

Stephen Kaplan

- education** Oberlin College, A.B. 1957
University of Michigan, PhD (Psychology) 1962
- positions** University of Michigan:
- Department of Psychology:
Assistant Professor, 1962-66; Associate Professor, 1966-1971;
Professor, 1971-present
- Department of Electrical Engineering & Computer Science:
Professor, 1971-present
- honors,
affiliations** Phi Beta Kappa
Distinguished Service Award, University of Michigan, 1965
Misha Strassberg Visiting Lectureship,
University of Western Australia, 1983
Career Award, Environmental Design Research Association, 1992
EDRA/*Places* Research Award, 1999
Bracken Fellow, Pennsylvania State University, 1999
- Fellow, American Psychological Association
Fellow, American Psychological Society
Environmental Design Research Association
International Association of Applied Psychology
American Association for the Advancement of Science
Honorary Member, American Society of Landscape Architecture,
Michigan Chapter
- Affiliate Professor, College of Forest Resources, University of Washington
- courses
taught** Cognitive functioning
Neural models and psychological processes
Cognition and environment
The human as an information processing system
Psychology of thinking
Environmental psychology
- Honors introduction to psychology as a natural science
Junior Honors Seminar: Historical perspectives
Perception and thought (advanced undergraduate)
Perception (advanced graduate course)

**current
research
directions**

The conditions under which people are more reasonable and more environmentally responsible, with a special emphasis on meeting human informational needs.

Participatory approaches that take advantage of the respective strengths of experts and laypeople.

Facilitating human effectiveness through identifying means of increasing restorative effects and reducing the influence of fatigue-producing environments.

**Recent Funded
Research
(co-PI)**

(Funded by USDA Forest Service unless otherwise noted)

Orientation, restorativeness and informational factors in a satisfying museum experience. Toledo Museum of Art; 1991-94.

Wildlife habitat and employee benefits: Phase One. Wildlife Habitat Enhancement Council, 1992-93.

Urban forestry and urban youth. 1992-96.

The Urban Forestry Design and Management Manual. 1992-97.

Preference and restoration: Symbiotic urban forest values. 1994-1998.

Expertise and patterns of involvement. 1996-1999.

Nearby nature at the urban fringe: Ecological and psychological values. 1999-2003.

Natural resources and decision-making for local planning. 2001-2004.

Making Metropolitan Areas More Livable: Recognizing and Enhancing Underappreciated Natural Resources. 2002-2005.

In collaboration with the University of Washington

The problem of assuming shared images. 1995-1997.

Stakeholder perspectives: A cognitive approach to assessing the human dimensions of forest management. 1996-1999.

Social and psychological impacts of residential development patterns at the urban-forest fringe. 1998-2001. (National Urban & Community Forestry Advisory Council)

Publications

Kaplan, S. Kaplan, R. and E. L. Walker. (1960) Individual differences in learning as a function of shock level. Journal of Experimental Psychology, 60, 404-407.

S. Kaplan. (1962) Arousal and perseveration: A theoretical model. Doctoral dissertation, University of Michigan.

S. Kaplan and R. Kaplan. (1962) Skin resistance recording in the unrestrained rat. Science, 138, 1403-1404.

L. J. Kleinsmith and S. Kaplan. (1963) Paired associate learning as a function of arousal and interpolated interval. Journal of Experimental Psychology, 65, 190-193.

L. J. Kleinsmith, S. Kaplan and R. D. Tarte. (1963) The relationship of arousal and short- and long-term verbal recall. Canadian Journal of Psychology, 17, 393-397.

S. Kaplan. (1963) Neither watered down nor tidied up. Review of Brown, et al.: New directions in psychology. Contemporary Psychology, 67, 124-126.

L. J. Kleinsmith and S. Kaplan. (1964) The interaction of arousal and recall interval in nonsense syllable paired-associate learning. Journal of Experimental Psychology, 67, 124-126.

S. Kaplan. (1964) Searching behavior in undergraduates. Psychology in the Schools, 1:403-405. (Reprinted in W. R. Hatch and A. L. Richards [Eds.] Approach to independent study. U.S. Department of HEW, New Dimensions in Higher Education #13, 1965.)

S. Kaplan, S. L. Mann and R. Kaplan. (1964) Honors housing opportunity at the University of Michigan. Superior Student, 7, 14-.

S. Kaplan and G. R. Fisher. (1964) A modified design for the Lykken zinc electrodes. Psychophysiology, 1, 88-89.

S. Kaplan and J. L. Hobart. (1964) A versatile device for the measurement of skin resistance in rats and humans. American Journal of Psychology, 77, 309-310.

S. Kaplan and J. L. Hobart. (1965) A new technique for recording skin resistance. American Journal of Medical Electronics, 4, 117-120.

S. Kaplan and R. Kaplan. (1968) Arousal and memory: A comment. Psychonomic Science, 10, 291-292.

S. Kaplan, R. Kaplan and J. R. Sampson. (1968) Encoding and arousal factors in free recall of verbal and visual material. Psychonomic Science, 12, 73-74.

S. Kaplan, J. R. Pomerantz and R. Kaplan. (1969) Satiation effects in the perception of single letters. Perception and Psychophysics, 6, 129-132.

S. Kaplan and R. Kaplan. (1969) The arousal-retention interval revisited: The effects of some procedural changes. Psychonomic Science, 15, 84-85.

- S. Kaplan and K. Winter. (1969) Arousal as a function of background factors in psychophysical experiments. Psychonomic Science, 16, 107-108.
- S. Kaplan and R. Kaplan. (1970) The interaction of arousal and retention interval: Ipsative vs. normative scoring. Psychonomic Science, 19, 115-117.
- S. Kaplan. (1970) The role of location processing in the perception of the environment. In J. Archea and C. Eastman (Eds.) EDRA TWO. Stroudsburg, PA: Dowden, Hutchinson and Ross.
- S. Kaplan, R. Kaplan and J. S. Wendt. (1972) Rated preference and complexity for natural and urban visual material. Perception and Psychophysics, 12, 354-356.
- S. Kaplan and J. S. Wendt. (1972) Preference and the visual environment: Complexity and some alternatives. In W. J. Mitchell (Ed.) Environmental design: Research and practice. Proceedings of the Environmental Design Research Association Conference, Los Angeles.
- S. Kaplan. (1972) The challenge of environmental psychology: A proposal for a new functionalism. American Psychologist, 27, 140-143.
- S. Kaplan. (1973) Cognitive maps in perception and thought. In R. M. Downs and D. Stea (Eds.) Image and environment. Chicago, IL: Aldine. Pp. 63-78.
- S. Kaplan. (1973) Cognitive maps, human needs and the designed environment. In W. F. E. Preiser (Ed.) Environmental design research. Stroudsburg, PA: Dowden, Hutchinson and Ross. Pp. 275-283.
- R. Kaplan, S. Kaplan and H. L. Deardorff. (1974) The perception and evaluation of a simulated environment. Man-Environment Systems, 4, 191-192.
- S. Kaplan. (1975) An informal model for the prediction of preference. In E. H. Zube, R. O. Brush and J. G. Fabos (Eds.) Landscape assessment: Values, perception and resources. Stroudsburg, PA: Dowden, Hutchinson and Ross. Pp. 92-101.
- S. Kaplan. (1976) Adaptation, structure and knowledge. In G. T. Moore and R. G. Golledge (Eds.) Environmental knowing: Theories, perspectives and methods. Stroudsburg, PA: Dowden, Hutchinson and Ross. Pp. 32-45.
- T. R. Herzog, S. Kaplan and R. Kaplan. (1976) The prediction of preference for familiar urban places. Environment and Behavior, 8, 627-645.
- S. Kaplan. (1977) Tranquility and challenge in the natural environment. In Children, nature and the urban environment. USDA Forest Service General Technical Report NE-30. Pp. 181-185.
- S. Kaplan. (1977) Participation in the design process: A cognitive approach. In D. Stokols (Ed.) Perspectives on environment and behavior: Theory, research and application. NY: Plenum. Pp. 221-233.
- S. Kaplan and R. Kaplan. (1977) The experience of the environment. Man-Environment Systems, 7, 300-305.

- S. Kaplan and R. Kaplan (Eds.). (1978) Humanscape: Environments for people. Belmont, CA: Duxbury. (Republished by Ann Arbor, MI: Ulrich's, 1982.)
- S. Kaplan. (1978) Perception of an uncertain environment. Pp. 30-35 in Humanscape.
- S. Kaplan. (1978) On knowing the environment. Pp. 54-58 in Humanscape.
- S. Kaplan. (1978) Attention and fascination: The search for cognitive clarity. Pp. 84-90 in Humanscape.
- S. Kaplan. (1979) Concerning the power of content-identifying methodologies. In Assessing amenity resource values. USDA Forest Service General Technical Report RM-68. Pp. 4-13.
- S. Kaplan. (1979) Perception and landscape: Conceptions and misconceptions. In Proceedings of Our National Landscape Conference. USDA Forest Service General Technical Report PSW-35. Pp. 241-248.
- T. R. Herzog, S. Kaplan and R. Kaplan. (1982) The prediction of preference for unfamiliar urban places. Population and Environment, 5, 43-59.
- S. Kaplan. (1982) Where cognition and affect meet: A theoretical analysis of preference. In P. Bart, A. Chen and G. Francescato (Eds.) Knowledge for design. Washington, D.C.: EDRA. Pp.183-188.
- S. Kaplan and R. Kaplan. (1982) Cognition and environment: Functioning in an uncertain world. New York: Praeger. (Republished by Ann Arbor, MI: Ulrich's, 1989.)
- S. Kaplan. (1982) Lost in Chelm: Maladaptive behavior in an adaptive model. (Commentary on I. Lieblich and M. A. Arbib "Multiple representations of space underlying behavior.") Behavioral and Brain Sciences, 5, 643-644.
- S. Kaplan and J. F. Talbot. (1983) Psychological benefits of a wilderness experience. In I. Altman and J. F. Wohlwill (Eds.) Behavior and the natural environment. New York: Plenum. Pp. 163-203.
- S. Kaplan. (1983) A model of person-environment compatibility. Environment and Behavior, 15, 311-332.
- S. Kaplan. (1984) Landscape preference and human evolution: The aesthetics of function. In A. S. Devlin and S. L. Taylor (Eds.) Environmental preference and landscape management. New London, CT: Connecticut College.
- S. Kaplan. (1984) Molar concepts and mentalistic theories: A moral approach. (Comments on B.F. Skinner's "The phylogeny and ontogeny of behavior.") Behavioral and Brain Sciences, 7, 692-693.
- S. Kaplan. (1984) A process-oriented approach to concerns in environmental decision-making. In S. L. Hart, G. A. Enk and W. F. Hornick (Eds.) Improving impact assessment: Increasing the relevance and utilization of technical and scientific information. Boulder, CO: Westview Press. Pp. 21-35.

- S. Kaplan. (1984) Affect and cognition in the context of home: The quest for intangibles. Population and Environment, 7, 126-133.
- S. Kaplan. (1985) Review of Christopher Alexander: The search for a new paradigm in architecture by S. Grabow. Environment and Behavior, 17, 405-408.
- S. Kaplan (1985) Cognition and affect in environmental learning. Children's Environmental Quarterly, 2(3), 19-21.
- T. Brown, T. Keane and S. Kaplan. (1986) Aesthetics and management: Bridging the gap. Landscape and Urban Planning, 13, 1-10.
- R. De Young and S. Kaplan. (1985-86) Conservation behavior and the structure of satisfaction. Journal of Environmental Systems, 15(3), 233-242.
- J. F. Talbot and S. Kaplan (1986) Perspectives on wilderness: Re-examining the value of extended wilderness experiences. Journal of Environmental Psychology, 6, 177-188.
- S. Kaplan (1987) Aesthetics, affect and cognition: Environmental preference from an evolutionary perspective. Environment and Behavior, 19, 3-32.
- S. Kaplan (1987) Mental fatigue and the designed environment. In J. Harvey and D. Henning (Eds.) Public environments. Washington, D.C.: EDRA. Pp. 55-60.
- S. Kaplan, F. D. Dale and R. Kaplan (1987) Patterns as hypotheses: An empirical test. In J. Harvey and D. Henning (Eds.) Public environments. Washington, D.C.: EDRA. Pp. 188-193.
- S. Kaplan (1987) Associative learning and the cognitive map: Differences in intelligence as expressions of a common learning mechanism. (Commentary on Macphail's "The comparative psychology of intelligence") Behavioral and Brain Sciences, 1987, 10, 672-673.
- R. Kaplan and S. Kaplan (1987) The garden as restorative experience: A research odyssey. In M. Francis and R. Hester (Eds.) Meanings of the garden conference proceedings. Davis, CA: Center for Design Research, University of California. Pp. 335-341.
- R. De Young and S. Kaplan (1988) On averting the tragedy of the commons. Environmental Management, 1988, 12(3), 273-283.
- S. Kaplan (1988) Review of Parallel distributed processing: Explorations in the microstructure of cognition, Vol. 1 & 2. American Scientist, 76, 309-310.
- S. Kaplan (1988) Some principles the Handbook left out: Notes to the neophyte researcher interested in changing the world. (Comments on Handbook of environmental psychology). Journal of Environmental Psychology, 8, 165-166.
- S. Kaplan (1988) Where cognition and affect meet: A theoretical analysis of preference. In J. L. Nasar (Ed.) Environmental aesthetics: Theory, research and application. New York: Cambridge University Press. Pp. 56-63. (Originally published in P. Bart, et al., 1982.)

- S. Kaplan (1988) Perception and landscape: Conceptions and misconceptions. In J. L. Nasar (Ed.) Environmental aesthetics: Theory, research and application. New York: Cambridge University Press. Pp. 45-55. (Originally published in Our National Landscape, 1979.)
- M. C. Monroe and S. Kaplan (1988) When words speak louder than actions: Environmental problem solving in the classroom. Journal of Environmental Education, 19, 3, 38-41.
- B. A. Whitehead, A. E. Fusillo, and S. Kaplan (1988) The design of physical environments and health behavior. In D. S. Gochman (Ed.) Health behavior: Emerging research perspectives. New York: Plenum. Pp. 231-241.
- S. Kaplan and R. Kaplan (1989) The visual environment: Public participation in design and planning. Journal of Social Issues, 45, 59-86.
- R. Kaplan, S. Kaplan and T. Brown (1989) Environmental preference: A comparison of four domains of predictors. Environment and Behavior, 21, 509-530.
- R. Kaplan and S. Kaplan (1989) The experience of nature: A psychological perspective. New York: Cambridge University Press.
- S. Kaplan (1989) Past environments and past stories in human effectiveness and well-being. In G. Hardie, R. Moore and H. Sanoff (Eds.) Changing paradigms. Oklahoma City: EDRA. Pp. 223-228.
- R. M. Lesperance and S. Kaplan (1989) A non-spatial solution to a spatial problem. Behavioral and Brain Sciences, 12, 408-409.
- M. C. Monroe and S. Kaplan (1989) A few more words on "Words and actions": Reaction to a recent commentary. Journal of Environmental Education, 20, 3-5.
- S. Kaplan, M. Weaver and R. M. French (1990) Active symbols and internal models: Towards a cognitive connectionism. AI and Society, 4, 51-71.
- M. Weaver and S. Kaplan (1990) Connectionist learning and the challenge of real environments. Behavioral and Brain Sciences, 13, 510-511.
- S. Kaplan (1990) Parks for the future: A psychological perspective. Stad & Land, 1990, #85, 4-22.
- S. Kaplan (1990) Being needed, adaptive muddling and human-environment relationships. In R. I. Selby, K. H. Anthony, J. Choi and B. Orland (Eds.) Coming of age. Oklahoma City: EDRA. Pp. 19-25.
- R. Kaplan and S. Kaplan (1990) Restorative experience: The healing power of nearby nature. In M. Francis and R. T. Hester, Jr. (Eds.) The meaning of gardens. Cambridge, MA: MIT Press. Pp. 238-243.
- S. Kaplan, M. Sonntag, E. Chown (1991) Tracing Recurrent Activity in Cognitive Elements (TRACE): A model of temporal dynamics in a cell assembly. Connection Science, 3, 179-206.
- S. Kaplan (1991) Beyond rationality: Clarity-based decision making. In T. Gärling and G. Evans (Eds.) Environment, cognition and action: An integrative multidisciplinary approach. New York: Oxford University Press. Pp. 171-190.

- S. Kaplan (1992) Environmental preference in a knowledge-seeking knowledge-using organism. In J. H. Barkow, L. Cosmides, and J. Tooby (Eds.) The adaptive mind. New York: Oxford University Press. Pp. 535-552.
- S. Kaplan, M. Weaver and R. M. French (1992) Active symbols and internal models: Towards a cognitive connectionism. In A. Clark and R. Lutz (Eds.) Connectionism in context. London: Springer-Verlag. Pp. 91-110.
- S. Kaplan (1992) The restorative environment: Nature and human experience. In D. Relf (Ed.) The role of horticulture in human well-being and social development. Portland, OR: Timber Press. Pp. 134-142.
- E. Chown and S. Kaplan (1992) Active symbols, limited storage and the power of natural intelligence. Brain and Behavioral Sciences, 15(3), 442-443.
- L. V. Bardwell and S. Kaplan (1992) The impact of the introductory environmental course: Guilt and despair vs. Hope and commitment. Environmental Professional, 14, 346-350.
- S. Kaplan, L. V. Bardwell, D. A. Slakter (1993) The museum as a restorative experience. Environment and Behavior, 25, 725-742.
- J. F. Talbot, R. Kaplan, F. E. Kuo and S. Kaplan (1993) Factors that enhance effectiveness of visitor maps. Environment and Behavior, 25, 743-760.
- S. Kaplan and C. Peterson (1993) Health and environment: A psychological analysis. Landscape and Urban Planning, 26, 17-23.
- S. Kaplan (1993) The role of natural environment aesthetics in the restorative experience. In P. H. Gobster (Ed.) Managing urban and high-use recreation settings. St. Paul, MN: Forest Service, USDA. General Technical Report NC-163. Pp. 46-49.
- S. Kaplan, L. V. Bardwell and D. A. Slakter (1993) The restorative experience as a museum benefit. Journal of Museum Education, 18, 3, 15-18.
- E. Chown, S. Kaplan and D. Kortenkamp (1995) Prototypes, location, and associative networks (PLAN): Towards a unified theory of cognitive mapping. Cognitive Science, 19, 1-51.
- S. Kaplan (1995) The urban forest as a source of psychological well-being. In G. A. Bradley (Ed.) Urban forest landscapes: Integrating multidisciplinary perspectives. Seattle: University of Washington Press. Pp. 101-108.
- S. Kaplan (1995) Review of The Biophilia Hypothesis (S. R. Kellert & E. O. Wilson, Eds.). Environment and Behavior, 27, 801-804.
- S. Kaplan (1995) The restorative benefits of nature: Toward an integrative framework. Journal of Environmental Psychology, 15, 169-182.
- M. Hucka, M. Weaver, and S. Kaplan (1995) Hebb's accomplishments misunderstood. Behavioral and Brain Sciences, 18, 635-636.

- R. Kaplan, L. V. Bardwell, H. A. Ford, and S. Kaplan (1996) The corporate back-40: Employee benefits of wildlife enhancement efforts on corporate land. Human Dimensions of Wildlife, 1(2), 1-13.
- A. R. Kearney and S. Kaplan (1997) Toward a methodology for the measurement of the knowledge structures of ordinary people: The Conceptual Content Cognitive Map (3CM). Environment and Behavior, 29, 5, 579-617.
- D. A. Schwartz, E. Ivanich, and S. Kaplan (1997). Suppression, attention and effort: A proposed enhancement for a promising theory. Behavioral and Brain Sciences, 20, 36-37.
- R. Kaplan, S. Kaplan, and R. L. Ryan (1998) With people in mind: Design and management of everyday nature. Washington, D.C.: Island Press.
- A. R. Kearney, G. Bradley, R. Kaplan, and S. Kaplan (1999) Stakeholder perspectives on appropriate forest management in the Pacific Northwest. Forest Science, 45, 62-73
- E. Ivancich, C. Huyck, and S. Kaplan (1999) Cell assemblies as building blocks of larger cognitive structures. Behavioral and Brain Sciences, 22, 292-293.
- S. Kaplan and L. L. Fu (1999) Making room for insight and incrementalism in the same brain: The contribution of D. O. Hebb. Psycoloquy (Psyc/1999.volume10/psyc99.10.76.lashley-hebb.8.kaplan)
- D. A. Schwartz, M. Weaver, and S. Kaplan. (1999) A little mechanism can go a long way. Behavioral and Brain Sciences, 22, 631-632.
- D. A. Schwartz and S. Kaplan (2000). Concentration and attention: New directions in theory and assessment. (Pp. 242-255) in D. Clements-Croome (Ed.) Creating a productive workplace. London: Routledge.
- J. E. Ivancich, D. A. Schwartz, and S. Kaplan (2000) Integrating exemplars in category learning: Better late than never, but better early than late. Behavioral and Brain Sciences, 23, 481-482.
- S. Kaplan. (2000) Human nature and environmentally responsible behavior. Journal of Social Issues, 56(3), 491-508.
- S. Kaplan. (2001) Meditation, Restoration and the Management of Mental Fatigue. Environment and Behavior, 33, 480-506.
- K. N. Irvine, and S. Kaplan. (2001) Coping with change: The small experiment as a strategic approach to environmental sustainability. Journal of Environmental Management, 28(6), 713-725.
- S. Kaplan. (2001) The restorative environment: Nature and human experience. In M. R. DeHart and J. R. Brown (Eds.) Horticultural therapy: A guide for all seasons. St Louis, MO: National Garden Clubs. Pp. 8-11. (Adapted from S. Kaplan, 1992)
- S. Kaplan (2002) Environmental psychology: Cognition, affect and meaningful action. In S. F. Davis and W. Buskist (Eds.) The teaching of psychology: Essays in honors of Wilbert J. McKeachie and Charles L. Brewer. Mahwah, NJ: Erlbaum. Pages 471-483

R. Kaplan, and S. Kaplan. (2002) Adolescents and the natural environment: A time out? In P. H. Kahn, Jr. and S. R. Kellert (Eds.) Children and nature: Theoretical, conceptual, and empirical investigations. Cambridge, MA: MIT Press. Pages 227-258.

S. Kaplan. (2002) Environmental psychology. Encyclopedia of Cognitive Science. London: Macmillan Reference Ltd. Pp. 1141-1145.

S. Kaplan and R. De Young. (2002) Toward a better understanding of prosocial behavior: The role of evolution and directed attention. Brain and Behavioral Sciences, 25, 263-264.

S. Kaplan and R. Kaplan (in press) Health, supportive environments and the reasonable person model. American Journal of Public Health

R. Kaplan, M. E. Austin, and S. Kaplan. (in press) Open space communities: Resident perception, nature benefits, and terminological problems. Journal of the American Planning Association.

S. Kaplan (in press) Some hidden benefits of the urban forest. In C.C. Konijnendijk, N.E. Koch, K. H. Hoyer, and J. Schipperijn (Eds.) Forestry serving urbanised societies. (Proceedings of the IUFRO European Regional Conference, 27-30 August 2002, Copenhagen)., Hoersholm, Denmark: Skov & Landskab.)