva Vow receiving the name *Sopa Yeshe* (Patience Wisdom).

Dr. Adelson is a Past Program Director at the National Science Foundation and Professor Emeritus at Rutgers.

Her current daily meditation practice focuses on Vipassana and the Four Immeasurables: kindness, compassion, empathetic joy and equanimity. Her daily yoga practice integrates meditative contentment of heart and mind into the physical poses.

Dr. Adelson is the founder of the 24th St. Sangha in Philadelphia.

Selected Publications

Volumes Edited

Adelson, B. Dumais, S. and Olson, J. Human Factors in Computing Systems. 1994. ACM Press. ISBN 0-201-76557-8.

Special Edition Journals Edited

Adelson, B. (Ed.) *The Journal of the Franklin Institute*. Special Edition on the Creativity

and Processes of the 2002 Franklin Institute Laureates. Vol. 340. Nos. 3 & 4. 2003.

Selected Articles

- Effects of a yoga breath intervention alone and in combination with an exposure therapy for post-traumatic stress disorder and depression in survivors of the 2004 South-East Asia tsunami T. Descilo, A. Vedamurtachar, P. L. Gerbarg, D. Nagaraja, B. N. Gangadhar, B. Damodaran, B. Adelson, L. H. Braslow, S. Marcus, R. P. Brown. Vol. 119(3). 17-32. *Acta Psychiatrica Scandinavica*. Aug. 2009.
- Comparison of a Yoga Breath-based Program and Client-centered Exposure Therapy for Relief of PTSD and Depression in Survivors of Tsunami Disaster. T. Descilo, A. Vedamurhtachar, PL Gerbarg, D Nagaratha, BN Gangadhar, R Damodoran, B Adelson, LH Braslow, RP Brown. *Proceedings World Conference Expanding paradigms: Science, Consciousness & Spirituality*. Feb 24-25, 2007. New Delhi India. Published by All India Institute of Medical Sciences. Pg. 64-78
- Adelson, B. The emotional design of everyday things: The 2006 Benjamin Franklin Medal in Computer and Cognitive Science presented to Donald A. Norman. *The Journal of the Franklin Institute*. Vol. 347 (4). 2006.
- Adelson, B. Issues in scientific creativity: Insight, perseverance and personal technique. *The Journal of the Franklin Institute*. Vol. 340. Nos. 3 & 4. pp. 163 - 189. 2003.
- Adelson, B. Bringing considerations of situated action to bear on the paradigm of cognitive modelling. *The Journal of the Franklin Institute*. Vol. 340. Nos. 3 & 4. pp. 283 -292. 2003.
- Adelson, B. Developing Strategic Alliances: A Framework for Collaborative Negotiation in Design. *Research in Engineering Design*. Vol. 11, 4. 133-144. 1999.
- Hewett, T. and Adelson, B. Can psychological principles be used to guide the design of artifacts? *Behavioral Research Methods, Instruments and Computers*. Vol. 30 (2). 314-319. 1998.
- Adelson, B. and Redmond, M. What would it take to have a personal assistant who fit into your life? *Proceedings of the 1998 AAAI Spring Symposium on Intelligent Environments*. 136-140.
- Adelson, B. Characterizing Analogical Reasoning. In *Mechanical Design: Theory and Methodology*. M. and K. Waldron (Eds.). Springer-Verlag:NY. 1996. Pages 240-263.
- Adelson, B. Theory-Based Negotiation Frameworks for Supporting Group Work. *Informatik Forum*. March, 1994. Vol. 8, (1), 26-32.
- Adelson, B. Impediments to the process of group work. *Proceedings East-West International Conference on Human-Computer Interaction*. 1993. 191-207.
- Adelson, B. and Jordan, T. The act of negotiation during design. *Human-computer Interaction: Tasks and Organization*. G. C. van der Veer, M.J. Tauber, S. Bagnara, M. Antalovits (eds). Publisher: CUD, Roma, Italy. ISBN 88-7721-232-2. Pages 145-153. Reprinted from *Proceedings of the Sixth European Conference on Cognitive Ergonomics*.
- Adelson, B. Evocative agents and multi-media interface design. *Proceedings of CHI'92*, 1992.

- 351-356. Reprinted as: Love and the Search for a Cheap Flat.
- Adelson, B. Educational tools for what you wanted to do anyway. *Proceedings of the Thirteenth Annual Meeting of the Cognitive Science Society*, 1991. 558-563.
- Adelson, B. Modeling Software Design within a Problem-Space Architecture. In *Design Theory '88*. S. Newsome, W. Spillers and S. Finger (Eds.) Springer-Verlag: New York, NY. 56-80.
- Adelson, B. Analogical problem-solving: Problem-Driven mapping and debugging. *Proceedings of the Twelfth Annual Meeting of the Cognitive Science Society*, 1990. 9-15. Reprinted in *IJCAI-90 Workshop on Automating Software Design*. 1-8.
- Adelson, B. Recognizing novel uses for familiar plans. *Proceedings of the Twelfth Annual Meeting of the Cognitive Science Society*, 1990. 253-260. Reprinted in *The American Society of Mechanical Engineers Workshop on Design Theory and Methodology*, 1990. 161-165.
- Adelson, B. The role of model-based reasoning in analogical learning. *Proceedings of the IJCAI-90 Workshop on Model-Based Reasoning*. 74-79.
- Adelson, B. Uncovering how designers design. *Research in Engineering Design*. 1989. Vol. 1, (1), 35-42.
- Adelson, B., Burstein, M., Gentner, D., Hammond, K., Holyoak, K. and Thagard, P. The Role of Analogy in a Theory of Problem-Solving *Proceedings of the Tenth Annual Meeting of the Cognitive Science Society*, 1988. 298-304.
- Soloway, E., Adelson, B., and Ehrlich, K. Knowledge and Processes in the Comprehension of Computer Programs. In *The Nature of Expertise*. 1988. Chi, M., Glaser, R. and Farr, M. (Eds.), Erlbaum: Hillsdale, NJ. 129-154.
- Burstein, M. and Adelson, B. Mapping and Integrating Partial Mental Models. *Proceedings of the Ninth Annual Meeting of the Cognitive Science Society*, 1987. 11-22.
- Adelson, B., and Soloway, E. A Model of Software Design. *International Journal of Intelligent Systems*. 1986. Vol 1, (3), 195-214. Reprinted in *The Nature of Expertise*. 1988. Chi, M., Glaser, R. and Farr, M. (Eds.), Erlbaum: Hillsdale, NJ. 185-208.
- Adelson, B. Constructs in the semantically rich domains. *International Journal of Intelligent Systems*. 1986. Vol 1, (1), 1-14.
- Adelson, B. Comparing natural and abstract categories: A case study from computer science. *Cognitive Science*. 1985. Vol. 9, (4), 417-430.
- Adelson, B. and Soloway, E. The role of domain experience in software design. *IEEE: Transactions in Software Engineering*. 1985. Vol. SE11, (11), 1352-1360. Reprinted in *Human Factors in Software Development* (2nd ed.); Bill Curtis (ed.). 1985. IEEE Computer Society Press: Washington, DC. 233-242. & Scientific Datalink microfiche collection.
- Adelson, B. When novices surpass experts: How the difficulty of a task may increase with expertise. *Journal of Experimental Psychology: Learning, Memory and Cognition*. 1984. Vol 10, (3), 483-495.
- Adelson, B. Problem solving and the development of abstract categories in programming languages. *Memory & Cognition*, 1981 9(4), 422-433.
- Adelson, B. Knowledge structures of computer programmers. *Proceedings of the Third Annual Meeting of the Cognitive Science Society*, 1981. 243-249.

Selected Research Grants

- Fetzer Foundation. The Shamatha Project. PI. \$44,000. 2005 - 2010.
- NSF/HRD. GEMS: Girls in Engineering, Mathematics and Science. Principal Investigator (with J. Li, G. Arbuckle and C. Singley). \$502,000. 1999-2002.
- Rutgers University SROA. Supporting Multi-modal Collaborative Interaction. Principal Investigator (with Z. Pylyshyn co-PI). \$135,000. 1997-1998.
- Rutgers University SROA. Applying Cognitive Science to Educational Technology. Principal Investigator. NYNEX. \$127,000. 1996-7.
- Rutgers University. Teaching Excellence Center Fellowship. Principal Investigator. \$2,400. 1993.
- Henry Rutgers Research Fellowship.
Research Fellow. \$30,000. 1991-1993.
- National Science Foundation, Division of Information Science and Technology. The Cognitive Processes Underlying Design.
Principal Investigator. \$162,000. 1986-1991.
- National Science Foundation, Division of Science Base Development in Design, Manufacturing and Computer Engineering. Modelling Mental Simulation in Software Design.
Principal Investigator. \$30,000. 1987-1991.
- National Science Foundation, Division of Information, Robotics and Intelligent Systems. Equipment Grant.
Co-Principal Investigator. \$22,500. 1989.
- Tufts University. Dean's Career Development Award
Principal Investigator, \$5,000. 1989.
- National Science Foundation, Division of Information, Robotics and Intelligent Systems. Problem Solving Strategies in Program Generation and Comprehension.
Principal Investigator: Research Initiation Award. \$100,000. 1984-1988.
- IT&T Incorporated. Research on the Similarities between Software and Hardware Design.
Co-Principal Investigator. \$60,000. 1985-1986.
- IT&T, Incorporated. Preliminary Research on the Cognitive Elements of Software Design.
Co-Principal Investigator. \$120,000. 1983-1985.

Selected Professional Activities

International Activities

- Franklin Institute's Committee on Science and the Arts. 1999-2016
Chair, Franklin Institute's Computer and Cognitive Science cluster: 2003-2004.
- Member of Executive Committee. ACM/SIGCHI. 1991-1995.
- Member of the Board. HCI International '97. August 1997.
- Co-chair. INTERCHI'93. (Interact '93 and CHI'93) combined. Amsterdam, The Netherlands. April, 1993.
- Invited speaker. British Computer Society Conference Human-Computer Interaction. Leicestershire, U.K. September 1993.

Program Committee. Vienna Conference on Human-Computer Interaction. Vienna, Austria. September 1993. (VCHCI'93).

Sixth European Conference on Cognitive Ergonomics. Budapest, Hungary. September 1992.
East-West International Conference on Human-Computer Interaction. Moscow, C.I.S. August 1993.

Co-chair. CHI'92. Monterey, CA. May, 1992.

St. Petersburg International Workshop on Human-Computer Interaction. St. Petersburg, Russia. August, 1992.

Member Advisory Board. International Conference on Artificial Intelligence in Design. Pittsburgh, PA. March, 1992.

Interact '84. London, UK. September, 1984.

Selected Meetings Organized & Chaired:

Co-chair. CHI'94. Boston, MA. May, 1994.

Co-chair. INTERCHI '93. Amsterdam, The Netherlands. May, 1993.

Invited leader of symposium on *Mediated Communication*. Amsterdam, The Netherlands. April, 1993.

Co-chair. CHI '92. Monterey, CA. May, 1992.

Co-chair. Twelfth Annual Meeting of the Cognitive Science Society. Boston, MA. 1990.

Funding Agency Panels:

National Science Foundation: Information, Robotics and Intelligent Systems, Research Initiation Panel; Science and Engineering Education; Centers for Engineering Research, Internal Panelist.

National Institute of Health: National Institute of Heart, Lung and Blood Disorders.

Editorial Advisory Boards, Journals:

Research in Engineering Design (Through 2014.)

Interacting with Computers (Through 2001.)

Selected Colloquia & Invited Talks

The Growth of Metta: Comparing Theory and Practice. Red Feather Lakes, CO. June 2007.

Situated action versus cognition: Franklin Institute. Philadelphia, PA. June & September 2001.

National Science Foundation. Gender Equity and the GEMS project. October, 2000.

Invited Lecture Series on Theories and Techniques in Collaborative Negotiation. NYNEX Science and Technology. April-July, 1995.

Symposium on Basic Research Issues in Human-Computer Interaction. Amsterdam, The Netherlands. April, 1993.

East-West International Conference on Human-Computer Interaction. Moscow, C.I.S. August 1993.

Invited speaker. Vienna Conference on Human-Computer Interaction. Vienna, Austria. September 1993.

Sixth European Conference on Cognitive Ergonomics. Budapest, Hungary. September 1992. St. Petersburg International Workshop on Human-Computer Interaction. St. Petersburg, C.I.S. August, 1992.

Bolt, Beranek and Newman. Cambridge, MA. November, 1990.

MIT Sloan School. Cambridge, MA. March, 1989.

MIT Laboratory for Artificial Intelligence. Cambridge, MA. May, 1989.

Carnegie Mellon University. Engineering Design Research Center. Pittsburgh, PA. April, 1989.

IBM Watson Research Center. Yorktown Heights, NY. January, 1989.

Duke University. Durham, NC. March, 1986.

University of California, Berkeley. January, 1986.

University of Pennsylvania. Philadelphia, PA. February, 1985. University College. London, U.K. September, 1984.

Bell Laboratories. Murray Hill, NJ. February, 1983.

IBM Watson Research Center. Yorktown Heights, NY. February, 1982.

Awards And Honors

Fellow. Philadelphia Psychoanalytical Association. 1996-1998.

NYNEX Science and Technology Competitive Equipment Grant Recipient, 1995.

Elected to ACM/SIGCHI Executive Board, 1991-1995.

Rutgers' Teaching Excellence Center Fellowship, 1993.

Henry Rutgers Research Fellowship, 1991.

Tufts' Faculty Research Award, 1990.

Tufts' Dean's Career Development Award, 1989.

NSF Research Initiation Award, 1984.

University of Toronto Connaught Fellowship, 1979.