

Vygotsky: The ZoPeD & Scaffolding*

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October 9, 2007

Introduction

In class we have discussed two major cognitive developmental theorists: Jean Piaget and Lev Vygotsky. They were contemporaries, and were even born in the same year (1896). Although both were brilliant scientists and gifted observers of children, their ideas and theories were radically different. Whereas Piaget was interested primarily in the child's *independent* construction of reality, Vygotsky was interested in how the child, in partnership with adults and more capable peers, constructed "reality" through social interaction. A fundamental concept for Vygotsky was the Zone of Proximal Development, or ZoPeD (see Figure 1).

Vygotsky operationally defined the ZoPeD as the difference between what a child can achieve independently and what the same child can achieve with assistance. For Vygotsky, the ZoPeD was important because it focused attention on two important aspects of development. First, attention is focused on those skills and abilities that are just emerging. According to Vygotsky, traditional tests and tasks (e.g., intelligence tests) assess what the child already knows; in other words, that which has already developed. Vygotsky referred to these abilities as "fossils", to emphasize that they are the product of past developments. Vygotsky felt that by focussing attention within the ZoPeD, one is able

*Prepared for *Child Psychology* (PSYC 30323)

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Figure 1: Vygotsky's Zone of Proximal Development



to observe the “buds” of developing skills, as opposed to the “flowers” of skills that have already developed. By watching these “buds” unfold one is able to discern the *processes* of development, which Vygotsky felt are fundamentally social (at least for the so-called “higher mental functions”).

The counterpart of the child’s budding skills is the tutoring of expert adults or peers. Wood, Bruner, and Ross coined the term “scaffolding” for the assistance that is provided by more capable members of one’s culture. Scaffolding is an appropriate term for this concept because effective tutoring involves gradually withdrawing the social supports provided when skills are new and fragile. As children pass through the ZoPeD their need for support decreases, and they are able to assume more and more of the responsibility themselves. Much as the scaffolding of a building is removed as the walls are capable of standing on their own, so is the social support provided by adults and peers removed as emerging skills are capable of “standing” on their own. As soon as a child can master the task independently, then the child (and tutor) move on to other more challenging tasks, and the process begins all over again.

In this activity you will have the opportunity to evaluate the scaffolding skill of mothers who participated in the TCU Child Development Project. As part of this study we asked both mothers and fathers to interact with their children, and scored both parents on a variety of constructs, including scaffolding. One approach that we used to assess scaffolding was with Chris Maslin’s rating scales. (These scales are discussed in the paper listed below under readings.) Maslin’s approach builds on the work of David Wood and his colleagues, but extends Wood’s original work through the use of rating scales and the inclusion of emotional support. We think of Maslin’s approach as “macro-analytic”, whereas Wood’s approach is more “micro-analytic”.

Requirements

Steps

1. Attend lecture and do the associated readings.
2. Select a partner, and together attend session for scoring infant scaffolding tapes. When scoring the videotapes, use the Maslin Scoring Protocol.
3. Get together with your partner to compute a reliability (see *Observational Methods* handout), and plan your written report.
4. Write your report—including answers to the questions below—and turn it in by the announced deadline.

Notes

- Do this activity with a partner.

- There is no limit to the enrollment for this activity; the only limitation is your ability to attend one of the scoring sessions.
- Your written report should include (a) your partner's and your scoresheets, (b) computation of reliabilities (see below), and (c) a *joint* set of answers to the questions (see below).
- You and your partner should compute a reliability for each of the fifteen scaffolding codes (i.e. five motivational codes, five emotional codes, and five technical codes). Count as an agreement any pair of codes that are identical or are within one point of one another (e.g., 4 and 4, or 4 and 5). Report the percent agreement for each code.
- Your grade will be based on your completion of the scoring assignment, and the quality of your answers to the questions. Your grade will *not* be based on the level of agreement you and your partner achieve, as reflected in your reliabilities.

Materials

- Knowledge map showing the evolution of Julie Mason's research program (*P = part of, C = characteristic of, I = influences, D = definition*) (Figure 2).
- Description of the scaffolding codes (included with this handout).
- Score sheets(included with this handout).

Readings

- Check the index in your textbook for "Zone of Proximal Development" and "Scaffolding."
- Yeager, R. K., Mason, J. A., & Cross, D. R. (1995). *Maternal scaffolding style and cognitive competence in infants*. Department of Psychology, Texas Christian University.

Questions

1. What type of observational method is the Maslin scaffolding scale? What are its strengths and weaknesses? What are the potential sources of bias? (Refer to Chapter 3—Observation—for this question.)
2. In their manuscript, Yeager et al (1995) identify four maternal scaffolding styles. Assign each of the mothers you scored to one of the four styles (the fit may not be perfect, do the best you can). Briefly justify your assignments.

3. What is the prognosis for the children of these mothers? What do you predict for their future development? Do you see any problems with basing predictions based on these protocols? If so, what difficulties do you see?

Maslin Scoring Protocol

Motivational Codes

1. *Initial Recruitment*: initial attempts to gain the child's interest in and attention to the task.
2. *Focussing*: attempts to keep the child task- and goal-oriented; behaviors include the mother's persistence, engagement, and refocussing.
3. *Encouragement and Praise*: includes verbal and nonverbal attempts to encourage and praise; emphasis is on statements that are intended to motivate the child (e.g., "keep going, you're doing great!").
4. *Communication of End-Goal*: includes instructions of what to do and modifications of the goal (adjusting what the child needs to be based on ability).

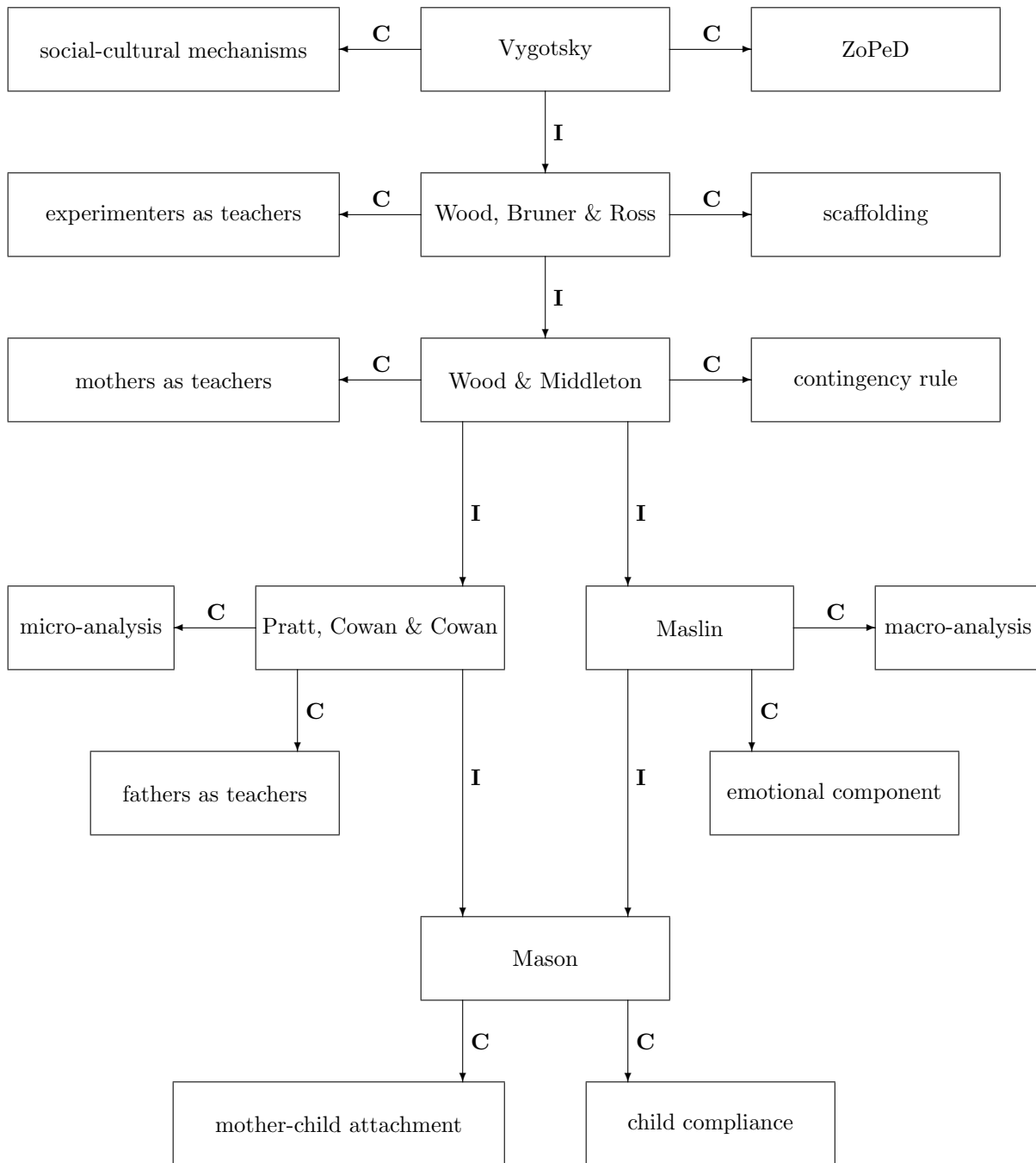
Emotional Codes

1. *Praise and Encouragement*: includes verbal and nonverbal attempts to praise and encourage; emphasis is on statements that share affect about child's successes.
2. *Acceptance of Child's Attempts and Strategies*: includes rejections and interruptions (lack of acceptance).
3. *Sensitivity to Child's Emotional State*: includes frustration reduction and awareness of restlessness.
4. *Affective Sharing*: enjoyment of the child's success and emotional communication.

Technical Codes

1. *Demonstration and Modeling*: includes partial and full demonstration by the parent.
2. *Simplifying the Task*: includes reducing the task to sub-steps; attempts to make the task "do-able."
3. *Marking Critical Features*: verbal and non-verbal accentuation of features necessary for the completion of the task.

Figure 2: Knowledge map showing the intellectual heritage for Julie Mason's dissertation



4. *Organization*: describing a goal structure for the task; reminding the child about overarching goals and task components.

Maslin Score Sheet

Subject _____

Date _____

Scorer _____

Motivational Support

Initial Recruitment	1	2	3	4	5
Focussing	1	2	3	4	5
Encouragement-Praise	1	2	3	4	5
Communication of Goal	1	2	3	4	5

Emotional Support

Praise-Encouragement	1	2	3	4	5
Acceptance of Attempts	1	2	3	4	5
Sensitivity	1	2	3	4	5
Affective Sharing	1	2	3	4	5

Technical Support

Demonstration-Modeling	1	2	3	4	5
Simplifying the Task	1	2	3	4	5
Marking Features	1	2	3	4	5
Organization	1	2	3	4	5

Anchors for Rating Scale

1. *Not at all* characteristic of the parent (i.e., behavior never occurs)
2. *A little* characteristic of the parent (i.e., behavior occurs rarely)
3. *Somewhat* characteristic of the parent (i.e., behavior some of the time when it would be appropriate)
4. *Largely* characteristic of the parent (i.e., behavior usually occurs when it is appropriate)
5. *Highly* characteristic of the parent (i.e., behavior always occurs when it is appropriate)