

C&RPlann. 732: Urban Planning & Urban Form: Psychological Functions	Autumn, 2005
(04838-8, 3 credits)	Jack L. Nasar
Mon. 6:30 p.m. - 8:18 p.m.	231 Knowlton Hall
0195 Knowlton, 275 W. Woodruff.	Phone: 292-1457
	nasar.1@osu.edu
	Office Hours: TBA

Course Description

Planners and designers often speculate about the effects of their plans on individuals, yet they lack an adequate empirical basis for making such judgments. Much research has looked at the relationship between humans and their physical environment. This course examines that research with an eye towards identifying directions for making environmental design more fitting to its inhabitants. The course focuses on the way individuals experience (perceive, construe, evaluate, and use) their surroundings and the use of that information to evaluate environments, predict consequences of alternative physical plans, and to plan places for human use.

Course Goal

The course aims to help students understand the complex interrelationships between physical settings and users (individuals and groups who interact with the settings). It also seeks to give students an understanding of how to apply that knowledge to analyze existing environments and to establish guidelines for the design of new environments.

Course Objectives

Upon completion of the course the student should be able to do define terms, identify and describe important principles, discriminate between different points of view, distinguish between sound and unsound principles and applications of methods, construct problem solving approaches using the methods and principles

They should be able to demonstrate the methods and principles in contexts similar and dissimilar to those discussed in class in relation to each of the following content areas:

- Theoretical concepts in environment and behavior
- Objective Behaviorism
- Process of environmental perception and cognition
- How people use their mental maps
- Modes of environmental perception and representation
- Mental maps (the elements of environmental image, styles of structuring mental maps, sources of inaccurate and accurate or legible images of environments, development of

<p>spatial cognition. Adapting environmental image to change Spatial orientation, Distance perception, Effects of change Environmental stressors Environmental aesthetics/meaning Hazard perception Personality and environment</p>
<p>Course Format</p>
<p>Class sessions will have a presentation by the instructor, presentations by students on projects and selected readings, and discussion/summary of readings to delineate issues, problems and solutions.</p>
<p>Textbook (required)</p>
<p>Bell, P. A., Greene, T. C., Fisher, J. D., & Baum, A. (2001). <i>Environmental Psychology</i> (5th edition), NY, NY: Wadsworth Group/Thomson Learning. (Other editions will have incorrect pages).</p>
<p>Resources</p>
<p>Books</p> <p>Altman and others. Human Behavior and Environment (Vol. 1-12), Plenum, New York.</p> <p>Cone, J. and Hayes, S. 1980. Environmental Problems/Behavioral Solutions, Brooks-Cole, Monterey, CA.</p> <p>Craik, K. & Zube, E. 1976. Perceiving Environmental Quality. NY: Plenum.</p> <p>Downs, R. and Stea, D. 1973. Image and Environment:Cognitive Mapping and Spatial Behavior. Chicago: Idine.</p> <p>Gifford, R. 1997. Environmental Psychology. Needham Heights, MA: Allyn & Bacon.</p> <p>Gutman, R. 1972. People and Buildings. NY: Basic Books.</p> <p>Ittleson, Proshansky, Rivlin and Winkel 1974. An Introduction to Environmental Psychology. NY: Holt, Rinehart and Winston..</p> <p>Lynch, K. 1960. The Image of the City. Cambridge, MA: M.I.T..</p> <p>Moore, G. and Golledge, R. 1976. Environmental Knowing, Dowden. Stroudsburg, PA: Hutchinson and Ross.</p> <p>Moore, G. & Zube, E. Advances in Environment Behavior and Design (Vols. 1 through 4), Plenum, N.Y.</p> <p>Nasar, J. (ed.) 1988. Environmental Aesthetics: Theory, Research & Application. NY: Cambridge University Press.</p> <p>Nasar, J. 1997. The Evaluative Image of the City. Sage.</p> <p>Passini, R. 1984. Wayfinding in architecture.NY: Van Nostrand</p> <p>Porteous, D. 1977.Environment and Behavior. Reading, MA: Addison and Wesley.</p> <p>Proshansky, Ittleson and Rivlin. 1976. Environmental Psychology (2nd Ed.),NY: Holt, Rinehart and Winston.</p>

Saarinen, T. 1976. Environmental Planning: Perception and Behavior. Boston, MA: Houghton Mifflin.
Stokols, D. 1976. Perspectives on Environment and Behavior. NY: Plenum.
Stokols, D. and I Altman. 1987. Handbook of Environmental Psychology. N.Y. Wiley.
Wapner, S., Cohen and Kaplan, 1976. Experiencing the Environment. NY: Plenum.

Journals

Environment and Behavior (E & B)
Journal of Environmental Psychology (J.E.P.)
Journal of of Planning Literature (JPL)
[Research Design Connections](#) (RDC)
Journal of Architectural and Planning Research (JAPR)
Journal of the American Planning Association (JAPA or JAIP)
Proceedings of the Environmental Design Research Association

Organizations

Environmental Design Research Association ([EDRA](#))
Association for the Study of Man Environment Relations (ASMER)
People and Physical Environment Research (PAPER)
International Assoc. for the Study of Persons and their Surroundings (IAPS)

Grading

Grades will be based upon the student's performance in meeting the course objectives in three ways.

1. Mastery of the literature and conducting/describing applied projects (60% of grade)

In addition to reading the required reading from the text, for four classes students will read one article from a list of optional readings, and during class students will be called on to present summaries of the OPTIONAL article. For that, have 100-200 word summary. Include bibliographic information--author, article name etc. Post on discussion page.

For four other classes students will conduct a project, write up the findings, and submit it before the start of class. Reports are one page or less, in which you describe what you did, how many people you interviewed or observed, what you found, and perhaps, why. Show actual numbers, using tables or charts to show the results. (For cognitive map project, you will need to attach respondents' maps.

Week 2, Mon., Oct. 3, Behavior change **reading**
Week 3, Mon., Oct. 10, Behavior change *PROJECT*
Week 4, Mon., Oct. 17, Cognitive map *PROJECT*
Week 5, Mon., Oct. 24, Orientation, wayfinding, distance **reading**
Week 6, Mon., Oct 31, Aesthetics *PROJECT*

Week 7, Mon, Nov. 7 Stress **reading**
Week 8, Mon., Nov. 14, Environmental hazard **reading**
Week 9, Mon., Nov. 26, Environmental hazard *PROJECT*
Week 10, Mon., Nov. 28 Personality inventory project(for your information, ungraded)

3. Final Graphic Concept Project (40% of grade).





DUE Final's Week: Mon. Dec. 5, 6:30 -8:18 p.m.

For each week of class, come up with five (5) major concepts discussed. Illustrate each concept graphically (photo, drawing, cartoon) and give each illustration a caption describing the concept. Captions should describe the concept in one sentence. Book must be 10 pages, one page per week. The next page shows an example for one session from another course.

Planning for pedestrians and bikers.



Planning for bikes and walking gives non-driving option, cuts air pollution, congestion, infrastructure, improves health and safety.

	<p>Separate pedestrian path from road by 5' strip for grass and trees</p>
	<p>Build curb extensions (called bulb-outs) that narrow the distance across the intersection, and use decorative crosswalks to enhance pedestrian visibility.</p>
	<p>Medians and pedestrian refuge islands allow pedestrians to cross one direction of traffic at a time, and provide a protected waiting area prior to getting across the next segment.</p>
	<p>To keep sidewalks level for pedestrians, bikers, and wheel chair users, swing the sidewalk away from the curb so that it meets the driveway at a level area.</p>

Lateness

All work must be handed in on time at START OF CLASS. For each 24 hours late, grades will drop one grade point:

- Up to 24 hours late: A goes to B
- Between 24 hours and 48 hours late: A goes to C
- Between 48 and 72 hours late: A goes to D
- Later than 72 hours: A goes to E

Medical excuses require a note from the doctor.

Academic Misconduct

Students are held responsible for knowing and abiding by the Department's policies on plagiarism and the University's policy's on academic misconduct. These have been distributed to City & Regional Planning students. If you have not received a copy, get one from the department secretary.

COURSE OUTLINE

Week 1 INTRODUCTION: Environmental Psychology

Mon., Sept. 26

Introduction to this class, course purposes, requirements, student objectives etc. A schematic overview of theoretical and conceptual approaches of environmental psychology as applied to planning.

Week 2 OBJECTIVE BEHAVIORISM FOR SOCIAL AND ENVIRONMENTAL PROBLEMS

Mon., Oct. 3

Theoretical, and ethical considerations. The technology of behavioral engineering, (contingency management, stimulus control, reinforcement schedules, token systems), open field applications (litter control, pollution control, birth planning, transportation, energy conservation, etc.).

DUE

- Read Bell et al. Ch. 14: Changing Behavior to Save the Environment (pp. 468-500)
- **READING:** Read and prepare 100-200 word summary of article (below) for report in class.

ARTICLES (pick one for optional reading/report) I've starred some preferred articles.

- ****Burgess, Clark and Hendee, An experimental analysis of anti- litter procedure, J. of App. Beh. Analysis, 4, 1971, pp. 71-75.**
- ****Clark, Burgess and Hendee, The development of anti- litter behavior in a forest campground, JABA, 1972, 5.**
- ****Everett, Hayward, Meyers, The effects of a token reinforcement procedure**

- on bus ridership, *JABA*, 7, 1974.
- Geller, E.S., Paterson, L. & Talbott, E. 1982. A behavioral analysis of incentive prompts for motivating seat belt use. *Journal of Applied Behavior Analysis*, 15, 403-415
 - Hopper, J. R. & Nielsen, J. M. 1991. Recycling as altruistic behavior: Normative and behavioral strategies to expand participation in a community recycling program. *E&B*, 195-220.
 - **Nasar, J. 2003. Prompting drivers to stop for crossing pedestrians, *Transportation Research F: Traffic, Psychology and Behavior*,
 - **Nasar, J., The shaping of design behavior, in Wineman, J. et al., *The Cost of Not Knowing*, EDRA 17, pp. 68-77
 - Studer, R., Behavior contingent design of man-environment systems, in Smith (ed.), *Behavior Design and Policy Aspects of Human Habitats*
 - **Willems, E.D., Go ye into the world and modify behavior: An ecologist's view, *Rep Res in Soc. Psych*, 1973, 4, pp. 93.

Articles available on-line

- Bamberg S.; Schmidt P. 2003. Incentives, morality, or habit?: Predicting students' car use for university routes with the models of Ajzen, Schwartz, and Triandis. *Environment & Behavior*, 35, 2, 264-285
- Blocker, T.J. & P.R. Koski (1984). Household income, electricity use and rate-structure preference, *E & B*, 16, 551-572.
- Boyce T.E.; Geller E.S. 2001. Encouraging college students to support pro-environment behavior: Effects of direct versus indirect rewards. *Environment & Behavior*, vol. 33, no. 1, pp. 107-125
- Boyce T.E.; Geller E.S. 2000. A community-wide intervention to improve pedestrian safety: guidelines for institutionalizing Large-Scale Behavior Change. *Environment & Behavior*, vol. 32, no. 4, pp. 502-520.
- Brandon, Gwendolyn; Lewis, Alan. 1999. Reducing household energy consumption: A qualitative and quantitative field study *J. Envir. Psych.*, 19, 1, 75 - 85
- Cheung S.F.; Chan D.K.-S.; Wong Z.S.-Y. 1999. Reexamining the theory of planned behavior in understanding wastepaper recycling. *Environment & Behavior*, vol. 31, no. 5, pp. 587-612
- Corral-Verdugo, V.; Bechtel, R. B.; Fraijo-Sing, B. 2003. Environmental beliefs and water conservation: An empirical study. *J. Envir. Psych.*, 23, 3, 247-257.
- Clark, C., Kotchen, M. J., Moore, M. R. 2003. Internal and external influences on pro-environmental behavior: Participation in a green electricity program, *Journal of Environmental Psychology*, 23, 237-246.
- Corral-Verduga, V., Bechtel, R. B., Fraijo-Sing, B. 2003. Environmental beliefs and water conservation: An empirical study. *Journal of Environmental Psychology*, 23, 247-257.
- **Durdan, C.A., G. D Reeder and P R Hecht (1985) Litter in a university cafeteria: demographic data and the use of prompts as an intervention

- strategy, E & B. 17,3, 387,404.
- Jason, L. A. & R. Jung (1984) Stimulus control techniques applied to handicapped-designated parking spaces: deterring unauthorized use by the non-handicapped. E & B. 16,6, 675-686.
 - Lubell M. 2002. Environmental activism as collective action, Environment & Behavior, vol. 34, no. 4, pp. 431-454.
 - Meeker, Frank L. 1997. A comparison of table-littering behavior in two wettings:A case for a contextual research strategy. J. Envir. Psych. 17, 1, 59 - 68
 - Siero, Frans W.; Bakker, Arnold B.; Dekker, Gerda B.; Van Den Burg, Marcel T.C. 1996. Changing organizational energy coconsumption behaviour through comparative feedback. J. Envir. Psych. 16, 3, 235-246.
 - Thogersen, J. & Olander, F. 2003. Spillover of enviromental-friendly consumer behavior. Journal of Environmental Psychology, 23, 225-236.
 - Villacorta M.; Koestner R.; Lekes N. 2003. Further validation of the motivation toward the environment ccale. Environment & Behavior, 35, 4, 486-505.
 - Werner, Carol M.; Makela, Eeva. 1998. Motivations and behaviors that support recycling. J. Envir. Psych., 18, 4, 373 - 386

Week 3 ENVIRONMENTAL PERCEPTION AND COGNITION: BASIC PROCESSES

Mon., Oct. 10

The dynamics of perception, the Gestalt view, and schemata and distinctive features of Gibson. The noticing, mapping and remembering of the environment. How cognitive maps are used in planning and executing both daily and long-term actions which involve both viewing and shaping our environment. Modes of perception and modes of mental representation of cognition will be discussed. The effects of spatial form of the environment of these processes will be examined. Implications for design will be discussed.

DUE:

- Read Bell et al. 56-69.
- **PROJECT:** Design, carry out and report project to change a behavior (using prompts or reinforcers). See p. 501, for examples. One page report: Describe what you wanted to test, what you did, how many people you observed (in each condition), what you found, and perhaps, why. Show acutal numbers, using tables or charts to show before and after results..

ARTICLES FOR YOUR INTEREST (no reading assignment this week)

- Bruner, J., On perceptual readiness, *Psych. Rev.*, 674, 1957, pp. 123-149.
- Brunswik, E. Perception and the design of psychological experiments. pp. 61-89
- Carr, S., and D. Schissler, The city as a trip: Perceptual selection and memory in the view from the road, in *Envir. & Beh* 1, 1, June, 1968, pp. 7-35.
- Feimer, N.R. (1984) Environmental perception: the effects of media, evaluative context and observer sample, *JEP*, 4,1, 61-80.
- Gibson, J.J. 1979 The ecological approach to visual perception. ch. 14.
- Gifford, R. and C.F. Ng (1982) The relative contribution of visual and auditory cues to environmental perception, *J Envir Psych*, 1982 2,4, 275-285.
- Ittleson, W., Environmental perception, in Ittleson et al., *An Introduction to Environmental Psych.*1974, 102-125.
- Lynch, K., A walk around the block, in Proshansky, (ed.).
- Moore, G., Environmental knowing: Concepts and theories, in Moore (ed.).
- Mackworth and Morandi, The gaze that selects informative details within pictures, *Perception and Psychophysics*, 1967 , 2, 547-552.
- Nasar, J. (1980) On determining dimensions of environmental perception. In R. Stough and A. Wandersman (eds.) *Optimizing environments: Research, practice and policy.* Environmental Design Research Association 11, Wash. D.C
- Oostendorp, A. and D.E. Berlyne, Dimensions in the perception of architecture: identification and interpretation of dimensional similarity, *Scand. J. Psych*, 1978, 19, 73-82
- Pennartz, P. J. J.& Elsinga, M. G. 1990. Adults, adolescents, and architects: Differences in perception of the urban environment. *E& B*, 22, 5, 675-714.
- Sadalla, E.K. & D. Oxley (1984) The perception of room size: The rectangularity illusion, *E & B*, 16,3, 394-405.
- Wagner, M , J.C. Baird, and W. Barberesi (1981) The locus of environmental attention, *J.Envir. Psych*, 1,3, 195-206.
- Williams, D.R. & R.C. Knopf (1985) In search of the primitive- urban continuum: The dimensional structure of outdoor recreation settings, *E & B* 17,3, 351.

On line

Kaya N.; Erkip F. 2001. Satisfaction in a dormitory building: The effects of floor height on the perception of room size and crowding. *Environment & Behavior*, 33, 1, 35-53.

Week 4 COGNITIVE MAPS: IMAGES, THEIR CONTENT, DEVELOPMENT & CHANGE

Mon. Oct. 17

Whatness, Whennes, Whereness. What are the differences and similarities in which people structure their mental image? What environmental attributes and personal factors result in different styles of structuring one's mental image of an environment? Are cognitive maps accurate? What are the usual sources of inaccurate and incomplete transformations from objective to subjective reality? What makes an environment legible and imageable?

Development vs. learning; how does our knowledge of the environment develop and change with time and age? Stages of development? Learning processes in a new city? How does our image of the environment change as the environment changes? How can the environment be arranged to facilitate the process of achieving an accurate and economic mental image of our environment?

DUE:

- Read Bell et al., pp. 69-87.
- PROJECT. (Question 1, p. 96, Cognitive mapping) Ask at least five other people to draw a sketch (cognitive) map of the campus (see p. 70 for instructions). Report whether and which components are similar to one another. What distortions or omissions do you see on the maps?

ARTICLES FOR YOUR INTEREST (no reading assignment this week)

- Acredolo, L., Frames of reference used by children for orientation in unfamiliar spaces, in Moore, pp. 165-173.
- **Appleyard, D., 1969. Why buildings are known, *Envir. and Beh.* 1, 131-157.
- **Appleyard, D., Styles and methods of structuring a city, in *Envir. & Behav.* 2, 1970.
- **Aragones, J.I and J.M Arredondo (1985) Structure of urban cognitive maps. *J Envir Psych*, 5, 197-212.
- Blaut, J., Environmental mapping in young children, in *Envir & Behav.* 2, 1970, 335-351.
- Cox, et al., The cognitive organization of the North American city, *Envir & Plann*, 1979, .
- **DeJonge, D., Images of urban areas: Their structure and psychological foundations, in *JAIP*, 1962, 28, pp. 266-276.
- **Devlin, A., The small town cognitive map: Adjusting to a new environment, in Moore, 58-67.
- **Evans, G., D. Marero and P. Butler, Environmental learning and cognitive

- mapping, *Enviro & Behav.* 13, 1981, 83-104.
- **Evans, G., C. Smith, and J. Rezdah, Cognitive maps and urban form, *JAPA Spring* 1982, 232-244.
 - Evans, G M.A. Skorpanich, T. Garling, K J Bryant and B Bresolin (1984) The effects of pathway configuration landmarks & stress on environmental cognition, *J Envir Psych*, 4,4, 323-336.
 - **Francescato and Mebane, How citizens view two great cities, Milan and Rome, in Downs (ed.), *Image & Environment*, pp. 131-147.
 - Garling, T., A. Bok, E. Lindberg and T.Nilsson (1981) Memory for the spatial layout of the everyday physical environment: factors affecting rate of acquisition, *J. Envir Psych.* 1, 263-278.
 - Garling, T., A. Bok, and E. Lindberg, Cognitive mapping of large scale environments, *E & B*, 1984, 16, 3-34.
 - Golledge, R., Cognitive approaches to spatial behavior, in Ittleson (ed.), *Environment & Cognition*, pp. 59-92, also read introduction by Gary Winkel, pp. 53-59.
 - Golledge, R.G., T.R. Smith, J.W. Pellegrino, S. Doherty and S.P. Marshall, A conceptual model and empirical analysis of children's acquisition of spatial knowledge, *J Envir Psych.* 1985, 5, 2, 125-52.
 - Gould, P., The black boxes of Jonkoping: Spatial information and Preference, in Downs No. 3, pp. 235-246.
 - **Gulick, J., Images of an Arab city, in *JAIP*, Vol. 29, 1963, pp. 179-197.
 - Hart, R., The development of spatial cognition, in Downs pp. 246-289.
 - Kirasic, K. C. G.L. Allen A.W. Siegl (1984) Expression of configurational knowledge of large-scale environments: students' performance of cognitive tasks, *E & B*, 16,6 687-712.
 - **Ladd, F., Black youths view their environment: Neighborhood maps, *E & B*, 1, 1970, 115-131.
 - **Lukashok, A. and K.Lynch, Some childhood memories of the city, in *JAIP*, 1956, 22, 142-152.
 - **Karar, Bladen, Singh, Slum dwellers and squatters images of the city, *E&P* 12, 1980, pp. 81-100.
 - Matthews, M.H., Young children's representations of the environment: comparisons of techniques, *J Envir. Psych*, 1985, 5, 3, 261-78.
 - **Milgram, S., Psychological maps of Paris, in Proshansky (ed.), *Environmental Psychology* (sec. ed.) 104-125, also introduction.
 - Moore, G., Theory and Research on the development of environmental knowing, in Moore (eds.), *Environmental Knowing*, pp. 139-164.
 - **Orleans, P., Differential cognition of urban residents: Effects of social scale of mapping, in *Image & Envir.* pp.115-130
 - Stea, D., Some preliminary observations on spatial learning in school children, in Downs (ed.), pp. 226-235.
 - **Tolman, E., Cognitive maps in rats and men, in Downs (ed.) pp. 8-27.
 - Wang, K., Maps in minds: An empirical study, *E & P*, 11, 1289- 1304.
 - Webley, P., Sex differences in home range and cognitive maps in eight year

old children, J. Envir. Psych. 1981, 1, 4, 293

On Line

- Blades, M. & L Medlicott 1992. Developmental differences in the ability to give route directions from a map. J Envir. Psych, 12, 175-186.
- Chokor, B. A. 2004. Pattern of representation of countries in cognitive maps of the world with special reference to Africa. Journal of Environmental Psychology, 24, 423-433.
- Foley, J.E. and A.J. Cohen (1984) Working mental representations of the environment. E & B, 16, 713-729.
- Heth, C. Donald; Cornell, Edward H.; Alberts, Denise M. 1997. Differential Use Of Landmarks By 8- And 12-Year-Old Children During Route Reversal Navigation . J. envir. Psych., 17, 3 199 - 213
- Lehnung, M. Leplow, B., Haaland, V. O., Mehdorn, M. & Ferstl, R. 2004. Pointing accuracy in children is dependent on age, sex and experience. Journal of Environmental Psychology, 24, 415-421.
- Pinheiro, José Q. 1998. Determinants of Cognitive Maps of the World as Expressed in Sketch Maps. J. Envir. Psych., 18, 3, 321 - 339

Week 5 ORIENTATION, WAYFINDING AND COGNITIVE DISTANCE

Mon. Oct. 24

How do we orient ourselves in the environment? What are the different orientation systems we use? How do we use our mental map in overcoming that central problem of "how to get there from here"? What factors affect our choice of route from one place to another? What factors affect our estimation of distances in the environment? How can the environment be arranged to facilitate orientation, wayfinding and accurate estimation of path lengths? Implications for sequence design at various scales from building and site design, to city and regional design will be discussed.

DUE

- Read Bell et al., 88-96.
- **READING:** Read and prepare 100-200 word summary of article (below) for report in class.

READINGS

- Biel, A. (1982) Children's spatial representation of their neighborhood: a step towards a general spatial competence, *J Envir Psych*, 2,3, 193-200
- **Beaumont, P, J. Gray, G. Moore and B. Robinson (1984) Orientation and wayfinding in the Tauranga Departmental Building: A focused post-occupancy evaluation. In D. Duerk and D. Campbell, *EDRA 15*, 1984. Wash. D.C.
- Briggs, R., Urban cognitive distance, in *Downs*, No. 3, pp. 361-389.
- **Burroughs, W.J. & E.K. Sadalla (1979) Landmarks and distances: Asymmetries in spatial cognition. In A.D. Seidel and S. Danford Eds. *Environmental Design: Research, Theory and Application*. 3- 9. *EDRA 10*, Buffalo.
- Cadwaller, M., Cognitive distance in intra-urban space, in *Moore*, No. 7, pp. 317-324.
- Conning, A.M and R.W. Byrne (1984) Pointing to preschool children's spatial competence: a study in natural settings, *J Envir Psych*, 4,2, 165-176.
- **Coren, S. and Porak, C. Distance Makes the heart grow fonder: Attributes and metrics in cognitive macromaps. Ward, J., Coren, S., Gruft, A., and Collins, J. (eds) *edra7*, Vancouver, CA, pp. 61-85.
- **Evans, G. 1980. Cognitive mapping and architecture. *Journal of Applied Psychology*, 4, 474-478.
- Filipovitch, A.J., K. Juliar and K.Ross (1981) Children's drawings of their home environment, 258-264. In Osterberg,A., C Tiernan and R. Findlay, eds. *Design Research Interactions*, *EDRA 12*.
- Golledge, R.G. T.R. Smith, J W Pellegrino, S Doherty and S Marshall (1985) A conceptual model and empirical analysis of children's acquisition of spatial

- knowledge, *J. Envir. Psych*, 5,2, 125-152.
- **Hunt, M.E. (1985) Enhancing a building's imageability. *J. of Arch. & Planning research* 2,3, 151-168.
 - **Lee, T., Perceived distance as a function of direction in the city, *Envir. & Behavior*, 2, 1970, 40-50.
 - Lundberg, U., Emotional and geographical phenomena in psychophysical research, in Downs, pp. 322-338.
 - Lynch, K., Some references to orientation, in Lynch, *The Image of the City*, pp. 123-140.
 - **Lyons, H., The sailing charts of the Marshall islanders, *Geographical Journal*, Vol. 72, No. 4, Oct. 1928.
 - Matthews, M.H. (1985) Young children's representations of the environment: comparisons of techniques, *J Envir Psych*, 5,3, 261- 278.
 - **Nasar, J. Environmental factors, perceived distance and spatial behavior, in *Environment and Planning B*, 1983, 10, 174-281.
 - Passini, R., Spatial representations, a wayfinding perspective, *J. Envir. Psych.*, 1984, 4, 2, 153-64.
 - Pearce, P. (1981) Route maps: a study of travellers' perceptions of a section of countryside, *J. envir. Psych*, 1,2, 141-156.
 - **Seidel, A. (1983) Way-finding in public spaces: The Dallas/Fort Worth, USA Airport. In D. Amedeo, J.B. Griffin and J.J. Potter EDRA 1983. Lincoln, NB.
 - Skorpanich, M.S. (1984) Urban design and environmental cognition. 110-121. In D. Duerk and D. Campbell eds. EDRA 15, 1984, Wash.D.C.
 - Smith, C.D. (1984) The relationship between the pleasingness of landmarks and judgments of distance in cognitive maps. *J Envir Psych*, 4,3, 229-234.
 - Spencer, C and Z Darvizeh (1981) The case for developing a cognitive psychology that does not underestimate the abilities of young children. *J Envir. Psych.*, 1,1, 21-32.
 - Webley, P (1981) Sex differences in home range and cognitive maps in eight year old children. *J. Envir. Psych.* 1,4, 293-302.
 - Windley, P.G and W.H. Vandeventer (1982) Environmental cognition of small rural towns: the case for older residents. *J. Envir Psych*, 2,4, 285-294.

On Line

- Abu-Ghazze, Tawfiq M 1976. Movement and wayfinding In The King Saud University built environment: A look at freshman orientation and environmental information. *J. Envir. Psych.* 16, 4, 303 - 318.
- Bailenson, Jeremy N.; Shum, Michael S.; Uttal, David H. 1998. Road Climbing: Principles Governing Asymmetric Route Choices on Maps. *J. Envir. Psych.* 18, 3, 251 - 264
- **Bronzoft, A. Spatial orientation in a subway system, in *Environment and Behavior*, 8, 1976, 545-575.
- **Carpman, J.R., M.A. Grant and D.A. Simmons (1985) Hospital design and wayfinding: a video simulation study. *E & B*, 17,3, 296-314.

- Cornell, E.H and D.H. Hay (1984.)Children's acquisition of a route via different media, E & B, 16,5, 627-642.
- **Cubukcu, Ebru; Nasar, Jack L. 2005. Relation of physical form to spatial knowledge in largescale virtual environments. Environment and Behavior, 37, 397-417
- Dogu U.; Erkip F. 2000. Spatial Factors Affecting Wayfinding and Orientation: A Case Study in a Shopping Mall. Environment & Behavior, vol. 32, no. 6, pp. 731-755
- Garling, T., A. Book and E. Lindberg (1984) Cognitive mapping of large-scale environments: The interrelationship of action plans, acquisition and orientation. E & B, 16,1, 3 -34.
- Jansen-Osmann P.; Berendt B. 2002. nvestigating Distance Knowledge Using Virtual Environments Environment & Behavior, vol. 34, no. 2, pp. 178-193.
- Levine, M. I. Marchon and G. Hanley (1984) The placement and misplacement of you-are-here maps. E & B. 16,2, 139-158.
- **Montello, D. R. 1991. Spatial orientation and the angularity of urban routes: A field study. E&B, 23, 1, 47-69.
- **Nasar, J.L., H. Valencia, Z.A. Omar, S. Chueh, and J. Hwang, Out of sight further from mind: destination visibility and distance perception, E&B 1985, 17, 5, 627-40.
- Passini R.; Pigot H.; Rainville C.; Tétrault M.H. 2000. Wayfinding in a Nursing Home for Advanced Dementia of the Alzheimer's Type. Environment & Behavior, vol. 32, no. 5, pp. 684-71
- Rochberg-Halton, E. (1984) Object relations, role models and cultivation of the self, E & B, 16,3, 335-368.
- **Sadalla, E. and L. Staplin,1980. The perception of traversed distance: Intersections, Envir. & Behav, 12, 167-182.
- **Sadalla, E. and Magel, 1980. The perception of traversed distances, Envir. & Behav., 12, 65-80.
- **O'Neil, M. J. 1991. Effects of signage and floor plan configuration on wayfinding accuracy. E& B., 23,5 553-574.
- O'Neill, M. J. 1991. Evaluation of a conceptual model of architectural legibility, 23, 3, E&B, 259-284.
- Weisman, J., 1981. Evaluating architectural legibility, Envir. & Behav., 13, 189
- **Zacharias, John. 2001. Path Choice And Visual Stimuli: Signs Of Human Activity And Architecture. J.Environmental Psycholgy, 21,4 341 – 352

Week 6 ENVIRONMENTAL MEANING: The Environment as a Source of Affect
 Mon. Oct. 31

Philosophical issues in aesthetics. The importance of aesthetics?
 Taste? The motivational side of individual's response to the
 environment. Environmental description, appraisals, emotional
 response, emotion. Taste cultures. The relation of specific attributes

of the environment to affect.

DUE:

- Read Bell et al. Ch. 2, 23-53, project on p. 96.
- **PROJECT:** Have at least five people draw an evaluative map of campus. Give each person a campus map, and ask them circle the places (and buildings) whose appearance they like most, and write down next to each one the reasons why. Have them draw X's through places (and buildings) whose appearance they dislike most, and have them write down next to each one, the reasons why. From those maps, create a table showing most cited liked places, most cited disliked places, and most cited reasons for likes and dislikes. Also create a composite map summarizing the most liked and most disliked places and reasons. Briefly describe your findings. Did people agree, and if so, on what?

ARTICLES FOR YOUR INTEREST (no reading assignment this week)

- Arnheim, R., The gestalt theory of expression, *Psych. Rev.*, 1949, 56, pp. 156-171.
- Boeschstein, W. (1985) Designing the nights of our cities. *J of Arch and Plann. Res.*, 2,1, 55-64.
- Canter, D, 1969. An intergroup comparison of connotative dimensions in architecture, *E&B*, 1, 27-48.
- Chalmers, D.J. and R.G. Knight (1985) The reliability of ratings of environmental stimuli: A generalizability analysis, *J.E.P.*17, 223-238.
- Espe, H.(1981) Differences in the perception of nationalist socialist and classicist architecture, *J Envir Psych*, 1,1 33-42.
- Genereux, R,L, L M Ward and J A Russell (1983) The behavioral component of the meaning of places, *J Envir Psych*, 3,1, 43-56.
- Groat, L., Meaning in post modern architecture, *J. Envir. Psych.*, 1982, 2, 3-22.
- Hershberger, R., A study of meaning and architecture in Broadbent et al., eds., *Meaning and behavior in the built environment*, pp. 21-41.
- Herzog, et al., The prediction of preference for unfamiliar places, *Pop & Envir*, Spring 1982, 43-49.
- Herzog, T. (1985) A cognitive analysis of preference for waterscapes, *J Envir Psych*, 5,3, 225-242.
- Kaplan, R. (1985) Nature at the doorstep: residential satisfaction and the nearby environment. *J of Arch and Plann. Res.* ,2, 115-128.
- Kaplan, S., R. Kaplan, and J.S. Wendt, Rated preference and complexity for natural and urban visual material, *Perception and Psychophysics* 1972, 12, 354-56.
- Kaplan, S., An informal model for the prediction of preference, in E.H. Zube et al. (eds.), *Landscape assessment: values, perceptions and resources*.
- Kreiger, H., What's wrong with plastic trees? *Science*, 1973, 179, 446-55.

- Lowenthal, D., Not every prospect pleases: What is our criterion for scenic beauty, 1962.
- Lynes, R., The Tastemakers, 1954, pp. 310-333.
- Maslow, A. and Mintz, N., Effects of aesthetic surroundings, I, J. of Psych., 1956, 41, pp. 247-254, in Gutman, People & Buildings.
- Mintz, N., Effects of aesthetic surroundings, II, J. of Psych., 1956, 41, pp. 459-466, in Gutman, People & Buildings.
- Nasar, J., Visual preferences in urban scenes: A cross-cultural comparison, J. Cross-Cultural Psych., 1984, 15, 79-93.
- Nasar, J., The emotional quality of scenes and observation points: a look at prospect and refuge, Landscape Planning, 1983, 10, 355-61.
- Nasar, J.L., The effects of sign complexity and coherence on the perceived quality of retail scenes, JAPA, Autumn 1987, 498-511.
- Neil, C.C. (1982) Housing symbolism in remote mining communities in Australia: Implications for innovative vs conventional design and siting of houses in harsh environments. J Envir. Psych, 2,3, 201-220.
- Oostenderp and Berlyne (1978) Dimensions in the perceptions of architecture. Scand. J. Psych. 19, 83-89, 145-150.
- Patsfall, M. et al., 1984. The prediction of scenic beauty from landscape content and composition, J. Envir. Psych., 4, 7-26.
- Patsfall, M.R. N R Feimer, G.J Buyhoff and J D Wellman (1984) The prediction of scenic beauty from landscape content and composition, J Envir Psych, 4,1, 7-26.
- Porteous, J.D. and J.F. Mastin (1985) Soundscape, J. Arch & Plann. Res., 2,3, 169-186.
- Sancar, F. H. (1985) Survey and evaluation of user preferences for large-scale residential design. J. Arch and Plann. Res. 2,1, 39-54.
- Tuan, Y.F., Environment and Topophilia, Topophilia, Ch. 9.
- Ward, L. and J.A. Russell, The psychosocial representation of molar physical environments, J. Exper. Psych.: General, 110, 2, 121-52, and or following comment articles by Daniel and Ittleson, and by Craik.
- Weinstien, C and A. Woolfolk (1981) The classroom setting as a source of expectations about teachers and pupils, J Envir Psych, 1,2, 117-130.
- Whitfeld, T.W.A.(1983) Predicting preference for familiar, everyday objects: an experimental confrontation between two theories of aesthetic behavior, J Envir Psych, 3,3, 221-238.
- Whitfield, A and J. Wiltshire (1982) Design training and aesthetic evaluation: an intergroup comparison, J Envir Psych, 2,2, 109-118.
- Wohlwill, J.F., What belongs where: research on fittingness of man-made structures in natural settings. In T.C. Daniel, E.H. Zube and B.L. Driver (eds.), Assessing amenity resource values (USDA General Tech Rep RM 68), Ft. Collins, Colorado: Rocky Mountain Forest and Range Experimental Station 1979, 57.
- Wohlwill, J.F., The concept of nature: a psychologist's view. In I. Altman and J.F. Wohlwill (eds.), Behavior and the natural environment, human behavior and environment, 1983, vol. 6, 5-38, New York: Plenum.

- Wohlwill, J.F. and G. Harris, Responses to congruity or contrast for man-made features in natural-recreation settings, *Leisure Sciences*, 1980, 3, 349-65.

On Line.

- Anderson, L. M. et al. 1983. Effects of sound on preferences for outdoor settings, *E&B*, 15,539-566.
- Bell, P.A. W. Malm, R.J. Loomis & G.E. McGlothlin (1985) Impact of impaired visibility on visitor enjoyment of the Grand Canyon: A test of an ordered Logit Utility Model. *E & B* 17, 4, 459-473
- Blöbaum, A.,Hunecke, M. 2005. Perceived danger in urban public space: the impacts of physical features and personal factors. *Environment and Behavior*, 37, 465-486
- Brown, Graham; Gifford, Robert. 2001. Architects Predict Lay Evaluations Of Large Contemporary Buildings: Whose Conceptual Properties? *J. Environ. Psych.*, 21, 1, 93 - 99
- Cherulnik, P. D. 1991. Reading restaurant facades: Environmental inference in finding the right place to eat. *E & B*. 23, 2, 150-170.
- Devlin, A. S. 1994. Children's housing style preferences: regional, socioeconomic, sex and adult comparisons.*E&B*, 26, 527-559.
- Hartig, T., M. Mang & G. Evans. 1991. Restorative effects of natural environment experiences. *E&B*, 23, 1, 3-26.
- Gifford R.; Hine D.W.; Muller-Clemm W.; Reynolds D.J..J.; Shaw K.T. 2000. Decoding Modern Architecture: A Lens Model Approach for Understanding the Aesthetic Differences of Architects and Laypersons. *Environment & Behavior*, vol. 32, no. 2, pp. 163-187
- Green, Ray 1999. Meaning And Form In Community Perception Of Town Character. *J. Envir. Psych.* 19, 4, 311 - 329
- Hagerhall, C. M. 2001. Consensus In Landscape Preference Judgements .*Journal of Environmental Psychology*, 21, 1, 83 - 92.
- Hagerhall, C., Purcell, T, and Taylor, R. 2004. Fractal dimensions of landscape silhouette outlines as a predictor of landscape preference. *Journal of Environmental Psychology*, 24,247-255.
- Hanyu, Kazunori 2000. Visual Properties And Affective Appraisals In Residential Areas In Daylight *Journal of Environmental Psychology*, 20, 3, 273 - 284
- Heath T.; Smith S.G.; Lim B. 2000. Tall Buildings and the Urban Skyline: The Effect of Visual Complexity on Preferences. *Environment & Behavior*, vol. 32, no. 4, pp. 541-556.
- Herzog, T. R., & Stark, J. L. 2004. Typicality and preference for positively and negatively valued environmental settings. *Journal of Environmental Psychology*, 24, 85-92.
- Herzog, T. R., & Barnes, G. J. 1999. Tranquility And Preference Revisited. *J. Envir. Psych.* 19, 2, 171 - 181.
- Herzog, T. R., Kropscott, L. S. 2004. Legibility, mystery and visual access as

- predictors of preference and perceived danger in forest settings without pathways. *Environment and Behavior*, 36, 659-677.
- Herzog T.R.; Shier R.L. 2000. Complexity, Age, And Building Preference. *Environment & Behavior*, vol. 32, no. 4, pp. 557-575
 - Im, S-B (1984) Visual preferences in enclosed urban spaces: an exploration of a scientific approach to environmental design. *E & B*, 16,2, 235-262.
 - Kaplan, R., Kaplan, S. & Brown, T. 1989. Environmental preference: a comparison of four domains of predictors. *E&B*, 21,5, 509-530.
 - Lyons, R., Demographic correlates of landscape preference, *E&B*, July 1983, 15, 4, 487-511.
 - Maas A.; Merici I.; Villafranca E.; Furlani R.; Gaburro E.; Getrevi A.; Masserini M.2000. Intimidating Buildings: Can Courthouse Architecture Affect Perceived Likelihood of Conviction? *Environment & Behavior*, vol. 32, no. 5, pp. 674-683.
 - Nasar, J. L. Stamps, A. E., Hanyu, K. 2005. Form and function in public buildings. *Journal of Environmental Psychology*, 25, 159-165.
 - Nasar, J., 1983. Adult viewer preferences in residential scenes, *Envir & Behav*, 15, 5.
 - Nasar J.L.; Hong X. 1999. Visual Preferences in Urban Signscapes. *Environment & Behavior*, vol. 31, no. 5, pp. 671-691
 - Orland, B., J. Vining, & A. Ebro. 1992. The effect of street trees on perceived values of residential property. *E&B*, 24, 3, 298-325
 - Nelson, Thomas; Johnson, Thomas; Strong, Michael; Rudakewich, Gail 2001. Perception Of Tree Canopy. *Journal of Environmental Psychology*. 21, 3, 315 - 324
 - Purcell T.; Peron E.; Berto R 2001. Why Do Preferences Differ Between Scene Types? *Environment & Behavior*, vol. 33, no. 1, pp. 93-106.
 - Russell, J., L. Ward, and G. Pratt, 1984. Affective qualities attributed to environments, *E&B*, 16, 235-62.
 - Sadalla, E., Vershure, B. & Burroughs, J. 1987. Identity symbolism in housing, *E& B*, 19, 569-587
 - Sadalla, E. K. & V. Sheets. 1993. Symbolism in building materials: self-presentational and cognitive components. *E&B*, 25, 155-180
 - Sheets, V. I. & Manzer, C. D. 1991. Affect, cognition and urban vegetation: some effects of adding trees along city streets, *E & B*, 23, 3, 285-304.
 - Staats, Henk; Gatersleben, Birgitta; Hartig, Terry. 1997. Change In Mood As A Function Of Environmental Design: Arousal And Pleasure On A Simulated Forest Hike. *J. Envir. Psych.* 17, 4, 283 - 300
 - Stamps, A. & Miller, S. 1993. Advocacy membership, design guidelines, and predicting preferences for residential infill designs. *E&B*, 25, 3, 367-409.
 - Stamps A.E. 1999. Physical Determinants of Preferences for Residential Facades. *Environment & Behavior*, 31, 723-751.
 - Stamps III, A. E. 2004. Mystery, complexity, legibility and coherence: A meta-analysis, *Journal of Environmental Psychology*, 24, 1-16.
 - Stamps III, A. E.; Nasar, J. L. 1997. Design Review And Public Preferences: Effects Of Geographical Location, Public Consensus, Sensation Seeking,

- And Architectural Styles *J. Envir. Psych.*, 17, 1, 11 - 32.
- Sullivan, W., C. & Kuo, F. E. 2004. The fruit of urban nature: Vital neighborhood spaces. *Environment and Behavior*, 36, 678-700.
 - Summit J.; Sommer R. 1999. Further Studies of Preferred Tree Shapes. *Environment and Behavior*, vol. 31, no. 4, pp. 550-576.
 - Ulrich, R.S., Natural vs. urban scenes: some psychophysiological effects, *E&B*, 1981, 13, 523-56.
 - Wilson, Margaret A. 1996. The Socialization Of Architectural Preference. *J. Envir. Psych.*, 16, 1, 33 - 44.
 - Zube,E.H., V. Vining, C.S. Law and R. B. Bechtel (1985) Perceived urban residential quality: a cross cultural bimodal study. *E & B*. 17,3,327

Week 7 ENVIRONMENTAL STRESS

Mon. Nov. 7

Environmental stressors such as noise, crowding, unpredictable and uncontrollable events can produce a cycle of stress, adaptation and its costs or its alternative adjustment. These after-effects take the form of physical and mental disease, psychosomatic disorders, performance and learning deficits, and general social-emotional maladjustments. Not all stress is harmful, however, in fact a lack of stress is harmful and exposure to stress is necessary for maintenance of necessary adaptation levels.

DUE

- Read Bell et al. Ch. 5 Noise (pp. 137-166) and portion of Ch. 10 333-441, projects on pp 53-4.
- **READING:** Read and prepare 100-200 word summary of article (below) for report in class.

READINGS

- ** Bronzaft, A.L. (1981) The effect of noise abatement program on reading ability, *J. Envir psych*, 1,3, 215, 222.
- **Bullinger, M. (1989). Psychological effects of air pollution on healthy residents--a timer-series approach. *J. Environmental Psychology*, 9, 103-118.
- Evans, G., (1982). *Environmental Stress*, Cambridge University, 1982, any chapter.
- **Evans, G. S.V. Jacobs and N. B. Frager (1982) Adaptation to air pollution, *J Envir Psychology*, 2,2 99-108
- **Evans, G. and Johnson, D.2000. Stress and open-office noise. *Journal of Applied Psychology*, 85, 719-783.
- Farr, Medical consequences of environmental home noises, in R. Gutman (ed.), *People and Buildings* (pp. 202-212).
- Glass, D., Behavioral and psychological effects of uncontrollable events, in Stokols (ed.), *Perspectives on E&B* (pp. 69-97).

- Glass, and Singer, Urban Stress, (any of the chapters below)
Ch 2: Environmental stress and the adaptive process, pp. 4-21; or
Ch. 3: Effect of noise on physiology and task performance, pp. 23-44; or
Ch. 4: Behavioral aftereffects of unpredictable noise, pp. 45-60; or
Ch. 5: Perceived control and behavioral aftereffects of unpredictable noise,
pp. 61-89.
- Hall, E., Human adaptability to high density, *Ekistics*, Vol. 20, Oct. 1966, pp. 161-163.
- **Kuo. Effective life functioning in the inner city: Impacts of environment and attention. for E&B.
- Jones, D, Chapman, A and T. Auburn (1981) Noise in the environment: a social perspective, *J Envir. Psych*, 1,1, 43-60.
- Lynch, K., What Time is This Place? 1.38, 163-243.
- **Maxewll, L. and Evans, G. (2000). The effect of noise on pre-school children's pre-reading skills. *Journal of Environmental Psychology*, 20, 91-97.
- Milgrim, S., The experience of living in cities, in Proshansky (ed.), 498-508.
- ** Moser, G. Urban stress and helping behavior: Effects of environmental overload and noise on behavior. *J. Envir. Psych*, 8, 287-298, 1981.
- Saegert, S.,1976. Stress-inducing and reducing qualities of environments. In Proshansky et al. (eds.), *Environmental Psychology*, pp. 218-24.
- Schroeder, H. (1981) The effect of perceived conflict on evaluations of natural resource management goals, *J Envir, Psych*, 1,1, 61-72.
- **Weinstein, N.D. (1982) Community noise problems: evidence against adaptation, *J Envir Psych*, 2,2, 87-98.
- White, R., Motivation reconsidered: the concept of competence, *Psych. Rev.*, 1959, 66, pp. 297-333.
- **Wohlwill, Nasar, DeJoy and Foruzani, Behavioral effects of a noisy environment: Task involvement vs. passive exposure, *J. Applied Psych.*, 1976, 61, 1, 67-74.
- Wortman, Brehm, Responses to uncontrollable outcomes, an integration of reactive theory and learned helplessness model, *Adv. Exp. Soc. Psych.*, 8 pp. 277-336.

On Line

- **Cackowski, J. M, & Nasar, J. L. 2003. The restorative effects of roadside vegetation.: Implications for automobile driver anger and frustration, *Environment and Behavior*, 36, 736-751.
- Enmarker, I.,Boman, E. Noise annoyance response of middle school pupils and teachers. *Journal of Environmental Psychology* , 24, 527-536
- Evans, Gary W.; Allen, Karen; Tafalla, Richard; Oaposmeara, Tiffan. 1996. Multiple Stressors: Performance, Psychophysiological and Affective Responses. *J. Envir. Psych.*, 16, 2, 147 - 154
- Evans, Gary W.; McCoy, Janetta Mitchell. 1998. When buildings don't work: the role of architecture in human health *J. Envir. Psych.*, 18, 1, 85 - 9.

- Evans, G., Stecker, R. 2004. Motivational consequences of environmental stress. *Journal of Environmental Psychology*, 24, 143-165.
- Evans G.W.; Wener R.E.; Phillips D 2002. The morning rush hour: predictability and commuter stress. *Environment & Behavior*, vol. 34, no. 4, pp. 521-530.
- Hartig, T.; Evans, G.W.; Jamner, L. D.; Davis, D.S.; Gärling, T. 2003. Tracking restoration in natural and urban field settings. *Journal of Environmental Psychology*, 23, 2, 109-123
- Herzog, T.R.; Colleen; M. P.; Nebel, M.B. 2003. Assessing the restorative components of environments. *Journal of Environmental Psychology*, 23, 2, 159-170
- Herzog, T.R.; Black, A.M.; Fountaine, K.A.; Knotts, D. J. 1997. Reflection and attentional recovery as distinctive benefits of restorative environments j. *Envir. Psych.* 17, 2, 165-170
- Huang, Y-H, Robertson, M. M., Change K-I. 2994. The role of environmental control on environmental satisfaction, communication and psychological stress: Effects of office ergonomics training. *Environment and Behavior*, 36, 617-637.
- Kaplan S. 2001. Meditation, restoration, and the management of mental fatigue. *Environment & Behavior*, vol. 33, no. 4, pp. 480-506.
- Kjellberg, Anders; Landström, Ulf; Tesarz, Maria; Söderberg, Lena; Akerlund, Elisabeth. 1996. The effects of nonphysical noise characteristics, ongoing task and noise sensitivity on annoyance and distraction due to noise at work. *J. Envir. Psych.*, 16, 2, 123 - 136.
- Korpela, Kalevi; Hartig, Terry. 1996. Restorative qualities of favorite places. *J. Envir. Psych.*, 16, 3, 221- 233
- Korpela K.M.; Hartig T.; Kaiser F.G.; Fuhrer U. 2001. Restorative experience and self-regulation in favorite places. *Environment & Behavior*, vol. 33, no. 4, pp. 572-58
- **Kuo, F. 2001. Coping with poverty - Impacts of environment and attention in the inner city, *Environment and Behavior*, 33, 5-34.
- Leather, P.; Beale, D. Sullivan, L. 2003. Noise, psychosocial stress and their interaction in the workplace. *Journal of Environmental Psychology*, 23,2, 213-222
- Laumann, K.; Gärling, T.; Stormark, K. M. 2003. Selective attention and heart rate responses to natural and urban environments. *Journal of Environmental Psychology*, 23, 2, 125-134
- Ng, Cheuk Fan 2000. Effects of building construction noise on residents: a quasi-experiment *J. Envir. Psych.* 20, 4, 375 - 385
- **Parsons, Russ; Tassinary, Louis G.; Ulrich, Roger S.; Hebl, Michelle R.; Grossman-Alexander, Michele. 1998. The view from the road: implications for stress recovery and immunization *J. Envir. Psych.*, 18, 2, 113 - 140.
- Siddiqui R.N.; Pandey J. 2003. Coping with environmental stressors by urban slum dwellers. *Environment & Behavior*, 35, 5, 589-604.
- Staats, H.; Kieviet, A.; Hartig, T. 2003 Where to recover from attentional fatigue: An expectancy-value analysis of environmental preference. *Journal*

- of Environmental Psychology, 23, 2, 147-157
- Staats, H. & Hartig, T. 2004. Alone or with a friend: A social context for psychological restoration and environmental preferences. *Journal of Environmental Psychology*, 24, 199-211.
 - **Staples S.L.; Cornelius R.R.; Gibbs M.S. 1999. Noise disturbance from a developing airport: perceived risk or general annoyance? *Environment & Behavior*, vol. 31, no. 5, pp. 692-710.
 - **Ulrich R. et al. Stress recovery during exposure to natural and urban environments. *Journal of Environmental Psychology*, 11, 201-230, 1991.
 - van den Berg, A.E.; Koole, S.L.; van der Wulp. 2003. Environmental preference and restoration: (How) are they related? *Journal of Environmental Psychology*, 23, 2, 135-146
 - Wallenius, M. 2004. The interaction of noise stress and personal project stress on subjective health. *Journal of Environmental Psychology*, 24, 167-177.
 - Wells N.M.; Evans G.W. 2003. Nearby nature: A buffer of life stress among rural children. *Environment & Behavior*, 35, 3, 311-330
 - Zimmer, Karin; Ellermeier, Wolfgang. 1999. Psychometric properties of four measures of noise sensitivity: a comparison. *J. Envir. Psych.*, 19, 3, 295 - 302.

Week 8 HAZARD PERCEPTION

Mon. Nov. 14

What factors contribute to our perception of environments as hazardous for certain activities? What factors result in inaccurate conceptions of environmental dangers? How do users cope with the dangers? Implications for such planning concerns as flood plain management, earthquake zones, and design of movement systems and playgrounds.

DUE

- Read Bell et al. Ch. 1: The Why and How of Environmental Psychology (pp. 1-22) Ch. 7 Disasters, Toxic Hazards, and Pollution (pp. 205-229)
- Read and summarize article distributed in class.

READINGS

- Baker, E., Public attitudes towards hazard zone controls, *JAIP*, Oct. 1977, 401-408.
 - Burton, Cultural and personality variables in the perception of natural hazards, in Wohwill and Carson (eds.), *Environment and Social Sciences: Perspectives and Applications*, A.P.A. 1972
 - **Burton and Kates, The perception of natural hazards in resource management, in English (ed.), *Man, Space and Environment*. pp. 282-304.
- BOOK**
- Cvetkovich, G. and T.C. Earle, 1980. *Classifying hazardous events*, J.

- Environmental Psych., 5, 1, 5- 36;
- **David, E. and J. Feb.er, Planner's notebook: Comparing costs of alternative flood hazard mitigation plans, J.Amer. Plann. Assoc., 1984, 50, 1, 22-35.
 - **Eiser, J. R. et al. 1988. Muddy waters and heavy metal: Time and attitude guide judgments of pollution. J. Envir. Psych, 18, 199-217
 - **Francaviglia, R.V., Xenia rebuilds: Effects of predisaster conditioning on post-disaster redevelopment, JAIP, Jan. 1978, 13-24.
 - Golant, S., A semantic differential experiment in interpretation and grouping of environmental hazards, in Moore (ed.), Environmental Knowing, pp. 364-374.
 - Gunter, B. and M. Wober, Television viewing and public perceptions of hazards to life, J. Envir. Psych., 1983, 3, 325- 36.
 - Hartsough, D. and Sivitsky, J., Three Mile Island: Psychology and environmental policy at a cross roads, Amer. Psychologist, 1984, 39, 1113-122.
 - **Hutchins, G.L. Morris, F.H. 1989. Life change in the disasater recovery period, E & B, 21, 33-56.
 - Kartez, J.D. (1984) Crisis response planning: toward a contingent analysis, J Amer Plann Assoc, 50,1, 9,21.
 - Lamson, C., "I think they're all caught up" - An inquiry into hazard perception among Newfoundland and inshore fisherman, E&B, July 1983, 15, 4, 458-486.
 - Nasar, J. and Greenberg, The preparedness and reactions of citizens to warning and crisis relocation for nuclear attack, J. Applied Social Psych., 1984, 5.
 - O'Riordon, T., R. Kemp and M. Purdue, 1980. How the Sizewell B Inquiry is grappling with the concept of acceptable risk, J. Environmental Psych., 5, 1, 69-86;
 - **Perry, R.W., Incentives for evacuation in natural disaster, J.Amer. Instit. Planners, Oct. 1979, 440-447.
 - Pligt, J., 1980. Public attitudes towards nuclear energy: salience and anxiety, J. Environmental Psych., 5, 1, 87-98.
 - Pligt, J., J. Linden and P. Ester, Attitudes to nuclear energy: beliefs, values and false consensus, J. Envir. Psych., 1982, 2, 3, 221-32.
 - Powell, J. & D. Canter, 1980. Quantifying the human contribution to losses in the chemical industry, J. Environmental Psych., 5, 1, 37-54;
 - Saarinen, T., Environmental Planning, Perception and Behavior, Chapter 6, pp. 149-160.
 - Svenson, O. and B. Fischhoff, 1980. Levels of environmental decisions, J. Environmental Psych., 5, 1, 55-68
 - Wober, M. and B. Gunter, 1980. Patterns of television viewing and of perceptions of hazards to life, J. Environmental Psych., 5, 1, 99-108.

On Line

- Adeola F.O. 2000. Endangered community, enduring people: toxic

- contamination, health and adaptive responses in a local context. *Environment & Behavior*, 32, 2, 209-249.
- **Brody, S. D. 2003. Are we learning to make better plans?: A longitudinal analysis of plan quality associated with natural hazards. *Journal of Planning Education and Research*, 23: 191-20
 - **De Man, A., P. Simpson-Housley and F. Curtis, Assignment of responsibility and flood hazard in Catahoula County, Louisiana, *E & B*, 1985, 17, 3, 371-86.
 - Faupel, C. E. & Styles, S. S. 1993. Disaster education, household preparedness, and stress responses following hurricane Hugo. *E&B*, 25, 2, 228-249.
 - Goldhaber, M. et al., Moving after the crisis: A prospective study of Three Mile Island area population mobility, *E&B*, 1983, 15, 1, 93-120.
 - Ives, S. and Furuseh, O., Immediate response to headwater flooding in Charlotte, N.C., *E&B*, July 1983, 15, 4, 512-25.
 - Lange, L. J., Toussaint, L. L., Fleming, R. 2004. Perceptions of accident foreseeability and stress and coping during the evacuation period of technological disaster. *Environment and Behavior*, 36, 701-716.
 - Lang, L. Toussaint, L. L., & Fleming, R. 2004. Perceptions of accident foreseeability and stress and coping during the evacuation period of technological disaster. *Environment and Behavior*, 36, 701-716.
 - Levi D.; Kocher S.; Aboud R. 2001. Technological Disasters in Natural and Built Environments
Environment & Behavior, 33, 1, 78-92.
 - Lima, M. L. 2004. On the influence of risk perception on mental health: Living near an incinerator. *Journal of Environmental Psychology*, 24, 71-84.
 - Lindell M.K.; Perry R.W. 2000. Household Adjustment to Earthquake Hazard: A Review of Research
Environment & Behavior, 32, 4, 461-501
 - Matthies E.; Höger R.; Guski R. 2000. Living on Polluted Soil: Determinants of Stress Symptoms. *Environment & Behavior*, 32, 2, 270-286.
 - **Napton, M. L. and Day, F. A. 1992. Polluted neighborhoods in Texas: Who lives there. *Envir. and Behav.*, 24, 4, 508-526.
 - **Preston, V. et al., Adjustment to natural and technological hazards: A study of an urban residential community, *E&B*, 1983, 5, 2, 143-164.
 - **Rochford, E.B. Jr. and Blocker, T.J. 1991. Coping with natural hazards as stressors: The predictors of activism in a flood disaster, *E&B*, 23, 171-194
 - **Rotton, James; Dubitsky, Susan S.; Milov, Alex; White, Steve M.; Clark, M. Cherie. 1997. Distress, elevated cortisol, cognitive deficits, and illness following a natural disaster. *J. Envir. Psych*, 17, 2, 85 - 98
 - Schiff, M., Hazard adjustment, locus of control and sensation seeking, in *Envir. & Behav*, 9, 2, June 1977, pp. 233-255.
 - Siegel J.M.; Shoaf K.I.; Afifi A.A.; Bourque L.B. 2003. Surviving Two Disasters: Does Reaction to the First Predict Response to the Second? *Environment & Behavior*, 35, 5, 637-654.
 - **Sime, J.D., Movement toward the familiar: person and place affiliation in a

- fire entrapment setting, E&B, 1985, 17, 6, 697-724.
- Sims, J. and Baumann, Educational programs and human response to natural hazards, E&B, 1983, 15, 2, 165-190.
- **Sorenson, J. Knowing how to behave under the threat of disaster: can it be explained, E&B 15, 1983, 438-457.
- **Verplanken, B. Beliefs, attitudes and intentions toward nuclear energy before and after chernobyl in a longitudinal within-subject design. E&B, 21, 1989: 371-392.

Week 9 WEATHER, AIR POLLUTION AND BEHAVIOR

Mon. Nov. 21

At the local, regional and national levels, development influence our weather and pollution. It is crucial to understand how such changes effect people.

DUE:

- Read Bell et al. Ch. 6 Weather, Climate & Behavior (pp. 167-203).
- **PROJECT:** Interview at least 5 people about the Hurricane and flood damage in New Orleans. Ask them how they feel now, how they felt during and immediately after the event. Explain whether they reacted to it more as a natural hazard, a technological accident, or some mix of the two?

ARTICLES FOR YOUR INTEREST (no reading assignment this week)

- Baron, R.A. and P.A. Bell, Aggression and heat: the influence of ambient temperature, negative effect and cooling drink on physical aggression, J. Pers. & Soc. Psych. 1976, 33, 245-
- Bullinger, M. 1989 Psychological effects of air pollution on healthy residents--a time series approach. J. Envir. Psych, 9, 103-118.
- Evans, G., S.V. Jacobs and N.B. Frager, Adaptation to air pollution, J. Envir. Psych., 1982, 2, 2, 99-108.
- Jacoby, L., Perception of Air, Noise and Water Pollution in Detroit, pp. 162-252.
- Zeidner, M. & Shechter, M. 1988 Psychological responses to air pollution some personality and demographic correlates, J. Envir. Psych., 8, 191-208.

On Line

- Campbell, D., Lunar-lunacy research, E & B, 14, 4, 1982, pp. 418-24.
- Chattopadhyay, P. K.; Som, B.; Mukhopadhyay, P. 1995. Air Pollution And Health Hazards In Human Subjects: Physiological And Self-Report Indices. J. Envir. Psych. 15, 327 – 331
- DeFronzo, J., Climate and crime: Tests of an FBI assumption, E& B, 16, 2, 1984, pp. 185-210.

- Garzino, S.J., Lunar effects on mental behavior, E&B, 14, 4, 1982, pp. 395-417.
- Hygge, Staffan; Knez, Igor 2001. Effects Of Noise, Heat And Indoor Lighting On Cognitive Performance And Self-Reported Affect Journal of Environmental Psychology, 21, 291.299.
- Napton, M.L. & Day, F.A. 1992 Polluted neighborhoods in Texas: Who lives there? Envir. & Beh. 24, 508- 526.
- Rotton, J. 1993. Atmospheric and temporal correlates of sex crimes: Endogenous factors do not explain seasonal differences in rape. E&B, 25, 5, 625-642.
- Rotton, J. and Cohn E. 2004. Outdoor temperature, climate control, and criminal assault: the spatial and temporal ecology of violence, Environment and Behavior, 36, 276-306
- Rotton J.; Cohn E.G.2000. Weather, Disorderly Conduct, and Assaults: From Social Contact to Social Avoidance. Environment & Behavior, 32, 651-673.
- Rotton, J., & Cohn, E. G. 2003. Global warming and U. S. crime rates: An application of routine activity theory. Environment and Behavior, 35, 802-825.
- Rotton, J. Shats, M. & Sanders, R. 1990 Temperature and pedestrian tempo: Walking without awareness. Enivr & Behav. 22, 650-674.
- van de Vliert, E., HJuang, X, and Parker, P. 2004. Do colder and hotter climates make richer societies more, and poorer societies less, happy and altruistic? Journal of Environmental Psychology, 24, 17-30.
- Zacharias, J. Stathopoulos, T., and Wu, H. 2004. Spatial behavior in San Francisco's plazas: The effects of microclimate, other people, and environmental design, 36, 638-658.
- Zacharias J.; Stathopoulos T.; Wu H. 2001. Microclimate and Downtown Open Space Activity Environment & Behavior, 33, 296-315

Thurs. Nov. 24 Thanksgiving. No classes
 Fri. Nov. 24 Columbus Day. No classes.

Week 10 PERSONALITY, ATTITUDE AND INDIVIDUAL DIFFERENCES IN ENVIRONMENTAL ENVIRONMENTAL RESPONSES. & FINAL EXAM REVIEW
 Mon., Nov. 28

Research suggests systematic differences across individuals in personality traits and their environmental response. This session looks at these differences and their possible implications for plans and planning.

DUE

- Read Bell et al. Ch. 2 (pp. 23-33)
- Completion of SEI.

- PROJECT: Complete Personality Inventory (off the web) [Kiersey, Myers-Briggs](http://www.humanmetrics.com/cgi-win/JTypes1.htm) , or <http://www.humanmetrics.com/cgi-win/JTypes1.htm> click Jung Typology Test, then click do it. (This will not be graded, but please hand in your score anonymously at the start of class, to help with the discussion).

ARTICLES FOR YOUR INTEREST (no reading assignment this week)

- Amedeo, D. and R.A. York, Grouping in affective responses to environments: indications of emotion norm influence in person-environment relations. In D. Duerk and D. Campbell (eds.), EDRA 15, 1984, 193-205.
- Buttell, F.H & Johnson, D.E. (1977) Dimensions of environmental concern: Factor structure correlates and implications for research. *J. Envir Education*, 9,2, 49-64.
- Dunlap, R.E., The impact of political orientation on environmental attitudes and actions, *E&B*, 1975, 7, 428-54.
- Dunlap, R.E. and W.B. Heffernan, Outdoor recreation and environmental concern: an empirical examination, *Rural Soc.*, 1975, 40, 18-30.
- Geller, D., J. Cook, M. O'Connor and S.K. Low (1982) Perceptions of urban scenes by small town and urban residents: A multidimensional scaling analysis, 128-141. In P. Bart, A. Chen & G. Francescato eds. *Knowledge for Design*. EDRA 13. Maryland.
- Geisler, C.C., O.B. Martinson and E.A. Wilkening, Outdoor recreation and environmental concern: a restudy. *Rural Soc.* 42, 241-249.
- Helson, H., *Adaptation level theory*, Ch. 4 (optional read 3 and/or 6), New York: Harper and Row, 1964.
- Hetrick, C.C., C.J. Lieberman, and D.R. Ranish, Public opinion and the environment: ecology, the coastal zone and public, *Coastal Zone Mgmt. Journal*, 1974, 1, 275-89.
- Nasar, J.L. and E. Johnson (1985). Self esteem, community esteem and perceived value of environmental aesthetics, presented at the 93rd Annual Convention of the American Psychological Association at Los Angeles, CA.
- Russell, J.A. and U.F. Lanius, Adaptation level and the affective appraisal of environments, *J. Envir. Psych.*, 1984, 4, 2, 119-136.
- Sonnenfeld, J., Equivalence and distortion of the perceptual environment,
- Sonnenfeld, J. (1976) Multidimensional measurement of environmental personality, in R. Golledge and G. Rushton (eds) *Spatial Choice and Spatial Behavior: Geographical Essays on the Analysis of Preference and Perceptions*. Columbus, OH: OSU.
- Sonnenfeld, J. Variable values in space and landscape, *J. Social Issues*, 1966
- Wohlwill, J.F. and I. Kohn, The environment as experienced by the migrant: an adaptation level view. *Representative Research in Social Psychology*, 1973, 4, 135-64.
- Zube et al. (1983) A life span developmental study of landscape assessment, *J. Envir Psych*, 3, 115-128.

On Line

- Arbuthnot, The role of attitudinal and personality variables in the prediction of environmental behavior and knowledge, E&B 1977, 9, 2, 69-84.
- Blake D.E. 2001. Contextual Effects on Environmental Attitudes and Behavior. *Environment and Behavior*, vol. 33, no. 5, pp. 708-725.
- Bunting, T.E., and L.R. Cousins (1985) Environmental dispositions among school-age children: a preliminary investigation, E & B. 17,6, 725-768.
- Constantini, E and K Hanf. (1972) Environmental concern and political elites: a study of perceptions, backgrounds and attitude. *Env and Be*, 4, 209-242.
- Driver, B. and R. C. Knopf (1977) Personality, outdoor recreation and expected consequences, E & B, 9,2, 21-46. Also in Craik, K H and McKechnie, G.E. (eds.) *Personality and environment* (1978) Sage Publications, Beverly Hills.
- Kaiser, Florian G.; Wölfling, Sybille; Fuhrer, Urs. 1999. Environmental Attitude And Ecological Behaviour. *J. Envir. Psych.* 19, 1, 1 - 19.
- Kaplan, R., Patterns of environmental preference, E&B, 1977, 9, 2, 47-68. Also in K.H. Craik and G.E. McKechnie (eds.), *Personality and environment*, Beverly Hills: Sage, 1978.
- McKechnie, G.E., The environmental response inventory in application, E&B, 1977, 9, 2, 107-128. Also in K.H. Craik and G.E. McKechnie (eds.), *Personality and environment*, Beverly Hills: Sage, 1978.
- Poortinga W.; Steg L.; Vlek C. 2002. Environmental Risk Concern and Preferences for Energy-Saving Measures. *Environment & Behavior*, vol. 34, no. 4, pp. 455-478.
- Rosnet E.; Le Scanff C.; Sagal M-S. 2000. How Self-Image and Personality Influence Performance in an Isolated Environment. *Environment & Behavior*, vol. 32, no. 1, pp. 18-31
- Schiff, M. (1977) Hazard adjustment, locus of control and sensation seeking: some null findings, E & B, 9,2, 85-106. Also in Craik, K H and McKechnie, G.E. (eds.) *Personality and environment* (1978). Sage Publications, Beverly Hills.
- Teisl M.F.; O'Brien K. 2003. Who Cares and Who Acts?: Outdoor Recreationists Exhibit Different Levels of Environmental Concern and Behavior. *Environment & Behavior*, 35, 4, 506-522.
- Wells M.; Thelen L 2002 What Does Your Workspace Say About You? The Influence of Personality, Status, and Workspace on Personalization. *Environment & Behavior*, vol. 34, no. 3, pp. 300-321.
- Wesley Schultz, P.; Zelezny, Lynnette. 1999. Values As Predictors Of Environmental Attitudes: Evidence For Consistency Across 14 Countries *J. of Envir. Psych.* 19, 3, 255 – 265
- Wohlwill, J.F. (1979) The social and political matrix of environmental attitudes: an analysis of the California Coastal Zone Regulation Act, E & B, 11, 71-86.

FINAL'S WEEK**FINAL PROJECT DUE**

Mon. Dec. 5, by 11:18 a.m. (hard copy or on-line)

RESERVE READING (A.L.)

QUARTER Autumn 2005

COURSE CRP 732

NO. STUDENTS 20

INSTRUCTOR
Nasar

PHONE 2-1457

<u>Call #</u>	<u>Author</u>	<u>Title</u>
GF8E5	Burton & Kates	Man, Space & Environ. 1 ag/bus
NA254235M4	Broadbent et al	Meaning & behavior in the built environment 1
BF353C66	Cone & Hayes	Environmental Problems Behavioral Solutions, 1 ED/UG
BF353P38	Craik & McKechnie	Personality & the Envir. 1 ED/ST
BF469D68	Downs & Stea	Image & Environment 1
BF353E59 1982	Evans, G.	Environmental Stress 1
	Gifford, R.	Environmental Psychology: Principles & Practice 1
BF 205N6 G551972	Glass & Singer	Urban Stress 1
NA25434668	Gutman, R.	People & Buildings 1
BF 353.A3	Helson, H	Adaptation Level Theory 1 EDU
BF353E53	Moore, G.	Environmental Knowing 1
BF353S66	Proshansky	Environmental Psychology et al (2nd edition) 1
NA9053H76B31977	Rapoport, A	Human Aspects of Urban... 1
HC79E5S2	Saarinen	Environmental Planning... 1
BF 469 S6	Sommer, R.	Personal Space 1
BF353S86	Stokols, D.	Readings in environmental Psychology 1
BF353P4	Stokols, D.	Perspective on environmental Psychology 1
HM20W673	Wohlwill & Carson	Environment & the social sciences 1

