



THE QUARTERLY NEWSLETTER OF THE
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OF
COMPARATIVE
HUMAN COGNITION



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THE QUARTERLY NEWSLETTER OF THE LABORATORY OF COMPARATIVE HUMAN COGNITION

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Introduction

Thematically and structurally the contributions to this issue separate into two distinct sections. The first, composed of two articles, continues a discussion on teaching and learning in parent-child interactions introduced in an earlier issue of the *Newsletter* (October, 1990). The second is a three-party review symposium on Luis C. Moll's (1991) edited volume, *Vygotsky and Education*.

We are delighted to see the extension of zone of proximal development analyses that Goodnow (1990) quite rightly asked for, virtually synonymously with Litowitz in this discussion forum: as we have argued for sometime (LCHC, 1983) the notion of zone of proximal development, which took its underlying rationale from highly constrained practices that occur in formal schooling, must be generalized to apply to culturally organized joint activity in general. To do that effectively requires us to represent adequately the special conditions of power and social organization that occur in tests-in-classrooms vis a vis reality in many settings of sociocultural importance. The examples provided by Gauvain and DeMent and Becker and Goodnow provide very useful next steps; we note in passing that the home-based interactions described in this work appear a great deal like apprenticeship, where there is a parallel discussion going on.

It's a rare treat to be able to offer a timely book edited by our former editor and current editorial board member, Luis Moll. As each of the three reviewers makes clear, Professor Moll has brought together a world-class group of scholars to consider how a cultural-historical pedagogy should be applied to problems of education in the late 20th Century. All can agree with Engeström that this is very much a "movement-in-progress," one with complex international and disciplinary implications (and, thereby, imply complex ideological issues. And we can agree with Gelb and Säljö that the cultural-historical movement must be very careful, lest it recapitulate a past it rejects despite its best intentions. The challenge of this book is clear: to succeed, a cultural-historical approach to education must, as Säljö puts it, "make fully literate and active contributors to work life and democratic processes" those who share different cultural resources.

Olga A. Vasquez
Michael Cole

"What's the Magic Word?" "Were You Born in a Tent?" — The Challenge of Accounting for Parents' Use of Indirect Forms of Speech with Children

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This paper takes up the invitation of the Editors to respond to questions raised by papers in the October, 1990 issue of *The Quarterly Newsletter of the Laboratory of Comparative Human Cognition*. Our particular interest is prompted by Litowitz's comments on the need to consider phenomena which do not easily fit current accounts of teaching and learning.

The phenomenon to which we wish to draw attention is the use of indirect speech as a way of teaching children what they should do. In the course of socializing children into the pragmatics of language, for instance, parents say such things as "What's the magic word?" when they want a child to say *please*, "I beg your pardon" when they want a child to express a request more politely, and "She stands in the stable" when they want a child to refer by name to a woman present (see Becker, 1990). In the context of household tasks, parents say "Were you born in a tent?" when they want a child to close the door, "Where do you think you are, the back side of the moon?" when they want a child to clean up a messy room, and "I'm not driving a taxi" or "This is a house, not a hotel/restaurant/cafeteria" when they presumably wish children to show more consideration for others and not act as if they had a right to "service" (see Goodnow, 1990; Goodnow & Warton, in press).

These indirect statements are extremely frequent. They comprise, for instance, over 80% of parents' comments to three-year-olds about their pragmatic errors and omissions (Becker, 1988). They are also puzzling. To start with, these statements do not fit with proposals that indirect forms of utterances are a sign of politeness. Moreover, their teaching function is far from straightfor-

ward. They are not consistent with psychology's description of parents as being most effective when they offer rationales which are clear and carefully geared to the child's level of understanding. Furthermore, they do not always seem to represent the expert's recognition that the novice's grasp of the task at some point allows a hint or an indirect suggestion to be effective where before a more direct form of assistance was needed.

In effect, parents' use of indirect comments provides a further reminder that, as Goodnow (1990) and Litowitz (1990) have pointed out, adults are not always the willing explainers, the careful scaffolders of advice, that are indicated by accounts of "proleptic teaching," "guided participation," or "scaffolding." These accounts may describe optimal behaviors, but they leave unexplained a great deal of everyday behavior.

To say that indirect statements present a problem, however, is hardly enough. We have wondered about the kinds of interactions in which they occur, why they are used, what their developmental history is, and what they convey to children hearing them.

To provoke thought on these questions, we offer below two sets of examples of indirect language. For the first, we can provide a record of whole episodes from observations of family interactions. For the second, we have no records of complete episodes (if others have these, we would be delighted to hear of them) and we offer instead our impressions of how these might proceed.

We begin with an example which fits neatly into the expected pattern of indirect statements followed by a more direct one when the indirect prompts are unsuccessful. A four-year-old has just made a request of her mother without using a polite form.

Child: I want doll clothes. You can make me five or four clothes.

Mother: I beg your pardon?

Child: What?

Mother: Are you ordering me to do it?

Child: Mmm, I don't know, Momma.

Mother: Can't you say *Mommy would you please make me some?* Don't order me on how many to make. That's not very nice.

Child: Mommy, please can you make me some?

In a second example, a mother continues to use indirect statements, but finally changes her affective tone, making it clear to her three-year-old son that he should

produce the appropriate behavior.

Mother: What do you say for hitting me in the stomach?

Child: Roar!

Mother: No, what do you say to me?

Child: (makes animal noises)

Mother: I can't understand that.

Child: Huh?

Mother: (using a more serious tone) What do you say, Bill?

Child: I'm sorry.

For both of these examples, there is evidence to argue for a developmental history that begins with the parent initially doing the work for both parent and child, saying for instance both "please" and "thank you" for the infant in routinized games. At a later point comes a direct instruction for the child (e.g., "*Say please*"), followed still later by indirect prompts such as "What do you say?" or "What's the magic word?" These indirect prompts are first used, according to the mother of a three-year-old, when the caregiver feels "it's about time she started doing it herself." They are also likely to appear at an earlier age for pragmatic behaviors which are easily mastered than for more difficult pragmatic behaviors (Becker, 1990).

The examples presented thus far offer no surprises. They extend into everyday life the patterns described in experimental teaching tasks, and they fit neatly into the expected pattern. A third example, however, does not do so. A father has asked his three-year-old son a question, and the child has not answered. Rather than proceed to the direct statement "Answer when I speak to you," the parents proceed indirectly.

Father: Hey, Craig.

Child: (no response)

Mother: Craig, Daddy is talking to you.

Child: (no response)

Father: Craig, hey Craig.

At this point, when current models would predict some direct instruction, the father desists and changes the subject.

In the transcripts that one of us (JB) has collected, episodes of the third kind are quite frequent. In fact, in many such episodes the parent desists following only one unsuccessful, indirect prompt. It is not clear why parents stop. Perhaps they do not view appropriate performance as important in those instances. They may feel that they "can't be bothered" pushing the matter further, or are

amused by their children's capacity to tune out and continue their own activities undisturbed. They may not even intend to teach appropriate behavior at all. Whatever the reason, parents do not treat this type of interaction as an occasion for sustained and conscious teaching. Our first proposal for research would thus be to ask about the conditions which give rise to such termination.

That unanswered question, however, represents only one gap in our understanding of interactions involving indirect statements. To bring out these further gaps, we turn to examples for which we only know what parents say. Take, for instance, some phrases that parents are known to use when a child asks for assistance that is regarded as inappropriate: "What did your last slave die of?" "Sorry, the maid's on strike today," "I'm not running a taxi service," "I'm not a Redi-Teller" (automatic money withdrawal machine), "This is not a restaurant/hotel/laundromat/delicatessen" (Goodnow & Warton, in press). These indirect ways of saying "no" may or may not be followed by some direct instruction. If a child looks puzzled or asks for an explanation, the parent may follow with more direct and explicit advice as to what should be done: "You should fetch that yourself," "You have to let me know ahead of time if you want me to drive you," or "You should eat what's put in front of you; I can't cook six separate meals for six people." We suspect that such direct instructions do not usually follow. Even when they do, there seem to be great explanatory gaps between the indirect and direct statements. If one thinks of instruction as a scaffold or a form of weaving, then there are several rungs missing, several holes in the pattern.

Missing pieces seem all the more the case when we consider statements such as "She stands in the stable" or "She is the cat's mother" when children use the pronoun "she" to refer to a woman who is present (usually the mother). In our own experience, and that of several others we have asked, the full meaning and intent of such indirect statements was not apparent until adulthood, long after parents first used them. It is possible that some parents may proceed to offer the direct advice "Use my name" or "Say *Mommy* when I'm here," though our intuition is that this rarely if ever occurs.

No such sequel seems likely or anticipated, however, when parents answer children's questions "What's that?" and "What's in here?" with statements such as "a wing wang for a goose's bridle" or "flypaper for a sticky beak" (Keesing, 1982). As one of Keesing's informants on the use of "wing wang for a goose's bridle" commented, "This expression was very commonly used in our family . . . in

the context of 'ask a silly question' etc. or else when they couldn't be bothered explaining what they were doing" (Keesing, p. 73). The message to the child, in effect, is "stop asking" and "I'm not going to explain."

What gives rise to indirect statements of the "slave" or "goose's bridle" variety? There may be various functions such utterances serve for parents. They may allow parents a socially acceptable vehicle for venting anger or frustration, alerting the child to the parent's feelings even when the bases for those feelings are unclear. They may reflect a push for equity, a sense that the child must now do more of the work in the teaching-learning process and figure things out more independently. They may also provide a welcome break from the monotony of repeating oneself, of speaking always at the child's level, of acting only as an interpreter/translator for young children. In the words of one Sydney mother, "Who wants to sound like a broken record?" Or another, "Sometimes I just want to feel I'm talking to an adult, and then I do talk over their heads." There may also be a certain pleasure in the play with language contained in some of these expressions.

This is not to say that children learn nothing from interactions that include often obscure indirect statements. They may learn a great deal about the ways such language is used to negotiate and comment on social relationships, and how parents signal that the children are approaching a "touchy area," "treading on thin ice," or need to change their style of learning. They may also learn a great deal about the effect upon others of their incorrect behaviors (Becker, 1990), learning how to distinguish between occasions when these give rise to a strong as opposed to indifferent parental response.

What we wish to bring out from these examples is the variety of ways in which the interactions between parents and children can and do depart from a picture of parents steadily guiding children towards increasing task competence. Parents emerge instead as pursuing multiple goals in their interactions with children, with the elicitation of a specific, correct behavior being only one of these. Even when parents see themselves as teaching, their goals may be more complex than one might at first suspect. There are times when correct performance may be the only goal. There are others, however, when the goal may be to help the child understand an underlying rule, learn the circumstances or the timing for certain behaviors, or come to distinguish what Goodnow (1990) has termed "important" as opposed to "trivial" areas of knowledge and performance. The major goal may even be one of teaching novices that they should do all the work of abstracting

what is needed, rather than ever having this explained to them. Entertaining such possibilities will not only help us understand the use of indirect instructions but will also expand our understanding of the many ways in which teaching and learning proceed.

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The Role of Shared Social History in Parent-Child Cognitive Activity

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I believe in time and in the life chronological rather than in the life existential. We live in time and through it, we build our huts in its ruins, or used to, and we cannot afford all these abandonings. (Wallace Stegner, *Angle of Repose*, 1971)

Increasing interest in social influences on the development of thinking skills has led to an influx of cognitive developmental studies involving social partners. These studies typically involve either an adult and a child or perhaps child peers working together on a joint cognitive task. Oftentimes these partners have had prior experience with one another before their participation in the research, with the adult frequently being the child's parent and the peer usually a classmate, possibly a friend. In this paper we are concerned with how knowledge stemming from such prior social experiences may influence the joint problem solving context as partners interact. In particular, this paper discusses the role that knowledge gleaned from prior interactions between a parent and child may play in cognitive interaction. Although it is somewhat unusual to consider shared social history between a parent and child as influential in cognitive interaction, shared social history, like prior skill, interest, or familiarity with task materials, may also regulate the cognitive opportunities that arise during a cognitive activity that occurs in social context.

In order to examine the role of shared social history in joint cognitive activity, we have been studying parent-child interaction on a joint cognitive task in families functioning normally and in families with young children who are considered chronically noncompliant. In this work we are attempting to compare patterns of cognitive interaction in individuals in ongoing relationships as a "natural laboratory" for studying the influence of child and adult characteristics in joint problem solving. Although we focus on child compliance as a mediating variable in parent-child interaction, we believe that many other shared experiences prior to task involvement may influence the nature and extent of cognitive interaction. Thus, our focus on child compliance as an important element of parent-child shared social history serves as an examination of this interactional difficulty itself, as well as an illustration of the notion of shared social history as an influence on cognitive opportunities during joint problem solving activity.

The research reported here is guided by a theoretical perspective that contends that children's thinking develops in practical contexts in which other people guide the use and development of cognitive skill (Laboratory of Comparative Human Cognition, 1983; Rogoff, 1990; Vygotsky, 1978; Wertsch, 1979). Underlying the present research is the general assumption that parents and children have a bidirectional impact on each other, and that their interactions are influenced by the sociohistory which they share. The cognitive opportunities provided by par-

ents for young children may be influenced by the child's social competence, which plays an important role in parent-child interaction. Behavioral patterns labeled as noncompliant interfere with interactional processes and occur in the general population at fairly high rates. In fact, unmanageable or noncompliant behavior is the most common reason for psychiatric referral for preschool children (Rutter & Garmezy, 1983). Research has shown that parents of children labeled noncompliant are more likely to be involved in prolonged sequences of coercive and controlling exchanges with their children (Patterson, 1982). It is not too surprising, therefore, that interactions between parents and children perceived as having behavioral disturbances decrease in frequency over time as family members avoid aversive interactions (Martin, 1981; Patterson, 1982), and when interaction does occur, parents of these children issue more commands than parents of children who are considered more compliant (Forehand, King, Peed, & Yoder, 1975). Beyond immediate interactional difficulties, research indicates a consistent association between these conduct disturbances and lower IQ and below average educational attainment (Rutter & Giller, 1983). In sum, it seems that the pattern of cognitive guidance provided for children perceived as having compliance problems may restrict the range of cognitive opportunities these children have relative to peers who are not so labeled, and may, in the long run, result in these children performing at a lower level of cognitive skill than their nonlabeled agemates.

In this paper we define conduct disturbances, specifically noncompliance, using a framework developed by Mehan, Hertweck, and Meihls (1986) and McDermott (1990) for describing learning disabilities. Conduct disorders, like learning disabilities, may be less reflective of internal child characteristics and more like a social category for describing children whose behavior is different from that desired on a range of culturally valued activities. Social behaviors, like compliance, are meaningful only in relation to sociocultural expectations and constraints that precede a child's participation in an activity and pertain to the fit between the child's behavior and the context of performance. This link between child compliance and contextual factors has not gone unnoticed by the way, and even parents of children labeled chronically noncompliant are quick to note the contexts in which their children function best. Not surprisingly, these are contexts that permit, sometimes even encourage, individual freedom and entail few constraints.

Of course, not all cultures are as concerned with behavioral compliance as ours, and similarities across

situations in middle-class American communities in which children commonly find themselves may exacerbate these patterns. For example, the premium placed on organized activities and time schedules, as well as a preference for working and playing indoors and/or in predefined and fairly restricted physical spaces may contribute to the high valuation of compliance in middle-class American communities. As a case in point, consider the observation made by the first author on several occasions while visiting Navajo friends accompanied by her "active" son. (Incidentally, "active," "busy," and "difficult" are common euphemisms for describing children considered noncompliant in our culture). This child typically appears more compliant, less fidgety and distractable, and less disruptive of adults while on the reservation than at home. Patterns more common on the reservation such as spending more time outdoors, infrequent involvement of children in any central way in organized activities either in or out of doors, and fewer adults displaying anxiety about his behavior and what he may do next likely contribute to a quite different assessment (or construction) of his behavior while there.

What is particularly fascinating in understanding social categories like noncompliance is the widespread appropriation in middle-class American culture of this category system and of the characteristics of children who are assigned to it. Since many situations in middle-class communities may, in part, promote patterns of noncompliance, the resulting cross-situational consistency is often looked upon as evidence of an internal cause of noncompliance. This is not to deny that some children may possess individual characteristics that precipitate noncompliance. Characteristics like irritability, soothability, and impulsivity, as well as conflicting definitions of the activity or of the identification process (Litowitz, 1990), may contribute to the formation and maintenance of behavioral patterns in children who are perceived as noncompliant. The important point is that these behaviors are supported by sociocultural expectations and constraints that help constitute these patterns in a child in a particular situation.

Considering noncompliance as a socially constructed category necessitates, as Mehan, Hertweck, and Meihls (1986) suggests, a shift in focus from viewing conduct disturbances as the property of the person to seeing them as the property of a situation. This may be particularly problematic in middle-class American culture that values both compliance and independence. As Litowitz (1990) points out, resistance or rejection of adult presented assistance may signal early attempts to perform the adult's

functions of choosing and structuring activities. Perhaps noncompliance, which involves resistance to the control and organization of the other, reflects a desire by the child to move beyond participation to responsibility.

Although the balance of parental requests and child responsiveness shifts by situational demands, the requirements of instructional encounters, in particular, may elicit compliance difficulties in parent-child relationships. In instructional interactions, the expert, typically the parent in parent-child dyads, initiates the activity by adopting a regulatory role. At the outset, regulatory functions are made overt and explicit. But in an ideal learning situation, regulation of the task materials and process is gradually transferred from the expert to the novice as the novice increases understanding and skill at the task. But for parents of children considered noncompliant, concern with controlling the child's behavior that stems from a history of difficult interactions with the child may override instructional goals.

When instructing such a child, a parent may introduce the task in a way that attempts from the outset to regulate the child's involvement, and over the course of the interaction, he or she may be reticent to relinquish a regulatory role. Efforts to manage the child's behavior as well as provide instruction may result in the parent focusing the instructional content on concrete and specific aspects of the task, rather than on strategic or representational aspects, since this will allow closer surveillance and control of the child's actions. In addition, how the parent and child share decision making responsibility throughout the task may be affected, with parents of children considered noncompliant less likely to provide their children with increasing responsibility in decision making. A preponderance of low level, or very task specific, cognitive information, coupled with less decision making responsibility, may provide less effective instruction overall. Low level guidance encourages less thinking on the part of the child, thereby giving the child fewer opportunities to develop his or her own thinking skills (Sigel & McGillicuddy-DeLisi, 1984). It may also frustrate a child who strives to adopt the regulatory role for him or herself (Litowitz, 1990). Thus, what began as an instructional episode may be transformed into a struggle for control as the parent attempts to focus the child's attention on the task through close monitoring of the child's actions, and the child struggles to manage all or part of the task on his or her own. In this way noncompliant behavior, or resistance, may be a coercive way to get parents to adjust scaffolding. The adjustments that parents make to accommodate noncompliance may result in less cognitive assistance and guidance

than when a child is more cooperative. Compliance, therefore, may be an essential condition for genuinely cooperative interaction to occur (Maccoby & Martin, 1983).

Even though it seems evident that both parents and children who are uncooperative contribute to problematic instructional interactions, it is far from clear whether parents and children differentially contribute to the process, or if interactional styles of either the parent or the child are more responsible for directing the interactional flow. In an attempt to explore the relative contributions of mothers and children to this process, the research described here used a matched dyad procedure. By examining the cognitive guidance provided for a child considered noncompliant by his or her own parent relative to that provided by a parent of a child considered compliant, as well as the involvement of the child in these differing circumstances, we may develop insight into the consistency and adaptability of cognitive interaction by parents and children in dyads with children either identified or not as having behavioral problems. And, in turn, we may increase our understanding of how shared social history in parent-child dyads may play a role in structuring cognitive interaction and thereby influence cognitive outcomes for the child.

Method

Forty mother-child dyads, recruited from a local newspaper, participated in the study, with children's ages ranging from 4 to 5:9 years. The mean age for the children was 4:9 years (with a standard deviation of 6 months). None of the children were currently or had ever been under treatment for conduct disturbances, and none were using psychoactive drugs.

An experimental design which involved matching a child considered to be normally functioning and his or her mother with a child considered chronically noncompliant and his or her mother was used in an attempt to disentangle questions about the evocative nature and consistency of noncompliance, as well as the consistency and adaptability of parental guidance in parent-child interaction with children displaying these behaviors. We tried to have half of the dyads in each group composed of mothers and daughters and half of mothers with their sons, however since males tend to be overrepresented relative to females in rates of noncompliance, even our best efforts yielded a slight disproportion. The final sample of 20 matched pairs contains 12 mother-son matched pairs and 8 mother-daughter matched pairs.

Participation involved two laboratory visits, one to determine whether the child met the basic criteria for participation and a second visit involving a matched pair of dyads composed of a mother with her child who met the criteria for noncompliance and a mother with her child who did not meet the criteria for noncompliance. During the first laboratory visit assessments were conducted to determine the behavioral compliance of the child using two standard measures of compliance: a free play observational technique involving both parent and child focused on child responsivity to parental requests over a 10 minute free play session and a clean-up period (Eyberg, Robinson, Knishern, & O'Brian, 1978), and completion by the mother of the Child Behavior Checklist (Achenbach & Edelbrock, 1983). This information was used to assign dyads to either the noncompliant or compliant group and to match dyads in same age, same sex pairs for a second laboratory visit. In other words, mother-child dyads were matched so that each dyad containing a child rated as noncompliant was paired with a dyad containing a same-age, same-sex child whose social conduct was considered normal. The child's basic level of intellectual functioning was also assessed at the first laboratory visit using the vocabulary, arithmetic, and block design subscales of the Wechsler Preschool and Primary Scale of Intelligence. All children exhibited normal intelligence on the WPPSI subscales and there were no differences between the two groups in their scores.

The second laboratory visit involved the matched pairs of mother-child dyads, and during this visit each child collaborated with his or her own mother and with the other mother on two planning tasks that involved sequencing and delivering five items to locations in a model village using a small delivery truck. (Figure 1 illustrates the general format of the tasks by presenting the Pretest version which involved delivering five letters to each of five houses, with the letters and houses color coded to indicate which letter was to go to which house.) Solution of the problems required a reverse sequencing strategy, i.e., the delivery truck was constructed so that only the next item to be delivered could be removed at any one time. Consequently, each problem required advance planning of the entire sequence of items in order for delivery to be successfully accomplished. The tasks combine some of the elements of planning tasks used by Hayes-Roth and Hayes-Roth (1979) and Gauvain and Rogoff (1989) in their research on planning skills and by Boder (1978) in his research on the development of children's skill at reverse sequencing.

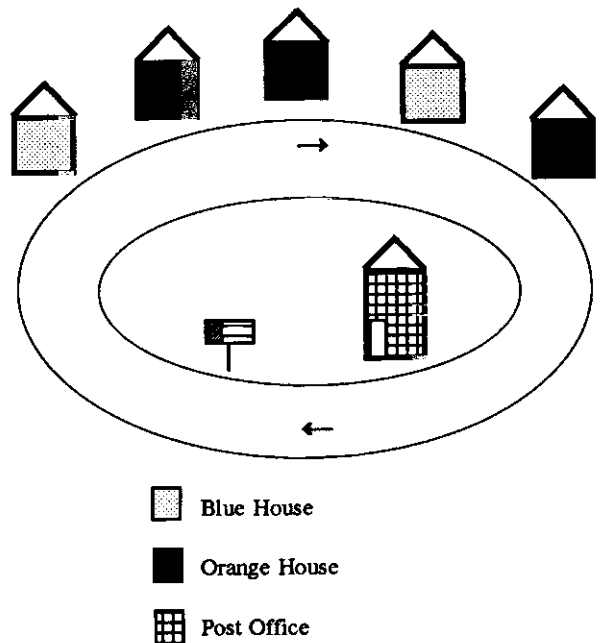


Figure 1. Mail Delivery Task Used as a Pretest

Each child participated in solving six planning problems: one as a solitary pretest, two trials with his or her own mother, two trials with the mother of the other child from the dyad with whom they were paired, and one as a solitary posttest at the conclusion of the entire session. The procedure was as follows: After a brief period during which subjects became acquainted with one another, each child participated in the individual pretest to establish a baseline on the tasks used. Then children participated, in turn, with their own mother and then with the other child's mother on similar but more difficult versions of the task. We had hoped to counterbalance the order in which children worked with their own and with the other mother but it became quite clear from the outset that this would be very difficult to accomplish. Not only were the children young, and therefore quite hesitant about working with an unfamiliar adult, but the children identified as noncompliant would not comply very readily to this request. Finally, at the conclusion of both dyadic sessions, each child received an individual posttest which was similar to but more difficult than the pretest.

All the interactions were videotaped and transcripts were made from these tapes. Coders, who were blind to the subjects' condition, used the transcripts in coding the data presented here. Coded variables included the frequency and type of strategic assistance adults provided at the outset of a trial and throughout the trial. In addition, the nature of the guidance and support the mother provided for the child during the task, including the use of behavioral directives, and the provision of positive and negative feedback that were task related were coded. And, finally, the extent to which mothers and children shared decision making responsibility during each trial was rated. Each of these variables is described in more detail below.

Strategic Assistance Provided by the Adult was evaluated as either high level, low level, or pertaining to item placement only. The type of strategic information conveyed by the adult at the outset of the trial, i.e., the strategic information conveyed in her first statement as to how the dyad should handle the planning problem, and the type of strategic information conveyed throughout the remainder of the trial, were coded. Evaluation of the strategic level used throughout each trial was determined by coding each strategy utterance made by the mother following her opening strategy statement, and then calculating a mean strategy score for each trial. The three types of strategic assistance were as follows: *High level strategy* included any statement about a general procedure for solving the problem in a more efficient, systematic or planful way. Since the task involved reverse sequencing, a high level strategy needed to refer to the fact that items had to be sequenced in reverse. This type of strategy was coded with a value of 3. *Low level strategy* included any concern with how to handle or manage a specific move in a strategic or planful way. Although a low level strategy may imply a high level strategy, the high level strategy is left unstated. For example, the mother may refer to the fact that a particular item needs to be positioned last. Low level strategies were coded with a value of 2. *Item placement only* included any concern with the selection or placement of a single item that did not involve any strategic information, such as "Put that one next." These were coded with a value of 1.

Adult Guidance and Support included the frequency of behavioral directives and the provision of positive and negative feedback to the child. *Directives* were task relevant statements that told the child what to do. *Positive feedback* included any comment regarding the child's task performance that expressed personal approval, satisfaction, or pride. *Negative feedback* included any comment of disapproval regarding the child's task performance.

Sharing Responsibility involved the extent to which the adult and child shared responsibility for decision making during a trial. This rating was based on Vygotsky's notion of the Zone of Proximal Development (1978) and was designed to capture the degree to which the child and adult coordinated their task involvement, and whether any shifting of responsibility from adult to child occurred over the course of developing a plan. The nominal rating was defined as follows: *Responsibility shifts from adult to child* (rating of 4) was used to describe interactions in which responsibility for determining the sequencing of the items was transferred from the adult to the child. *Adult and child share responsibility* (rating of 3) was used to describe interactions in which the adult and child both actively shared in the decision making involved in determining the sequencing of the items. *Adult responsible with the child as an active helper* (rating of 2) was used to describe interactions in which the adult assumed primary responsibility, but she allowed the child to help in determining the sequence. This was usually accomplished through focused item selection questions by the adult. *Adult responsible with the child as an instrumental helper* (rating of 1) was used to describe interactions in which the adult assumed all responsibility for sequencing the items and the child was used simply to accomplish some of the physical actions of the task under close adult scrutiny.

Reliabilities based on 20% of the transcripts exceeded 90% agreement for all variables.

Results and Discussion

Results support the hypothesis that shared social history may influence the way in which adults and children work together on a joint cognitive task. Mothers of children rated as noncompliant employed more lower level strategies both at the outset of a joint problem solving session and throughout the session when working with their children than mothers of children rated compliant did when working with their children, MANOVA $F(2,36)=6.08, p<.01$ and MANOVA $F(2,36)=16.79, p<.01$, respectively. (Table 1 presents the means for these variables by trial for each of the four dyadic conditions and Table 2 contains the Univariate results by trial for these variables.) Children rated as noncompliant were also less involved in or responsible for decision making when they worked with their own mother than children considered compliant were when they worked with their own mother, for both trials, $\chi^2(1)=8.02, p<.01$ (Trial 1) and $\chi^2(1)=13.31, p<.001$ (Trial 2). (Dyads involving children rated as non-compliant while working with their own mothers had mean ratings for responsibility sharing of 2.02 (sd=.8) on

Trial 1 and 2.00 (sd=.8) on Trial 2, whereas dyads involving compliant children working with their own mothers had mean ratings of 2.80 (sd=.8) on Trial 1 and 3.24 (sd=.9) on Trial 2.) Mothers of children rated as noncompliant also expressed more disapproval of their children, $F(1,38)=4.96$, $p<.05$, and used more behavioral directives, $F(1,38)=11.26$, $p<.01$, while working with their children than did mothers of children rated compliant

Table 1

Mean (and Standard Deviations) for Strategic Assistance Provided by the Adult for Each Dyad*

Dyad	Trial 1		Trial 2	
	Opening strategy	Strategy throughout	Opening strategy	Strategy throughout
Child rated non-compliant with own mother	1.65 (.8)	1.27 (.4)	1.72 (.7)	1.45 (.6)
Child rated compliant with own mother	2.40 (.7)	2.22 (.6)	2.45 (.8)	2.21 (.7)
Child rated non-compliant with mother of child rated compliant	2.17 (.7)	1.67 (.7)	2.12 (.6)	1.82 (.6)
Child rated compliant with mother of child rated non-compliant	1.80 (.7)	1.47 (.6)	2.20 (.7)	1.80 (.6)

*A value of 1 to 3 was coded for this variable, with 3=high level strategic assistance, 2=low level strategic assistance, and 1=item placement assistance only.

when working with their own children. No differences in positive feedback occurred between these two groups. (Table 3 provides the means for these variables by group.)

These patterns suggest that cognitive interactions proceed differently for mothers working with their own children whom they consider difficult than for mothers working with their children who they do not see as having a history of difficulty. The difference between the two

Table 2

Multivariate and Univariate Analyses of Variance Comparing the Strategic Assistance Provided by Mothers While Planning With Their Own (Rated Compliant or Noncompliant) Children At the Opening of the Interaction and Throughout

Strategic Assistance	Opening statement	Throughout
MANOVA	$F(2,36)=6.08^*$	$F(2,36)=16.79^*$
Tri.1 ANOVA	$F(1,37)=9.25^*$	$F(1,37)=33.62^*$
Tri.2 ANOVA	$F(1,37)=8.88^*$	$F(1,37)=13.36^*$

* $p<.01$

Table 3

Means (and Standard Deviations) for Directives, Positive Feedback, and Negative Feedback for Each Dyad

Dyad	Directives	Positive	Negative
		Feedback	Feedback
Child rated non-compliant with own mother	16.25 (11.4)	4.15 (4.2)	2.10 (3.2)
Child rated compliant with own mother	6.65 (5.8)	5.80 (4.2)	.65 (.8)
Child rated non-compliant with mother of child rated compliant	5.00 (5.5)	10.30 (8.5)	.70 (1.3)
Child rated compliant with mother of child rated non-compliant	7.55 (8.4)	9.05 (8.1)	1.00 (1.5)

groups in the initial or opening strategy is of particular interest in that all of the other actions of the mother could be a consequence of child behaviors which occurred during the interaction. But given that mothers of children considered noncompliant began by introducing the task in a strategically different and more behaviorally specific way than mothers of children considered compliant, it appears that mothers brought to the situation their knowledge or perception of their children's behavior that influ-

enced how they introduced the task to the child. Mothers of children seen as noncompliant introduced the task at a lower cognitive level than mothers of children seen as compliant, perhaps in an attempt to regulate the child's behavior from the outset. These patterns raise questions about an implicit assumption in research on the Zone of Proximal Development in which adjustments in guidance provided by the adult have been assumed to be made in response to information emanating from the immediate task context. The present findings suggest that information brought into the context may also influence the nature and the extent of cognitive guidance that an adult provides for a child.

The critical questions are whether the skills or behaviors of the child or of the adult or of both best explain these patterns and whether any adjustments on the part of the mother or child occur over the course of the interaction. In order to explore these questions we examined how the mothers and children interacted along these same dimensions when they worked with their matched partner. In other words we investigated the consistency of the mothers' and children's behaviors in the noncompliant group when they worked with their matched partner from the compliant group. (Tables 1 and 3 contain the mean values for these pairings.)

Considering the children rated noncompliant first, it is clear that these children had a very different experience when they worked with the mother of the matched child than with their own mother. When we compare these two sets of interactions, we found that the children rated noncompliant received slightly higher level strategic assistance at the outset of the interaction, MANOVA $F(2,37)=2.88, p<.10$, and throughout the trials, MANOVA $F(2,37)=2.44, p<.10$, while working with the mother of the matched child than with their own mother. Examination of the Univariate indicates that this difference is carried by the interaction during Trial 1, both at the outset of the interaction, $F(1,38)=4.52, p<.05$, and throughout the trial, $F(1,38)=4.72, p<.05$. These differences were only marginally significant for Trial 2 $F(1,38)=3.35, p<.10$ for opening strategy and $F(1,38)=3.66, p<.10$ for strategy throughout. While working with mothers of children rated compliant, children rated noncompliant were also given more responsibility in decision making during both trials, $\chi^2(1)=6.19, p<.01$ for Trial 1 and $\chi^2(1)=11.88, p<.001$ for Trial 2, and they received more positive feedback, $F(1,38)=8.36, p<.01$, somewhat less negative feedback, $F(1,38)=3.27, p<.10$, and fewer behavioral directives, $F(1,38)=15.08, p<.001$, than when they worked with their own

mother. These patterns suggest that children considered noncompliant may be more involved when they work on a problem solving task with an adult who does not have the same history of interaction with the child that the mother does. They also suggest that the child may be behaving in ways that does not require extensive behavioral regulation. However, notice how this interpretation is more descriptive of the interaction in Trial 1 than Trial 2. After mothers of the matched children (rated compliant) worked with the children rated noncompliant only briefly, the difference between them and the children's own mothers is less evident. Perhaps the "other mothers" adjust downward to better fit the needs of the children rated noncompliant. Or perhaps the children considered noncompliant were appropriately responsive and involved in Trial 1, but that by Trial 2 their conduct slipped into less manageable territory and the adults are responding to this. Of course, both explanations may fit and ongoing analyses are designed to explore these suggestions further.

A second approach to investigating the consistency of the noncompliant dyad is to compare the dyads in which the mothers of the children rated noncompliant interacted with their own children and with the other, matched, child. Mothers of children rated noncompliant did not provide a different level of strategic assistance either at the outset of the interaction or throughout the two trials for their own versus the matched child. However, for Trial 2 only, dyads involving children rated compliant working with mothers of children rated noncompliant shared more decision making responsibility than these same mothers when working in dyads with their own (noncompliant) children, $\chi^2(1)=4.28, p<.05$. Mothers of children considered noncompliant also provided the matched child with more positive feedback and fewer directives during the session than they had provided for their own children, $F(1,38)=4.45, p<.05$ and $F(1,38)=7.58, p<.01$. There was no difference in the rate of negative feedback provided by these mothers to the two groups of children. It appears that over the course of the session, opportunities for child involvement and the provision of adult support by mothers of children considered noncompliant is affected by whether she is working with her own child who she sees as having a history of noncompliance or with another child. However, her strategic assistance did not differ across the two groups. Thus, we are seeing some consistency, as well as some adaptability, in maternal guidance by adults who have a history of working with a child perceived as displaying chronic noncompliant behavior.

It should be clear that these analyses barely begin to unravel the complex dynamics revealed in these joint

tasks. Further analyses presently being conducted include microanalytic examination of the contingency relationships between adult guidance and child compliance during each joint session, as well as the relationship of the process of cognitive interaction to posttest performance by the child. It is hoped that examination of these and other differences in these parent-child dyads may offer insight into how parents and children in ongoing relationships come to terms with social and cognitive demands as they solve problems together.

The process by which adults, in particular parents, influence children's learning is not yet clearly established, nor do we know just what aspects of interpsychological functioning regulate the interactional process and potentially affect the intrapsychological outcome for the child. This research represents one attempt to move beyond the assertion that social context is a mechanism of cognitive development by examining how and when social context operates in a way that promotes, or perhaps impedes, cognitive growth. This paper reports preliminary results that point to the importance of examining shared social history as a factor in order to understand the connection between social interaction, cognitive opportunity, and cognitive growth. A further agenda of this research, which may be more implicit than explicit, is a disregard for traditional boundaries in developmental psychology that maintain cognitive and social development as distinct areas of investigation. We hope this research illustrates how cognitive developmental theory, particularly theory reflecting a sociocultural emphasis such as Vygotsky's, will be refined as we consider how children's real social experiences, experiences that are often shared with those with whom children interact, help define the cognitive opportunities children have in their everyday lives.

In a 1985 paper, Sylvia Scribner outlines Vygotsky's concern with the influence of history on psychological development along three axes. Vygotsky was concerned with how general cultural history, i.e., material resources and socially organized activities, promotes human psychological functioning. He was also concerned with how a subject's individual or ontological history, which contains both biological or natural processes that regulate the development of elementary psychological functions and social and cultural processes that regulate the development of language and higher psychological functions, influences intellectual development. And, finally, he was interested in how the child's individual history and his or her cultural history merged to produce higher psychological functions. The research presented here extends this latter point by suggesting that the contribution of the

child's individual history may include socioemotional factors and that in order to understand a child's intellectual history it is important to know something about his or her history of social interaction. Social experiences create or restrict opportunities for the child to develop higher psychological functions. And, as these data show, such opportunities are defined in part by the shared knowledge and experiences that participants bring with them to an interaction. In this way, children both appropriate and construct their own historical and cultural opportunities as they work with others, who, over time, attempt to foster the development of culturally valued behaviors and mental practices. The data also illustrate that shared social history is not benign (see Goodnow, 1987). In some cases, it may open doors, as teachers and learners grow together. In others it may be more like building among the ruins, as partners rely on wobbly pilings and old materials. Yet, even among the ruins, all is not lost, for there is always potential for growth in living systems. The sad fact is that for some systems, like our "noncompliant dyads," much effort and insight may be needed to identify the riches and discard the rubble - a taxing chore in the best of circumstances. The important point is that shared social history is an inextricable aspect of human development, and that coming to know, in large part, entails coming to know the other and learning with them.

Note

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Review Symposium

Moll, L. C. (Ed.). *Vygotsky and Education*
Cambridge University Press, 1991.

A Legacy in Transition

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Luis Moll has done an invaluable job in compiling and editing *Vygotsky and Education*, a major volume of original papers focusing on the educational implications of Vygotsky's psychological theory. My task is to review the first part of the book that deals with historical and theoretical issues. The two reviews following address the second and third parts of the book respectively.

The first part contains six papers, written by Guillermo Blanck, Alberto Rosa and Ignacio Montero, Michael Cole, James Wertsch, Rafael Diaz, Cynthia Neal and Marina Amaya-Williams, and Jonathan Tudge. Two of these papers (Blanck and Rosa & Montero) discuss the biographical and historical contexts of Vygotsky's work. The remaining four papers deal with selected theoretical aspects of the Vygotskian legacy.

Guillermo Blanck's paper is a masterful essay on Vygotsky's life. One of its many insights is that Vygotsky's work was indeed a conscious attempt to rebuild psychology based on the dialectical and historical methodology of Karl Marx. Vygotsky aimed at a holistic, unified psychological science. This may sound like another attempt at creating a rigid "grand theory." Yet Blanck carefully demonstrates that Vygotsky's own method rejected such

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dogmatism. Blanck calls Vygotsky's method "critical assimilation." It was based on an ongoing dialogue with theories representing a wide range of orientations. Vygotsky's assertions result from "creative counterpoints" with those theories, inviting the reader to join in the further elaboration of the theory.

While Blanck emphasizes the dialogical character of Vygotsky's theorizing, he rejects the notion that Vygotsky's work would be only a beginning toward a new psychology. He calls Vygotsky's theoretical legacy an "habitable building." I don't find this a particularly appropriate metaphor. Buildings are stable structures. I think Vygotsky would rather see his work as a process, an historically evolving collaborative activity. Accordingly, a section on the elaboration and further development of Vygotsky's theory by his followers, such as Leont'ev and Davydov, would have been useful.

Alberto Rosa and Ignacio Montero analyze Vygotsky's work with the help of concepts taken from the history of science. They present a convincing account of the development of science - and psychology in particular - in the post-revolutionary Russia. The stepwise emergence and consolidation of Stalinism explain the curious fact that Vygotsky's ideas were practically forgotten for nearly three decades. Vygotsky's agenda is seen above all as formulation of conceptual tools for the development of the new science of general psychology. These conceptual tools stood well the test of Stalinist suppression and appear surprisingly modern today.

Michael Cole's chapter analyzes the relationship between cognitive development and formal schooling by means of the four Vygotskian levels of history: phylogeny, general cultural history, ontogeny, and microgenesis. This is a stimulating demonstration of what a Vygotskian historical methodology might imply in practice. Cole's analysis is particularly strong at the ontogenetic level. The context-specific nature of the cognitive consequences of schooling is shown in detail. "Education provides new 'tools of the intellect,' to be sure. But without contexts of use, these tools appear to 'rust' and fall into disuse" (p. 106).

In his discussion of Luria's classical research of cognitive change in Central Asia, Cole touches upon an important problem in the Vygotskian four levels of history. Cole points out that Luria failed to study or model in his experiments the practical activity systems of the Uzbeki and Kazaki people. A closer look at the four levels of history (see Scribner, 1985) indicates that the history of

local activity systems was not explicitly required in Vygotsky's methodological writings. Such an "activity-genetic" level (Engeström, 1991) seems to fall between general cultural history and ontogeny.

This relative neglect of concrete analyses of local activities and institutions in Vygotsky's work is addressed by James Wertsch. He points out an interesting difference between chapters 5 and 6 in Vygotsky's *Thinking and Speech*. The former, written in the early 1930s, discusses concept development primarily from the perspective of individual psychology. The latter, written shortly before Vygotsky's death in 1934, approaches concept development from the perspective of how it emerges in institutionally situated activity. According to Wertsch, Vygotsky was searching for a way to relate the psychological functioning of the individual with particular sociocultural settings.

Wertsch suggests that this unfinished agenda may be fruitfully elaborated by employing the ideas of Vygotsky's contemporary and countryman M. M. Bakhtin. Bakhtin's idea of the fundamentally dialogical nature of all thinking can be concretely studied by analyzing institutional discourse as the interaction of multiple historically grounded voices, or social speech types. Wertsch describes the "voice of decontextualized rationality" as an example of a pervasive social speech type that tends to exclude and silence other voices in many institutional activity contexts. He points out that in concrete research one needs to formulate typologies of voices that characterize particular sociocultural settings. In fact, some interesting studies employing the notion of voices already exist - for example, Mishler's (1984) work on medical discourse as well as Conley and O'Barr's (1990) work on courtroom discourse.

Rafael Diaz, Cynthia Neal and Marina Amaya-Williams discuss the origins of self-regulation in their chapter. They make it clear that self-control and self-regulation are two qualitatively different phenomena. The former refers to the child's ability to obey internalized commands, the latter refers to the child's ability to formulate and execute plans or goals on his or her own. The authors show that Vygotsky's and Luria's works provide a foundation for understanding the emergence of self-regulation as stepwise internalization of signs and language that mediate behavior and make it reflective. The authors' own research findings suggest possible instructional strategies for promoting self-regulation.

While the concept of self-regulation is greatly clarified by this analysis, I am slightly troubled by its as-

sumedly general and relatively content-free nature. I tend to agree with Cole's conclusion in that I am "unimpressed by the possibility that children master metacognitive abilities in school that transfer broadly" (p. 106).

In the sixth and final chapter of the first part of the book, Jonathan Tudge discusses the Vygotskian concept of the zone of proximal development from the viewpoint of peer collaboration. Tudge points out that most of the research on the zone of proximal development has focused on child-adult interactions. In child-child interaction, or peer collaboration, advancing toward a correct solution of the task is not necessarily guaranteed. In some cases, children are likely to regress rather than progress in their thinking. Tudge calls for a more complete model of peer collaboration that would take into account the possibility of different types of interaction (e.g., both conflict and collaboration) as well as motivational factors.

Tudge's comments may be read as another pointer toward the importance of local institutional analyses. As long as peer collaboration is regarded as a universal, context-free phenomenon, concrete studies are bound to produce contradictory findings. Different institutional activity settings with different embedded patterns of motivation and interaction will give different meanings to collaboration.

All in all, the first part of the book gives me the impression of a theoretical legacy preparing to transcend its boundaries. These boundaries can be seen in the insistence on calling Vygotsky's approach a psychological theory - despite its obvious transdisciplinary potential and Vygotsky's own multidisciplinary background. The boundaries can also be seen in the persistent lack of concrete historical and ethnographic analyses of local institutional activity systems - a lack that is both criticized and upheld in so many recent Vygotskian studies. These are dilemmas and tensions with tremendous creative power.

Finally, it should be pointed out that Luis Moll's introduction to the volume is an unusually informative and useful treatise in its own right. It elucidates several key issues in Vygotsky's thought in a way that goes clearly beyond the typical standards in the genre of introductions.

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Street Level and Trickle-Down Psychology

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Mine is the perspective of a teacher trainer and neophyte in the area of sociohistorical psychology. I finished the provocative four chapters that constitute the "Educational Implications" section in *Vygotsky and Education* with a clear sense of the richness and potential of neo-Vygotskian theory, frustration over the ground that must be covered before psychology genuinely integrates itself with the humanities and other social sciences, and skepticism about the possibility that what is presented here can transform education. Basically, I believe that sociocultural psychology is insufficiently aware of its context and still uncertain of its purpose, even as the theory draws our attention to the necessity of attending to both.

First, the promise. The inadequacy of available educational psychology texts to prepare teachers is obvious (Peterson, Clark & Dickson, 1990). Experimental psychology's pursuit of decontextualized, universal laws is yet being transmitted to teachers. Even now, with attention riveted to the need to prepare teachers for cultural diversity, introductory texts continue to marginalize the topic.

For this reason, the first, longest and most important chapter in the section, "Teaching Mind in Society," by Sharp and Gallimore (derived from their 1988 book, *Rousing Minds to Life*) is most welcome. Its comprehensive critique and reformulation of educational psychology from a neo-Vygotskian perspective could potentially

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make culture a central rather than marginal concern for educational psychologists. The model of teaching, learning and instructional supervision that is developed—based upon a definition of teaching as instructional assistance to activity performed within the learner's zone of proximal development (ZPD)—is comprehensive and theoretically grounded, an impressive accomplishment. Despite the criticisms that follow I am indebted to the authors for helping me rethink the nature of teaching and learning.

But I am uneasy with their claim to have created a unified theory of education and with their ethnocentrism. Tharp and Gallimore put forth their model seemingly unaware that many of their taken-for-granted assumptions about education and society may be contested, and therefore colonize, rather than integrate, non-psychological perspectives on education. Psychology, the discipline with an apparently intractable case of social amnesia (Jacoby, 1975), once again acts as the tail convinced that it is wagging the dog.

Since G. Stanley Hall initiated the Child Study Movement near the turn of the century several generations of workers have believed themselves to be in possession of the psychological Grail that would finally put education on solid footing. Likewise, Tharp and Gallimore (1988), while commendably sensitive to the danger of being too prescriptive, nonetheless believe that psychology is now in a position to specify the "technical means" (p. 43) by which teachers may be professionalized to ensure efficiency in learning.

Yet we cannot know "what works" without having first decided what purposes are worth working for (Gibson, 1986). The question of what to do on Monday morning must be answered philosophically before it can be answered technically. When schooling is framed solely in scientific/technical terms, questions such as what the goals of education should be, whose knowledge and what knowledge is worth teaching and who should make these decisions, are not addressed. And since—to use a software metaphor—the default settings for the answers to these questions are always status quo, reforms that fail to specify alternatives are predictably assimilated, but not greatly accommodated by education and society as they already are. Bruner (1986) reminds us that "without explicit value presuppositions, we will fall into the habit of forming implicit ones and lose such power as we might have either in furthering or opposing the values of the culture in which we find ourselves" (p. 27).

An example of teaching provided by Tharp and Gallimore illustrates that criteria for good teaching rest upon presuppositional answers to foundational questions. A teacher intent on helping children understand the concept of hero is shown eliciting examples that include John Glenn, Superman, Apache Chief, He-Man and Bugs Bunny, while skillfully using questions to advance the discussion. The authors call it an "excellent instructional conversation," which, according to purely technical criteria, it is.

But judged in other ways the lesson is less successful. The "heroes" discussed are all males, and except for John Glenn, television characters. To be sure, it is the children who produced this sample. But if goals of schooling include promoting cultural democracy, the teacher might ask other questions such as whether females can be heroes, why children think of cartoon characters before real people, and if and how people in cartoons behave differently than people on the street. Knowledge is not objective and method is not transparent.

Similarly, the potential of neo-Vygotskian theory to sensitize educators to the strengths of non-mainstream students is unrealized. The authors relate what happens inside school to life outside of it, but seem to conceive of society as a benevolent, but ill-informed monolith, rather than a culturally diverse, highly stratified, arena of conflict. They praise the "responsive" way that middle-class Anglo parents treat their children and scold teachers for adopting "the interactional patterns so often attributed to disadvantaged homes" (p. 197). This ethnocentrism is capped with the observation, attributed to Minick, that in schools children are "drawn into unique modes of social interaction and thinking that have their roots in the history of Western science and philosophy" (p. 195). That is not a comment I expected to encounter in this volume, but in light of the authors' citation of Great Books guru Mortimer Adler, whose *Paedia Proposal* incorporates Socratic questioning and coaching in service of a curriculum based on Western thought, it is not surprising.

If Socrates was a street-level Vygotskian, so too are Marie Clay and Yetta and Kenneth Goodman, whose chapters follow. Writing with Courtney Cazden, Clay acknowledges that Vygotskian theory played no role in the development of her Reading Recovery program. The initial 15 pages of the chapter describe the assumptions and methods of the model, which clearly has much to recommend it. But only two pages, appearing just before the half-page conclusion, relate the model to Vygotsky.

The chapter might be seen as providing theoretical confirmation of Vygotsky's ideas, but that purpose would be far better served by integrating Vygotsky's ideas throughout the text.

That is not a problem in the piece by the Goodmans' which follows. It begins with a keynote quotation from Vygotsky and moves on to note that whole language teachers "are reading Vygotsky individually and in support groups, thinking about his concepts, applying them in their classrooms, and using his arguments to defend their teaching and to understand what their pupils are doing" (p. 224). The Goodmans present whole language as a "practical philosophy" of education that draws upon diverse perspectives, psychology among them. Their integration of psychology with other perspectives is praiseworthy.

In places the chapter assumes a messianic tone: "In whole language, each learner builds on his or her own culture, values, and interest. Each builds on his or her own strengths: There are no disadvantaged" (p. 226). So the Goodmans, like Tharp and Gallimore, believe that disadvantage and inequity in schools can be surmounted without explicit attention to issues of power and domination. Such a belief may silence rather than empower minority students (Delpit, 1988).

In the light of Ogbu's work (1981, 1988), there is a real need for neo-Vygotskian work to focus on structural, as well as cultural and historical influences on development and education. Several ethnographies of education show how structure mediates (good Vygotskian word!) students' experiences in school (see, for example, Willis, 1977; Weis, 1990).

The Goodmans reject a central aspect of Vygotsky's thought, that systematized, scientific knowledge is qualitatively different than everyday knowledge, a distinction carefully elaborated and supported in the section's final chapter, by Panofsky, John-Steiner, and Blackwell. Instead they offer what is, I believe, a much less defensible dichotomy, that of "authentic" (contextualized, purposeful) and "inauthentic" (recitation) learning, which echoes, to some degree, Tharp and Gallimore's distinction between "natural" and "unnatural" learning.

But what is natural and/or authentic to Phyllis Schlafly is not so to me. Both traditional recitation and instructional assistance are cultural inventions with contexts. Work sheets, for example, are excellent preparation for multiple choice tests and mindless occupations, both of which exist in American society. Our preference for a

different kind of education is informed not only by a theory of learning, but by presuppositional values about the purposes of education. The false dichotomies of authenticity/inauthenticity and natural/unnatural mask these values and their underlying political orientations.

Panofsky, et al., provide a useful distinction between the non-systematically ordered, experiential knowledge of the street and the more consistently arranged, taxonomic knowledge of science. They suggest that teachers study children's spontaneous sortings and groupings so that instruction can focus on the point of development where these two lines intersect. Science must be linked to the experiences of everyday life. Or, to reduce their conclusion to the bumper-sticker size of an aphorism in education, "begin where the student is."

That slogan has not succeeded in changing educational practice, in spite of the fact that Piaget's constructivism has been embraced in Colleges of Education for at least 15 years. What will the fate of sociohistorical psychology be when it washes against the same beachhead and is accepted with open arms, as it is about to be?

To the extent that schooling continues to be conceived of as a value-free, yet competitive, meritocratic exercise aimed at helping individuals achieve their "true potential," aspects of Vygotsky's thought will be assimilated to that ideology. Predictably, complex notions will be reduced to "neutral" methods (cooperative learning, for example) that "work." Corporations may embrace the notion of cognitive apprenticeships (the largest employer in my town makes guided weapon systems). New terms may come to describe old practice. "Activity settings" might replace "learning centers," "instructional discussions" might replace "instruction," "performance assistance" might replace "teaching."

Paradoxically, more genuinely Vygotskian education will continue to be inspired not by Vygotsky, but by other purposes. Caroline Pratt (1948) and Ira Shor (1987) provide but two examples of many dialogic, contextualized, cooperative experiments that have been instigated for the purpose of social transformation. Perhaps true educational applications of sociohistorical psychology, like the child's construction of language, grow out of the corner of the eye.

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Vygotskian Lessons

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For Vygotsky, education was a vital sociocultural activity of prime significance for the individual as well as for society. It is in the context of the school that the child

encounters the world from a new angle, as an object for systematic analysis and contemplation, rather than as a taken-for-granted arena of spontaneous activity. In the transition from *child to student*, a new attitude to the world has to be invoked and a new set of learning priorities are imposed on the child. Secondary socialization presents the individual with cultural tools and practices such as literacy, numeracy, and scientific and other forms of knowledge that are not encountered in such a systematic fashion outside the school setting. The collective experiences of a society as codified in "scientific concepts" and literate cultural practices are thus made into daily concerns for the individual through the educational institution and its power to control the communicative environment of the child.

Using the sociocultural framework for understanding what goes on in educational institutions, as well as a source for ideas on how to experiment and "devise successful methods of instructing the school-child in systematic knowledge" (Vygotsky, 1987, p. 147), is, as I see it, very much in line with the agenda set by Vygotsky himself. But, in a sociohistorical perspective understanding educational practices is important also because of the role that instruction and institutionalized forms of communication play in shaping our mentality. Scrutinizing the consequences of participation in these communicative practices thus becomes essential for psychology itself in modern societies.

There is of course an extensive amount of empirical research founded on a sociohistorical interpretation of humankind. Yet, the seven chapters on instructional applications in the volume *Vygotsky and Education* edited by Luis C. Moll stand a good chance of bringing something new to the reader. Most of the work done so far has been published in Russian and German and has by no means always been translated into English. And even when it has been translated, many scholars with a background in the Anglo-Saxon versions of psychological and educational research have been puzzled when discovering that there is a whole pattern of construing scientific work, of understanding the relationship between theoretical statements and empirical observations, and of explicitly relating to philosophical and social theories, that appears alien to our traditions. Sometimes we may also have felt turned off by the monistic rhetoric and politicized conception of education underlying some of the work, discourse that does not provide a comfortable environment in which scholars working in pluralist societies like to look for new input. And here is where the contributions to this volume will help a broad readership of Western scholars to feel at

home. In these chapters we find phenomena such as teachers' thinking (Au), literacy (McNamee; McLane; Moll & Greenberg; Rueda) and children's acquisition of scientific concepts (Hedegaard; Martin) that will appear familiar. An obvious value of the work reported is that it brings parts of the conceptual resources of the sociohistorical school to bear on phenomena that will be recognized as significant educational challenges in our time; developing literacy skills among underprivileged groups and enabling children to internalize scientific perspectives on the world.

Without attempting to comment on the broad range of issues that are dealt with, let me just focus on what I find to be particularly significant and, at least in my reading, common to much of the empirical work that is being reported. The critical question for me is: What sense can we make of instruction when we approach it with the conceptual tools provided by the sociohistorical school? What do we see when we begin to think in terms of zones of proximal development, when we utilize a genetic perspective or try to follow the transition from intermental to intra-mental processes?

Just as schooling is embedded in a wider social setting that constrains the mode in which schools do business, research on education is also socioculturally situated and constrained in how instruction is analyzed. Generally, researchers take the present organization of teaching and learning for granted, and in much research learning is totally synonymous with the institutionalized activities that characterize schooling as we have known it for centuries. In many cases it even seems as if the really important forms of LEARNING in society are those that supposedly go on in schools, and that the knowledge we acquire outside is idiosyncratic, less systematic and valuable. The institutionalized forms of learning are thus treated as superior in the alleged generality of the knowledge and skill they foster. To me, this seems to be a highly problematic account of how people learn in which the metaphor of learning is applied indiscriminately to many experiences inside the formal setting in which people do not learn at all. A positive contribution in several of the chapters is that they explicitly address the issue of how learning in formal setting could be related to, and made relevant for, life in a complex society. Thus, classroom learning does not appear as a privileged activity. Rather, the relationship to other social arenas is explicitly recognized as problematic and as in need of careful analysis.

A common thread is the attempt to apply the concept of zone of proximal development when designing learn-

ing experiences and for analyzing the outcome of such experiences. In my opinion, the presence of this concept is a powerful tool for achieving a sensitive and grounded understanding of literacy skills, the focus of most of the chapters. Thus, when viewed in this perspective, skills are not construed as disembodied, abstract abilities that should be practised as such and be mastered before being allowed to participate in authentic situations requiring reading and writing. On the contrary, developing situations which for the participants require the need for literate forms of communication becomes the interesting problem and the significant challenge. Skills are conceived as outcomes of participation in shared practices, and they are seen as developing in response to increased responsibilities on the part of the individual for the success of those practices. Thus, as in the studies on the acquisition of reading and/or writing competencies by McNamee, McLane, Moll and Greenberg, and Rueda, one interesting issue is how to organize learning situations in such a way that the learner is kept within the zone of proximal development, being able to participate in reading and writing, yet being moved forward by the demands of the situation. This is a delicate balance requiring consideration of the child's resources on the one hand, and the concern to maintain a communicative commitment on the part of the child on the other. In a similar way, the chapters by Martin and Hedegaard formulate the traditional "how can we teach scientific concepts in the best way-question" in a manner which recognizes the problems of keeping the child in contact with its everyday reality at the same time as we attempt to introduce theoretical forms of understanding. In line with the argumentation introduced by these authors, a critical issue has been not only that concepts stay on the empirical level, thus never becoming a part of the child's generalizable conceptual repertoire, but also that through the very way of teaching, large groups of children are so frustrated by the communicative experiences they are exposed to that they feel alienated and lose interest in school as an arena in which to commit oneself. And this is a very high price to pay for any society.

Contrary to what seems to be the belief of dominant political voices in these days, excellence in education is not shown by increasing competition between children and schools—at least that should not be allowed to stand as an unchallenged reference for the metaphor of excellence in education. Making those who lack the cultural resources for participating in the competitive educational game that goes on in Western schools, and who therefore lag behind, fully literate and active contributors to work life and democratic processes is a much better test of an educational system that wants to characterize itself in

terms of excellence. And it is a much harder challenge, too. In my opinion, a sociohistorical interpretation of human competencies and growth has a lot to offer for anchoring the debate on schooling in the complex cultural practices that characterize modern societies. And, as illustrated by the writings, it does so by helping us to see the individual and her/his involvement in meaningful sociocultural practices as the basic unit of analysis. Making the social context and the individual co-exist in our analyses will help us overcome the dominant tendency in research of alienating individual activity from its embeddedness in social life. If we can succeed in feeding some of this perspective into the broader political and administrative discourse in society, the link between political decisions on allocation of educational opportunities on the one hand, and the development of human competencies on the other, may become visible to a broader audience. And, as a consequence, the possibilities of formal schooling to contribute to truly educative processes for all groups may be seen as more important than its ability to stratify individuals.

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Work-in-Progress

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While in the process of investigating notions of cultural evolution and mental development, I came across an astonishing book entitled, *The Ascent of Man*, written by Henry Drummond and published in 1901 by Hodder and Stoughton, a London publisher of the day. The extensive passage quoted below provides a quintessential picture of both scholarly and everyday ideas about the evolution of culture and mind that pervaded European and American society at the end of the last century. It was this world view that informed the work of early psychologists and anthropologists.

...No one should pronounce upon the Evolution of Mind till he has seen a savage. By this is not meant the show savage of an Australian town, or the quay

Kaffir of a South African port, or the Reservation Indian of a Western State; but the savage as he is in reality, and as he may be seen to-day by any who care to look upon so weird a spectacle. No study from the life can compare with this in interest or in pathos, nor stir so many strange emotions in the mind of a thoughtful man. To sit with this incalculable creature in the heart of the great forest; to live with him in his natural home as the guest of Nature; to watch his ways and moods and try to resolve the ceaseless mystery of his thoughts—this, whether the existing savage represents the primitive savage or not, is to open one of the workshops of Creation and behold the half-finished product from which humanity has been evolved.

The world is getting old, but the traveller who cares to follow the daybreak of Mind for himself can almost do so still. Selecting a region where the wand of western civilization has scarcely reached, let him begin with a cruise in the Malay Archipelago or in the Coral Seas of the Southern Pacific. He may find himself there even yet on spots on which no white foot has ever trod, on islands where unknown races have worked out their destiny for untold centuries, whose teeming peoples have no name, and whose habits and mode of life are only known to the outer world through a ship's telescope. As he coasts along, he will see the dusky figures steal like shades among the trees, or hurry past in their bark canoes, or crouch in fear upon the coral sand. He can watch them gather the bread-fruit from the tree and pull the cocoa-nut from the palm and root out the taro for a meal which, all the year round and all the centuries through, has never changed. In an hour or two he can compass almost the whole round of their simple life, and realize the gulf between himself and them in at least one way—in the utter impossibility of framing to himself an image of the mental world of men and women whose only world is this.

Let him pass on to the coast of Northern Queensland, and, landing where fear of the white man makes landing possible, penetrate the Australian bush. Though the settlements of the Europeans have been there for a generation, he will find the child of Nature still untouched, and neither by intercourse nor imitation removed by one degree from the lowest savage state. These aboriginal peoples know neither house nor home. They neither sow nor reap. Their weapons are those of Nature, a pointed stick and a knotted club. They live like wild things on roots and berries and birds and wallabies, and in the monotony of their life

and the uncouthness of their Mind represent almost the lowest level of humanity.

From these rudiments of mankind let him make his way to New Hebrides, to Tanna, and Santo, and Ambrym, and Aurora. These islands, besides Man, contain only three things, coral, lava, and trees. Until but yesterday their peoples had never seen anything but coral, lava, and trees. They did not know that there was anything else in the world. One hundred years ago Captain Cook discovered these islanders and gave them a few nails. They planted them in the ground that they might grow into bigger nails. It is true that in other lands a very rich life and a very wide world could be made out of no more varied materials than coral, lava, and trees; but on these Tropical Islands Nature is disastrously kind. All that her children need is provided for them ready-made. Her sun shines on them so that they are never either cold or hot; she provides crops for them in unexampled luxuriance, and arranges the year to be one long harvest; she allows no wild animals to prowl among the forests; and surrounding them with the alienating sea she preserves them from the attacks of human enemies. Outside the struggle for life, they are out of life itself. Treated as children, they remain children. To look at them now is to recall the long holiday of the childhood of the world. It is to behold one's natural face in a glass.

Pass on through the other Cannibal Islands and, apart from the improvement of weapons and the construction of a hut, throughout vast regions there is still no sign of mental progress. But before one has completed the circuit of the Pacific the change begins to come. Gradually there appear the beginnings of industry and even of art. In the Solomon Group and in New Guinea, carving and painting may be seen in an early infancy. The canoes are large and good, fish-hooks are manufactured, and weaving of a rude kind has been established. There can be no question at this stage that the Mind of Man has begun its upward path. And what now begins to impress one is not the poverty of the early Mind, but the enormous potentialities that lie within it, and the exceeding swiftness of its Ascent towards higher things. When the Sandwich Islands are reached, the contrast appears in its full significance. Here, a century ago, Captain Cook, through whom the first knowledge of their existence reached the outer world, was killed and eaten. To-day the children of his murderers have taken their place among the civilized nations of the world, and their Kings and Queens demand acknowledgement at modern Courts.

Books have been given to the world on the Mind of animals. It is strange that so little should have been written specifically on the Mind of the savage. But though this living mine has not yet been drawn upon for its last contribution to science, facts to suggest and sustain a theory of mental evolution are everywhere abundant. Waiving individual cases where nations have fallen from a higher intellectual level the proof indicates a rising potentiality and a widening range as we pass from primitive to civilized states. It is open to debate whether during the historic period mere intellectual advance has been considerable, whether more penetrating or commanding intellects have ever appeared than those of Job, Isaiah, Plato, Shakespeare. But that is matter of yesterday. What concerns us now to note is that the Mind of Man as a whole has had a slow and gradual dawn; that it has existed, and exists to-day, among certain tribes at almost the lowest point of development with which the word human can be associated; and that from that point an Ascent of Mind can be traced from tribe to nation in an ever increasing complexity and through infinitely delicate shades of improvement, till the highest civilized states are reached. In the very nature of things we should have expected such a result. For this is not only a question of faculty. In a far more intimate sense than we are apt to imagine, it is a question of a gradually evolving environment. Every infinitesimal enrichment of the soil for Mind to grow is meant infinitesimal enrichment of the Mind itself. "It needs but to ask what would happen to ourselves were the whole mass of existing knowledge obliterated, and were children with nothing beyond their nursery-language left to grow up without guidance or instruction from adults, to perceive that even now the higher intellectual faculties would be almost inoperative, from lack of the materials and aids accumulated by past civilization. And seeing this, we cannot fail to see that development of the higher intellectual faculties has gone on *pari passu* with social advance alike as cause and consequence; that the primitive man could not evolve these higher intellectual faculties in the absence of a fit environment; and that in this, as in other respects, his progress was retarded by the absence of capacities which only progress could bring."¹ (pp. 180-186)

Note

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ANNOUNCEMENT

Conference for Socio-Cultural Research An agenda for cultural and educational change

Organized by
Infancia y Aprendizaje & the Society for Socio-Cultural Studies
(under constitution)

Aims and Scope of the Conference

—To foster the study of human kind in its developmental and socio-historical dimension, so that the human sciences may be in a position to raise the problems of the present and future, integrating “theory” and “intervention” within the same object of study.

—To promote contact and coordinate research with a socio-cultural approach at present in progress in different cultural areas worldwide.

—To foster social and educational research and intervention programmes in line with this approach.

Main Themes

I. Historical and social models of human change and evolution.

II. Intervention models on human change and evolution: design, enculturation and education.

III. Epistemological and methodological issues and tools for the description, explanation, assessment and design of change.

Deadlines

Deadline for symposia and poster sessions proposals and for individual presenters of papers and posters who want an early decision: **August 31, 1991.**

Decisions will be communicated in: October, 1991.

Deadline for individual papers and posters and symposia and poster sessions submissions. **December 31, 1991.**

Decisions will be communicated in : March, 1992.

Outline of the programme will be mailed in: **May, 1992**

Deadline for registration: **May 1, 1992.**

Submission:

Those interested in participating may contact either Dr. Pablo del Rio or Amelia Alvarez, co-chairs.

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Amelia Alvarez

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Erratum

The Table of Contents of the April, 1991 issue of the *Newsletter* lists the third author as Jean Brockmeier. Correctly, it should read, Jens Brockmeier.

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