

# Environmental Models & The HOME\*

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## Introduction

You may recall my lecture in class concerning Bronfenbrenner's theory about the ecologies of children's development. Here I provide a brief summary to jog your memory:

- *A Microsystem* consists of a setting in which the developing child actually participates. Examples are home, church, school, and playground. The microsystem is characterized by the following features:
  - *Activities*: Different microsystems are characterized by different activities; activities provide opportunities for development.
  - *Roles*: Different persons within a microsystem are given different roles (e.g., parent and child, teacher and student) much as actors are given different roles in a play; roles also have consequences for development.
  - *Interpersonal Relations*: Relations between persons are the glue of microsystems, and are both a cause and consequence of development.
  - *Settings*: Microsystems are usually characterized by a particular setting, such as the family in a home, or a teacher and students in a classroom; settings can be more or less conducive to different activities.

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- *The Mesosystem* is the set of all microsystems within which a child participates. Three important features of mesosystems are:
  - *Expansion*: The number of microsystems within which a child participates expands with development (e.g., first there is the home, then the home and school, etc.).
  - *Linkages*: An important feature of a child’s mesosystem is the strength of the linkages between microsystems (especially home and school).
  - *Transitions*: One way to look at development is that some microsystems are designed to prepare the developing child for participation in subsequent microsystems (e.g., home prepares children for school, elementary school prepares children for middle school, college prepares students for the world of work).
- *The Exosystem* consists of those microsystems within which the child does *not* participate, but that can affect the developing child. The classic example is the parents’ workplace, but there are other examples as well (e.g., school boards, or government agencies).
- *The Macrosystem* is the set of beliefs, attitudes, and practices that permeate a culture, and therefore strongly influence the activities, roles, participants, and settings of microsystems within that culture (e.g. the strong sense of independence that might be considered a myth of American culture).

In this activity you use an observational tool, *Home Observation for Measurement of the Environment* (HOME), to assess the quality of two or more children’s home environments (home ecologies). Bronfenbrenner’s model provides a theoretical framework for the HOME, and indeed it is no accident that both the theory and the method were developed during the same time frame (the 1970s). This was a time when there emerged great interest in understanding the environments where children live, grow, and develop, and Bronfenbrenner’s theory and the HOME grew out of this interest. In the following section I provide a bit more detail about Bronfenbrenner’s theory, some of it in his own words. In the section after that, I will introduce the HOME itself.

## Ecological Systems Theory

In this section I elaborate a bit on the theoretical roots of ecological psychology, Bronfenbrenner’s own personal background, and his ecological model. I also note where you can find elaborations of this outline in your textbook.

### I. Theoretical Roots of Ecological Psychology

- A. Gestalt psychology, especially Kurt Lewin’s topological psychology.
- B. Environmental psychology, especially Barker and Wright at Kansas.<sup>1</sup>
- C. Systems theory, which also influenced Bowlby, Thelen, and family systems theory.<sup>2</sup>
  - (1) *Wholism*. The whole of a system is greater than the sum of its parts.
  - (2) *Organization*. Systems are organized into patterns of relationships and functional roles.
  - (3) *Morphogenesis*. Organismic systems grow and adapt.
  - (4) *Ecological relativism*. Organismic systems are embedded in larger systems.

### II. Bronfenbrenner’s Personal Background

#### A. Bronfenbrenner had a special childhood

It was my good fortune to have been brought up on the premises of a state institution for those who were then called “the feeble-minded,” where my father was a neuropathologist. Along with his medical degree, he had a Ph.D. in zoology, and he was a field naturalist by heart. The institution’s grounds offered a rich biological and social terrain for his observant eye (1979, p. xi).

#### B. Bronfenbrenner was a pioneer in cross-cultural research

Seen in different contexts, human nature, which I had previously thought of as a singular noun, became plural

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<sup>1</sup>Roger Barker’s pivotal role in the emergence of ecological psychology is discussed on the Wikipedia—search for “Environmental Psychology”

<sup>2</sup>There is a good discussion of ecological systems perspectives on the family on pages 50–50 of your textbook.

and pluralistic; for the different environments were producing discernible differences, not only across but also within societies, in talent, temperament, human relations, and particularly in the ways in which the culture, or subculture, brought up its next generation (1979, p. xiii).

### III. Bronfenbrenner's Ecological Theory (see Figures 1 and 2)<sup>3</sup>

#### A. The Microsystem

... a pattern of activities, roles, and interpersonal relations experienced by the developing person in a given setting with particular physical and material characteristics (1979, p. 22).

#### B. The Mesosystem

A mesosystem comprises the interrelations among two or more settings in which the developing person actively participates (such as, for a child, the relations among home, school, and neighborhood peer group; an adult, among family, work, and social life) (1979, p. 25).

#### C. The Exosystem

An exosystem refers to one or more settings that do not involve the developing person as an active participant, but in which events occur that affect, or are affected by, what happens in the setting containing the developing person (1979, p. 25).

#### D. The Macrosystem

Finally, the source of influence most remote from the children's immediate experience is the array of attitudes, practices, and convictions shared throughout society at large. This *macrosystem* is composed of the *cultural milieu*, which is represented in Figure 2 by the large box encompassing the microsystems, mesosystem, and exosystems of the child's environment (Thomas, 1992, p. 442).

### IV. Implications of the Theory

There are a number of implications of the theory, here I mention three of the most important:

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<sup>3</sup>The two diagrams in this section are adapted from Thomas (1992), pp. 440–441.

Figure 1: Examples of children's microsystems

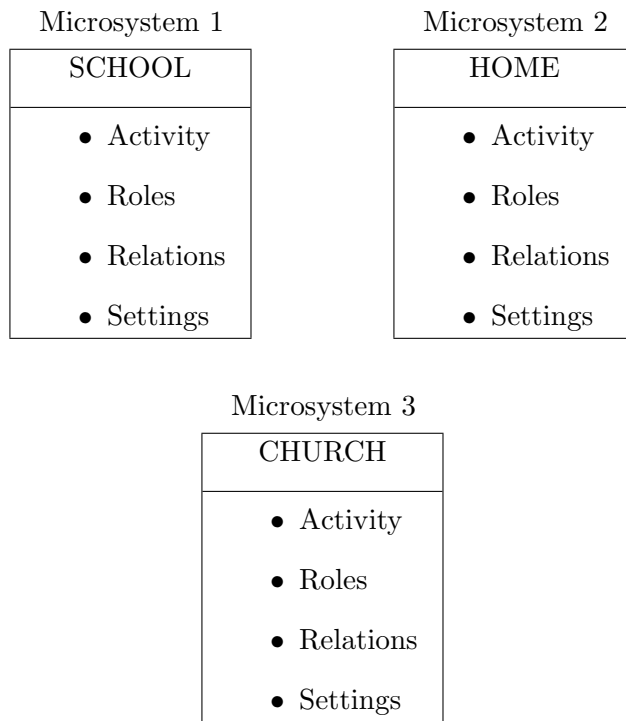
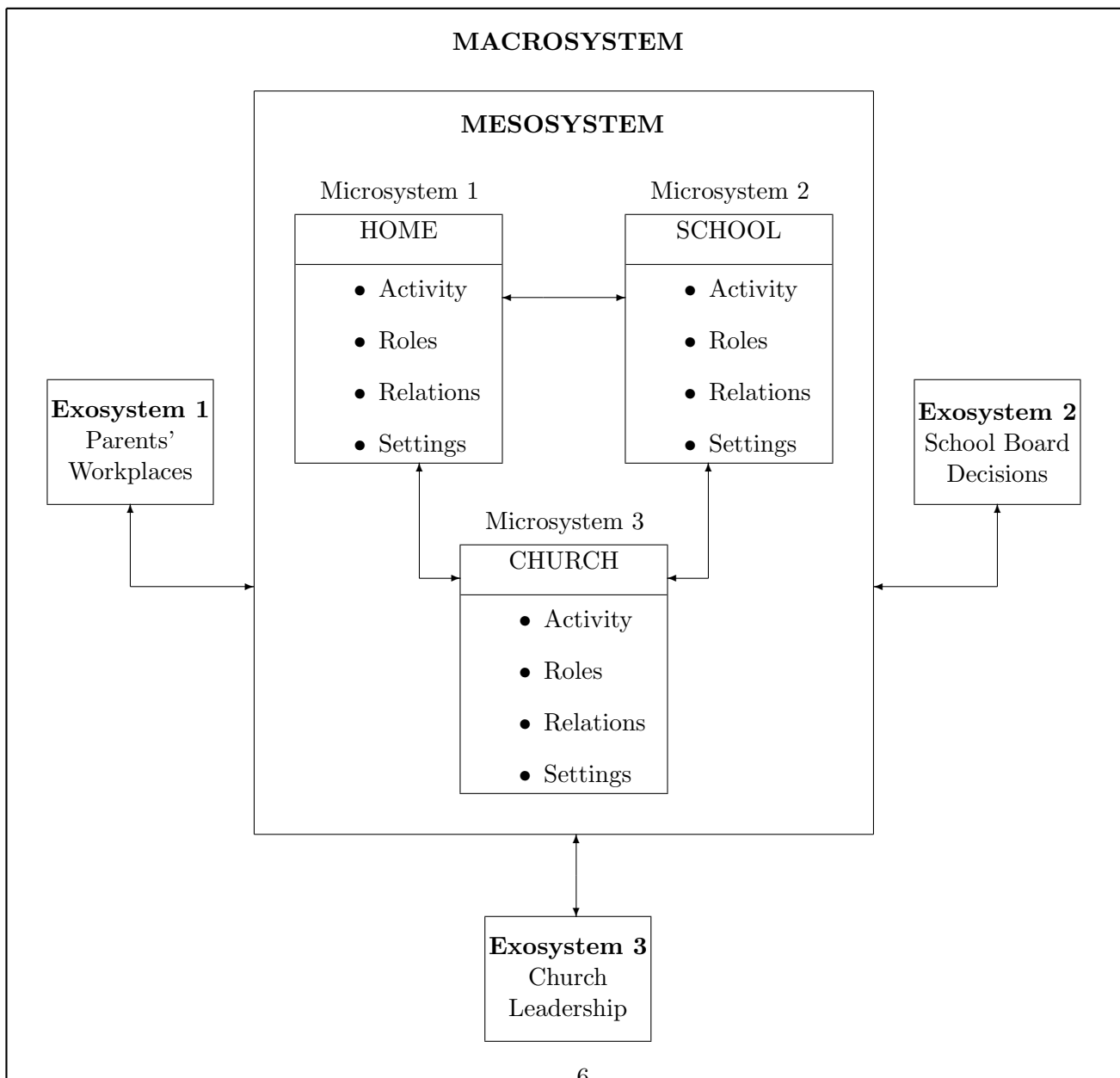


Figure 2: Embedded systems of children's ecologies



- A. Ecological transactions: Connections between microsystems
- B. Ecological transitions: Moving from one microsystem to the next
- C. Ecological transformations: The chronosystem

## V. Annotated Bibliography

Here are some of the most important resources for Bronfenbrenner's theory:

- A. Thomas, R. M. (1992). *Comparing theories of child development*. Belmont, CA: Wadsworth. [A great introduction to Bronfenbrenner's ideas; a good place to start.]
- B. Bronfenbrenner, U. (1989). Ecological systems theory. In R. Vasta (Ed.), *Six theories of child development*. Greenwich, CT: JAI Press. [Another introduction to Bronfenbrenner's theory, substantially meatier than the introduction by Thomas.]
- C. Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology (5th ed.): Volume 1: Theoretical models of human development*. New York: John Wiley & Sons. [This is the most up to date statement of Bronfenbrenner's theory.]
- D. Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge, MA: Harvard University Press. [This is Urie's classic work, the most complete statement of his theory and where applies it to early childhood development.]
- E. Bronfenbrenner, U. (1986). Ecology of the family as a context for human development: Research perspectives. *Developmental Psychology*, **22**, 723–742. [This is an excellent paper where Urie extends his theory and suggests many ideas for future research.]
- F. Bronfenbrenner, U., & Crouter, A. C. (1983). The evolution of environmental models in developmental research. In W. Kessen (Ed.), *Handbook of child psychology (4th ed.): Volume 1: History, theory, and methods*. [This is a valuable chapter which traces the development of ecological models of development; it is valuable for the historical perspective that it provides.]

## Home Observation for Measurement of the Environment (HOME)

Now, the HOME is an observational technique for making systematic observations about children's most important microsystem—their home. Properties of the microsystem—activities, roles, relations, settings—are apparent in the structure of the HOME itself, as can be seen in the following breakdown of the various HOME inventories. I have listed below the subscales for each of the three versions of the HOME.

- **HOME Inventory for Families of Infants and Toddlers**
  - Emotional and Verbal *Responsivity* of Parent
  - *Acceptance* of Child's Behavior
  - *Organization* of Physical and Temporal Environment
  - Parent *Involvement* with Child
  - Opportunities for *Variety* in Daily Stimulation
  
- **HOME Inventory for Families of Preschoolers (Three to Six)**
  - Learning Stimulation
  - Language Stimulation
  - Physical Environment
  - Warmth and Affection
  - Academic Stimulation
  - Modeling
  - Variety in Experience
  - Acceptance
  
- **HOME Inventory for Families of Elementary Children**
  - Emotional and Verbal Responsivity
  - Encouragement of Maturity
  - Emotional Climate
  - Growth Fostering Materials and Experiences
  - Provision for Active Stimulation
  - Family Participation in Developmentally Stimulating Experiences
  - Paternal Involvement
  - Aspects of the Physical Environment

## Requirements

### Steps

- Check out a copy of the HOME instrument from Psychology Department Office and do the associated readings (see below).
- Arrange to administer at least two HOMEs, in at least two different households. You may do up to four HOMEs; two siblings may be used for this activity as long as they require the administration of two different versions of the HOME (e.g., toddler and preschooler version, elementary school version).
- After setting a time for administration, and after reading over the instructions, visit the children's households and administer the appropriate versions of the HOME.
- After administering each HOME, compute subscale scores and a total score. Feel free to go over the HOME with families whom you have observed if you feel comfortable doing so. For the Infant–Toddler HOME and the Preschool HOME indicate whether the scores fall in the upper fourth, middle half, or lower fourth of the normed distribution for this instrument.
- Write your report and turn it in by the announced deadline.

### Notes

- Do this activity alone.
- There is no limit to the enrollment for this activity; the only limitation is your ability to recruit families for the assessment. (If you are desperate to do this but can't find enough families, let me know. I may be able to help you out.)
- Your written report should include (a) your three (2–4), (b) showing computation of subscale scores and total scores, and (c) answers to the questions (see below).
- Your grade will be based on your completion of the scoring assignment, and the quality of your answers to the questions.

## Materials

- Scoresheets for each HOME version (make copies if you need extras).
- Instructions for each HOME version (handed out in class).

## Readings

- Your textbook: all of chapter 2 (Contexts), and parts of chapters 7, 8, & 10 (those parts relevant to parenting and social environment).
- Caldwell, B. M., & Bradley, R. H. (1984). *Home Observation for Measurement of the Environment* (revised edition). University of Arkansas at Little Rock. [Copies are available in the Psychology Department Office]

## Questions

- What type of observational method is the HOME? What are its strengths and weaknesses? What are the potential sources of bias? (Refer to the *Observational Methods* handout for this question.)
- How do the subscales of the HOME relate to Bronfenbrenner's ideas about the ecology of human development? Can you see any parallels? If so, what are they?
- Read the summaries in the HOME manual (*pp.* 61–63 & 85–86). Based on these summaries what do think about the construct validity of the HOME? Would you feel confident using it in your research or practice as a psychologist? Why or why not?
- Given what is known about the HOME (see previous question), what would you predict for the three children whose microsystems you assessed using the HOME? Briefly justify your answers.