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Keith James Holyoak

Personal Information

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University of California, Los Angeles
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Citizenship: United States & Canada

Education

University of British Columbia, B.A. (1971) in psychology
Stanford University, Ph.D. (1976) in psychology

Academic Appointments

Distinguished Professor of Psychology, University of California, Los Angeles, 2004-present
Professor of Psychology, University of California, Los Angeles, 1986-2004
Vice-Chair for Academic Personnel, Dept. of Psychology, UCLA, 2002-2006
Co-Director, Cognitive Science Research Program, 1989-92
Member, Brain Research Institute, 1991-present
Professor of Psychology, University of Michigan, 1986
Associate Professor of Psychology, University of Michigan, 1981-1986
Visiting Scholar, LRDC, University of Pittsburgh, 1985-1986
Visiting Associate Professor of Psychology, Carnegie-Mellon University, 1984-1985
Assistant Professor of Psychology, University of Michigan, 1976-1981

Research Interests

Analogy, induction, and problem solving
Computational models of cognition
Cognitive neuroscience
Educational applications of technology

Awards

UCLA Dept. of Psychology Distinguished Service Award, 2005
James McKeen Cattell Fellow, 1999
John Simon Guggenheim Fellow, 1991
NIMH Research Scientist Development Award, 1981-1986
Rackham Faculty Fellowship, University of Michigan, 1976
Stanford University Fellowship, 1972-1975
British Columbia Psychological Association Gold Medal, 1971

Honorary Fellowships and Elected Offices in Scientific Organizations

Fellow, American Association for the Advancement of Science (from 2003)
Fellow, Cognitive Science Society (from 2006); Chair of Governing Board, 1994-1995;
Member of Governing Board, 1992-1998
Fellow, Association for Psychological Science (from 1993)
Fellow, Society for Experimental Psychology (from 1990)

Teaching Experience

University of California, Los Angeles 1986-present

Undergraduate

Psychology 10, Introduction to Psychology
Psychology 120A, Cognitive Psychology
Psychology 121, Laboratory in Cognitive Psychology
Psychology 124F (Psychology Honors Program), Thinking
Psychology 185, Cognitive Science

Graduate

Psychology 264, Thinking
Psychology 269, Analogy in the Mind and Brain
Psychology 269, Applications of Technology for Mathematics Teaching
and Learning
Psychology 269, Causal Knowledge and Cognitive Evolution
Psychology 269, Induction and Knowledge Acquisition
Psychology 269, Metaphor and Cognition
Psychology 269, The Adaptive Character of Memory and Thinking
Neuroscience 211A, Mental Imagery
Anthropology 297, Cognitive Science & Anthropology of the Supernatural

University of Michigan, 1976-1986

Undergraduate

Psychology 310, Experimental Psychology Lab
Psychology 443, Psychology of Thinking

Psychology 447, Psychology of Language
Psychology 448, Learning and Memory
Psychology 518, Learning and Memory Lab

Graduate

Psychology 646, Pro-Seminar in Cognitive Psychology
Psychology 745, Psychology of Language
Psychology 746, Human Learning and Memory
Psychology 908, Seminar on Categorization
Psychology 948, Seminar on Language Induction

Stanford University, 1972-1976

Teaching Assistant for introductory psychology and psycholinguistics courses

Department and University Service

University of California, Los Angeles:

Vice Chair for Academic Personnel
Chair, Cognitive Science Development Committee
Chair, Cognitive Area
Chair, Cognitive Search Committee (multiple times)
Co-Chair, Assistant Professor Guidance Committee
Psychology Dept. Executive Committee
Merit Review Committee
Departmental Long-Range Planning Committee
Graduate Admissions Committee

University of Michigan:

Graduate Studies Committee
Experimental Area Graduate Admissions Committee
Search Committees in Developmental and Experimental Psychology
Human Subjects Review Committees (for both College and Psychology Department)
Experimental Area Graduate Student Progress Committee
Experimental/ Mathematical Areas Training Grant Committee
Departmental Executive Committee
College Internal Grant Review Board
Undergraduate Academic Counselor
Coordinator of Psychology 170 (Introductory Experimental)

Professional Service

Editorships:

Editor, Cognitive Psychology, 1995-1999
Senior Editor, Cognitive Science, 1990-1992
Associate Editor, Cognitive Psychology, 2000-present

Associate Editor, *Psychological Science*, 2012-present

Guest Co-editor, Special section on analogy, *J. of Experimental Psychology: Learning, Memory, and Cognition*, 2012

Member of Editorial Board:

Journal of Experimental Psychology: General, 1988-1995; 2007-present

Thinking & Reasoning, 1993-present

Adaptive Behavior, 1991-present

Cognitive Psychology, 1990-1995

American Journal of Psychology, 1988-2008

Psychological Science, 2001

Cognitive Science, 1992-2000

Journal of Experimental Psychology: Learning, Memory, and Cognition, 1984-1987

Memory & Cognition, 1977-1990

Ad Hoc Reviewer:

Journals

American Psychologist, *Applied Cognitive Psychology*, *Behavioral and Brain Sciences*, *Brain and Cognition*, *Brain Research*, *Cerebral Cortex*, *Child Development*, *Cognition*, *Cognition and Instruction*, *Cognitive Development*, *Cognitive Neuroscience*, *Cognitive Systems Research*, *Developmental Psychology*, *European Journal of Cognitive Psychology*, *Journal of Cognitive Neuroscience*, *Journal of Experimental Child Psychology*, *Journal of Experimental Psychology: Human Perception and Performance*, *Journal of Experimental Social Psychology*, *Journal of General Psychology*, *Journal of Medical Informatics*, *Journal of Memory and Language*, *Journal of Neuroscience*, *Journal of Personality and Social Psychology*, *Nature Neuroscience*, *Neuropsychologia*, *Perception & Psychophysics*, *PLoS Computational Biology*, *Political Psychology*, *Proceedings of the National Academy of Sciences (USA)*, *Psychological Bulletin*, *Psychological Review*, *Psychological Science*, *Psychology and Aging*, *Psychonomic Bulletin and Review*, *Review of General Psychology*, *Science*, *Scientific Study of Literature*, *Trends in Cognitive Sciences*

Government & Private Agencies, Conferences, and Publishing Companies

Guggenheim Foundation, National Science Foundation, National Institute of Education, National Science and Engineering Council (Canada), Social Science & Humanities Research Council (Canada), Biotechnology & Biological Sciences Research Council (UK), Australian Research Council, Conferences of Cognitive Science Society, Program Committee, Advanced Computing in the Social Sciences, (Energy Division of Oakridge National Laboratory), Adjudicator: Ontario Premier's Discovery Awards Program, MIT Press, Harcourt Brace Jovanovich, Lawrence Erlbaum Associates, Prentice-Hall, Harvard University Press, Princeton University Press, Oxford University Press, Wiley & Sons

Advisory Panel Memberships and Workshops:

NSF workshop on Higher Cognition in Adolescents, 2008

Co-organizer, 2nd International Conference on Analogy, Sofia, Bulgaria, 2009

NIH panel, 2005
NSF workshop on Knowledge Transfer, 2002
NSF Learning & Intelligent Systems initiative, 1997
Co-organizer, 1st International Conference on Analogy, Sofia, Bulgaria, 1998
NIMH Subcommittee on Thinking and Communication, 1993
International Advisory Board, Dept. of Cognitive Science, New Bulgarian University
Editorial Advisory Board, Issues in Thinking and Reasoning, Erlbaum (UK)
Editorial Advisory Board, Advances in the Psychology of Thinking, Simon & Schuster
NSF Memory and Cognitive Processes Panel, 1980-1981
NSF/NIE Program in Science and Mathematics Education, 1978

Grants

Intelligence Advanced Research Project Activities (UCLA PI; with Lockheed Martin)
Title: FRAMES: Framework for Analogy and Memory Embodied as Spiking Neurons
Dates: Dec. 12, 2010 – Dec. 12, 2012
Amount: \$705140

Institute of Education Sciences (Co-PI; Eva Baker, PI)
Title: Center for Advanced Technology in Schools
Dates: Sept. 14, 2010 – Sept. 14, 2013
Amount: \$592,000

Office of Naval Research
Title: Analogical Reasoning: Integration of Neural, Behavioral and Computational Analyses
Dates: March 1, 2008 to December 31, 2012
Amount: \$927,215

Canon, Inc.
Title: Analogical Reasoning and Creative Product Design
Dates: Feb. 1, 2010 (no end date)
Amount: \$87,500 (gift to Holyoak lab)

Air Force Office of Scientific Research (Co-I; Alan Yuille, PI)
Title: Hidden Causal Structure for Reasoning and Learning: Human Cognition, Machine Intelligence, and Statistics
Dates: October 1, 2008 to Sept 30, 2011
Amount: \$900,000

Office of Naval Research (in collaboration with Medantic Technology)
Title: Distributed Training for Force Mobilization: CBRNE
Dates: December 1, 2006 to August 31, 2007
Amount: \$24,998

National Institute of Mental Health

Title: Neuroimaging of Analogical Reasoning

Dates: July 1, 2005 to June 30, 2008

Amount: \$129,976 (\$100,000 direct)

National Science Foundation (with D. Simon & S. Read)

Title: Coherence-Based Decision Making: A Theoretical Framework and Practical Applications

Dates: April 15, 2004 to March 31, 2007

Amount: \$143,250 (\$98,436 direct)

Institute of Education Sciences

Title: A Multidisciplinary Study of Analogical Transfer in Children's Mathematics

Dates: January 1, 2004 to December 31, 2006

Amount: \$300,715 (\$202,195 direct)

Office of Naval Research (in collaboration with Medantic Technology)

Title: An Intelligent System for Case-Based Instruction

Dates: July 1, 2004 to January 31, 2005

Amount: \$29,926 (\$19,496 direct)

National Science Foundation (with D. Simon & S. Read)

Title: Collaborative Research: Applying Constraint Satisfaction Models to Legal Reasoning

Dates: August 1, 2000 to June 30, 2004

Amount: \$178,330

Office of Naval Research (in collaboration with Medantic Technology)

Title: Authoring Shell for Case-based Reasoning

Dates: January 25, 2002 to July 24, 2002

Amount: \$16,191

National Science Foundation (with J. Hummel)

Title: Learning and Inference with Schemas and Analogies

Dates: February 1, 1998 to January 31, 2001

Amount: \$250,000

National Science Foundation (with J. Hummel)

Title: Schema Induction in a Structure-Sensitive Connectionist Model

Dates: August 15, 1995 to July 31, 1998

Amount: \$150,000

National Institute of Neurological Disorders and Stroke (with J. Grafman & F. Boller)

Title: Structure and Functions of the Human Prefrontal Cortex

Dates: September 30, 1994 to September 29, 1995

Amount: \$17,000

National Science Foundation

Title: Mechanisms of Analogical Reminding and Priming

Dates: August 15, 1993 to August 14, 1995

Amount: \$150,000

Army Research Institute (with P. Thagard)

Title: A Cognitive Architecture for Analogy and Problem Solving

Dates: September 1, 1989 to August 31, 1992

Amount: \$599,793

National Science Foundation (Co-PI; 4 others)

Title: Maintenance and Support for Parallel Computation in Cognitive Science
and Cognate Areas

Dates: August 1, 1991 to July 31, 1994

Amount: \$600,000

Biomedical Research Support Grant

Title: Conditioning and Learning Within Rule-based Default Hierarchies

Dates: June 14, 1989 to June 30, 1990

Amount: \$15,420

National Science Foundation (Co-PI; 9 others)

Title: Center for Research in Computational Neuro-Cognition

Dates: July 1, 1987 to June 30, 1988

Amount: \$994,700 (plus \$300,000 supplement, August 1988)

Keck Foundation (Co-PI; 7 others)

Title: Center for Research in Computational Neuro-Cognition

Dates: July 1, 1988 to June 30, 1990

Amount: \$750,000

Army Research Institute (with P. Thagard)

Title: A Cognitive Model for Solving Ill-Defined Problems

Dates: September 1, 1986 to August 31, 1989

Amount: \$400,840

National Science Foundation (with M. Bassok)

Title: Instruction and Transfer Between Isomorphic Topics in Algebra and Physics

Dates: September 1, 1986 to August 31, 1989

Amount: \$106,108

National Science Foundation (with R. Nisbett)

Title: Formal versus Pragmatic Approaches to Deductive Reasoning

Dates: October 1, 1984 to September 30, 1986

Amount: \$45,000

National Science Foundation

Title: Cognitive Processing of Analogy
Dates: April 1, 1983 to September 30, 1986
Amount: \$118,445

Spencer Foundation (with P. Cheng and R. Nisbett)
Title: Influence of Logic Training and Substantive Knowledge on Deductive Reasoning
Dates: January 1, 1983 to June 1, 1984
Amount: \$5,000

Systems Development Foundation (with J. Holland, R. Nisbett, and P. Thagard)
Title: The Process of Induction
Dates: August 1, 1983 to September 30, 1984
Amount: \$15,500

National Science Foundation (with L. S. Fried)
Title: Perceptual Learning with Ill-Defined Categories
Dates: June 1, 1979 to January 31, 1984
Amount: \$115,247

National Institute of Mental Health
Title: Cognitive Processing of Magnitude and Order Information
Dates: June 1, 1979 to December 31, 1982
Amount: \$120,745

National Science Foundation
Title: Decision Processes in Judgments of Order and Relative Magnitude
Dates: June 1, 1977 to December 31, 1979
Amount: \$59,900

Rackham Faculty Grant, University of Michigan
Title: Perceptual Learning with Ill-Defined Categories
Dates: January 1, 1978 to December 31, 1978
Amount: \$5,028

Rackham Faculty Grant, University of Michigan
Title: Decision Processes in Judgments of Order and Relative Magnitude
Dates: January 1, 1977 to December 31, 1977
Amount: \$5,004

Publications

Books

Holyoak, K. J., & Morrison, R. G. (Eds.) (2012). *The Oxford handbook of thinking and reasoning*. New York: Oxford University Press.

- Holyoak, K. (2010). *My Minotaur: Selected Poems 1998-2006*. Loveland, OH: Dos Madres Press.
- Kokinov, B., Holyoak, K. J., & Gentner, D. (2009). *New frontiers in analogy research: Proceedings of the Second International Conference on Analogy*. Sofia, Bulgaria: New Bulgarian University Press.
- Holyoak, K. (translator) (2007). *Facing the Moon: Poems of Li Bai and Du Fu*. Durham, NH: Oyster River Press.
- Holyoak, K. J., & Morrison, R. G. (Eds.) (2005). *The Cambridge handbook of thinking and reasoning*. Cambridge, UK: Cambridge University Press.
- Gentner, D., Holyoak, K. J., & Kokinov, B. N. (Eds.) (2001). *The analogical mind: Perspectives from cognitive science*. Cambridge, MA: MIT Press.
- Holyoak, K. J., Gentner, D., & Kokinov, B. N. (Eds.) (1998). *Advances in analogy research: Integration of theory and data from the cognitive, computational, and neural sciences*. Sofia, Bulgaria: New Bulgarian University Press.
- Shanks, D. R., Holyoak, K. J., & Medin, D. L. (Eds.) (1996). *The psychology of learning and motivation, Vol. 34: Causal learning*. San Diego: Academic Press.
- Grafman, J., Holyoak, K. J., & Boller, F. (Eds.) (1995). *Structure and functions of the human prefrontal cortex*. New York: New York Academy of Sciences.
- Holyoak, K. J., & Thagard, P. (1995). *Mental leaps: Analogy in creative thought*. Cambridge, MA: MIT Press. Paperback edition, 1996. Japanese translation, 1998.
- Holyoak, K. J., & Barnden, J. A. (Eds.) (1994). *Advances in connectionist and neural computation theory, Vol. 2: Analogical connections*. Norwood, N.J.: Ablex.
- Barnden, J. A., & Holyoak, K. J. (Eds.) (1994). *Advances in connectionist and neural computation theory, Vol. 3: Analogy, reminding, and metaphor*. Norwood, N.J.: Ablex.
- Holland, J. H., Holyoak, K. J., Nisbett, R. E., & Thagard, P. (1986). *Induction: Processes of inference, learning, and discovery*. Cambridge, MA: MIT Press. Paperback edition, 1989. Japanese translation, 1991. Portions of Ch. 4 reprinted in L. Davis (Ed.) (1987), *Genetic algorithms and simulated annealing* (pp. 116-128). London: Pitman. Portions of Ch. 9 reprinted in A. I. Goldman (Ed.) (1993), *Readings in philosophy and cognitive science* (pp. 23-41). Cambridge, MA: MIT Press. Chapter 1 reprinted in N. Lazaric & E. Lorenz (Eds.) (2003), *Critical studies in economic institutions: Knowledge, learning and routines* (pp. 25-56). Camberley, UK: Edward Elgar.
- Glass, A. L., & Holyoak, K. J. (1986). *Cognition*, 2nd edition. New York: Random House.
- Glass, A. L., Holyoak, K. J., & Santa, J. L. (1979). *Cognition*. Reading, MA: Addison-Wesley.

Individual Papers

- Castel, A. D., Vendetti, M., & Holyoak, K. J. (in press). Fire drill: Inattention blindness and amnesia for the location of fire extinguishers. *Attention, Perception, & Psychophysics*.
- Vendetti, M., Knowlton, B. J., & Holyoak, K. J. (in press). The impact of semantic distance and induced stress on analogical reasoning. *Cognitive, Affective, and Behavioral Neuroscience*.
- Holyoak, K. J., & Richland, L. E. (in press). Using analogies as a basis for teaching cognitive readiness. In H. F. O'Neil, R. S. Perez, & E. L. Baker (Eds.), *Teaching and measuring cognitive readiness*. New York: Springer.
- Richland, L. E., Stigler, J. W., & Holyoak, K. J. (in press). Teaching the meaningful structure of mathematics. *Educational Psychologist*.

- Lu, H., Chen, D., & Holyoak, K. J. (2012). Bayesian analogy with relational transformations. *Psychological Review*, *119*, 617-648.
- Knowlton, B. J., Morrison, R. G., Hummel, J. E., & Holyoak, K. J. (2012). A neurocomputational system for relational reasoning. *Trends in Cognitive Sciences*, *16*, 373-381.
- Penn, D. C., Holyoak, K. J., & Povinelli, D. J. (2012). So, are we the massively lucky species? *Behavioral and Brain Sciences*.
- Omata, T., & Holyoak, K. J. (2012). The role of comparison processes in the induction of schemas for design styles. In N. Miyake, D. Peebles & R. P. Cooper (Eds.), *Proceedings of the 34th Annual Conference of the Cognitive Science Society*. Austin, TX: Cognitive Science Society.
- Jurgens, D. A., Mohammad, S. M., Turney, P. D., & Holyoak, K. J. (2012). SemEval-2012 Task 2: Measuring degrees of relational similarity. In *Proceedings of the First Joint Conference on Lexical and Computational Semantics (*SEM)* (pp. 356-364). Montreal, Canada: Association for Computational Linguistics.
- Bassok, M., Dunbar, K. N., & Holyoak, K. J. (2012). Introduction to the special section on the neural substrate of analogical reasoning and metaphor comprehension. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *38*, 261-263.
- Holyoak, K. J., & Morrison, R. G. (2012). Thinking and reasoning: A reader's guide. In K. J. Holyoak & R. G. Morrison (Eds.), *The Oxford handbook of thinking and reasoning* (pp. 1-7). New York: Oxford University Press.
- Holyoak, K. J. (2012). Analogy and relational reasoning. In K. J. Holyoak & R. G. Morrison (Eds.), *The Oxford handbook of thinking and reasoning* (pp. 234-259). New York: Oxford University Press.
- Holyoak, K. J. (2012). Discovering weight in baby steps. In D. J. Povinelli (Ed.), *World without weight*. Oxford, UK: Oxford University Press.
- Holyoak, K. J., & Lu, H. (2011). What the Bayesian framework has contributed to understanding cognition: Causal learning as a case study. *Behavioral and Brain Sciences*, *34*, 2-3-204.
- Rai, T. S., & Holyoak, K. J. (2011). The rational hypocrite: Informal argumentation and moral hypocrisy. In L. Carlson, C. Hólscher & T. F. Shipley (Eds.), *Proceedings of the 33rd Annual Conference of the Cognitive Science Society* (pp. 2475-2479). Austin, TX: Cognitive Science Society.
- Holyoak, K. J., & Cheng, P. W. (2011). Causal learning and inference as a rational process: The new synthesis. *Annual Review of Psychology*, *62*, 135-163.
- Holyoak, K. J., Lee, H. S., & Lu, H. (2010). Analogical and category-based inference: A theoretical integration with Bayesian causal models. *Journal of Experimental Psychology: General*, *139*, 702-727.
- Chen, D., Holyoak, K. J., & Lu, H. (2010). Learning and generalization of abstract semantic relations: Preliminary investigations of Bayesian approaches. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 871-876). Austin, TX: Cognitive Science Society.
- Lee, H. S., & Holyoak, K. J. (2010). Causal models interact with structure mapping to guide analogical inference. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1094-1099). Austin, TX: Cognitive Science Society.

- Chen, D., & Holyoak, K. J. (2010). Enhancing acquisition of intuition versus planning in problem solving. In S. Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32nd Annual Conference of the Cognitive Science Society* (pp. 1875-1880). Austin, TX: Cognitive Science Society.
- Morsanyi, K., & Holyoak, K. J. (2010). Analogical reasoning ability in autistic and typically-developing children. *Developmental Science*, *13*, 578-587.
- Holyoak, K. J. (2010). Analogy. In P. C. Hogan (Ed.), *Cambridge encyclopedia of the language sciences* (pp. 97-98). Cambridge, UK: Cambridge University Press.
- Rai, T. S., & Holyoak, K. J. (2010). Moral principles or consumer preferences? Alternative framings of the trolley problem. *Cognitive Science*, *34*, 311-321.
- Cho, S., Moody, T. D., Fernandino, L., Mumford, J. A., Poldrack, R. A., Cannon, T. D., Knowlton, B. J., & Holyoak, K. J. (2010). Common and dissociable prefrontal loci associated with component mechanisms of analogical reasoning. *Cerebral Cortex*, *20*, 524-533.
- Penn, D. C., Holyoak, K. J., & Povinelli, D. J. (2009). Universal grammar and mental continuity: Two modern myths. *Behavioral and Brain Sciences*, *32*, 462-464.
- Penn, D. C., Cheng, P. W., Holyoak, K. J., Hummel, J. E., & Povinelli, D. J. (2009). There is more to thinking than propositions. *Behavioral and Brain Sciences*, *32*, 221-223.
- Povinelli, D. J., Penn, D. C., & Holyoak, K. J. (2009). An open letter to comparative psychologists. *Psychological Science Agenda*, *23*, 13-14.
- Knowlton, B. J., & Holyoak, K. J. (2009). Prefrontal substrate of human relational reasoning. In M. S. Gazzaniga (Ed.), *The cognitive neurosciences (4th edition)* (pp. 1005-1017). Cambridge, MA: MIT Press.
- Lee, H. S., Holyoak, K. J., & Lu, H. (2009). Integrating analogical inference with Bayesian causal models. In B. Kokinov, K. J. Holyoak & D. Gentner (Eds.), *New frontiers in analogy research: Proceedings of the Second International Conference on Analogy* (pp. 300-309). Sofia, Bulgaria: New Bulgarian University Press.
- Bendig, B. W., & Holyoak, K. J. (2009). Relational priming of analogical reasoning. In B. Kokinov, K. J. Holyoak & D. Gentner (Eds.), *New frontiers in analogy research: Proceedings of the Second International Conference on Analogy* (pp. 30-36). Sofia, Bulgaria: New Bulgarian University Press.
- Lu, H., Yuille, A. L., Liljeholm, M., Cheng, P. W., & Holyoak, K. J. (2008). Bayesian generic priors for causal learning. *Psychological Review*, *115*, 955-982.
- Lee, H. S., & Holyoak, K. J. (2008). The role of causal models in analogical inference. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *34*, 1111-1122.
- Holyoak, K. J. (2008). Induction as model selection. *Proceedings of the National Academy of Sciences USA*, *105*, 10637-10638.
- Holyoak, K. J., & Hummel, J. E. (2008). No way to start a space program: Associationism as a launch pad for analogical reasoning. *Behavioral and Brain Sciences*, *31*, 388-389.
- Lee, H. S., & Holyoak, K. J. (2008). Absence makes the thought grow stronger: Reducing structural overlap can increase inductive strength. In B. C. Love, K. McRae & V. M. Sloutsky (Eds.), *Proceedings of the 30th Annual Conference of the Cognitive Science Society* (pp. 297-302). Austin, TX: Cognitive Science Society.

- Krawczyk, D. C., Morrison, R. G., Viskontas, I., Holyoak, K. J., Chow, T. W., Mendez, M. F., Miller, B. L., & Knowlton, B. J. (2008). Distraction during relational reasoning: The role of prefrontal cortex in interference control. *Neuropsychologia*, *46*, 2020-2032.
- Penn, D. C., Holyoak, K. J., & Povinelli, D. J. (2008). Darwin's mistake: Explaining the discontinuity between human and nonhuman minds. *Behavioral and Brain Sciences*, *31*, 109-130; discussion 130-178.
- Simon, D., Krawczyk, D. C., Bleicher, A., & Holyoak, K. J. (2008). The transience of constructed preferences. *Journal of Behavioral Decision Making*, *21*, 1-14.
- Cho, S., Holyoak, K. J., & Cannon, T. (2007). Analogical reasoning in working memory: Resources shared among relational integration, interference resolution, and maintenance. *Memory & Cognition*, *35*, 1445-1455.
- Richland, L. E., Zur, O., & Holyoak, K. J. (2007). Cognitive supports for analogy in the mathematics classroom. *Science*, *316*, 1128-1129.
- Holyoak, K. J. (2007). Relations in semantic memory: Still puzzling after all these years. In M. A. Gluck, J. R. Anderson & S. M. Kosslyn (Eds.), *Memory and mind: A festschrift for Gordon H. Bower* (pp. 141-158). New York: Psychology Press.
- Lu, H., Yuille, A. L., Liljeholm, M., Cheng, P. W., & Holyoak, K. J. (2007). Bayesian models of judgments of causal strength: A comparison. In D. S. McNamara & G. Trafton (Eds.), *Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society* (pp. 1241-1246). Austin, TX: Cognitive Science Society.
- Lee, H. S., & Holyoak, K. J. (2007). Causal models guide analogical inference. In D. S. McNamara & G. Trafton (Eds.), *Proceedings of the Twenty-ninth Annual Conference of the Cognitive Science Society* (pp. 1205-1210). Austin, TX: Cognitive Science Society.
- Thompson, G. A., Morrison, R. G., Holyoak, K. J., & Clark, T. K. (2006). Evaluation of an online analogical patient simulation program. *Proceedings of the Nineteenth IEEE International Symposium on Computer-Based Medical Systems* (pp. 623-628). Los Alamitos, CA: IEEE Computer Society.
- Richland, L. E., Morrison, R. G., & Holyoak, K. J. (2006). Children's development of analogical reasoning: Insights from scene analogy problems. *Journal of Experimental Child Psychology*, *94*, 249-271.
- Doumas, L. A. A., Holyoak, K. J., & Hummel, J. E. (2006). The problem with using associations to carry binding information. *Behavioral and Brain Sciences*, *29*, 38-39.
- Viskontas, I. V., & Holyoak, K. J. (2006). Mechanisms of fluid cognition: Relational integration and inhibition. *Behavioral and Brain Sciences*, *29*, 141.
- Lu, H., Yuille, A. L., Liljeholm, M., Cheng, P. W., & Holyoak, K. J. (2006). Modeling causal learning using Bayesian generic priors on generative and preventive powers. In R. Sun & N. Miyake (Eds.), *Proceedings of the Twenty-eighth Annual Conference of the Cognitive Science Society* (pp. 519-524). Mahwah, NJ: Erlbaum.
- Kittur, A., Hummel, J. E., & Holyoak, K. J. (2006). Ideals aren't always typical: Dissociating goodness-of-exemplar from typicality judgments. In R. Sun & N. Miyake (Eds.), *Proceedings of the Twenty-eighth Annual Conference of the Cognitive Science Society* (pp. 429-434). Mahwah, NJ: Erlbaum.
- Kittur, A., Holyoak, K. J., & Hummel, J. E. (2006). Using ideal observers in higher-order human category learning. In R. Sun & N. Miyake (Eds.), *Proceedings of the Twenty-*

- eighth Annual Conference of the Cognitive Science Society* (pp. 435-440). Mahwah, NJ: Erlbaum.
- Lu, H., Morrison, R. G., Hummel, J. E., & Holyoak, K. J. (2006). Role of gamma-band synchronization in priming of form discrimination for multiobject displays. *Journal of Experimental Psychology: Human Perception and Performance*, *32*, 610-617.
- Viskontas, I. V., Holyoak, K. J., & Knowlton, B. J. (2005). Relational integration in older adults. *Thinking & Reasoning*, *11*, 390-410.
- Fenker, D. B., Waldmann, M. R., & Holyoak, K. J. (2005). Accessing causal relations in semantic memory. *Memory & Cognition*, *33*, 1036-1046.
- Satpute, A. B., Fenker, D. B., Waldmann, M. R., Tabibnia, G., Holyoak, K. J., & Lieberman, M. D. (2005). An fMRI study of causal judgments. *European Journal of Neuroscience*, *22*, 1233-1238.
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