

Douglas L. Medin

Department of Psychology
Northwestern University
2029 Sheridan Road
Evanston, IL 60208-2710
Phone: (847) 467-1660
Fax: (847) 491-7859
medin@northwestern.edu

Education:

Moorhead State College, Moorhead, MN, B.A., Psychology, 1965
University of South Dakota, Vermillion, SD, M.A., Psychology, 1966
University of South Dakota, Vermillion, SD, Ph. D., Psychology, 1968
UHPHS Postdoctoral fellow, Rockefeller University, 1968-1969

Honors:

B.A., Magna Cum Laude
Cognitive Science Society Governing Board
Psychonomic Society Governing Board
New York Academy of Science
Psychometric Society
American Psychological Association Fellow
AAAS Fellow
APS Fellow, APS Governing Board
Society of Experimental Psychologists
Eligible scholar, Center for Advanced Study in the Behavioral Sciences.
CAS Visiting Committee Research and Teaching Professor, 1996-2000
American Academy of Arts and Sciences (Elected 2002)
John Simon Guggenheim Fellow, 2004
APA Distinguished Scientific Contribution Award, 2005
National Academy of Sciences (Elected 2005)
Louis W. Menk Chair in Psychology, 2005
APA Presidential Citation, 2008

Major Research Interests:

Culture, Cognition and Learning, Computational Models of Cognition, Concept and Classification Learning, Decision Making

Research and/or Professional Experience:

Professor, Northwestern University, 1992- present; Department Chair, 1994-1998, 2000-2001.
Professor, University of Michigan, 1989-1992
Professor, University of Illinois, 1981-1989
Director, Program in Culture, Language and Cognition, 2000 - present
Director, Program in Cognitive Studies of the Environment, 2000 - present
Fellow, U. of Illinois Center for Advanced Study, 1981-1982
Visiting Professor, University College, London, 1985
Associate Professor, University of Illinois, 1978 - 1981

Associate Professor, The Rockefeller University, 1975 - 1978
 Assistant Professor, The Rockefeller University, 1969 - 1975
 USPHS Postdoctoral Fellow, The Rockefeller University, 1968 - 1969
 NASA Predoctoral Fellow, University of South Dakota, 1965 - 1968
 Editor, The Psychology of Learning and Motivation, 1992-2000
 Consulting Editor, Cognition, 1988 -1990; 1996 - present
 Editor, Cognitive Psychology, 1990-1995
 Consulting Editor, Cognitive Psychology, 1988 - 1990, 1995 - present
 Consulting Editor, Journal of Experimental Psychology: Human Learning and Memory,
 1981 - 1984, 2000- present
 Associate Editor, Journal of Experimental Psychology: Learning, Memory, and Cognition,
 1984 - 1988
 Consulting Editor, Journal of Experimental Psychology: General, 1985 -1989
 Consulting Editor, Journal of Experimental Psychology: Animal Behavioral Processes, 1974
 - 1985
 Member, NSF Memory and Cognition Program Grant Panel, 1985 -1987
 Member, NIMH Basic Behavioral Research Grant Panel, 1979 - 1984

Publications:

Winkler-Rhoades, N., Medin, D. L., Waxman, S. R., & Woodring, J. (in press). Naming the animals that come to mind: Effects of culture and experience on category fluency. *Journal of Cognition and Culture*.

Unsworth, S., Medin, D.L., (in press). Concept Learning. In *International Encyclopedia of Education*, 3rd Ed.

Bang, M., Medin, D., Washinawatok, K., and Chapman, S. (in press). Innovations in Culturally-based Science Education through Partnerships and Community. In M. Khine & I. Saleh (Eds.) *New Science of Learning: Cognition, Computers and Collaboration in Education*. New York: Springer.

Bennis, W., Medin, D., & Bartels, D. (in press). The Costs and Benefits of Calculation and Moral Rules. *Perspectives on Psychological Science*.

Bartels, D. M., Bauman, C.W., Skita, L.J. & Medin, D.L. (in press). *Psychology of Learning and Motivation, Vol. 50: Moral Judgment and Decision Making*. San Diego, CA: Academic Press. In B. H. Ross (Series Ed.) & D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.)

Iliev, R., Sachdeva, S., Bartels, D., Joseph, C., Suzuki, S., Medin, D. (in press). Attending to Moral Values. In B. H. Ross (Series Ed.) & D. M. Bartels, C. W. Bauman, L. J. Skitka, & D. L. Medin (Eds.), *Psychology of Learning and Motivation, Vol. 50: Moral Judgment and Decision Making*. San Diego, CA: Academic Press.

Sachdeva, S., Iliev, R., Medin, D. L. (2009). Sinning saints and saintly sinners: The paradox of moral self-regulation. *Psychological Science*. 20(4) 523-528.

Leddon, E. M., Waxman, S.R. & Medin, D.L. (2008) Unmasking “alive:” Children’s

appreciation of a concept linking all living things. *Journal of Cognition and Development*. 9(4): 461-473.

Medin, D.L. & Bang, M. (2008). Perspective Taking, Diversity and Partnerships. *American Psychological Association*. 22(2) online.

Anggoro, F. K., Waxman, S.R. & Medin, D.L. (2008). Naming practices and the acquisition of key biological concepts: Evidence from English and Indonesian. *Psychological Science*.

Burnett, R. & Medin, D.L. (2008). Reasoning across cultures. In Rips, L. & Adler, J. (Eds.), *Reasoning: Studies of Human Inference and its Foundations*. Cambridge, Mass: Cambridge University Press.

Atran, S. & Medin, D.L. (2008). *The Native Mind and the Cultural Construction of Nature*. Boston, MA.: MIT Press.

Tanner, C., Medin, D. & Iliev, R. (2008). Influence of deontological versus consequentialist orientations on act choices and framing effects: When principles are more important than consequences. *European Journal of Social Psychology* 38(5), 757-769.

Ross, N., Medin, D., & Cox, D. (2007). Epistemological models and culture conflict: Menominee and European American hunters in Wisconsin. *Ethos*. 35(4), 478-515.

Blok, S., Osherson, D., & Medin, D.L. (2007). From similarity to chance. In A. Feeney & E. Heit (Eds.), *Inductive Reasoning*, 137-166. New York, NY : Cambridge University Press.

Medin, D. L. & Waxman, S. R., (2007). Interpreting asymmetries of projection in children's inductive reasoning. In A. Feeney & E. Heit (Eds.), *Inductive Reasoning*, 55-80. New York , NY: Cambridge University Press.

Bang, M., Medin, D., & Atran, S. (2007). Cultural mosaics and mental models of nature. *Proceedings of the National Academy of Sciences*. 104, 13868-13874.

Ginges, J., Atran, S., Medin, D., & Shikaki, K. (2007). Sacred bounds on rational resolution of violent political conflict. *Proceedings of the National Academy of Sciences*. 104, 7357-7360.

Medin, D.L., Unsworth, S.J., Hirschfeld, L. (2007). Cultures, Categorization and Reasoning. In S. Kitayama & D. Cohen (Eds.), *Handbook of Cultural Psychology*, 615-644. Guilford.

Waxman, S., & Medin, D. (2007). Experience and cultural models matter: Placing firm limits on anthropocentrism. *Human Development*. 50, 23-30.

Bartels, D. M. & Medin, D. L. (2007). Are morally-motivated decision makers insensitive to the consequences of their choices? *Psychological Science*. 18(1), 24-28.

Medin, D., Ross, N., Cox, D & Atran, S. (2007) Why folkbiology matters: Resource conflict despite shared goals and knowledge. *Human Ecology*. 35(3), 315-329.

- Waxman, S.R., Medin, D.L., & Ross, N. (2007). Folkbiological reasoning from a cross-cultural developmental perspective: Early essentialist notions are shaped by cultural beliefs. *Developmental Psychology*, 43(2), 294-308.
- Lynch, E., Medin, D.L., (2006). Explanatory models of illness: A study of within-culture variation. *Cognitive Psychology*, 53(4), 285-309.
- Bloomfield, A.N., Sager, J.A., Bartels, D.M. & Medin, D.L. (2006). Caring about framing effects. *Mind & Society*, 5(2), 123-138.
- Medin, D., Ross, N.O., & Cox, D. (2006). *Culture and Resource Conflict: Why meanings matter*. New York: Russell Sage Foundation.
- Medin, D.L., Ross, N., Atran, S., Cox, D., Coley, J., Proffitt, J., & Blok, S. (2006). Folkbiology of Freshwater Fish. *Cognition*, 99(3), 237-273.
- Unsworth, S.J. & Medin, D.L. (2005). Cross Cultural Differences in Belief Bias with Deductive Reasoning? *Cognitive Science*, 29(4), 525-529.
- Burnett, R., Medin, D., Ross, N., & Blok, S. (2005). Ideal is Typical. *Canadian Journal of Experimental Psychology*. 59(1), 5-10.
- Atran, S., Medin, D., & Ross, N. (2005). The Cultural Mind: Environmental Decision Making and Cultural Modeling Within and Across Populations. *Psychological Review*, 112(4), 744-776.
- Anggoro, F.K., Waxman, S.R., & Medin, D.L. (2005). The effects of naming practices on children's understanding of living things. In B. Bara, L. Barsalou, & M. Bucciarelli (Eds.) *Proceedings of the Twenty-seventh Annual Meeting of the Cognitive Science Society*, 139-144. Mahwah, NJ: Lawrence Erlbaum Associates.
- Ross, N.O., & Medin, D.L. (2005). Ethnography and Experiments: Cultural Models and Expertise Effects elicited with experimental research techniques. *Field Methods*, 17(2), 131-149.
- Rips, L.J. & Medin, D.L. (2005). Concepts, Categories, and Semantic Memory. In K. Holyoak & R. Morrison (Eds.). *Cambridge Handbook of Thinking and Reasoning*, p. 37-72. Cambridge: Cambridge University Press.
- Medin, D.L & Atran, S. (2004). The Native Mind: Biological Categorization, Reasoning and Decision Making in Development Across Cultures. *Psychological Review*, 111(4), 960-983.
- Tanner, C., & Medin, D.L. (2004). Protected Values: No omission bias and no framing effects. *Psychonomic Bulletin and Review*, 11(1), 185-191.
- Love, B.C., Medin, D.L., & Gureckis, T. (2004). SUSTAIN: A Network model of category learning. *Psychological Review*, 111, 309-332.
- Medin, D.L., Ross, B., & Markman, A. (2004). *Cognitive Psychology*, 4th Edition. New York: John Wiley & Sons.

- Atran, S., Medin, D.L., & Ross, N. (2004). Evolution and Devolution of Knowledge: A Tale of Two Biologies. *Journal of the Royal Anthropological Institute*, 10(2): 395-420.
- Medin, D.L., Coley, J.D., Storms, G. & Hayes, B. (2003). A Relevance Theory of Induction. *Psychonomic Bulletin and Review*, 3, 517-532.
- Blok, S., Medin, D.L. & Osherson, D. (2003). Probability from similarity. Paper presented at the American Association for Artificial Intelligence Spring 2003 Symposium, March 24-26, Palo Alto, CA.
- Ross, N., Medin, D.L., Coley, J.D. & Atran, S. (2003). Cultural and Experiential Differences in the Development of Folkbiological Induction. *Cognitive Development* 18, 25-47.
- Atran, S. & Medin, D.L. (2002). Thinking about Biology: Modular Constraints on Categorization and Reasoning in the Every Day Life of Americans, Maya and Scientists. *Mind and Society*, 6(3), 31-64.
- Sousa, P., Atran, S., & Medin, D.L. (2002). Essentialism and Folkbiology: Evidence from Brazil. *Journal of Cognition and Culture*, 2.3, 195-223.
- Markman, A & Medin, D.L. (2002). Decision Making. *Stevens Handbook of Experimental Psychology*, 3rd edition: Volume 2, Memory and Cognitive Processes. New York: Wiley.
- Medin, D.L., Ross, N., Atran, S., Burnett, R. & Blok, S. (2002). Categorization and Reasoning in Relation to Culture and Expertise. *Psychology of Learning and motivation*, 41, 1-41
- Atran, S., Medin, D., Vapnarsky, V., Ucan Ek', E., Coley, J.D., Timura, C. & Baran, M. (2002). Folkecology, Cultural Epidemiology, and the Spirit of the Commons: A Garden Experiment in the Maya Lowlands, 1995-2000. *Current Anthropology*, 43(3), 421-450.
- Bailenson, J.N., Shum, M., Atran, S., Medin, D.L. & Coley, J.D. (2002). A Bird's eye View: Biological Categorization and Reasoning Within and Across Cultures. *Cognition*, 84, 1-53
- Ahn, W., Kalish, C., Gelman, S., Medin, D.L., Luhman, C., Atran, S., Coley, J.D. & Shafto, P. (2001). Why essences are essential in the psychology of concepts. *Cognition*, 82, 59-69.
- Atran, S., Medin, D.L, Lynch, E., Vapnarsky, V., Ucan Ek' & Sousa, P. (2001) Folkbiology doesn't come from Folkpsychology: Evidence from Yukatec Maya in Cross-cultural Perspective. *Journal of Cognition and Culture* 1, 4-42.
- Wolff, P. & Medin, D.L. (2001). Measuring the Evolution and Devolution of Folkbiological Knowledge. In L. Maffi (Ed.) *On Biocultural Diversity: Linking Language Knowledge and the Environment*, 212-227. Smithsonian Institution: Washington
- Lynch, E. B., Coley, J. D., & Medin, D. L. (2000). Tall is typical: Central tendency, ideal dimensions and graded category structure among tree experts and novices. *Memory and Cognition*, 28(1), 41-50.

- Medin, D. L., Lynch, E. B., & Solomon, K. O. (2000). Are there kinds of concepts? *Annual Review of Psychology*, *51*, 121-147.
- Medin, D. L., Proffitt, J. B., & Schwartz, H. C. (2000). Concepts: Overview. In A. E. Kazdin (Ed.), *Encyclopedia of Psychology*. New York: Oxford University Press.
- Proffitt, J. B., Coley, J. D., & Medin, D. L. (2000). Expertise and category-based induction. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, *26*(4), 811-828.
- Aguilar, C. M., & Medin, D. L. (1999). Asymmetries of comparison. *Psychonomic Bulletin and Review*, *6*(2), 328-337.
- Wolff, P., Medin, D. L., & Pankratz, C. (1999). Evolution and devolution of folkbiological knowledge. *Cognition* *73*, 177-204.
- Atran, S., Medin, D., Ross, N., Lynch, E., Coley, J. Ucan Ek', E. & Vapnarsky, V. (1999). Folkecology and commons management in the Maya Lowlands. *Proceedings of the National Academy of Sciences U.S.A.*, *96*, 7598-7603.
- Choplin, J. M., & Medin, D. L. (1999). Similarity of the perimeters in the Ebbinghaus illusion. *Perception and Psychophysics*, *61*(1), 3-12.
- Coley, J. D., Medin, D. L., Proffitt, J. B., Lynch, E., & Atran, S. (1999). Inductive reasoning in folkbiological thought. In D. L. Medin & S. Atran (Eds.), *Folkbiology* (pp. 205-232). Cambridge, MA: Bradford.
- Medin, D. L., & Aguilar, C. M. (1999). Categorization. In R. A. Wilson & F. C. Keil (Eds.), *The MIT Encyclopedia of the Cognitive Sciences* (pp. 104-106). Cambridge: MIT Press.
- Medin, D. L., & Atran, S. (Eds.) (1999). *Folkbiology*. Cambridge, MA: Bradford.
- Medin, D. L., & Bazerman, M. H. (1999). Broadening Behavioral Decision Research: Multiple Levels of Cognitive Processing. *Psychonomic Bulletin and Review*, *6*(4), 533-547.
- Medin, D. L., & Heit, E. J. (1999). Categorization. In D. Rumelhart & B. Martin (Eds.), *Handbook of cognition and perception* (pp. 99-143). San Diego: Academic Press.
- Medin, D. L., Schwartz, H. C., Blok, S., & Birnbaum, L. (1999). The semantic side of decision making. *Psychonomic Bulletin and Review*, *6*(4), 562-569.
- Solomon, K. O., Medin, D. L., & Lynch, E. B. (1999). Concepts do more than categorize. *Trends in Cognitive Science*, *3*(3), 99-105.
- Medin, D. L. & Coley, J. D. (1998). Concepts and categorization. In J. Hochberg (Ed.), *Handbook of perception and cognition. Perception and cognition at century's end: History, philosophy, theory* (pp. 403-439). San Diego: Academic Press.

- Medin, D. L., & Waxman, S. R. (1998). Conceptual organization. In W. Bechtel & G. Graham (Eds.), *A Companion to Cognitive Science* (pp. 167-175). Oxford, England: Blackwell.
- Atran, S., & Medin, D. L. (1997). Knowledge and action: Cultural models of nature and resource management in Mesoamerica. In M. H. Bazerman, D. M. Messick, A. E. Tenbrunsel, & K. A. Wade-Benzoni (Eds.), *Environment, ethics, and behavior: The psychology of environmental valuation and degradation. The New Lexington Press management series and the New Lexington Press social and behavioral science series*. San Francisco: Jossey-Bass.
- Atran, S., Estin, P., Coley, J. D., & Medin, D. L. (1997). Generic Species and Basic Levels: Essence and Appearance in Folk Biology. *Journal of Ethnobiology*, *17*, 22-45.
- Bassok, M. & Medin, D. L. (1997). Birds of a feather flock together: Similarity judgments with semantically rich stimuli. *Journal of Memory and Language*, *36*, 311-336.
- Coley, J. D., Medin, D. L., & Atran, S. (1997). Does rank have its privilege? Inductive inferences within folkbiological taxonomies. *Cognition*, *64*(1), 73-112.
- Goldstone, R. L., Medin, D. L., & Halberstadt, J. (1997). Similarity in context. *Memory and Cognition*, *25*, 237-255.
- Kaplan, A. S. & Medin, D. L. (1997). The coincidence effect in similarity and choice. *Memory & Cognition*, *25*(4), 570-576.
- López, A., Atran, S., Coley, J. D., Medin, D. L., & Smith, E. E. (1997). The tree of life: Universal and cultural features of folkbiological taxonomies and inductions. *Cognitive Psychology*, *32*, 251-295.
- Medin, D. L., Lynch, E. B., Coley, J. D., & Atran, S. (1997). Categorization and reasoning among tree experts: Do all roads lead to Rome? *Cognitive Psychology*, *32*, 49-96.
- Johnson, J. S., Shenkman, K. D., Newport, E. L., & Medin, D. L. (1996). Indeterminacy in the grammar of adult language learners. *Journal of Memory & Language*, *35*(3), 335-352.
- Medin, D. L., Goldstone, R. L., & Markman, A. B. (1995). Comparison and choice: Relations between similarity processes and decision processes. *Psychonomic Bulletin and Review*, *2*, 1-19.
- Medin, D. L. & Goldstone, R. L. (1995). The predicates of similarity. In C. Cacciari (Ed.), *Similarity* (pp. 83-110). Milan: Bompiani.
- Markman, A. B. & Medin, D. L. (1995). Similarity and alignment in choice. *Organizational Behavior & Human Decision Processes*, *63*, 117-130.
- Ahn, W. K., Kalish, C. W., Medin, D. L., & Gelman, S. A. (1995). The role of covariation versus mechanism information in causal attribution. *Cognition*, *54*, 299-352.

Wisniewski, E. J., & Medin, D. L. (1994). The fiction and nonfiction of features. In R. S. Michalski & G. D. Tecuci (Eds.), *Machine Learning: A Multistrategy Approach, Vol. 4* (pp. 63-84). San Mateo, CA: Morgan Kaufman Publishers, Inc.

Wisniewski, E. J. & Medin, D. L. (1994). On the interaction of theory and data in concept learning. *Cognitive Science, 18*, 221-281.

Medin, D. L. & Bettger, J. G. (1994). Presentation order and recognition of categorically related examples. *Psychonomic Bulletin & Review, 1*, 250-254.

Goldstone, R. L. & Medin, D. L. (1994). Time course of comparison. *Journal of Experimental Psychology: Learning, Memory, & Cognition, 20*, 29-50.

Goldstone, R. L. & Medin, D. L. (1994). Similarity, interactive activation, and mapping: An overview. In K. J. Holyoak & J. A. Barnden (Eds.), *Analogical Connections: Advances in Connectionist and Neural Computation Theory, Vol. 2*, 321-362.

Medin, D. L., Goldstone, R. L., and Gentner, D. (1993). Respects for similarity. *Psychological Review, 100*, 254-278.

Medin, D. L. (Ed.). (1993). *The Psychology of Learning and Motivation, Vol. 30*. San Diego, CA: Academic Press.

Gelman, S. A., & Medin, D. L. (1993). What's so essential about essentialism? A different perspective on the interaction of perception, language, and conceptual knowledge. *Cognitive Development, 8*, 157-167.

Medin, D. L., & Thau, D. M. (1992). Theories, constraints, and cognition. In H. L. Pick, Jr., P. W. van den Broek, & D. C. Knill (Eds.), *Cognition: Conceptual and methodological issues* (pp. 165-187). Washington, DC: American Psychological Association.

Medin, D. L., & Florian, J. E. (1992). Abstraction and selective coding in exemplar-based models of categorization. In A. F. Healy, S. M. Kosslyn, & R. M. Shiffrin (Eds.), *Essays in honor of William K. Estes, Vol. 1: From learning theory to connectionist theory; Vol. 2: From learning processes to cognitive processes* (pp. 207-234). Hillsdale, NJ: Erlbaum.

Lassaline, M. E., Wisniewski, E. J., & Medin, D. L. (1992). Basic levels in artificial and natural categories: Are all basic levels created equal? In B. Burns (Ed.), *Percepts concepts, and categories: The representation and processing of information. Advances in psychology, Vol. 93* (pp. 327-378). Amsterdam: North-Holland.

Ahn, W. K. & Medin, D. L. (1992). A two-stage model of category construction. *Cognitive Science, 16*, 81-121.

Wisniewski, E. J., & Medin, D. L. (1991). Harpoons and long sticks: The interaction of theory and similarity in rule induction. In D. Fisher & M. Pazzani, (Eds.), *Computational Approaches to Concept Formation* (pp. 237-278). San Mateo, CA: Morgan Kaufman.

Wisniewski, E. J., & Medin, D. L. (1991). Is it a pocket or a purse? Tightly coupled theory and data driven learning. *Proceedings of the Eighth International Workshop on Machine Learning*, (pp. 564-568). Evanston, IL.

Wisniewski, E. J., & Medin, D. L. (1991). Feature construction in human and machine learning. *Proceedings of the First International Workshop on Multistrategy Learning*, (pp. 343-353). Harpers Ferry, WV.

Medin, D. L., & Bettger, J. G. (1991). Sensitivity to changes in base-rate information. *American Journal of Psychology*, *104*, 311-332.

Goldstone, R. L., Medin, D. L., & Gentner, D. (1991). Relational similarity and the nonindependence of features in similarity judgments. *Cognitive Psychology*, *23*, 222-262.

Medin, D. L., Ahn, W. K., Bettger, J. G., Florian, J. E., Goldstone, R. L., Lassaline, M. E., Markman, A., Rubinstein, J., & Wisniewski, E. J. (1990). Safe takeoffs -- soft landings. *Cognitive Science*, *14*, 169-178.

Medin, D. L., Goldstone, R. L., & Gentner, D. (1990). Similarity involving attributes and relations: Judgments of similarity and difference are not inverses. *Psychological Science*, *1*, 64-69.

Medin, D. L., & Goldstone, R. L. (1990). Concepts. In M. W. Eysenck (Ed.), *The Blackwell Dictionary of Cognitive Psychology*.

Medin, D. L. (1989). Concepts and conceptual structure. *American Psychologist*, *44*, 1469-1481.

Goldstone, R. L., Gentner, D., and Medin, D. L. (1989). Relations relating relations. In *Proceedings of the 11th Annual Conference of the Cognitive Science Society*. Ann Arbor, Michigan, August 16-19th, 1989. Erlbaum, Hillsdale, N. J.

Ahn, W. and Medin, D. L. (1989). A Two-Stage Categorization Model of Family Resemblance Sorting. In *Proceedings of the 11th Annual Conference of the Cognitive Science Society*. Ann Arbor, Michigan, August 16-19th, 1989. Erlbaum: Hillsdale, N.J.

Matheus, C. J. Rendell, L. R., Medin, D. L. and Goldstone, R. L. (1989). Purpose and Conceptual Functions: A framework for Concept Representation and Learning in Humans and Machines. In: *The Seventh Conference of the Society for the Study of Artificial Intelligence and Simulation of Behavior*. Sussex, England April, 1989. Tony Cohn (Ed.). Pitmen Publishing.

Medin, D. L., & Ross, B. H. (1989). The specific character of abstract thought: Categorization, problem-solving, and induction. In R. J. Sternberg (Ed.), *Advances in the psychology of human intelligence*, Vol. 5 (pp. 189-223). Hillsdale, NJ: Erlbaum.

Medin, D. L., & Ortony, A. (1989). Psychological essentialism. In S. Vosniadou and A. Ortony (Eds.), *Similarity and analogical reasoning* (pp. 179-195). New York: Cambridge University Press.

- Medin, D. L. (1989) You almost have to know something in order to learn it. [Review of the book *Encyclopedia of Artificial Intelligence*]. *Contemporary Psychology*, *34*, 445-447.
- Skorstad, J., Gentner, D., and Medin, D. L. (1988). Abstraction Processes During Concept Learning: A Structural View. *Proceedings of the 10th Annual Conference of the Cognitive Science Society*. Montreal, Canada, August 17-19, 1988. Erlbaum: Hillsdale, N.J.
- Wattenmaker, W. D., Nakamura, G. V., & Medin, D. L. (1988). Relationships between similarity-based and explanation-based categorization. In D. Hilton (Ed.), *Contemporary science and natural explanation: Commonsense conceptions of causality* (pp. 205-241). Sussex, England: Harvester Press.
- Medin, D. L., & Shoben, E. J. (1988). Context and structure in conceptual combination. *Cognitive Psychology*, *20*, 158-190.
- Medin, D. L., & Edelson, S. M. (1988). Problem structure and the use of base-rate information from experience. *Journal of Experimental Psychology: General*, *117*, 68-85.
- Medin, D. L. (1988). Social categorization: Structures, processes, and purposes. In T. K. Srull & R. S. Wyer, Jr. (Eds.), *A dual process model of impression formation. Advances in social cognition, Vol. 1* (pp. 119-126). Hillsdale, NJ: Erlbaum.
- Medin, D. L., Wattenmaker, W. D., & Michalski, R. S. (1987). Constraints and preferences in inductive learning: An experimental study comparing human and machine performance. *Cognitive Science*, *11*, 319-359.
- Medin, D. L., & Barsalou, L. W. (1987). Categorization processes and categorization perception. In S. Harnad (Ed.), *Categorical perception* (pp. 455-490). Cambridge: Cambridge University Press.
- Medin, D. L., Wattenmaker, W. D., & Hampson, S. E. (1987). Family resemblance, concept cohesiveness, and category construction. *Cognitive Psychology*, *19*, 242-279.
- Medin, D. L., & Wattenmaker, W. D. (1987). Category cohesiveness, theories and cognitive archeology. In U. Neisser (Ed.), *Concepts and conceptual development: Ecological and intellectual factors in categorization* (pp. 25-62). Cambridge: Cambridge University Press.
- Medin, D. L., & Dewey, G. I. (1986). Memory theories: Past, present, and projected. In D. F. Kendrick, M. E. Rilling, & M. R. Denny (Eds.), *Theories of animal memory. Comparative cognition and neuroscience* (pp. 173-196). Hillsdale, NJ: Erlbaum.
- Wattenmaker, W. D., Dewey, G. I., Murphy, T. D., & Medin, D. L. (1986). Linear separability and concept learning: Context, relational properties and concept naturalness. *Cognitive Psychology*, *18*, 158-194.
- Medin, D. L. (1986). Commentary on "Memory Storage and Retrieval Processes in Category Learning." *Journal of Experimental Psychology: General*, *115*, 373-381.

- Barsalou, L. W., & Medin, D. L. (1986). Concepts: Fixed definitions or dynamic context-dependent representations? *Cahiers de Psychologie Cognitive*, 6(2), 187-202.
- Murphy, G. L., & Medin, D. L. (1985). The role of theories in conceptual coherence. *Psychological Review*, 92, 289-316.
- Medin, D. L., Altom, M. W., & Murphy, T. D. (1984). Given versus induced category representations: Use of prototype and exemplar information in classification. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 10, 333-352.
- Medin, D. L., & Reynolds, T. J. (1984). Cue-context interactions in discrimination, categorization, and memory. In P. Balsam and A. Tomie (Eds.), *Context in learning and memory* (pp. 323-356). Hillsdale, NJ: Erlbaum.
- Smith, E. E., Medin, D. L., & Rips, L. J. (1984). A psychological approach to concepts: Comments on Rey's "concepts and stereotypes." *Cognition*, 17, 265-274.
- Medin, D. L. (1984). Time in cognitive processing and memory: Discussion paper. *Annals of the New York Academy of Sciences*, 423, 385-388.
- Busemeyer, J. R., Dewey, G. I., & Medin, D. L. (1984). Evaluation of exemplar-based generalization and the abstraction of categorical information. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 10, 638-648.
- Medin, D. L., & Dewey, G. I. (1984). Learning of ill-defined categories by monkeys. *Canadian Journal of Psychology*, 38, 285-303.
- Medin, D. L., & Smith, E. E. (1984). Concepts and concept formation. *Annual Review of Psychology*, 35, 113-138.
- Lingle, J., Altom, M., & Medin, D. L. (1983). Social categorization. In R. S. Wyer, T. Srull, & J. Hartwick (Eds.), *Handbook of social cognition*. Vol. 1. Hillsdale, NJ: Erlbaum Associates.
- Medin, D. L. (1983). Linear separability and concept naturalness. In *Proceedings of the 2nd International Conference on Machine Learning*. Champaign IL: University of Illinois Press.
- Medin, D. L., Dewey, G. I., & Murphy, T. D. (1983). Relationships between item and category learning: Evidence that abstraction is not automatic. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 9, 607-625.
- Parkinson, J. K., & Medin, D. L. (1983). Emerging attributes in monkey short-term memory. *Journal of Experimental Psychology: Animal Behavior Processes*, 9, 31-40.
- Medin, D. L. (1983). Structural principles in categorization. In T. Tighe & B. Shepp (Eds.), *Development: Interactional analyses* (pp. 203-230). Hillsdale, NJ: Erlbaum.
- Whitlow, J. W., Smith, E. E., & Medin, D. L. (1982). Retrieval of correlated predicates. *Journal of Verbal Learning and Verbal Behavior*, 21, 383-402.

- Medin, D. L., Altom, M. W., Edelson, S. M., & Freko, D. (1982). Correlated symptoms and simulated medical classification. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, 8, 37-50.
- Medin, D. L., & Schwanenflugel, P. J. (1981). Linear separability in classification learning. *Journal of Experimental Psychology: Human Learning and Memory*, 7, 355-368.
- Smith, E. E., & Medin, D. L. (1981). *Categories and concepts*. Cambridge, MA: Harvard University Press.
- Medin, D. L., & Smith, E. E. (1981). Strategies and classification learning. *Journal of Experimental Psychology: Human Learning and Memory*, 7, 241-253.
- Reynolds, T. J., & Medin, D. L. (1981). Stimulus interaction and between trial proactive interference in monkeys. *Journal of Experimental Psychology: Animal Behavior Processes*, 7, 334-347.
- Medin, D. L., (1980). Proactive interference in monkeys: Delay and interstimulus interval effects are noncomparable. *Animal Learning and Behavior*, 8, 553-560.
- Medin, D. L., Reynolds, T. J., & Parkinson, J. K. (1980). Stimulus similarity and retroactive interference and facilitation in monkey short-term memory. *Journal of Experimental Psychology: Animal Behavior Processes*, 6, 112-125.
- Reynolds, T. J., & Medin, D. L. (1979). Strength versus temporal-order information in delayed matching-to-sample performance by monkeys. *Animal Learning and Behavior*, 7, 294-300.
- Medin, D. L., & Schaffer, M. M. (1978). A context theory of classification learning. *Psychological Review*, 85, 207-238.
- Fahrmeier, E. D., & Medin, D. L. (1977). Developmental study of similarity judgments involving dimensions. *Perceptual and Motor Skills*, 45, 619-629.
- Medin, D. L. (1977). Memory processes and discrimination learning set formation. In A. M. Schrier (Ed.), *Progress in behavioral primatology*. Hillsdale, NJ: Erlbaum Associates.
- Medin, D. L. (1977). Status of unchosen objects in discrimination learning by monkeys. *Bulletin of the Psychonomic Society*, 9, 118-120.
- Medin, D. L. (1976). Animal models and memory models. In D. L. Medin, W. A. Roberts, and R. T. Davis (Eds.), *Processes of animal memory*. Hillsdale, NJ: Erlbaum Associates.
- Medin, D. L., & Cole, M. (1975). Comparative psychology and human cognition. In W. K. Estes (Ed.), *Handbook of learning and cognitive processes, Vol. 1* (pp. 111-150). Hillsdale, NJ: Erlbaum Associates.

- Medin, D. L. (1975). A theory of context in discrimination learning. In G. Bower (Ed.), *The psychology of learning and motivation, Vol. 9* (pp. 263-314). New York: Academic Press.
- Medin, D. L. (1975). Theories of discrimination learning and learning set. In W. K. Estes (Ed.), *Handbook of learning and cognitive processes, Vol. 3*. Hillsdale, NJ: Erlbaum Associates.
- Cole, M., & Medin, D. L. (1974). Comment on Golin and Rosser. *Journal of Experimental Child Psychology, 17*, 545-546.
- Flagg, S. F., Medin, D. L., Davis, R. T. (1974). Stimulus generalization in monkeys following discrimination training with gray stimuli. *Animal Learning & Behavior, 2*(1), 19-22.
- Medin, D. L. (1974). Frequency and coding responses in verbal discrimination learning. *Memory & Cognition, 2*(1), 11-13.
- Medin, D. L. (1974). Position distinctiveness and successive discrimination learning. *Bulletin of the Psychonomic Society, 4*(1), 35-36.
- Medin, D. L. (1974). Reward pretraining and discrimination learning set. *Animal Learning & Behavior, 2*(4), 305-308.
- Medin, D. L., & Davis, R. T. (1974). Memory. In A. M. Schrier & F. Stollnitz (Eds.), *Behavior of non-human primates: Modern research trends, Vol. 5* (pp. 2-47). New York: Academic Press.
- Allmeyer, D. H., & Medin, D. L. (1973). Reward Information and Cue Selection Following Multiple-Cue Probability Learning. *Journal of Experimental Psychology, 99*(3), 426-428.
- Flagg, S. F., & Medin, D. L. (1973). Constant Irrelevant Cues and Stimulus Generalization in Monkeys. *Journal of Comparative and Physiological Psychology, 99*(2), 339-345.
- Medin, D. L. (1973). Subproblem analysis of discrimination shift learning*. *Behavior Research Method and Instrument, 5*(4), 332-336.
- Medin, D. L. (1973). Measurement and Training Dimensional Preferences. *Child Development, 44*, 359-362.
- Cole, M., & Medin, D. L. (1973). On the existence and occurrence of mediation in discrimination transfer: A critical note. *Journal of Experimental Child Psychology, 15*, 352-355.
- Medin, D. L. (1972). Adjusting retention scores: Reply to Balogh and Zimmerman. *Perceptual and Motor Skills, 35*, 461-462.
- Medin, D. L. (1972). Partial information and choice behavior in differential reward magnitude learning. *Psychonomic Science, 27*, 73-176.
- Medin, D. L. (1972). Role of reinforcement in discrimination learning set in monkeys. *Psychological Bulletin, 77*, 234-238.

Medin, D. L. (1972). Response factors in verbal learning and transfer. *Journal of Verbal Learning and Verbal Behavior*, *11*, 234-238.

Medin, D. L. (1972). Evidence of short- and long-term memory in monkeys. *American Journal of Psychology*, *85*, 117-119.

Robbins, D. L., & Medin, D. L. (1971). Cue selection after multiple-cue probability training. *Journal of Experimental Psychology*, *91*, 333-335.

Medin, D. L. (1971). Review of N. S. Sutherland and N. J. MacKintosh, "Mechanisms of animal discrimination learning." *Contemporary Psychology*, *16*, 333-334.

Borkhuis, M. L., Davis, R. T., & Medin, D. L. (1971). Confusion errors in monkey short-term memory. *Journal of Comparative and Physiological Psychology*, *77*, 206-211.

Medin, D. L., & Robbins, D. (1971). Effect of frequency on transfer performance after successive discrimination training. *Journal of Experimental Psychology*, *87*, 434-436.

Medin, D. L., Borkhuis, M. L., & Davis, R. T. (1970). Response latency and brightness judgments by monkeys. *Journal of Experimental Psychology*, *83*, 480-485.

Medin, D. L. (1968). Form perception and pattern reproduction by monkeys. *Journal of Comparative and Physiological Psychology*, *68*, 412-419.

Medin, D. L., & Davis, R. T. (1968). Formation of a successive (Sign-Differentiated Position) learning set in stump-tail monkeys. *Perceptual and Motor Skills*, *27*, 835-858.

Medin, D. L. (1968). S-R separation with monkeys. *Psychonomic Science*, *10*, 247-248.

Medin, D. L., & Davis, R. T. (1967). Color discrimination by rhesus monkeys. *Psychonomic Science*, *7*, 33-34.

Reid, J. B., Medin, D. L., & Davis, R. T. (1965). Perception of verticality by monkeys. *Journal of Comparative and Physiological Psychology*, *60*, 208-212.

Current Research Grants:

Sacred Values in Decision Making and Cultural Conflict

Source of Support: National Science Foundation & Department of Homeland Security

Start/End Dates: 9/01/05- 8/31/09 Role: PI

one year extension to 8-31-09

Computational Models for Belief Revision, Group Decisions, and Cultural Shifts

Source of Support: Air Force Office of Sponsored Research

Start/End Dates: 6/1/05-5/14/10 Role: Collaborator

Collaborative Research: The Cultural Context of Native-American Science Education

Source of Support: NSF

Start/End Dates: 9/01/05-8/31/08 Role: PI

one year extension to 8-31-09

Collaborative Research: The Cultural Context of Learning: Native-American Science Education

Source of Support: NSF

Start/End Dates: 9/1/-2/28/11 Role: PI

A Cross-Cultural View of Biological Thought

Source of Support: NSF

Start/End Dates: 5/15/08-5/14/11 Role: PI

Collaborative Research: The Role of Culture and Experience in Children's Understandings of the Biological World

Source of Support: NSF

Start/End Dates: 9/15/08-8/31/11 Role: PI

Graduate and Post-Graduates Advisors and Advisees:

Graduate Advisor - Roger T. Davis

Postdoctoral Fellowship Advisor - William K. Estes

Previous and Current (C) Graduate Advisees

Stephen Edelson

Will Wattenmaker

Gerald Dewey

Wookyoung Ahn

Robert Goldstone

Mary Lassaline

Joshua Rubinstein

Cynthia Aguilar

Bradley Love

Sergey Blok

Russ Burnett

Amber Bloomfield

Dan Bartels

Megan Bang

Sara Unsworth

Rumen Iliev (C)

Sonya Sachdeva (C)

Trish Herrmann (C)

Previous and Current (C) Advisees:

Tom Reynolds

Denis Hilton

Edward Wisniewski

Evan Heit

John Coley

Karen Solomon

Luisa Maffi

Norbert Ross

Elizabeth Lynch

Andrzej Tarlowski

Will Bennis (C)

Erin Leddon (C)

Olivier LeGuen

Craig Joseph (C)

updated 10-8-08