age 15 by their parents; (v) no benefits at age 15 or 20 in "educational aspirations," "occupational aspirations," "employment," or "use of leisure." One long-term finding stands apart from these small and temporary traces. By far the most remarkable effect of preschool attendance concerns placement in special education: by the time experimental and control group pupils finished grade 12, 13 percent of the former and 31 percent of the latter had at some time been placed in special-education classes. Such is the way the tree has been inclined.

The pattern of these findings allows at least two interpretations, one of which is complimentary to the spirit pervading this volume and which is favored by the many authors, and the other of which is ironic (given the child-development focus of these endeavors).

To the psychologists, a hopeful beginning has been made. As Lazar and Datta maintain in their concluding chapters, children's lives were changed for the better; and if the changes were not permanent (not even tonsillectomies are forever, one must remember) they were at least profound in the short run and discernible in the deflection of the course of lives many years later. The efforts evaluated here are now 20 years old; today's psychologists are more intelligent and eager to build the next generation of preschool programs that will outperform these—or so it is argued.

A more critical analysis of the findings viewed by considering the public schools as sifters and winnowers of endowed talent for later grades and higher education could result in an even more plausible interpretation. Through practice, habituation, or coaching, preschool programs improved poor children's intelligence test scores. Though their experiences in preschool were scarcely discernible in their school-related skills and knowledge at even the earliest grades, their elevated IQ scores and school officials' knowledge that they had participated in a preschool program were enough to keep them from being labeled "special education" upon entry into the public school system. Once claimed by the special education imperialists, children seldom work their way back to the mainstream. Their parents and teachers expect less of them; they eventually come to expect less of themselves. Although a child may be no less talented (in abilities and skills) than his or her *Doppelgänger* who escaped special education placement by a few evanescent IQ points, labeling and sorting by adults who manage the institution bend the trajectory of the child's subsequent life a few degrees toward the shabby end of the scale, at least for as long as he or she remains in their stewardship. Once the child is out of the institution, the distinctions and differences disappear. The irony in this interpretation of the facts is that those whose ideas are represented in *As the Twig Is Bent . . .* see themselves as developmental psychologists molding the inner, lasting core of the individual—one can almost visualize the cortical wiring they imagine being rearranged by ever-earlier intervention. And yet the true lasting effects of a child's preschool experiences may be etched only in the attitudes of the professionals and in the records of the institutions that will husband his or her life after preschool.

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Personal Interactions

Close Relationships. HAROLD H. KELLEY, ELLEN BERSCHEID, ANDREW CHRISTENSEN, JOHN H. HARVEY, TED L. HUSTON, GEORGE LEVINGER, EVIE MCCLINTOCK, LITITIA ANNE PEPLAU, and DONALD R. PETERSON. Freeman, New York, 1983. xviii, 572 pp., illus. Cloth, $28.95; paper, $17.50.

The past decade has witnessed an explosion of research on close relationships. By my count, the present volume is the 15th major social science treatise on the subject in the last ten years. There have also been innumerable journal articles and scholarly books on specific aspects of close relationships (for example, communication, power, loneliness, jealousy, sexuality, friendship, marriage, divorce, gender roles, interpersonal attraction, family processes, the single life, social support, widowhood).

This enormous quantity of information is becoming problematic, for there is an undersupply of conceptual principles by which to order it. *Close Relationships*, the joint effort of nine leading researchers, was designed to alleviate this problem in two ways. First, most of the book's 12 chapters are devoted to reviews of the literature. Second, the book is organized around an innovative comprehensive framework for examining close relationships.

Such an insistence on organization and integration has meant some restrictions on what is discussed. For instance, although the general framework and many of the principles articulated by the authors may be applicable to a wide variety of relationships, adult heterosexual relationships receive by far the most attention, with parent-child interactions a distant second. There are very few references made to relationships between same-sex friends or lovers. Finally, although the introductory and concluding chapters point to the importance of the larger social context (for example, the effects of culture and class), few of the authors—with the notable exception of Peplau in her chapter "Roles and gender"—give it much attention. On the whole, the book reflects the expertise of its authors in social, clinical, and developmental psychology, with an emphasis on the personal and social psychological aspects of dyadic interactions.

The book begins with an introductory chapter (by Berscheid and Peplau) outlining some of the major changes in the study of close relationships that have occurred since the 1950's and describing the general history of the study of close relationships by various disciplines in the social sciences. The second chapter (by all nine contributors) sets out in some detail the framework that is central to the book. In this framework a dyadic interaction is conceptualized as consisting of the *inter*chain connections between the two individuals' separate *intra*chain sequences of behaviors (including emotional and cognitive responses as well as overt behaviors). From this perspective, an interaction takes place when one person's behaviors affect those of another person. Dyadic interactions are said to be "interdependent" when there is mutual impact, and a "close" relationship is defined by a high degree of interdependency—frequent, strong, and diverse interchain connections that endure over a relatively long period of time. Specific interactions are then set in the context of more general "causal conditions," including personal characteristics of the participants (for example, anxiety), external features of the dyad's social and physical environments (for example, economic conditions), and relational factors (for example, propinquity). Causal conditions are viewed as having an influence on and as being influenced by specific interactions—as, for example, when propinquity makes a rewarding interaction between two individuals possible and the rewarding interaction leads to efforts to increase propinquity.

The framework allows for two particularly important distinctions. First, there is the contrast between behaviors by one partner that augment the other's ability to meet his or her goals ("facilitating interchain connections") and behaviors

that impede goal-attainment ("interfering interchain connections"). Second, there is the sometimes difficult but frequently crucial distinction between interactional events that can be described (by the participants themselves or by uninvolved observers) and causal conditions for these events, which can only be inferred. As various authors turn to these (and other) aspects of the general framework, bringing different conceptual, methodological, and substantive points to bear, the capacity of the framework to reveal connections among apparently disparate topics becomes increasingly evident.

Following the two initial chapters, there are eight chapters on specific topics. A chapter on short-term interactions (McClintock) and one on longer-term patterns of development and change (Levinger) examine the sequence of interactions in a close relationship. Two other chapters discuss relational conflict (Peterson) and therapeutic remediation of distressed relationships (Christensen). The remaining four chapters address emotion (Berscheid), power (Huston), roles and gender (Peplau), and love and commitment (Kelley). The book concludes with a detailed summary of the various methodological approaches taken and problems encountered in empirical research on close relationships (Harvey, Christensen, and McClintock) and a chapter (Kelley) pointing out the relevance of research on close relationships to other domains of social science inquiry.

Overall, the book is scholarly and readable (especially in light of the complexity of much that is considered). There is no question that it will become a major source for investigators and students interested in close relationships.

If the book has a serious flaw, it lies in the failure of most of the authors to go beyond a review and organization of existing material to an original theoretical statement. One becomes most aware of this shortcoming by virtue of Berscheid's chapter on emotion, in which she does take that extra step and formulates an extraordinarily stimulating model for understanding the relational conditions conducive to emotional response. However, through its careful reviews and marked attention to organizing principles, the present volume may well serve as a necessary ingredient for fostering future theoretical endeavors by both its authors and its readers.

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Mississippi Valley Archeology

Archaeology of the Central Mississippi Valley. DAN F. MORSE and PHYLLIS A. MORSE. Academic Press, New York, 1983. xx, 345 pp., illus. $39.50. New World Archaeological Record.

It is fitting that 101 years after Colonel Norris, a field agent for the Bureau of American Ethnology Division of Mound Exploration working under the direction of Cyrus Thomas, conducted an archeological survey of the Central Mississippi Valley, a volume be published synthesizing knowledge about the archeological resources of the region. Extending from near the mouth of the Ohio River to the mouth of the Arkansas River, a distance of 800 kilometers, the Central Mississippi Valley is defined by the Morses as the alluvial valley bounded on the east by the Mississippi River and on the west by the Ozark Highland and Grand Prairie. An overview of past relationships between humans and land in the Central Mississippi Valley is presented succinctly and in sufficient detail to introduce many new data.

The volume begins with a brief review of the environment of the region including geological history, climate, geomorphology, soils, and biota. This landscape, which contains archeological resources in extreme quantity, has been ravaged by modern agriculture. Archeological preservation, through research and the compilation of data, is a battle fought only once, and though the effort has been noble the battle is lost in the Central Mississippi Valley. Even with ample personnel and funding the potential for reconstructing settlement patterns from archeological sites that existed 10 years ago no longer exists.

In the second chapter of the volume an overview of the history of archeological research in the region is presented, moving from observations made by early naturalists such as Henry Schoolcraft and Thomas Nuttall through work conducted by the St. Louis Academy of Science, Captain C. W. Riggs, and Captain Wilford Hall, to the first well-documented archeological excavations conducted along the St. Francis River by Edwin Curtis in 1879. Work by the Bureau of American Ethnology, Gerard Fowke, Clarence B. Moore, James K. Hampson, Samuel C. Dellinger, Jesse Wrench, Brewton Berry, and Carl Chapman is reviewed. The formation of the Lower Mississippi Valley Survey in 1940 is hailed as the beginning of modern archeology in the region. A brief review of archeological research since that time is also presented. To my knowledge this chapter is the first published history of archeological research unique to this region.

After discussions of recovery techniques and data interpretation and incorporation, a brief overview of the archeological sequence spanning approximately 12,000 years is presented, beginning with the Paleo-Indian Period and ending with the Euro-American Period. The following 10 chapters are more detailed accounts of these chronological/cultural divisions. At the beginning of each chapter a map illustrates important sites and archeological phases unique to the cultural period to be discussed. Each chapter contains ample photographs and artistic renderings of artifacts, site plans, excavations, and other subjects discussed in the text. Most of the illustrations have not been previously published and stem from research carried out by the authors. The simple traditional terminology for the cultural stages in the valley is not followed. For example, "Early Archaic" is replaced with the "Early Corner-Notched Horizon" and "Middle Archaic" becomes the "Hypsithermal Archaic" followed by the "Poverty Point" instead of the "Late Archaic" period. Similar treatment is afforded the traditional Woodland Period, and Mississippian is divided not into Early and Late Mississippian but Early Period, Middle Period, and Late Period Mississippian. The new terminology reflects important cultural and environmental changes.

The treatment of the Paleo-Indian Period includes a presentation on finds of Pleistocene fauna in the region. Although the quantity of finds has been impressive, only one has been putatively associated with human artifacts. A summary of fluted point finds is presented, and somewhat tenuous cultural reconstruction follows.

Important new data on the period designated Dalton Efflorescence are synthesized with examples drawn from the Brand and Sloan sites. The authors' long-standing interest in Dalton research is reflected in this publication. A convincing argument is presented for a low human population density in the lowland portion of the Central Valley during the Hypsithermal and for a major increase in population during the following 2500 years during the Poverty Point Period.

Significant previously unpublished data are presented on the McCarty site, an Early Woodland locus, providing a better understanding of Tchula expressions in the Central Mississippi Valley, and the Hopewellian is represented by a