

A META-ANALYSIS OF THE PROCESS OF INTERPRETATION

Lauren Debra Smith



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ABSTRACT

The present study is part of a larger project currently in progress, which addresses the interface between epistemology and method. The work of the philosophers Paul Ricoeur, Hans-Georg Gadamer and Jürgen Habermas constitute secondary sources in the master project which is focussed on the process of discovery in the works of Darwin, Marx and Freud. The specific aim of the present study may be stated as an attempt to explicate the conditions which make possible the interpretation of meaningful human action; this endeavour is approached by means of a critical investigation of Ricoeur's theory of, and methodological proposals for, the interpretation of action. Ricoeur's central thesis for the social sciences is that a literary text is analogous to the object of these sciences, namely meaningful human action. The validity of this analogy for the discipline of socio-psychology is investigated in the present study in terms of the primary dialectic which Ricoeur proposes between 'distanciation' and 'appropriation'. Thus Ricoeur's hermeneutical theory serves as the main data base in the present study. Other data bases include video-recordings of mother-child transactions during problem-solving tasks (in this sense the tasks represent, for the dyad, an object of interpretation); the transcript of a discussion between the

author and a mother who also formed part of a problem-solving dyad; and the transcript of a discussion between four analysts engaged in the process of interpreting mother-child dyads during their engagement in problem-solving activity.

Ricoeur's proposals for the interpretation of action are applied to the above data bases and the outcome is presented and discussed. While Ricoeur's theory provides certain methodological insights, particular problems are encountered with regard to the application of the theory to socio-psychological data. These problems focus on the role of an actor's intentions in the process of the interpretation of action and on the relevance of the socio-historical circumstances in which the action investigated is produced, and in which the interpretative act proceeds.

In concluding the project, proposals for a theory-method of the interpretation of action are presented in which Ricoeur's methodological proposals and the conclusions reached in the present study, are integrated.

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CHAPTER 1 : INTRODUCTION TO PROJECT

- 1.1. THE INTERPRETATION OF ACTION : THE CENTRAL ACTIVITY OF SOCIAL SCIENTISTS

- 1.2. PROCEDURE ADOPTED
 - 1.2.1. An exploration of Paul Ricoeur's methodological proposals
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1.1. THE INTERPRETATION OF ACTION : THE CENTRAL ACTIVITY OF SOCIAL SCIENTISTS

The investigation of the process of the interpretation of meaningful human action¹ is deemed to be of great importance to all the social sciences. Researchers in all the disciplines comprising the social sciences are fundamentally occupied with the investigation of human action, albeit from different perspectives and utilising different methodologies. Moreover, not only in formalised research programmes, but also in our everyday lives, we are profoundly engaged in the process of interpretation, interpreting as we do other people and events. Thus interpretation can rightly be termed a transcendental human activity. Habermas (1971) stated that "hermeneutics is the scientific form of the interpretive activities of everyday life" (cited in McCarthy, 1978, p.73).

In the present study, the transactions transpiring between a mother and her child while engaged in problem-solving activities, was used as an occasion for a meta-analysis of the process of (formal) interpretation. The present author would like to stress that the formal procedure of action-interpretation is analogous to the central activity of human beings, the activity in which any 'subject' comes to acquire knowledge about any 'object'², and is thus representative of the ongoing activity of interpreting events

and other people in our ordinary, everyday lives. An obvious difference between the formal and the ordinary process of interpretation is that in the former, the activity is pursued deliberately and hence self-consciously. Ricoeur, when linking the process of interpretation with epistemology, utilises the term 'interpretation', rather than knowledge construction/ acquisition; for this reason, the term 'interpretation' is used in this report. Interpretation can thus refer to any act by which a 'subject' acquires information about an 'object'. The understanding achieved between a mother-child dyad engaged in a joint problem-solving activity, provides an example of interpretation in ordinary life: Both mother and child are simultaneously the 'subject' and the 'object' of interpretation with reference to one another and both act as subjects vis-à-vis the problem-solving task (the object). In formalised research, as is the case in this study, such a dyad can become an 'object' for interpretation by the researcher who is in this regard the 'subject' of interpretation (see Figure 6, p.27). At every level of interaction, both between people, and between people and events or objects, human subjects are profoundly engaged in the process of interpretation.

Despite the central role played by interpretation in the practice of the social sciences, social scientist "have not yet brought to full consciousness the assumptions and procedures that bring the simplest and most unremarkable of

their interpretations of particular (events) ... into being" (Horton, 1979, p.viii). In order to interpret interpreting, we have to step outside the process of interpretation, as it were, so that we can examine the process critically. This is because as human beings we are constantly engaged in the process of interpretation while not specifically making this process an object of knowledge. In order to cast a critical perspective on the process of interpretation, we are forced to dislodge our 'being-in-the-world'. Ideally, this would require that we achieve a distance from our object of study, the process of interpretation (cf. Linge, 1976 and Habermas, 1984). Like all institutions, research methodology has its own history and is part of a social history of which people as individual cognitive systems are an intergral part. Ricoeur, (1974) in discussing our historical condition in terms of the narrative tradition, has this to say:

Each poem, newly brought into existence, emerges in a prior world of works: poetry can only be made out of other poems; novels out of other novels. Literature shapes itself (p.287).

Similarly, one can say the following about the writing of a methodology for the process of interpretation:

Each thesis, newly brought into existence, emerges in a prior world of works: Methodological explorations can only be made out of other methodologies; theories out of other theories. Knowledge shapes itself.

The present project is part of a larger project in which the aim is to explore the methods of discovery implied and/or made explicit by Darwin, Marx and Freud (cf. Craig and Miller, in progress). More specifically, the present project is aimed at exploring Ricoeur's theory of interpretation in a specific domain of analysis, that is, the domain of socio-psychology³.

Ricoeur (in addition to Habermas, whose work is currently undergoing a similar investigation) was chosen as a secondary source for the larger project, specifically because he addresses the epistemology of Freud (cf. Ricoeur, 1970) and also, to some degree, that of Marx (cf. Ricoeur, 1974). The present project therefore emerges in a prior world of works, in two senses:

1. It is part of a larger project through which the object of knowledge - Ricoeur's theory of interpretation - was determined; and
2. The present project, like the larger one, emerges in a wealth of literature on method and methodology, meta-analysis and epistemology in the social sciences.

The following approach has been adopted in the present project:

1. A review of the history of hermeneutics;
2. A specific emphasis on and exploration of Paul Ricoeur's attempt to explicate the process of interpretation;
3. The engagement in the act of interpretation;
4. The formulation of the necessary conditions for the construction of knowledge of (any) object by (any) subject.

Each of the above focii form a step in the process, or a point of departure, for the exploration of Ricoeur's theory of interpretation as it is applied to a specific domain of analysis. In what is to follow, each of these steps is presented as a section or chapter of the manuscript (refer to the index).

While the investigation of Ricoeur's hermeneutical proposals is presented in the main body of the manuscript, it is important to stress that the appendices, which document both the author's engagement in the process of interpretation, and the products of this process, constitute an important part of the present project. The interpretation of Ricoeur's theory as an object of knowledge and the application of his theory to a body of empirical data⁴ together stand as the

researcher's engagement in the act of interpretation and together constitute the data of the present project. In this project, each tenet of Ricoeur's theory is both applied, where possible, to data collection and analysis, and is examined from a meta-reflection of the process of interpretation as it occurs between (1) a mother-child dyad; (2) the researcher and the dyad; (3) the researcher and a mother and (4) between different analysts engaged in an interpretative endeavour.

This critical application of Ricoeur's theory of interpretation would seem to add substantially to a theory-method⁵ for the interpretation of action within a specific domain of analysis. This domain may be termed 'socio-psychology' in the tradition of Bhaskar (1979) and Harré and Secord (1972), a domain in which the manifest, non-random patterns in human action are regarded as the products of both intrinsic and extrinsic generative mechanisms⁶.

This project is both an attempt to determine the limits of Ricoeur's theory of interpretation - the extent to which his proposals are useful for the interpretation of socio-psychological data - and is an attempt to use the results of an interpretative endeavour (see appendix 3), to postulate about the necessary conditions for the construction of knowledge when (any) subject confronts (any) object of knowledge.

1.2. PROCEDURE ADOPTED

In the present study, two objects of knowledge delineate the different data bases used (see figure 6, p.27):

- 1) Ricoeur's hermeneutical proposals for the object of the human sciences, namely meaningful action; and
- 2) Mother-child transactions during joint problem-solving activities.

The aim was to test the limits of Ricoeur's theory (1) by applying it to a body of empirical data (2).

This project was undertaken in five phases⁷ each of which is discussed below.

The various data bases used and appendices presented are outlined below (see figure 1, p.9).

DATA BASES

1. THE ORIGINAL VIDEO-TAPES OF MOTHER-CHILD DYADS ENGAGED IN JOINT PROBLEM-SOLVING ACTIVITIES
2. GROUP DISCUSSION OF DATA BASE 1 (THE ORIGINAL VIDEO-TAPES)
3. THE FOCUS VIDEO-TAPE: A VIDEO-RECORDING OF A MOTHER (A.) AND HER CHILD (B.) ENGAGING IN TWO PROBLEM-SOLVING TASKS
4. DISCUSSION BETWEEN THE AUTHOR AND A., ABOUT DATA BASE 3 (THE FOCUS VIDEO-TAPE)

APPENDICES

1. TRANSCRIPT OF VIDEO-TAPED INTERACTION BETWEEN A. AND B.
2. TRANSCRIPT OF DISCUSSION BETWEEN THE AUTHOR AND A., ABOUT THE FOCUS VIDEO-TAPE
3. AN EXERCISE IN INTERPRETATION
4. APPROPRIATION FROM PREVIOUS PROJECTS

FIGURE 1 : THE DATA BASES USED AND THE APPENDICES PRESENTED IN THIS PROJECT

1.2.1. AN EXPLORATION OF PAUL RICOEUR'S METHODOLOGICAL PROPOSALS

1.2.1.1. Literature review and discussion

Ricoeur's hermeneutical proposals were critically examined in two ways:

1. The present author conducted a literature review which is presented in Chapter 2 of this manuscript. The requirements of a conventional literature review are considerably surpassed however in that the present author, in a crucial sense, deliberately interprets Ricoeur's theoretical proposals so that she is able to apply them empirically. These proposals are then re-addressed in the light of their relevance for the interpretation of socio-psychological data.
2. Ricoeur's hermeneutical theory was also examined in a series of seminars led by the present author. The procedure adopted for the group analysis is outlined below.

Participants

Six subjects participated in this part of the study, namely the author, her supervisor, her co-supervisor, a clinical psychologist and two post-graduate psychology research students.

Materials

From the prolific scholarly works of Paul Ricoeur (cf. Reagan, 1979), the specific focus chosen by the author was Ricoeur's model which relates most closely to the aim of formulating a theory-method for socio-psychology; in this model, Ricoeur analogises a literary text with meaningful human action and he proposes a methodology for the interpretation of action, which is based on the methodology of text-interpretation.

Procedure

Fortnightly seminars were conducted over a period of six months. For each of these seminars, a specific aspect of Ricoeur's hermeneutical theory was chosen as a focus. The seminars took the form of discussion/debate about the meaning of Ricoeur's proposal(s). Each participant, in arguing about different possible interpretations of Ricoeur's proposal(s), in effect, put his/her

wants and beliefs at a distance and submit(ted) them to a concrete dialectic of confrontation with opposite points of view (1981, p.214)⁸.

The seminars were deliberately undertaken to enable the author to achieve a critical distance (or 'distanciation') from Ricoeur's hermeneutical theory as an object of knowledge.

1.2.1.2. A preliminary application of Ricoeur's proposals

Participants

The author and her supervisor participated as analysts in this part of the project.

Materials

An extensive library of video-tapes (27 hours) of mother-child and teacher-child dyads engaged in joint problem-solving activities has been produced by certain researchers in the Department of Psychology at the University of Natal, Durban. These video-tapes, which are further described in 1.2.2.1. and 1.2.2.2.1. below, are hereafter referred to as "the original video-tapes" and they constitute data base 1 in the present study (see figure 6, p.27).

Procedure

The author and her supervisor reviewed the 27 hours of video-tape. The tape was stopped at frequent intervals in order to discuss the possibility of using Ricoeur's proposals for the construction of knowledge about mother-child dyads.

The analysts also discussed the possibility of using Ricoeur's proposals to clarify the process of interpretation as it transpires between the mother-child dyad. This part of

the investigation represents a substantial immersion in the data, and was conducted over a two-month period (see also pp. 124 - 127).

1.2.2. ENGAGING IN THE ACT OF INTERPRETATION

1.2.2.1. Group analysis of original video-tapes

The group analysis was conducted, partly for the purpose of investigating Ricoeur's concept of human action as an 'open work' and partly for the purposes of the master project referred to earlier. In addition, A's participation in the group analysis provided the author with further data on her performance.

Participants

Four analysts participated in the group analysis, namely:

1. The author (R);
2. The author's supervisor (R₁);
3. A Clinical Psychology Master's student (Z) who at the time of analysis was engaged in research which utilised the original video-tapes (cf. Kok, 1986);
4. A mother (A.) who participated in a problem-solving task (see 1.2.2.2.1. below).

Materials

The original video-tapes served as the data base for the group analysis. These video-tapes are described below (cf. pp.16-23).

Procedure

The analysis was conducted along the lines of a discussion, each of the four participants/interpreters being encouraged to comment on the 'action-events' observed on video-tape. Where a 'conflict of interpretations' arose, the interpreters engaged in deliberate negotiation regarding each other's interpretation and the possible resolution of the conflict. This discussion was conducted over a four-day period. The discussion was audio-taped and transcribed.

The transcript of the discussion is referred to in the present project as data base 2. For reasons of economy, the transcript is not presented in this manuscript, but is lodged in the Department of Psychology at the University of Natal, Durban.

1.2.2.2. The interpretation of a chosen object of knowledge
(a mother-child dyad)

The procedure outlined below documents certain stages in the interpretation of the action-events transpiring between a chosen mother-child dyad during problem-solving activities. The product of this interpretative endeavour is presented as appendix 3.

1.2.2.2.1. The production of a 'focus' video-tape

A further video-tape of a mother-child dyad engaged in joint problem-solving activities, hereafter referred to as the 'focus video-tape', was produced by the present author for the following reasons:

1. In that the author was familiar with the previous projects which had been conducted using the original video-tapes as data, the events observed on tape tended to retain the 'fixed' meaning which has been imposed by the previous researchers (see appendix 4). Hence it was decided to produce a further video-tape as a 'fresh' data base in which similar subjects and the identical tasks were utilised and the same procedure was adopted, but where the actors were available for negotiation.
2. Bhaskar and Harré and Secord, in contrast to Ricoeur, accord an actor's intentions an explanatory

function in the process of the interpretation of meaningful action; they consider an author's intentions to play a central role in the process of knowledge construction about human action. It was decided in the present study to incorporate a data source based on an actor's reasons, the actors in the focus video-tape being available for negotiation after the production of the tape (see 1.2.2.2.2. below).

The focus tape constitutes data base 3 in the present project.

Because the form and content of the focus video-tape was almost identical to that of the original video-tapes, and because both constitute important data bases in the present project, both (1) the original and (2) the focus video-tapes are described below.

Subjects

1. The transactions between thirty-three mother-child dyads and sixteen teacher-child dyads⁹ were recorded on the original video-tapes. The mothers and children are all Zulu-speaking and were born and were currently living in Kwa Mashu. The mothers have an average of 8 years of schooling. Mothers were asked to participate in the study through canvassing in the area by the research assistant and the staff of a township clinic. The only selection criteria employed were as follows:

1. Child's age (2,6 - 4,7 years).
2. Mothers born and raised in the township.
3. Mother's age (18-40 years).

2. For the focus video-tape, a mother (hereafter referred to as A.) and her daughter (hereafter referred to as B.), served as subjects. A. is a black, Zulu-speaking female aged 44 years. She has completed Std. 10 and also has some nursing training and experience. A. is, furthermore, fairly articulate in English which is why she was chosen to participate in the present study which includes discussions conducted in English in which A. was required to participate (see 1.2.2.1. and 1.2.2.2.2.).

A's daughter, B., is an intelligent and lively 3,7 year old. B. has attended a non-racial crèche situated on the campus of the University of Natal, Durban for one school year. B. responded enthusiastically to the tasks presented to her in the present project and she performed briskly and efficiently.

Materials

1. The aim was to use tasks that required adult assistance for completion, without being completely beyond a young child's ability. Two puzzle-like tasks similar to those used by Wertsch (1980) were used, as well as a simple and complicated version of a three-dimensional block construction task which involves the placement of differently shaped

(internally and externally) and coloured blocks on three vertical sticks. These tasks are illustrated in figures 2, 3 and 4. A demonstration task adapted from Wertsch (1980) was also used and is illustrated in figure 5.

2. A. and B. were presented with two of the original problem-solving tasks, namely task 2 and the complicated version of task 3. It was clear from the previous projects that limiting the number of tasks presented to the subjects would not result in a loss of information for the purposes of the present project.

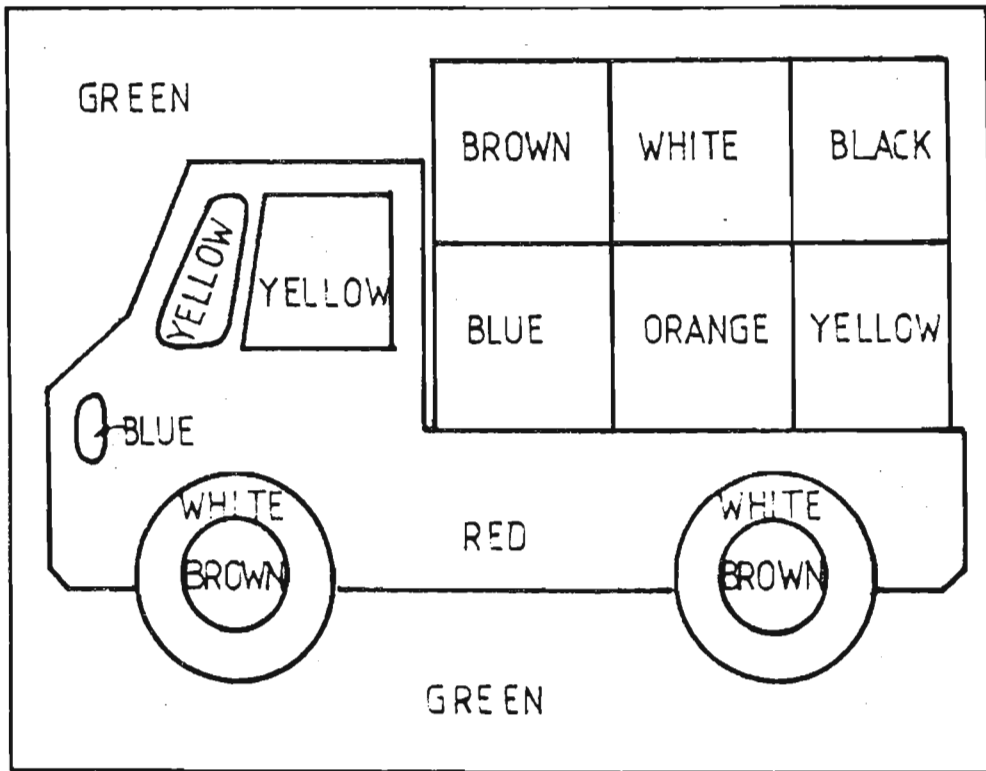


FIGURE 2 : TASK 1 : TRUCK PUZZLE WITH SIMPLE CARGO

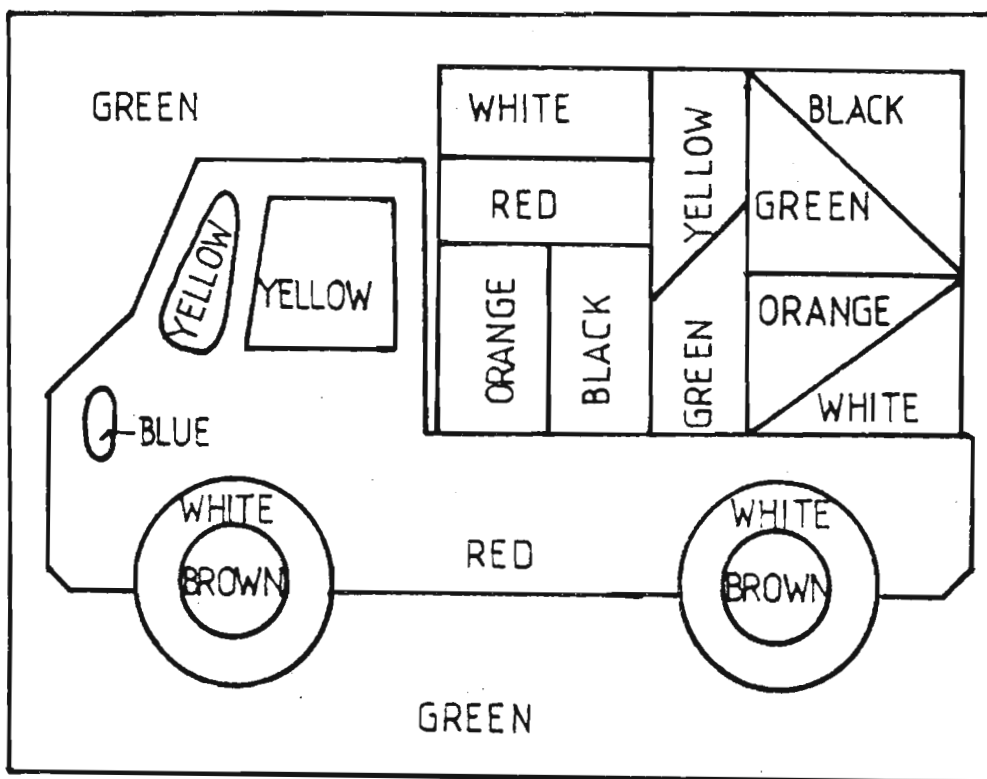


FIGURE 3 : TASK 2 : TRUCK PUZZLE WITH COMPLEX CARGO

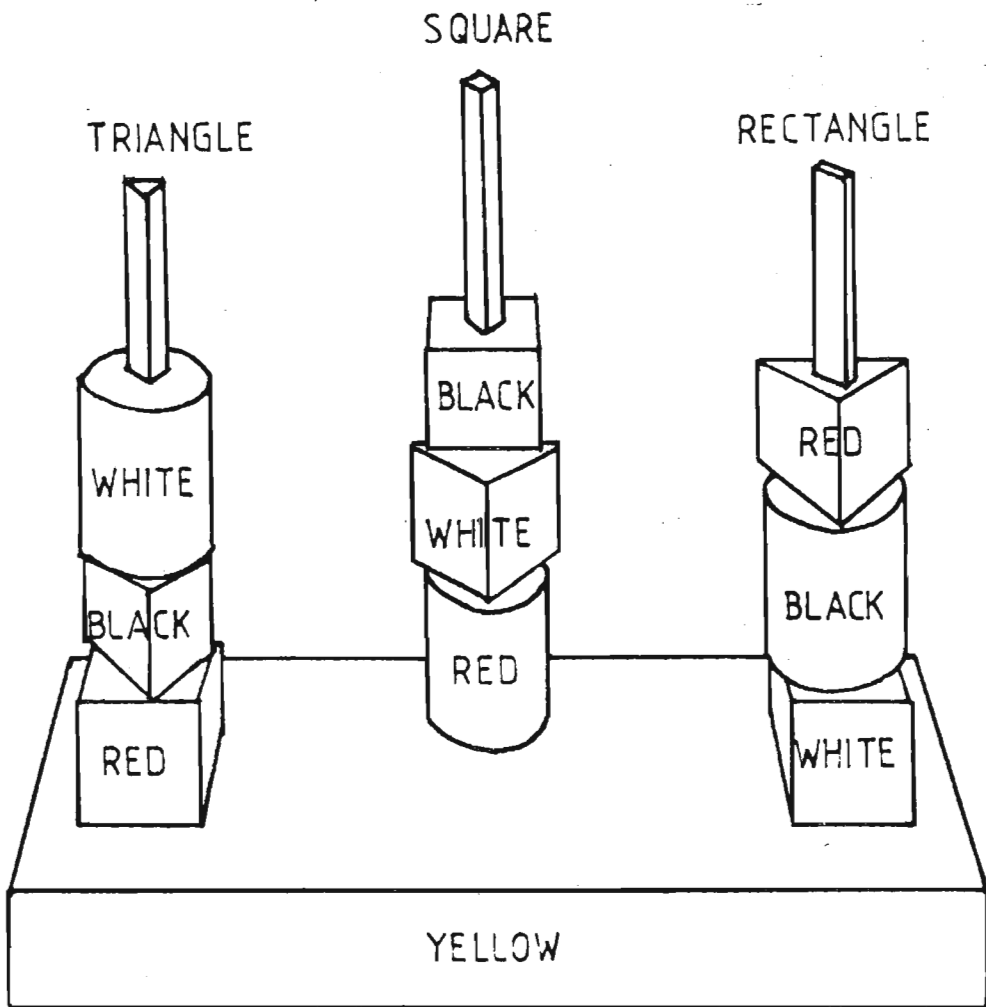


FIGURE 4 : TASK 3 : BLOCK CONSTRUCTION TASK

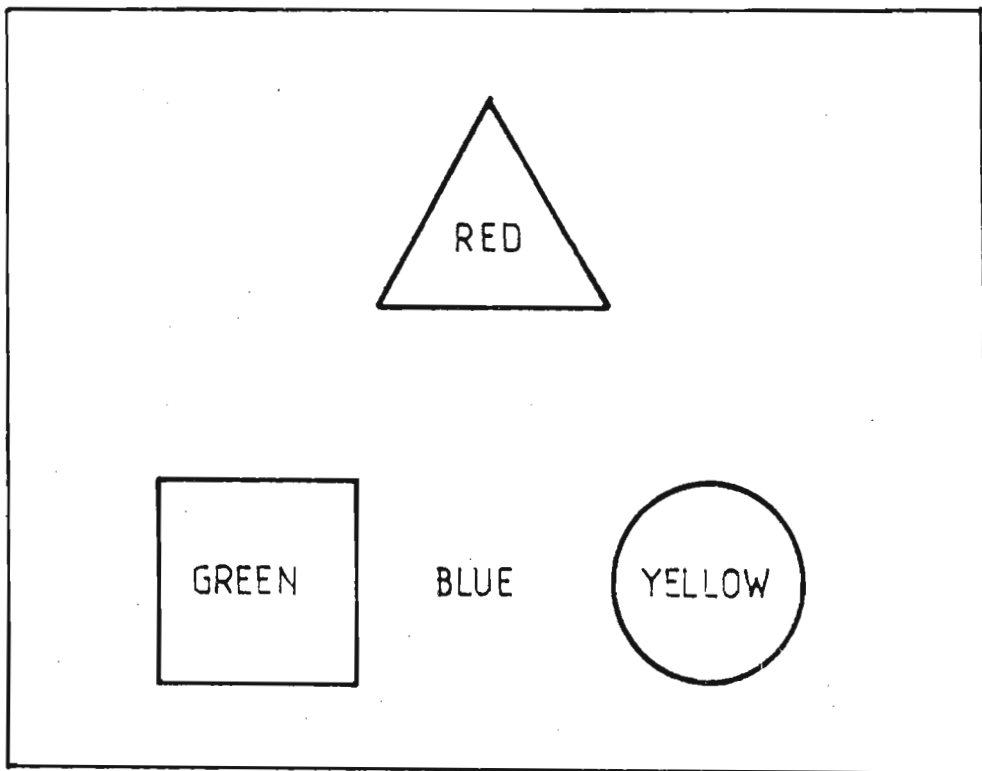


FIGURE 5 : DEMONSTRATION TASK

Procedure

1. The mothers were made to feel at ease and were seated at a table. They were told that the purpose of the study was to learn how mothers and children together solve puzzle-like tasks. They were also informed that the tasks were too difficult for the child to do alone and it was emphasised that the task was not a test of the child's ability. The mothers were instructed to assist their children in completing the puzzle in accordance with a model. They were told that they could provide whatever assistance they felt would be useful to the child. It was stressed that the purpose was to help the child to do the task but not to do the task for the child. The concept of constructing an identical copy from a model was demonstrated by the research assistant and the dyads were given a demonstration task as an exercise.

The task instructions were very detailed and took a total of 10 minutes for all tasks. All instructions were conveyed in Zulu, by a Zulu-speaking research assistant. Video-recordings were made of all mother-child transactions for all three tasks.

2. The procedure was identical to that of (1) above, except that the dyad was not required to complete a demonstration task and all instructions were conveyed in English by the author.

The 16 minute video-recording of A. and B's interaction has

been dubbed into English by a Zulu-English bilingual. The Zulu soundtrack has, however, been retained for future reference. The transcript of the focus video-tape is presented as appendix 1.

1.2.2.2.2. An exploration of the phenomenological viewpoint

Given the status of 'reasons as causes' in the domain of socio-psychology, it was decided to deliberately explore this concept in relation to Ricoeur's thesis regarding the role of an actor's intentions in the process of interpretation.

Participants

The author and A. participated in this discussion.

Materials

The focus video-tape constituted the data base in this phase of the project.

Procedure

Approximately two months after the focus video-recording had been produced, A., the mother whose interaction with her child was recorded, participated in a discussion with the author. Both participants viewed the focus video-tape until either one experienced an 'occasion for surprise'¹⁰ or an 'occasion for interpretation'. The video-tape was then

stopped and A. questioned about her reasons for particular behaviours of hers and about the effects she supposed her actions might have on her child. A's reasons, that is, her stated intentions 'behind' a particular action, were then negotiated in a fashion similar to that suggested by Harré and Secord (cf. "the negotiation of accounts", 1972, p.235).

The transcript of this discussion was produced and is referred to in the present study as data base 4. This transcript is presented as appendix 2.

By way of concluding this section on the procedure adopted in the present project, it seems important to emphasise the major empirical data bases used in the project:

Data Base 1: The original video-tapes of mother-child dyads engaged in joint problem-solving activities.

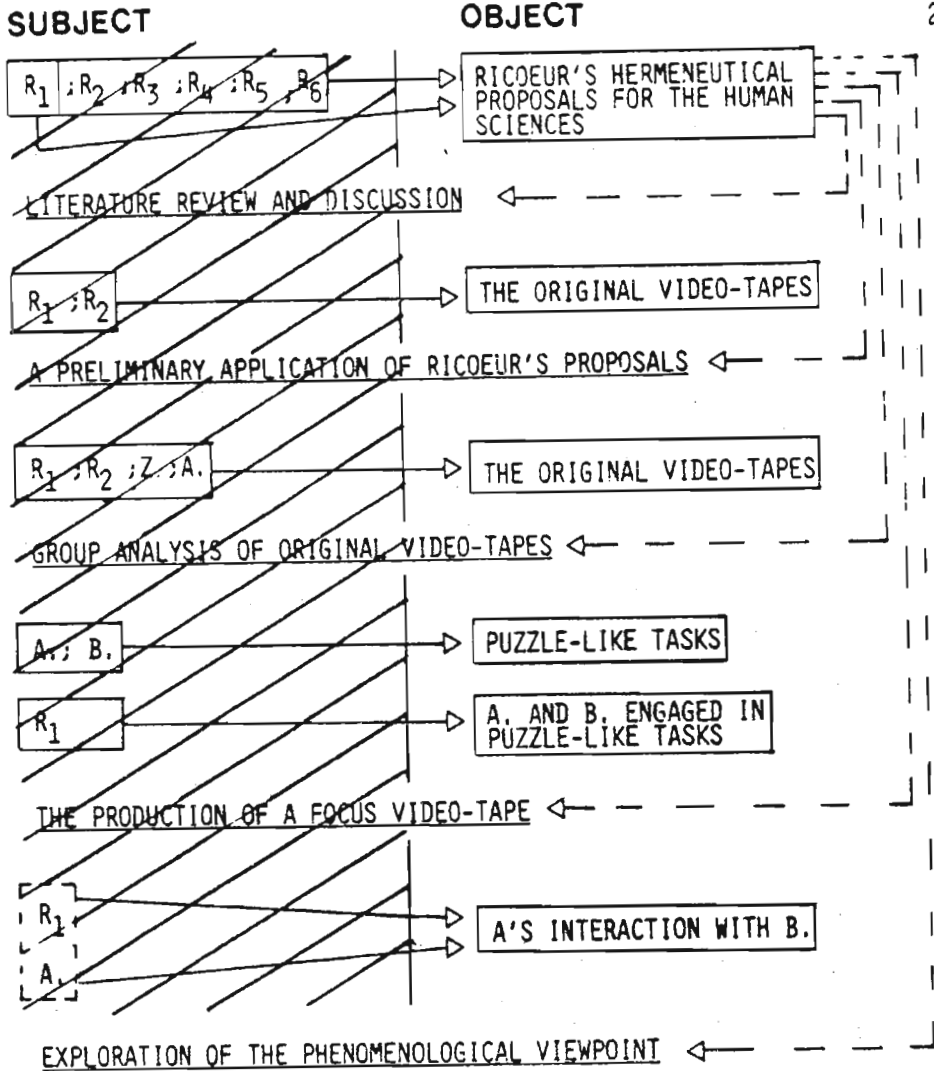
Data Base 2: Group discussion of data base 1.

Data Base 3: The focus tape which is a video-recording of A. and B. engaging in two of the original four problem-solving tasks and the transcript thereof.

(The transcript of this video-tape is presented as appendix 1.)

Data Base 4. Discussion between A. and the author, about the focus video-tape.
(The transcript of this discussion is presented as appendix 2.)

Figure 6 below depicts the different configurations of subject-object pairs which can be delineated in the present project.



KEY

- R_1 = AUTHOR
- R_2 = AUTHOR'S SUPERVISOR
- R_3 = AUTHOR'S CO-SUPERVISOR
- R_4 = CLINICAL PSYCHOLOGIST
- R_5 = PSYCHOLOGY RESEARCH MASTER'S STUDENT
- R_6 = PSYCHOLOGY RESEARCH MASTER'S STUDENT
- Z = CLINICAL PSYCHOLOGY MASTER'S STUDENT
- A. = FOCUS MOTHER
- B. = FOCUS CHILD

- ▶ INDICATES A SUBJECT'S INTERPRETATION OF AN OBJECT
- - - - -▶ INDICATES THE EXPLORATION OF RICOEUR'S PROPOSALS

FIGURE 6 : THE PROCESS OF INTERPRETATION AS IT OCCURS BETWEEN DIFFERENT CONFIGURATIONS OF SUBJECT-OBJECT PAIRS

NOTES

1. 'Meaningful action' is regarded in the present project as action which is both intentional, that is, planned and/or goal-directed on the part of the individual and meaningful, that is behaviour which is recognised by other individuals as having form, purpose and consequences. It is also because intentional and meaningful behaviour are seen as being necessarily linked, that the present project may be located in what could be called the domain of socio-psychology (see note 3 below).

2. The term 'subject' refers to an organism which essentially engages in intentional and goal-directed praxis; the deliberate construction of knowledge from the encounter between (any) subject and (any) object is the central example of such praxis. The term 'object' is used in this report to refer to people, animals, things, events and tasks. The term is therefore used generally to indicate the subject's distance from the focus of her/his attention and activities (including the activity of interpretation).

3. 'Socio-psychology' refers to an elaboration of Bhaskar's notion of a linking science between the individual and the social levels of analysis; in this interface the reproduction and transformation of either or both individual and/or social forms are addressed.
4. This data consists of video-tape recordings of mother-child transactions during problem-solving activities and of a transcript of a group discussion and a discussion between the researcher and a mother who acted as a subject in the video-tape recordings.
5. The term 'theory-method' is used by Vygotsky (1978, p.8) and stresses the fact that the theory implicitly or explicitly held by a researcher will determine what method she/he will adopt and what she/he is likely to 'discover' empirically. The notion of 'theory-method' thus emphasises the interaction between 'theory' and 'method' and is closely related to Pascual-Leone's dictum that it is necessary to invent something before you can discover it.
6. Generative mechanisms provide the rational explanation of observable non-random patterns in that they are regarded as producing an object or organism's manifest forms and/or performance. Intrinsic generative mechanisms, in

terms of socio-psychology, refer to 'mind' while extrinsic generative mechanisms refer to 'society'. Vygotsky refers to generative mechanisms as the actual causal-dynamic relations that underlie phenomena" (1976, p.62).

7. The phases of the project which are presented in 1.2. were not necessarily conducted in the chronological sequence indicated by the order of their presentation; certain phases were conducted concurrently.
8. Although Thompson is the editor and translator of the book, Hermeneutics and the human sciences, because the essays comprising it are written by Ricoeur, this text is referred to in the present project as "Ricoeur (1981)" (except where reference is being made specifically to Thompson's 'Introduction').
9. For convenience sake, both types of dyad are hereafter referred to as "mother-child dyads".
10. This term refers to moments in the interpretative process when the analyst is alerted to an unfamiliar or partially familiar event which can be said to 'beg' interpretation.

CHAPTER 2 : HERMENEUTICS

2.1. THE HISTORY OF HERMENEUTICS

2.2. PAUL RICOEUR'S THEORY OF INTERPRETATION

2.2.1. The interpretation of texts

2.2.2. The interpretation of
action-events

2.1. THE HISTORY OF HERMENEUTICS

Bleicher (1980) defines hermeneutics as "the theory of the interpretation of meaning" (p.268) and hermeneutical theory as "the methodology and epistemology of interpretive understanding practised as a science" (p.267). While the word 'hermeneutics' is generally used to refer to the formal procedure of interpretation, hermeneutics is an equally applicable description of the interpretative activities we perform in our everyday lives. Ricoeur makes this point:

hermeneutics cannot remain a technique for specialists ... rather, hermeneutics involves the general problem of comprehension (cited in Bleicher, p.237).

Thus hermeneuticists investigate how we understand; they investigate the conditions which make possible the understanding of any object by any subject. Hermeneutics is defined as

the discipline concerned with the investigation and interpretation of human behaviour, speech, institutions, etc., as essentially intentional (Flew, 1979, p.146).

Originally hermeneutics was closely associated with exegesis, the attempt to understand any text which presented some impediment to comprehension on the part of the reader. Thus hermeneutics arose as a pedagogical aid. Gadamer pointed out that Schleiermacher "instituted a subtle shift in the conception of the task of hermeneutics" (Linge, 1976, p. xii), a shift which was to have profound consequences for the problem of understanding. Schleiermacher emphasised "the natural priority of misunderstanding" (Ibid., p. xiii), these misunderstandings arising from the disjunction between the author and the interpreter. Because "intervening historical developments" represent a danger to accurate interpretation, Schleiermacher contended, the meaning of any text cannot be directly assessed (Ibid., p.xiii). Instead, he asserted,

its meaning must be recovered by a disciplined reconstruction of the historical situation or life-context in which it originated. Only a critical, methodologically controlled interpretation can reveal the author's meaning to us (Linge, 1976, p.xiii).

Dilthey, like Schleiermacher, "identified the meaning of the text or action with the subjective intention of its author" (Ibid., p. xiii) and he aimed to give to the Geisteswissenschaften "a validity comparable to that of the natural sciences" (Ricoeur in Bleicher, 1980, p.238) by means

of establishing hermeneutics as "the universal methodological basis of the Geisteswissenschaften" (Ibid., p.xiii).

Advocates of the Romantic tradition of hermeneutics, asserted that the aim of hermeneutics was "... to rejoin the original subjectivity which would support the meaning of the text" (Ricoeur, 1981, p.113). Ricoeur characterises Romantic and Diltheyan hermeneutics by its "psychologising and historicising character" (Ibid., p.140). For Dilthey, the ultimate aim of hermeneutics was "to understand the author better than he understands himself" (Ibid., p.151). Understanding then, was conceived

essentially (as) a self-transposition or imaginative projection whereby the knower negates the temporal distance that separates him from his object and becomes contemporaneous with it (Linge, 1976, p.xiv).

After Dilthey, hermeneuticists, instead of asking the question, "How do we know?" (the epistemological enterprise), began asking, "What is the mode of being of that being who exists only in understanding?" (the ontological enterprise) (Ricoeur, 1981, p.54). In effect, Martin Heidegger de-psychologised understanding, by making the object of understanding not only the other, but the world (Ibid., p.56). He identified understanding with "apprehending a possibility

of being" (Ibid., p.56). The Heideggerian notion of understanding is thus essentially a projection (Ibid., p.56).

Gadamer, for one, objected strongly to the possibility of the "methodological alienation of the knower from his own historicity" (Linge, Ibid., p.xiv) which was implied in the Romantic tradition. For Gadamer, an interpreter's 'prejudices', his "boundness to his present horizons" (Ibid., p.xiv), are not only insurmountable, but are a prerequisite in any process of understanding: They are regarded as "the productive ground of all understanding rather than negative factors or impediments to be overcome" (Ibid., p.xiv). Gadamer is well known in the history of hermeneutics for his contribution concerning the dialectical nature of understanding as captured in his concept of 'the fusion of horizons'. He contended that the process of understanding involves the 'fusing of the horizon' of the interpreter and the 'horizon of the text'. Thus in each circumstance, each interpretation would be unique.

Ricoeur takes up his task as hermeneuticist at the point at which he feels the work of Heidegger and Gadamer fails, namely "the problem of how hermeneutics is to return from ontology, to the epistemological questions which have been left behind" (Thompson, 1981, p.20). Ricoeur strongly objects

to the Romantic tradition of hermeneutics and invokes the tenets of the school of Structuralism which he proposes is "the simple contrary of Romanticism" (1981, p.140). Ricoeur's position within the hermeneutical tradition is of interest specifically because he attempts to explicate the process of interpretation. The well known division of methods between "qualitative" and "quantitative" and the accompanying alliances between a phenomenological philosophy of science, and a positive conception of science respectively (cf. Mouton, 1984), leaves the social scientist with little more than a choice between what are presented as polar opposites. In this regard, Ricoeur's attempt to explicate the method of interpretation and to provide a basis for the validation of the explanation-understanding achieved as the outcome of interpretation, certainly adds substantially to the methodological debate in the social sciences.

2.2. PAUL RICOEUR'S THEORY OF INTERPRETATION

2.2.1. The interpretation of texts

The theory of interpretation Ricoeur proposes is closely connected to the concept of the text, written discourse as such defining the object domain of hermeneutics¹ (Thompson 1981, p.14). One of Ricoeur's most fundamental premises is that the meaning of a text, the elucidation of which is the aim of interpretation, is constituted by something other than the subjective intentions of its author. Ricoeur asserts that "the problem of the right understanding can no longer be solved by a simple return to the alleged intention of the author" (1981, p. 211). This is implied in the first two forms of 'distanciation' Ricoeur outlines, namely "the eclipse of the event of saying by the meaning of what is said and the severance of the latter from the intentions of the speaking subject" (Thompson, p.14, emphasis added). This categorical denial of the alleged intentions of the author "as having a privileged role" (Ibid., p.14) in the process of interpretation, places Ricoeur in direct contrast to the Romantic tradition which had as its aim in interpretation, to "recover ... the genius of the author" (1981, p.190), that is, to rejoin the author and to determine his/her² intentions. Ricoeur proposes that an interpreter cannot and must not

attempt to interpret a text by means of deducing the author's intentions; consequently she/he is forced to construct an interpretation. This process Ricoeur examines in the context of two "attitudes"/procedures which one may adopt in confronting a text, namely explanation and understanding (1981, p.145).

Before discussing these "attitudes", it is necessary to examine the underlying tenets of Ricoeur's theory of interpretation.

Ricoeur's theory of interpretation is founded on a fundamental distinction between 'langue' and 'parole', between language (as the language-system or code) and discourse (the realm of language-use). Emile Benveniste claimed that the linguistics of language and the linguistics of discourse are constructed upon different units, the 'sign' (phonological and lexical) constituting the basic unit of language and the 'sentence', the basic unit of discourse (1981, p.133). It is the sentence that is Ricoeur's focus, in particular a "genuine semantics of the sentence, as distinct from a semiotics of the sign" (Thompson, 1981, p.11). The nuclear dialectic of Ricoeur's theory of interpretation is that between event and meaning, and the linguistics of the sentence underlies this dialectic.

Ricoeur discusses the features of discourse in terms of the event-meaning dialectic. While discourse "is realised temporally and in the present", "the system of language is virtual and outside of time" (1981, p.133): Thus we can speak of the 'instance of discourse', this term designating its event-ful character. It is precisely because discourse has the character of a fleeting event, that fixation or inscription is necessary; it is "discourse's destination" (Ibid., p.199). We inscribe not the event, however, Ricoeur claims, but the meaning of the discourse.

A second difference between language and discourse is as follows: "Whereas language has no subject insofar as the question 'who speaks?' does not apply at this level, discourse refers back to its speaker by means of a complex set of indicators, such as personal pronouns" (Ibid., p.133). Discourse is thus self-referential and event-ful in another sense: "the event consists in the fact that someone speaks, someone expresses himself in taking up speech" (Ibid., p. 133).

Thirdly, while discourse is always about something, that is, it "refers to a world which it claims to describe, express or represent", language does not have a world in that "the signs of language refer only to other signs in the interior of the same system" (Ibid., p.133).

Fourthly, while discourse inevitably involves another person, an interlocutor to whom it is addressed, language merely "provides the codes" for the exchange of messages that occurs in the process of discourse. Thus in discourse, the event is "the temporal phenomenon of exchange, the establishment of a dialogue which can be started, continued or interrupted" (Ibid., pp. 133-34).

The four features described above "constitute discourse as an event" (Ricoeur, 1981, p.134, emphasis added), the one pole of the event-meaning dialectic.

The concept of meaning

The other pole of the event-meaning dialectic concerns meaning, and in this regard Ricoeur asserts his central axiom:

If all discourse is realised as an event,
all discourse is understood as meaning
(Ibid., p.134).

Ricoeur proposes that

What we wish to understand is not the
fleeting event, but rather the meaning
which endures (Ibid., p.134).

He states that this articulation "is the core of the whole hermeneutical problem. Discourse, Ricoeur asserts,

by entering the process of understanding, surpasses itself as event and becomes meaning. The surpassing of the event by the meaning is characteristic of discourse as such. It attests to the very intentionality of language (Ibid., p.134).

Ricoeur states that there are two 'types' of meaning which he distinguishes as follows:

... the concept of meaning allows two interpretations which reflect the main dialectic between event and meaning. To mean is both what the speaker means, i.e., what he intends to say, and what the sentence means, i.e., what the conjunction between the identification function and the predicative function yields. Meaning in other words is both noetic and noematic (1976, p.12).

Ricoeur refers to the former sense of meaning as the utterer's meaning (the subjective pole) and to the latter as the utterance meaning (the objective pole) and claims that "the utterer's meaning has its mark in the utterance meaning" (Ibid., p. 13): "The utterance meaning points back towards the utterer's meaning thanks to the self-reference of discourse to itself as an event" (Ibid., p.13). Here Ricoeur is referring to the feature of discourse whereby assorted grammatical procedures are used to refer back to the speaker, to the subject of the speech-act (Ibid., p.13). This obviates the need to reduce the utterer's meaning "to a mere psychological intention"; "No mental entity need be

hypothesised or hypostasised" (Ibid., p.13). We are able "to give a nonpsychological, because purely semantic, definition of the utterer's meaning"³ (Ibid., p.13). This proposal is crucial: It forms the crux of Ricoeur's argument that psychological entities, namely the author's intentions, are irrelevant in the process of interpretation. Reference to them should be omitted by the interpreter attempting to understand a text.

Ricoeur defines the meaning of a proposition in terms of "the sameness of sense in the infinite series of its mental actualisations (this) constituting the ideal dimension of the proposition" (1976, p.90). Frege & Husserl defined 'meaning' as follows:

... a 'meaning' ... is not an idea that somebody has in his mind. It is not a psychic content, but an ideal object which can be identified and reidentified by different individuals at different times as being one and the same. By ideality they meant that the meaning of a proposition is neither a physical nor a psychic reality (Ibid, p.90).

Frege & Husserl, Ricoeur claims, influenced the anti-historicist movement, historicism being

the epistemological presupposition that the content of literary works and in general of cultural documents receives its intelligibility from its connection to the social conditions of the community that produced it or to which it was destined (1976, p.89).

Ricoeur claims that "the 'logician' rejoinder to such 'historicism' preceded from a rational refutation of the epistemological pre-supposition of historicism" (Ibid., p.90), Frege and Husserl's definition of 'meaning', as given above, representing the 'logician' rejoinder. Dilthey asserted that "the inner connection" which enables a text "to be understood by another person and to be fixed by writing", was "something similar to the ideality that Frege and Husserl recognised as the meaning of a proposition" (Ibid., p.90). Ricoeur argues that if this comparison is valid, then the act of understanding is less "geschichtlich" and more "logisch" than previously claimed (1976, p.91).

In the sphere of literary criticism, Ricoeur explains, a wave of 'anti-historicism' followed, postulates of this movement asserting that a text "is a kind of atemporal object which has, so to speak, cut its ties from all historical development" (Ibid., p.91). With this "overcoming of the historical process", which is "implied by the access to writing", Ricoeur explains, discourse was transferred "to a sphere of ideality that allows an indefinite widening of the sphere of communication" (Ibid., p.91). Consequently, "the act of 'understanding'", Ricoeur proposes, "is less 'historical' and more 'logical'" (1981, p.184).

Ricoeur states that his theory of interpretation incorporates this "presupposition concerning the objectivity of meaning in general" (1976, p.91); firstly in his concept of "the semantic autonomy of written discourse" which is "grounded in the objectivity of meaning of oral discourse itself", and secondly in his emphasis on structuralism by which "the text - objectified and dehistoricised - becomes the necessary mediation between writer and reader" (Ibid., p.91). Ricoeur asserts that "the objectification of meaning is a necessary mediation between the writer and the reader" (1981, p.185) if the reader intends to appropriate⁴ the meaning of a text.

To assess the meaning of what is said, Ricoeur proposes that hermeneutics must appeal "not only to linguistics ... but also to the theory of speech-acts, as found in the work of Austin and Searle" (Ricoeur, 1981, p.134). Speech-act theory divides the act of discourse into "a hierarchy of subordinate acts distributed on three levels :

- 1) the level of the locutionary or propositional act, the act of saying;
- 2) the level of the illocutionary act (or force), what we do in saying;
- 3) the level of the perlocutionary act, what we do by the fact that we speak (Ibid., p.134).

Ricoeur explains that it is by means of "intentional exteriorisation" (Ibid., p.135) that the event is surpassed in the meaning and he examines each of the three acts to determine the extent to which each can be exteriorised in the sentence.

The locutionary act "is exteriorised in the sentence qua proposition. For it is as such and such proposition that the sentence can be identified and reidentified as the same ... What is identified is the predicative structure itself" (1981, p. 135).

The second act, the illocutionary act, "can also be exteriorised by means of grammatical paradigms and other procedures which 'mark' the illocutionary force of a sentence and thus enable it to be identified and reidentified" (Ibid., p.135). Although certain features of the illocutionary act (such as gestures, gesticulations and prosody) are less easily inscribable or exteriorise-able in writing, this is still possible.

The perlocutionary act is "the least inscribable element" - being primarily a characteristic of oral discourse - and is also "the least discursive aspect of discourse : It is discourse qua stimulus" and unlike the former two acts, does not operate "through the recognition of (the speaker's) ... intention by the interlocutor, but in an energetic mode, as it

were, by direct influence upon the emotions and affective attitudes of the interlocutor" (Ibid., p.135).

Examining all three acts then, Ricoeur proposes that

the propositional act, the illocutionary force and the perlocutionary action are susceptible, in decreasing degrees, to the intentional exteriorisation which renders inscription by writing possible (1981, p.135).

The concept of the text

Ricoeur explores other senses of the concept of 'meaning', in his theory of the text. Thompson claims that "Ricoeur makes the transition from semantics to hermeneutics proper with the formulation of a concept of the text" (1981, p.13).

Thompson presents Ricoeur's preliminary definition of a text:

The text is a work of discourse, and hence in the first instance a work (Ibid., p.13).

Ricoeur proposes three distinctive features of a work namely: "a work is a sequence longer than the sentence" (1981, p. 136); "the work is submitted to a form of codification which is applied to the composition itself ... This codification is known as a literary genre" (Ibid., 136).

Finally, "a work is given a unique configuration which likens it to an individual and which may be called its style" (Ibid., 136). Thus the production of discourse as a work is displayed in its composition, its genre and its style. All of these categories, Ricoeur states, are categories of production and labour (Thompson, 1981, p.13).

Ricoeur defines a text as "any discourse fixed by writing" (1981, p. 145). This "fixation by writing takes the very place of speech, occurring at the site where speech could have emerged" (Ibid., p.146). Ricoeur presents the writing-reading dialectic as follows:

the writing-reading relation is ... not a particular case of the speaking-answering relation. It is not a relation of interlocution, not an instance of dialogue. ... The book divides the act of writing and the act of reading into two sides, between which there is no communication. The reader is absent from the act of writing; the writer is absent from the act of reading. The text thus produces a double eclipse of the reader and the writer (1981, pp. 146-47).

Writing "preserves discourse and makes it an archive available for individual and collective memory" and in addition, "the linearisation of symbols permits an analytic and distinctive translation of all the successive and discrete features of language and thereby increases its efficacy"

(Ibid., p.146). This, however, is not all that inscription achieves: Ricoeur proposes that a more significant result is that

the emancipation of the text from the oral situation entails a veritable upheaval in the relations between language and the world, as well as in the relation between language and the various subjectivities concerned (that of the author and that of the reader) (1981, p. 147).

Ricoeur qualifies his definition of a text, claiming that "the text cannot ... be purely and simply identified with writing" (Ibid., p.132). The first reason is that "it is not writing as such which gives rise to the hermeneutical problem, but the dialectic of speaking and writing" (Ibid., p.132). Secondly, the dialectic of speaking and writing "is constructed upon a dialectic of distanciation which is more primitive than the opposition of writing to speaking and which is already part of oral discourse qua discourse; we must therefore search in discourse itself for the roots of all subsequent dialectics" (Ibid., p.132). Thirdly, "it seems necessary to insert the fundamental notion of the realisation of discourse as a structured work", "between the realisation of language as discourse and the dialectic of speaking and writing" (Ibid., p.132).

DISTANCIATION

Discourse realised in writing, Ricoeur proposes, in effect distances the text from the conditions of spoken discourse. Ricoeur encapsulates this effect in the key notion of 'distanciation', as displayed in four principal forms:

1. The surpassing of the event of saying by the meaning of what is said

The event is fleeting, temporal while the meaning endures, is omni-temporal. The meaning is inscribable in writing by means of the intentional exteriorisation of the speech-act, as described above (see pp.44-46).

2. The disjunction of textual meaning and authorial/psychological meaning

The second form of distanciation is defined as follows:

Whereas in spoken discourse the intention of the speaking subject and the meaning of what is said frequently overlap, there is no such coincidence in the case of writing. 'What the text signifies no longer coincides with what the author meant; henceforth textual meaning and psychological meaning have different destinies' (Thompson, 1981, p.13).

The "verbal meaning", of a text, Ricoeur proposes, is autonomous, for it has "broken its moorings to the psychology of the author"; It has freed itself "from the tutelage" of the author's intentions (1981, p.201).

3. The world of the text: Non-ostensive versus ostensive references

This form of distanciation refers to the "genuine referential power of the text" (1976, p.12) and "concerns the emancipation of the text from the limits of ostensive reference" (Thompson, 1981, p.14). Whereas in oral discourse, the interlocutors share a common situation and so utilise ostensive references to achieve communication, in the case of writing this shared reality no longer exists" (Ibid., p.14). Thus the referential dimension of the text is of a different order from that of speech. The situation referred to in a text is done so using non-ostensive references. This referential dimension "is unfolded in the process of interpretation" (Ibid., p.14). So in the

same manner that the text frees its meaning from the tutelage of the mental intention, it frees its reference from the limits of ostensive reference. For us, the world is the ensemble of references opened up by the texts (Ricoeur, 1981, p.202).

4. The explosion of the dialogical relation

In spoken discourse there is an interlocutor in the dialogical situation. This situation, Ricoeur argues, is "exploded" in written discourse (1981, p.139) for "written discourse is addressed to an unknown audience and potentially to anyone who can read. Thus "the narrowness of the dialogical relation explodes" (Ibid., p.202). The text "'decontextualises' itself from its social and historical conditions of production, opening itself to an unlimited series of readings" (Ibid., p.14). Thus in the process of reading, the text becomes re-contextualised (1981, p.91). Ricoeur thus takes an anti-historicist stance and claims that a text is forever awaiting 'fresh' interpretation (Ibid., p.208) and that an author's contemporaries have no privilege in this process (Ibid., pp.208-209). The meaning of a text, Ricoeur claims, is "'in suspense'" (Ibid., p.208).

APPROPRIATION

Constructing an interpretation : The explanation -
understanding dialectic

Ricoeur draws a correlation between the act of reading and the structure of discourse:

To the extent that the act of reading is the counterpart of the act of writing, the dialectic of event and meaning, so essential to the structure of discourse, ... generates a correlative dialectic in reading between understanding or comprehension (the verstehen of the German hermeneutic tradition) and explanation (the erklären of that same tradition). ... it may be said, at least in an introductory fashion, that understanding is to reading what the event of discourse is to the utterance of discourse and that explanation is to reading what the verbal and textual autonomy is to the objective meaning of discourse. A dialectical structure of reading therefore corresponds to the dialectical structure of discourse (1976, pp. 71-72).

In Romanticist hermeneutics, explanation and understanding are conceived as polar opposites, as contradictory 'attitudes'. Explanation is often deemed to belong to the realm of the natural sciences: "the appropriate correlate of explanation is nature understood as the common horizon of facts, laws and theories, hypotheses, verifications and deductions" (1976, p.72). In contrast, understanding is rightly deemed to belong to the field of the human sciences which have to do "with the experience of other subjects or other minds similar to our own. It relies on the meaningfulness of such forms of expression as physiognomic, gestural, vocal or written signs, and upon documents and monuments, which share with writing the general character of inscription" (Ibid., pp. 72-73). This dichotomy between

understanding and explanation "opposes two methodologies and two spheres of reality, nature and mind" (1976, p.73).

Ricoeur proposes that explanation and understanding should "not be treated in dualistic terms but as a complex and highly mediated dialectic" (Ibid., p.74). Ricoeur asserts that the central problem of hermeneutics is the supposed opposition between explanation and understanding. In addition, for Ricoeur, the term 'interpretation' may be applied "to the whole process that encompasses explanation and understanding" (Ibid., p.74). He defines interpretation in terms of the dynamic of "interpretive reading" (Ibid., p.74). Ricoeur argues in favour of situating "explanation and understanding along a unique hermeneutical arc" and he asserts that "the opposed attitudes of explanation and understanding should be intergrated within an overall conception of reading as the recovery of meaning" (1981, p.161). Ricoeur proposes that both 'attitudes' are necessary in the process of interpretation and he explores the explanation-understanding dialectic by examining it from both directions: Firstly in the direction from understanding to explanation and then in the direction from explanation to understanding. Ricoeur postulates that in the process of interpretation there occurs two stages of understanding which are mediated by explanation. He elaborates as follows :

The first time, understanding will be a naive grasping of the meaning of the text as a whole. The second time, comprehension will be a sophisticated mode of understanding, supported by explanatory procedures. In the beginning, understanding is a guess. At the end, it satisfies the concept of appropriation (1976, p.74).

From understanding to explanation

The first act of understanding takes the form of a guess and the "necessity of guessing the meaning of a text may be related to the kind of semantic autonomy ... ascribed to the textual meaning" discussed previously (1976, p.75). It is because "the author's intention is beyond our reach", that we have to guess the meaning of a text (Ibid., p.75).

Ricoeur elaborates as follows on the peripheral role of the author's intentions in the process of interpretation:

... the author can no longer 'rescue' his work ... His intention is often unknown to us, sometimes redundant, sometimes useless, and sometimes even harmful as regards the interpretation of the verbal meaning of his work. In even the better cases it has to be taken into account in light of the text itself (1976, pp. 75-76).

Ricoeur concludes that the problem of interpretation arises "not so much because of the incommunicability of the psychic experience of the author, but because of the very nature of the verbal intention of the text" (Ibid., p.76).

Once having been fixed, that is, inscribed, the meaning of discourse can only be 'rescued' by the meaning: The physical and psychological presence of the author can no longer contribute to the interpreter's attempt to determine the meaning of a text⁵. The only 'remedy' is interpretation (1981, p. 201).

In order to understand a text, Ricoeur proposes that the interpreter has to construe the "verbal meaning" of the text. This necessitates a guess on the part of the interpreter. Whilst misunderstanding is a possibility, even a likelihood, Ricoeur insists that we cannot decide on the correct interpretation by "a simple return to the alleged situation of the author" (1976, p.76). While we cannot follow any set of rules in making guesses, that is, we cannot systematically produce good guesses, it is possible, Ricoeur argues, to follow a method for validating our guesses. Both guessing (also referred to as the 'divinatory') and validation (the 'grammatical') are required in reading any text.

What we attempt to do, when we guess, is firstly to construe the "verbal meaning" of a text and more specifically to construe the text as a whole, for a work, Ricoeur argues, is "a cumulative, holistic process " (1976, p.76). A complex text has a kind of plurivocity and this opens it to "a plurality of constructions (Ibid., p.77). Construing the "verbal meaning" of a text, Ricoeur asserts, takes the form of

a circular process alternating between conceptualising parts and the whole.

Secondly, "to construe a text is to construe it as an individual", more specifically to guess about its "literary genre, the class of texts to which this text belongs, and the type of codes and structures that intersect in this text. This localisation and individualisation of the unique text is also a guess" (1976, p.77).

Ricoeur asserts that any text or action is always understood from a particular perspective which is only one of many perspectives. The Necker Cube effect seems to operate in the process of interpretation in that "the text ... may be viewed from several sides but never from all sides at once" (Ibid., p.78). Ricoeur elaborates as follows

... as an individual the text may be reached from different sides. Like a cube, or a volume in space, the text presents a 'relief'. Its different topics are not at the same altitude. Therefore the reconstruction of the whole has a perspectivist aspect similar to that of perception. It is always possible to relate the same sentence in different ways to this or that sentence considered as the cornerstone of the text. A specific kind of onesidedness is implied in the act of reading (1981, pp.211-12).

This onesidedness, Ricoeur proposes, "grounds the guess character of interpretation" (Ibid., p.78) and the present author suggests that it could comprise a Piagetian or a

Marxist bias, for example. Other hermeneuticists, such as Gadamer, emphasise in addition the different 'prejudices' which different interpreters apply to the interpretandum. This too gives rise to a myriad of interpretations of the same phenomenon. Horton (1979) provides a fascinating and powerful metaphor which illustrates the Necker Cube effect in operation in the process of interpretation. She refers to a sculpture by Isamu Noguchi, Cubic Pyramid (see Figure 7, p.59). The sculpture comprises a pyramid with mirror surfaces such that light from the windows of Noguchi's studio, where the piece stands, falls upon it from two directions. The observer will perceive reflections of the light as well as reflections of herself. Consequently, if one desired to see "the whole sculpture", one would have to stand in the studio for a full twenty-four hours so as to experience all variations of natural light falling upon the sculpture. Moreover, one would have to spend twenty-four hours in each possible point around the sculpture because one's own reflection will be different at different points. In addition, the observer would have to 'experience' the sculpture on different kind of days, for example on sunny and grey days, on partially cloudy and on cloudy days. Horton concludes that "one could perceive 'the whole' that is Cubic Pyramid, in theory as well as in practice, only by standing there forever" (Ibid., p.23). This illustration suggests that there will never be one truthful interpretation of any phenomenon.

Literary texts "involve potential horizons of meaning which may be actualised in different ways", Ricoeur asserts, this third trait being related to "the role of the secondary metaphoric and symbolic meaning of a text" (1976, p.78). Because of these secondary meanings which surround perceived objects, the work is opened to several readings (Ibid., p.78).

The procedures for validation by which we test our guesses are closer, Ricoeur asserts, "to a logic of probability than to a logic of empirical verification. We cannot prove whether a certain guess/hypothesis is true, but we can show that an interpretation is more probable than another in the light of what we already know. Thus validation is not equivalent to verification. Rather, Ricoeur suggests,

It is an argumentative discipline comparable to the juridical procedures used in legal interpretation, a logic of uncertainty and of qualitative probability (1976, p.78).

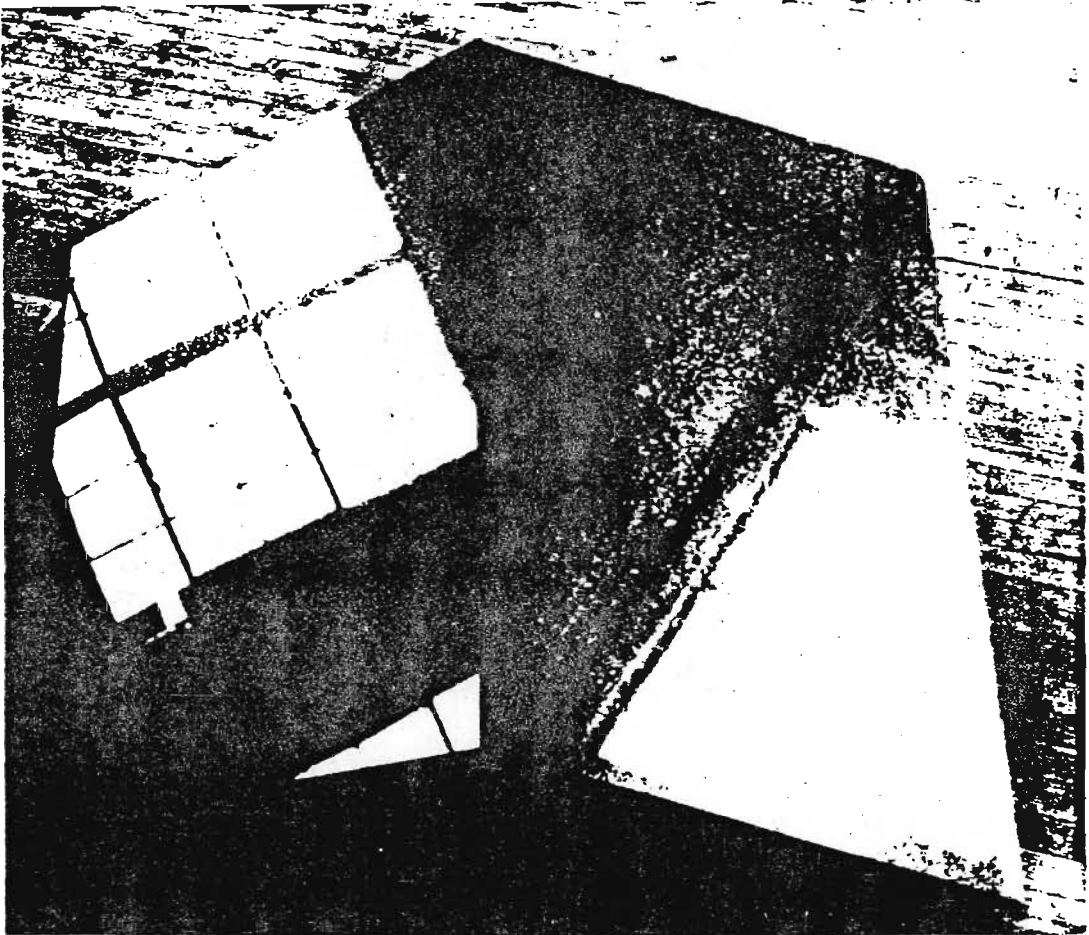


FIGURE 7 : CUBIC PYRAMID BY ISAMU NOGUCHI

(From Horton, 1979)

Moreover "the validation of an interpretation applied to it may be said to yield a scientific knowledge of the text" (Ibid., p.79) in that

The method of converging indices, which characterises the logic of scientific probability, provides a firm basis for a science of the individual (which is how Ricoeur construes a text) which may rightly be called a science (1976, p.79).

The balance between "the genius of guessing and the scientific character of explanation" (Ibid., p.79) correlates with the dialectic between verstehen and erklären. Ricoeur regards 'guess' and 'validation' as being "circularly related as subjective and objective approaches to the text", and he claims that this circle is not a vicious circle because of the operation of procedures of invalidation/falsifiability (Ibid., p.79). These procedures operate in the case of competing interpretations:

An interpretation must not only be probable but more probable than another interpretation. There are criteria for resolving this conflict, which can easily be derived from the logic of subjective probability (1976, p.79).

Thus all interpretations are not equal: "The text presents a limited field of possible constructions" (Ibid., p.79) which can be debated and weighed, one against the other.

What Ricoeur refers to as "a limited field of possible constructions" must be integrally related to the package of resistances of the object of interpretation as well as those resistances of the subject of interpretation (cf. Pascual-Leone, 1986).

From explanation to understanding

While the preceding description of the dialectic between understanding and explanation "was roughly the counterpart of the dialectic before event and meaning" (1976, p.80), the following presentation of the same dialectic in the reverse order, corresponds, Ricoeur asserts, to the dialectic between 'sense' and 'reference'. (These terms will be defined shortly.)

In a text, language has a world as opposed to a situation. In a text there is no longer a situation common to both writer and reader as is the case in oral discourse. A text "exceeds the mere ostensive designation of the horizon of reality surrounding the dialogical situation" (Ibid., p.80).

As a reader, one can adopt one of two opposed attitudes: We may either "remain in a kind of state of suspense as regards any kind of referred to reality, or we may imaginatively actualise the potential non-ostensive references of the text in a new situation, that of the reader" (1976, p.81). In the first approach, "we treat the text as a

wordless entity" (Ibid., p.81) and remain within the inner 'world' of the text. In the second approach, "we create a new ostensive reference thanks to the kind of 'execution' that the act of reading implies" (Ibid., p.81). Thus the reader moves beyond what is said in the text - that is, the 'sense' of the text - to what the text is about - the 'reference' of the text.

The first way of reading corresponds to the procedures adopted by the structural schools of literary criticism. Their approach involves suspending or suppressing the ostensive reference and involves "transferring oneself into the 'place' where the text stands, within the 'enclosure' of this wordless place" (1976, p.81). The text then is considered as only having an interior - it no longer has an exterior. This approach enables one to adopt "a new kind of explanatory attitude towards the literary object" (Ibid., p.81). Moreover, Ricoeur claims, the explanatory system used comes not from an alien area of knowledge, the natural sciences, but from the same field, namely the semiological field:

It is henceforth possible to treat texts according to the explanatory rules that linguistics successfully applied to the elementary system of signs which underlie the use of language (1976, p.81).

This approach, in effect, involves abstracting systems from processes and then relating these systems (of what ever kind), "to units which are already defined through opposition to other units of the same system" (Ibid., p.82).

Ricoeur proposes that this structural model is applicable to the interpretation of texts. He does concede, however, that this approach is "just one of the possible approaches to the notion of interpreting texts" (Ibid., p.82).⁶ Ricoeur provides an example of the structural model applied to one category of texts, that of myths, and presents Levi-Strauss's analysis of the Oedipus myth using the structural method (1976, pp.83-84). The myth, is divided into its "gross constituent units" (Ibid., p.82) which Claude Levi-Strauss called 'mythemes'. These mythemes are arranged so as to display the structure of the myth. Ricoeur defines a mytheme as follows:

... a mytheme is ... an opposite value attached to several individual sentences, which form 'a bundle of relations'. It is 'only as bundles that these relations can be put to use and combined so as to produce a meaning' (1976, p.83).

Ricoeur proposes that at the conclusion of a structural analysis, the analyst, while having explained the text, (in this case the myth), will not have interpreted it. By

'explanation', Ricoeur refers to the process whereby the interpreter,

by means of structural analysis, (will have) brought out the logic of the operations that relate the ... bundle of relationships among themselves. This logic constitutes 'the structural law of the myth' (or text) under consideration (1976, p.84).

Structural analysis consists in performing a segmentation (the horizontal aspect) and then establishing various levels of integration of parts comprising the whole (the hierarchical aspect) (Ibid., p.84). Ricoeur provides an example of how a narrative can be explained using the structural model: "structural analysis ... bring(s) out a hierarchy of actors correlative to the hierarchy of actions" and thereafter the parts of the narrative are assembled so as to form a whole (Ibid., p.85).

Structural analysis is not an end in itself, but should be regarded as a means to an end. Ricoeur proposes that "explanation (erklären) requires understanding (verstehen)" (1976, p.86) and asserts that "nobody stops with a conception of myths and narratives as formal as ... (an) algebra of constitutive units" (Ibid., p.86). The units which are postulated and which are opposed to one another are not meaningless, analytical entities: They "bear meaning and reference" and the oppositions and combinations posited are

meaningful oppositions concerning ... existential conflicts" (Ibid. p.86). Structural analysis "merely represses this function. But it cannot suppress it" (Ibid., pp.86-87).

Ricoeur places the procedure of structural analysis in its context in the process of interpretation (of a myth, in this case) :

... the function of structural analysis is to lead us from a surface semantics, that of the narrated myth, to a depth semantics, that of the boundary situations, which constitute the ultimate 'referent' of the myth (1976, p.87).

In Ricoeur's theory of interpretation, structural analysis plays a vital role in that it is the means whereby a "critical" or a "depth" interpretation is achieved.

Ricoeur proposes a progression from the descriptive level to some kind of unresolved existential dilemma which he calls an "aporia"⁷ (Ibid., p.87). If structural analysis did not serve the intermediary function described above, Ricoeur proposes,

... structural analysis would be reduced to a sterile game, a divisive algebra, and even the myth itself would be bereaved of the function ... of making men aware of certain oppositions and of tending towards their progressive mediation. To eliminate this reference to the aporias of existence around which mythic thought gravitates would be to reduce the theory of myth to the necrology of the meaningless discourses of mankind (1976, p.87).

Ricoeur argues that we should consider structural analysis as

... one stage - albeit a necessary one - between a naive interpretation and a critical one, between a surface interpretation and a depth interpretation (1976, p.87).

This would enable us "to locate explanation and understanding at two different stages of a unique hermeneutical arc" (1976, p.87). The mediating role played by structural analysis prevents us from

... identifying understanding with some kind of intuitive grasping of the intention underlying the text (1976, p.88)

We are rather "invite(d) ... to think of the sense of the text as an injunction coming from the text, as a new way of looking at things, as an injunction to think in a certain manner" (1976, p. 88). The reference, "borne by the depth semantics" offers a possible mode-of-being for the reader:

The text speaks of a possible world and a possible way of orienting oneself within it. ... It goes beyond the mere function of pointing out and showing what already exists (1976, p.88).

The reference of the text, the non-ostensive reference, as opposed to the sense of the text (with which structural analysis deals), is

the kind of world opened up by the depth semantics of the text, a discovery, which has immense consequences regarding what is usually called the sense of the text. The sense of the text is not behind the text but in front of it. It is not something hidden, but something disclosed (1976, p.87).

What the reader must construe then, is not the mental intention of the author, but what the text refers to, "what points towards a possible world, thanks to the non-ostensive reference of the text" (Ibid., p.87). Ricoeur clarifies the notion of understanding thus:

Understanding has less than ever to do with the author and his situation. It seeks to grasp the world-propositions opened up by the reference of the text. To understand a text is to follow its movement from sense to reference: from what it says, to what it talks about (1976, pp. 87-88).

Figure 8 below depicts Ricoeur's model of the interpretative procedure.

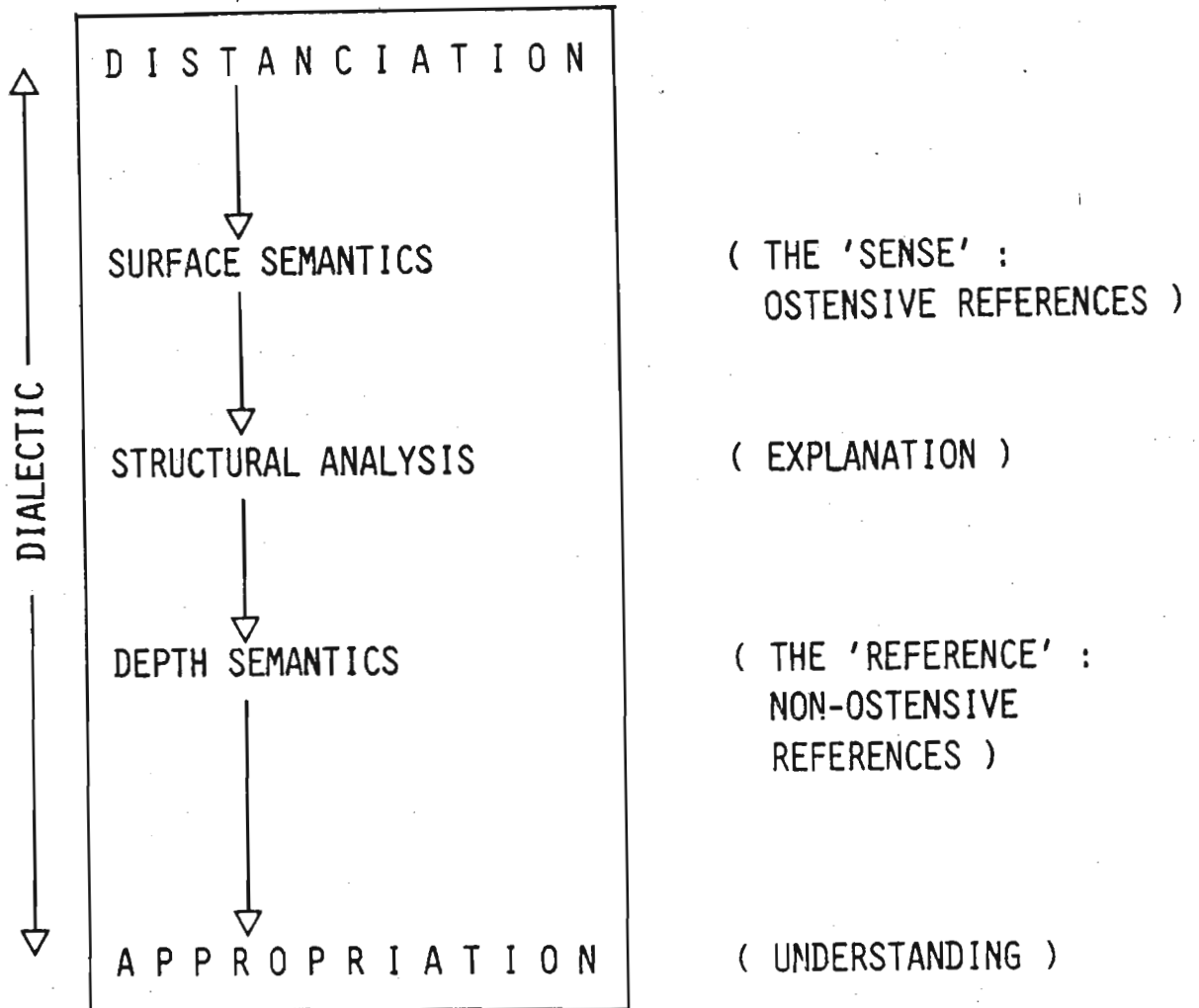


FIGURE 8 : A DIAGRAMMATIC REPRESENTATION OF RICOEUR'S MODEL OF THE INTERPRETATIVE PROCEDURE

Appropriation and its relation to distanciation

Contrary to many philosophical conceptions, Ricoeur rejects the concepts of distanciation and appropriation as polar opposites which negate one another. He thus rejects the alternative which Gadamer presents, in evaluatory terms, between "alienating distanciation" and "participatory belonging" (Ricoeur, 1981, p.131). Instead, Ricoeur claims that "the text ... reintroduces a positive and ... productive notion of distanciation" (Ibid., p.131) and he constructs a dialectic between distanciation and appropriation in which distanciation and appropriation are regarded as reciprocal and complementary moments.

The dialectic between distanciation and appropriation "has an existential overtone" (1976, p.89), Ricoeur claims, the former term referring traditionally to estrangement and the latter to "the 'remedy' which could 'rescue' cultural heritage of the past from the alienation of distance" (Ibid., p.89). Rather than regarding distanciation as playing a negative role in the process of interpretation, Ricoeur pleads

... for a concept of productive distanciation, according to which the predicament of cultural distance would be transformed into an epistemological instrument (1976, p.89).

Ricoeur proposes that distanciation is a defining characteristic of a written text which he regards as "the paradigm of distanciation in communication" (1981, p.131). In an essay, Ricoeur claims that

... distanciation is not the product of methodology and hence something superfluous and parasitical; rather it is constitutive of the text as writing (1981, p.139).

Ricoeur, however, also regards distanciation as a methodological strategy and writes elsewhere that "productive distance means methodological distanciation" and moreover, "active methodological distanciation" (1976, p.89, emphasis added). Here Ricoeur is referring to the anti-historicist stance with which he is in agreement. While advocates of the historicist stance, in Marxist fashion, explain a text primarily "as the expression of certain socio-cultural needs and as a response to certain perplexities, well localised in space and time" (1976, p.90), Ricoeur, in the anti-historicist tradition, considers a text as "a kind of atemporal object, which has, so to speak, cut its ties from all historical development" (1976, p.91).⁸ Consequently, Ricoeur claims, the meaning of the text is 'in suspense' (1981, p.208). The text, Ricoeur argues, "objectified and dehistoricised ... becomes the necessary mediation between writer and reader"

(1976, p.91). Ricoeur asserts that the reader provides a temporality in that readings at different times and by different individuals, will produce different interpretations.

As discussed above, the distanciation which gives rise to the semantic autonomy of the text, is displayed in the following forms:

- 1) The surpassing of the event of saying by the meaning of what is said;
- 2) The disjunction of textual meaning and authorial/psychological meaning;
- 3) The emancipation from situational/dialogical/ostensive references.
- 4) The explosion of the dialogical relation.

Ricoeur also refers to a kind of distanciation which he calls "a distanciation of the real from itself" (1981, p.142) or " a moment of distanciation in the relation of self to itself" (Ibid., p. 144). This kind of distanciation is said to occur in the final stages of the process of interpretation during which the reader's 'self' is enlarged by exposure to "the type of being-in-the-world unfolded in front of the text" (Ibid., p.141). Ricoeur claims that distanciation operates at yet another stage of the process of interpretation, namely the process of arguing:

... in arguing about the meaning of an action I put my wants and beliefs at a distance and submit them to a concrete dialectic of confrontation with opposite points of view (1981, p.214).

Ricoeur regards the semantic autonomy of a de-contextualised, a-temporalised text as the most primary kind of distanciation. Appropriation provides the means of overcoming this a-temporality of the text which is an essential condition of distanciation:

Appropriation is ... the counterpart of the timeless distanciation implied by any literary or textual criticism of an anti-historicist character (1981, p.185).

Appropriation is the translation of the term "aneignen" which means, "to make one's own what was previously 'foreign'" (1976, p.91). Ricoeur proposes that

... the aim of all hermeneutics is to struggle against cultural distance and historical alienation. Interpretation brings together, equalises, renders contemporary and similar (1981, p.185).

Thus in "its last stage", interpretation "wants to equalise, to render contemporaneous, to assimilate in the sense of making similar" (1976, pp.91-92).

This goal is achieved insofar as "interpretation

actualises the meaning of the text for the present reader" (Ibid., p.92) Ricoeur has defined appropriation as "apprehension applied to the world conveyed by the work" (1981, p.182).

Appropriation is, in effect, "the actualisation of the meaning as addressed to somebody"; it is like the answer in a dialogue (1976, p.92). Reading, Ricoeur asserts, should yield "something like an event, an event of discourse, which is an event in the present moment. As appropriation, interpretation becomes an event" (Ibid., p.92). Ricoeur summarises his theory of interpretation in his answer to a question he poses, namely, "what is to be understood - and consequently appropriated - in a text?" (Ibid., p.92). Ricoeur's answer to this question is given below:

Not the intention of the author, which is supposed to be hidden behind the text; not the historical situation common to the author and his original readers; not the expectations or feelings of these original readers; not even their understanding of themselves as historical and cultural phenomena. What has to be appropriated is the meaning of the text itself, conceived in a dynamic way as the direction of thought opened up by the text. In other words, what has to be appropriated is nothing other than the power of disclosing a world that constitutes the reference of the text (1976, p.92).

Thus there is an important link between disclosure and appropriation (Ibid., pp.92-93). The "genuine referential

power of the text", Ricoeur claims, is its "disclosure of a possible way of looking at things" (Ibid., p.92).

Ricoeur proposes that distanciation, the process of atemporalisation, "is the fundamental presupposition for this enlarging of the horizon of the text" (Ibid., p.93).

The meaning of the text is omni-temporal (Ibid., p.93) and so is open to anyone who can read. Reading, by contrast, has a historicity which "is the counterpart of this specific omni-temporality" (Ibid., p.93).

Interpretation "is the process by which disclosure of new modes of being - or ... of new forms of life - gives to the subject a new capacity for knowing himself ... The reader is enlarged in his capacity of self-projection by receiving a new mode of being from the text itself" (1976, p.94). Thus appropriation, rather than being "a kind of possession, ... a way of taking hold of things; instead ... implies a moment of dispossession of the egoistic and narcissistic ego" (Ibid., p.94). Thus appropriation involves the relinquishment of the self (1981, p.183). Consequently, in reading, one can 'try on' the sense of self offered by the text : "The reader ... is invited to undergo an imaginative variation of his ego" (Ibid., p.189). As readers, a new self-understanding will be achieved where "the interpretation ... complies with the injunction of the text⁹ and follows the 'arrow' of the sense and ... tries to think accordingly" (1976, p.94). "It is the

text", claims Ricoeur, "with its universal power of world disclosure, which gives a self to the ego" (Ibid., p.94). In essence, Ricoeur argues that interpretation must have a 'future orientation'. The text, Ricoeur elaborates,

speaks of a possible world and of a possible way of orienting oneself within it. The dimensions of this world are properly opened up by and disclosed by the text (1976, p.88).

Ricoeur insists on going beyond the reality presented by the phenomenon to be interpreted, to possibilities it suggests.

Ricoeur argues that

... everything gained from the critique of the illusions of the subject must be intergrated into hermeneutics (1981, p.191).

The critique of the illusions of the subject, "conducted in either a Freudian or Marxist tradition", Ricoeur claims, is "the modern form of the critique of 'prejudice'" (Thompson, 1981, p.19). In terms of the Freudian tradition, Ricoeur considers psychoanalysis "as the self-criticism of the reader, as the purification of the act of appropriation" (1981, p.191). Similarly, a critique of the illusions of the object

of knowledge can be undertaken; an actor's behaviour and the reasons which she provides to explain her behaviour, can be examined in terms of a Freudian and/or Marxist critique (see pp.139-141; 143-144). Thus both what is done and said and what is not done and said, are data for interpretation. One should not, in the process of interpretation, be limited to what is manifest or overt.

An "effect of self-analysis", Ricoeur proposes, is the relinquishment of the subject which enables the reader to "let go" and thereby "be carried off towards the reference of the text" (Ibid., p.191).

Ultimately, hermeneutics entails self-understanding :

Understanding is self-understanding, although the return to the self is not the first but the final moment in the theory of interpretation (Thompson, 1981, p.23).¹⁰

This conception of understanding is similar to Toulmin's (1963) proposal that "in order to better understand ourselves we must look beyond ourselves" (cited in Miller, 1984, p.21). When interpreting the behaviour of others, we are, in a profound sense, interpreting ourselves. Miller expresses this idea as follows:

The issue is not how people in other cultures do our tricks ... or how they do their tricks It is to understand how we manage to do our tricks (Ibid., p.21).

From the foregoing review of Ricoeur's proposals, regarding the interpretation of texts the following important aspects of his theory emerge.

Ricoeur proposes that four forms of distancing are embodied in a text, namely:

- 1) The surpassing of the event of saying by the meaning of what is said;
- 2) The disjunction of textual meaning and authorial/psychological meaning;
- 3) The world of the text : Non-ostensive versus ostensive references.
- 4) The explosion of the dialogical situation.

Furthermore, Ricoeur presents and elaborates:

- 5) his concept of appropriation in terms of the dialectic between explanation and understanding.

2.2.2. The interpretation of 'action-events'

Ricoeur's claim that action may be regarded as a text, "insofar as it may be objectified in a way that embodies the

four forms of distanciation" (Thompson, 1981, p.15) characteristic of a text, represents "a provocative attempt to extend the theory of interpretation to the field of the social sciences" (Ibid, 1981, p.23). The far-reaching implication of this analogy is that interpreting action is a hermeneutical activity. Ricoeur hypothesises that

... if there are specific problems which are raised by the interpretation of texts because they are texts and not spoken language, and if these problems are the ones which constitute hermeneutics as such, then the human sciences must be said to be hermeneutical (1) inasmuch as their object displays some of the features constitutive of a text as text, and (2) inasmuch as their methodology develops the same kind of procedures as those of Auslegung or text-interpretation (1981, p.197).

Ricoeur firstly examines the viability of "the notion of text as a good paradigm for the so-called object of the social sciences" (1981, p.197) and then examines the extent to which the methodology of text-interpretation can be considered as a paradigm for interpretation in general in the field of the human sciences (Ibid., p.197).

The paradigm of text : Meaningful action considered as a text

Max Weber defined the object of the human sciences as "meaningfully oriented behaviour" (1981, p.203); Ricoeur

argues that the predicate "meaningfully oriented" can be replaced by what he calls "readability-characters derived from the ... theory of the text" (Ibid., p.203). Ricoeur then attempts to apply the four criteria of a text to the concept of meaningful action. Using 'action-event' terminology, Ricoeur provides equivalent labels for these criteria:

- 1) The first form of distanciation which refers to "the surpassing of the event of saying by the meaning of what is said", is termed here, "the fixation of action";
- 2) Ricoeur refers to "the disjunction of textual meaning and authorial meaning" using the label, "the autonomisation of action";
- 3) Ricoeur substitutes the label which refers to the feature of "social and historical de-contextualisation" and "non-ostensive references" with the label, "relevance and importance";
- 4) The fourth form of distanciation referred to as "the explosion of the dialogical situation", Ricoeur re-labels, "human action as an 'open work'".

Each of these forms of distanciation in the interpretation of 'action-events' is discussed separately below.

1. The fixation of action

Ricoeur's primary thesis in this regard is that meaningful action is an object for science only under the condition of "a kind of objectification similar to the fixation which occurs in writing" (1981, p.203). By treating action as a fixed text, Ricoeur proposes that "interaction is overcome" in the same way that in writing, interlocution is overcome (Ibid., p.203).¹¹

Ricoeur claims that the objectification of action is imperative if action is to be studied scientifically:

My claim is that action itself, action as meaningful, may become an object of science without losing its character of meaningfulness, through a kind of objectification similar to the fixation which occurs in writing. By this objectification, action is no longer a transaction to which the discourse of action would still belong. It constitutes a delineated pattern which has to be interpreted according to its inner connections (1981, pp. 203-204).

Ricoeur invokes the theory of speech-acts in order to explain how this objectification is achieved. He claims that 'doing', that is acting, can be seen as a kind of 'utterance' and he coins the term 'action-event' as an "analogical expression" (Ibid., p.205.). Ricoeur proposes that in the same way that fixation by writing is possible because of the

"intentional exteriorisation imminent to the speech-act itself",

the fixation of action is possible in that the meaning of the action can be detached from the event of the action and thereby becomes an object to interpret" (1981, p.204).

Ricoeur elaborates on how the fixation of action is possible, this fixation being based on speech-act theory.

Firstly, Ricoeur claims, "an action has the structure of a locutionary act. It has a propositional content which can be identified and reidentified as the same" (Ibid., p.204).

Ricoeur identifies the 'propositional' structure of action with the verbs of action which "constitute a specific class of predicates" and which "allow a plurality of 'arguments' capable of complementing the verb" (Ibid., p.204). This phenomenon is referred to as "the variable polydlicity of the predicative structure of ... action-sentences" (Ibid., p.204).

Ricoeur points to another trait of the verbs of action which "is important for the transposition of the concept of fixation from the sphere of discourse to the sphere of action", that concerning "the ontological status of the 'complements' of the verbs of action" (1981, p.204) :

Whereas relations hold between terms equally existing (or non-existing), certain verbs of action have a topical subject which is identified as existing and to which the sentence refers, and complements which do not exist. Such is the case with the 'mental acts' (to believe, to think, to will, to imagine, etc.) (Ibid., p.204).

Furthermore, there are other "traits of the propositional structure of actions derived from the description of the function of the verbs of action". For example, there is "the distinction between states, activities and performances" which "can be stated according to the behaviour of the tenses of the verbs of action which fix some specific temporal traits of the action itself" (Ibid., p. 204).

The propositional content of action, Ricoeur proposes, "gives a basis to a dialectic of event and meaning similar to that of the speech-act" (1981, p.205) : Ricoeur proposes that the noematic structure of action (its meaning) "may be fixed and detached from the process of interaction and become an object to interpret" (Ibid., p. 205).

This 'noema' (ideal meaning) has, in addition to a propositional content, illocutionary traits : The illocutionary act is the second analytic component of the speech-act and refers to what is done in saying. In writing, the illocutionary act can be exteriorised through grammatical paradigms which permit its identification and reidentification

(1981, p.199). Ricoeur proposes that "the different classes of performative acts of discourse described by Austin ... may be taken as paradigms ... for the actions which fulfil the corresponding speech-acts" (Ibid., p.205). Thus

A typology of action, following the model of illocutionary acts, is therefore possible. Not only a typology, but a criteriology, inasmuch each type implies rules, more precisely 'constitutive rules' which, according to Searle in Speech Acts, allow the construction of 'ideal models' similar to the 'ideal types' of Max Weber (1981, p.205).

Thus, as regards action, the illocutionary level is represented by any attempt to define the 'essential content' of a particular category of action, that is, what constitutes a particular action, what the "essential condition" of any action is (Ibid., p.205).

The third level of the speech-act/action-event is the perlocutionary level which refers to "that which we do by saying" (1981, p.199). Ricoeur states that "the perlocutionary act is the least inscribable aspect of discourse", least amenable to "the intentional exteriorisation which makes inscription in writing possible" (Ibid., p.200). Ricoeur claims that "the perlocutionary action is precisely what is the least discourse in discourse"; It is "the discourse as stimulus" and "it acts, not by my interlocutor's recognition

of my intention but sort of energetically, by direct influence upon the emotions and the affective dispositions" (1981, p.200). Henceforth, Ricoeur abandons the concept of the perlocutionary action in his analysis of action-events.

Both the propositional content and the illocutionary force of an action constitute its 'sense-content' and "makes possible the 'inscription' of the action-event" (Ibid., p.205). Like discourse, the action-event, Ricoeur asserts, has a temporal status, is "an appearing and disappearing event", and has a "logical status as having such-and-such identifiable meaning or 'sense-content'" (Ibid., p.205).

In writing, "the noema of the speaking, the saying as said" is inscribed; Ricoeur asks to what extent we may say that "what is done is inscribed" (1981, p.205). Ricoeur proposes a correlate of writing in the field of action: He suggests the metaphor of "marks on time" to capture this notion:

We say that such-and-such event left its mark on its time. We speak of marking events. Are not there marks on time, the kind of thing which calls for a reading, rather than for a hearing? (1981, pp.205-206).

In his discussion of the remaining three criteria of a text, as applied to action, Ricoeur elaborates on the nature of this fixation.

2. The autonomisation of action

Ricoeur claims that "in the same way that a text is detached from its author, an action is detached from its agent and develops consequences of its own" (1981, p.206). This feature constitutes the social dimension of action, not only because any action is performed similarly by agents occupying different roles, but mainly because "our deeds escape us and have effects which we did not intend" (Ibid., p.206). These unintended effects, the present author would like to propose, which correspond to the perlocutionary level of analysis, constitute an important domain of study for psychologists.¹²

As with a text, Ricoeur asserts that there is a severance between the intentions of an agent and the meaning of an action she produces (Ibid., p.206). This distance between the intentions of an agent and her action, is analogous, Ricoeur claims, to the consequence of inscription by writing. Ricoeur suggests that the correlate of writing, in terms of action, is something like 'the course of events' (Ibid., p.206):

Could we not say that what we call the course of events plays the role of the material thing which 'rescues' the vanishing discourse when it is written? (1981, p. 206).

Ricoeur writes of actions as "events which imprint their mark on their time" (Ibid., p.206) and suggests that the

medium on which they imprint their mark is "something spatial", "something temporal" for

Social time ... is not only something which flees; it is also the place of durable effects, of persisting patterns. An action leaves a 'trace', it makes its 'mark' when it contributes to the emergence of such patterns which become the documents of human action (1981, p.206).

Ricoeur also provides the metaphors of the 'record' or 'registration' (Ibid., p.206) and 'reputation' (Ibid., p.207) to support his contention that action, like a text, can be fixed. He proposes that "history is itself the record of human action", history being a "quasi-'thing' on which human action leaves a 'trace', puts its mark" (Ibid., p. 207.). Hence 'archives' become possible (Ibid., p.207). As an individual action escapes its agent and has unintended effects, the history of human action can be regarded as "the sum of 'marks', the fate of which escapes the control of individual actors" (Ibid., p.207). Ricoeur characterises history as "an autonomous entity, as a play with players who do not know the plot" (Ibid., p.207).

Only in retrospect Ricoeur claims, can a human action be seen in its perspective in a particular pattern. Ricoeur proposes that "human action becomes social action when written

down in the archives of history" and thanks to "this sedimentation in social time, human deeds become 'institutions', in the sense that their meaning no longer coincides with the logical intentions of the actors" (1981, p.207). In human action, Ricoeur proposes, the rule-governed nature of behaviour is not a feature which is "superimposed; it is the meaning as articulated from within these sedimented or instituted works" (Ibid., p.207). The 'social fixation' of meaningful behaviour, Ricoeur argues, constitutes its objectivity (Ibid., p.207).

In fact, Ricoeur proposes, "the meaning may be 'depsychologised' to the point where the meaning resides in the work itself" (Ibid., p.207). One might add that actors, as intentional organisms, are moved by the force of their social being, their history.

3. Relevance and importance

In his theory of the text, Ricoeur refers to this feature as the display of non-ostensive references. In that a text, by its "emancipation from the situational context", by its breaking of ties "to all the ostensive references" is de-contextualised, so

... a meaningful action is an action the importance of which goes 'beyond' its relevance to its initial situation (1981, p. 207).

Ricoeur attempts to answer the all-important question regarding the correlate of the non-ostensive references of a text, in the field of action (Ibid., p.208). In that "a work does not only mirror its time, but it opens up a world which it bears within itself", an important action, Ricoeur argues,

... develops meanings which can be actualised or fulfilled in situations other than the one in which this action occurred. ... the meaning of an important event exceeds, overcomes, transcends, the social conditions of its production and may be re-enacted in new social contexts. Its importance is its durable relevance and, in some cases, its omni-temporal relevance (1981, p. 208).

These non-ostentensive references concern hitherto unrealised modes-of-being, or, as Ricoeur suggests elsewhere, the "aporias"⁷ of social existence (1981, p.220). In the same way that "a text develops new references and constitutes new 'worlds'", so "the great works of culture ... overcome the conditions of their social production" (Ibid., p.208). Thus important works and deeds are "capable of receiving relevance in new historical situations" (Ibid., p.208).

4. Human action as an 'open work'

In the same way that a text has a universal range of addressees, so, Ricoeur argues, "the meaning of human action is also something which is addressed to an indefinite range of possible 'readers'"; Human action "is opened to anybody who can read" (1981, p.208) Moreover, Ricoeur asserts, "the judges are not the contemporaries, but ... history itself" (Ibid., p.208). Ricoeur refers to human action as "an open work, the meaning of which is 'in suspense'" (Ibid., p.208). Through time, the same actions can be given new relevance :

It is because it 'opens up' new references and receives fresh relevance from them, that human deeds are also waiting for fresh interpretations which decide their meaning (1981, p.208).

In fact, Ricoeur argues, "the interpretation by the contemporaries has no particular privilege in this process", in that "the meaning of an event is the sense of its forthcoming interpretations" (Ibid., pp.208-209, emphasis added).

The "dialectic between the work and its interpretations" (Ibid., p.209) constitutes the topic of discussion in the following section on the methodology of interpretation.

The paradigm of text-interpretation : A solution for the methodological paradox of the human sciences

Ricoeur claims that the paradigm of text-interpretation "offers a fresh approach to the question of the relation between erklären (explanation) and verstehen (understanding/comprehension) in the human sciences" (1981, p.209). The paradigm of reading, Ricoeur asserts, "provides a solution for the methodological paradox of the human sciences" (Ibid., p.209).

The explanation-understanding dialectic

Ricoeur explores the dialectic between explanation and understanding from both directions.

From understanding to explanation

Ricoeur examines the process by which "the objective meaning" (1981, p.210) of a text is construed, which involves both guessing and validation, and he attempts to extend these concepts to "the whole field of the human sciences" (Ibid., p.213). Ricoeur argues that while "the meaning of human actions, of historical events and of social phenomena may be construed in several different ways", this "methodological perplexity ... (being) founded in the nature of the object

itself", "there is a specific plurivocity belonging to the meaning of human action. Human action, too, is a limited field of possible constructions" (Ibid., p.213). As in the case of a text, a onesidedness operates in the process of construing the meaning of an action. The "perspectivist" aspect of guessing (1981, p.213) which Ricoeur refers to, could be termed the Necker Cube effect in that one can never see all the 'dimensions' of an action simultaneously. At any one moment, one has a particular perspective which is different both to one's perspective at a different moment in time and to another interpreter's perspective.

Ricoeur briefly discusses another trait of human action, namely that trait concerning "the relation between the purposive and the motivational dimensions of action" (1981, p.213). He refers to Anscombe's concept of "the 'desirability-character' of wanting" (Ibid.,p.214) which gives rise to argumentation between interpreters about the meaning of an action "on the basis of these desirability-characters and the apparent good which corresponds to them" (Ibid.,p.214). Ricoeur proposes that

... what can be (and must be) construed in human action is the motivational basis of this action, i.e., the set of desirability-characters which may explain it (1981, p.214).

Thus "the process of arguing linked to the explanation of action by its motives unfolds a kind of plurivocity which makes action similar to a text" (Ibid., p.214).

In arguing both about the meaning of a text and the meaning of an action, there is a kind of distanciation which occurs in that "in arguing about the meaning ... (the interpreter) puts (her) wants and ... beliefs at a distance and submit(s) them to a concrete dialectic of confrontation with opposite points of view" (Ibid., p.214). This distanciation, Ricoeur asserts, which involves putting (one's) action at a distance in order to "make sense of (one's) own motives paves the way for the kind of distanciation which occurs with what we called the social inscription of human action and to which we applied the metaphor of the 'record'" (Ibid., p.214).

Having "extend(ed) to action the concept of 'guess' ... a synonym for verstehen", Ricoeur then examines the application of the concept of 'validation' (an equivalent of erklären), to the field of action. In this respect, Ricoeur suggests that the validation of a guess (about the meaning of an action) based on a logic of probabilities is analogous to "juridical reasoning" which "comes to grips with the different ways of 'defeating' a claim or an accusation"; This is because "human actions are fundamentally 'defeasible'" (1981, p.215). There will always be argumentation, a conflict of interpretations"

but no "last word" (Ibid., p.215). This implies that no one interpretation can be proclaimed as the correct interpretation.

From explanation to understanding

This direction of the dialectic concerns mainly "the referential function of the text (/action)" (1981, p.215). Ricoeur proposes that the non-ostensive references of the text may be suspended, as is the case in the structuralist approach, or they can be actualised in a new situation, that of the reader.

Ricoeur asserts that "this second figure or Gestalt of the dialectic between explanation and comprehension has a strong paradigmatic character which holds for the whole field of the human sciences" (Ibid., p.218). He proposes that "a structural model of explanation can be generalised as far as all social phenomena which may be said to have a semiological character" (1981, p.219).

In that "social reality is fundamentally symbolic" (Ibid., p.219), Ricoeur proposes that the structural model of explanation may be legitimately extended to the sphere of social action. This kind of explanation is very different to the classical causal model :

Structural systems imply relations of quite a different kind, correlative rather than sequential or consecutive (1981, p. 219).

If this proposal is true, Ricoeur claims, then "the classical debate about motives and causes which has plagued the theory of action these last decades loses its importance" (1981, p.219). Ricoeur elaborates on this point:

If the search for correlations within semiotic systems (social phenomena) is the main task of explanation, then we have to reformulate the problem of motivation in social groups in new terms (Ibid., p.219).

The appropriation of an action-event

Ricoeur proposes that in social science, as in literary criticism,

... we proceed from naive interpretations to critical interpretations, from surface interpretations to depth interpretations through structural analysis (1981, p.220).

He asserts that "it is depth interpretation which gives meaning to the whole process" (Ibid., p.220). Ricoeur proposes that

it is this depth semantics which constitutes the genuine object of understanding and which requires a specific affinity between the reader and the kind of things the text is about (Ibid., p.218).

Depth semantics serves a mediating function (proceeding as it does between structural analysis and appropriation) which, Ricoeur claims is important, "since the appropriation's losing its psychological and subjective character and receiving a genuine epistemological function, depends on it" (1981, p.219). Similarly, Ricoeur proposes that in the field of human action, "the search for correlations within and between social phenomena treated as semiotic entities", yields "something like a depth semantics" (Ibid., pp.219-220).

Social structures, Ricoeur proposes, "have a referential function" in that they "point toward the aporias of social existence" and in so doing "develop traits very similar to ... the ostensive reference of a text, i.e., the display of a Welt which is no longer an Umwelt" (Ibid., p.220). Ricoeur insists that to understand any action, one does not, in fact must not, understand the actor's intention "which is supposed to be hidden behind the text" (1976, p.92); nor is one to try to understand the action in terms of its historical and social context. Instead, the interpreter must understand what the action 'points towards', namely a possible way of being-in-the-world. Ricoeur characterises the process of interpretation as a decidedly existential activity. He proposes that "to understand is to understand oneself in front of the text" (1981, p.143).

We do not understand a text, or by extension, an action

by imposing upon it our finite capacity of understanding, but of exposing ourselves to the text (or action) and receiving from it an enlarged self which would be the proposed existence corresponding in the most suitable way to the world proposed (Ibid., p.143).

Ricoeur would certainly agree with Pascual-Leone's thesis that psychologists, in a profound sense, study themselves.

Ricoeur proposes that we should not exclude "the final act of personal commitment" from the process of interpretation (1981, p.221):

... we must say that the meaningful patterns which a depth interpretation wants to grasp cannot be understood without a kind of personal commitment similar to that of the reader who grasps the depth semantics of the text and makes it his 'own' (1981, p.220).

Ricoeur points out that in the social sciences, the concept of appropriation is sometimes regarded as violating the criteria of scientific inquiry. His solution, derived from the framework of text-interpretation, "is not to deny the role of personal commitment in understanding human phenomena, but to qualify it" (Ibid., p.220). Appropriation, Ricoeur argues, "is not something which can be felt"¹³: Instead, "it

is the dynamic meaning released by the explanation which we identified earlier with the reference of the text, i.e., its power of disclosing a world" (Ibid., p.220). This qualification Ricoeur asserts, prevents the 'hermeneutical circle', "when it is applied to human things ... from becoming a vicious circle" (Ibid., p.221).

From the foregoing review of Ricoeur's proposals regarding the interpretation of action-events, the following points were discussed in connection with Ricoeur's analogy between a text and action:

- 1) The fixation of action;
- 2) The autonomisation of action;
- 3) Relevance and importance - the non-ostensive references of action-events;
- 4) Human action as an 'open work'.

Furthermore, Ricoeur's proposed 'methodology' for action-interpretation, based on the paradigm of text-interpretation, was discussed in terms of:

- 5) the explanation-understanding dialectic.

The above formulation provides not only a "provocative attempt to extend the theory of interpretation to the field of

the social sciences", but also provides the social scientist with an interface between epistemology and method, which is open to critical application and evaluation. In this regard it is worth mentioning that one of the major problems facing the explication of the conditions of knowledge construction, concerns the translation of philosophical concepts into applicable methods or procedures of analysis (cf. Craig and Miller, in progress).

NOTES

1. As discussed previously (see p.2), all manner of phenomena can be considered as "the object domain of hermeneutics", the act of interpretation being a fundamental human activity.
2. To avoid repetition, the feminine pronoun will be used throughout this report.
3. One can argue that here Ricoeur imposes a kind of psychologism on interpretation: He appears to identify "mental entities" with individual idiosyncracies rather than with either individual forms, Piagetian-type schemes or intrinsic generative mechanisms. (See also note 13 below.)
4. The concept of appropriation is addressed fully, later in the discussion (see p.51 ff.).
5. As will be argued later, this is not necessarily the case as regards the interpretation of action. In the interpretation of action, it is often possible to enter into a "negotiation" of meaning with the actors (cf. Harré and Secord, 1972) and to thereby determine their

alleged reasons for their actions (cf. also Bhaskar, 1979). The fact that a writer is usually unavailable for negotiation with all potential audiences, while an actor is often available for negotiation, may be one important difference between a text and action as postulated in Ricoeur's analogy between them.

6. This is a very important point to bear in mind. The kind of explanatory model which Ricoeur provides is different, for example, to Bhaskar's (1979) model of explanation which invokes the generative mechanisms (see note 6, p.29) which underlie and produce manifest phenomena. However, Ricoeur's model comes close to a notion of generative mechanisms in that he emphasises the importance of finding meaning in the data at a level other than the surface meaning. He distinguishes "surface semantics" from "depth semantics" (1976, p.87). The notion of a 'deeper structures' is thereby implied.
7. Thompson (1981) defines an aporia as "an insoluble problem, a difficulty with no way out" (p.29).
8. As will be elaborated later, this thesis is in direct contrast to Vygotsky's thesis in which he emphasises that any entity can only be understood as the product of a

particular historical process. This principle underlies Vygotsky's developmental method in which the genesis and development of 'fossilised' behaviour is retracted (cf. Vygotsky, 1978, p.64).

9. This notion of an injunction is similar to the concept of the 'package of resistances' which define the essence of any phenomenon or object of knowledge (cf. Pascual-Leone, 1986).
10. Gadamer also argues that self-understanding results from the engagement in interpretation. However, "the return to the self" which Ricoeur proposes occurs "only in the final moment" of interpretation, is considered by Gadamer to be one of the first steps in the process of interpretation (cf. Linge, 1976, p. xiv-xix).
11. The effects of "overcoming interaction" in the process of interpretation, is problematic. Coulthard (1977) argues that

The work by philosophers on speech acts ... is based entirely on decontextualised data and data which in fact takes no account of any preceding or succeeding sentences - in other words there is no concern with interaction even on an idealised level (p.9, emphasis added).

12. Change/development, it should be noted, often results from the unintended effects of our own and others' behaviour (cf. Bhaskar, 1979).

13. In contrast to what Ricoeur implies, "felt" need not refer to an idiosyncratic, psychological experience; instead it could refer to the psychological structures or functions (cf. Piaget) by which the possibilities of meaning of the 'text' are determined, given that the resistances of the interpreter's mind will at least partially determine how 'reality' is constructed from 'Reality' (or the 'transitive' from the 'intransitive', to use Bhaskar's distinction).

CHAPTER 3 : EXPLORING RICOEUR'S MODEL OF
ACTION-INTERPRETATION

3.1. INTRODUCTION

3.2. DISTANCIATION

3.2.1. The fixation of action

3.2.2. The autonomisation of action

3.2.3. Relevance and importance : The
non-ostensive references of
action-events

3.2.4. Human action as an 'open work'

3.3. APPROPRIATION

3.3.1. The explanation-understanding dialectic

3.1. INTRODUCTION

In this chapter of the manuscript, each aspect of Ricoeur's explication of the interpretative task is analysed in terms of a specific body of empirical data (see appendices 1 to 4). As has been stated above, this body of data may be characterised as socio-psychological data; data which specifically addresses what may be termed the interface between 'mind' and 'culture' (cf. Miller, 1984; and Craig, 1985).

Before exploring Ricoeur's model for the interpretation of action, it seems warranted to again emphasise the importance of the appendices in the present study: They represent the engagement(s) in, and the products of, the interpretative task.

By way of introduction, consider the following extracts from the data bases used in the present investigation:

Extract 1: From the transcript of video-taped interaction between a mother and child engaged in problem-solving.
(Appendix 1 : Data base 3).

Extract 2: From the transcript of a discussion between the author and a mother (Appendix 2 : Data base 4).

Extract 3: From the text of an exercise in interpretation (Appendix 3).

Extract 4: From the transcript of a group discussion during the interpretation of the original video-tapes. (For reasons of economy, neither the transcript of the original video-tapes (Data base 1) nor the transcript of the group discussions (Data base 2) are included in the appendices.)

These extracts from the different data bases used (see figure 1, p. 9) are included to illustrate:

- 1) the kind of data analysed and which is considered relevant to the domain of socio-psychology;
- 2) the way in which the subjectivity behind action may be explored; and
- 3) to point to the conditions for appropriation.

Extract 1: From the transcript of video-taped interaction between a mother-child dyad engaged in problem-solving (Appendix 1, pp.2-3).

This excerpt is taken from the very start of the focus video-tape.

MOTHER

CHILD

(Scratches head and looks at researcher).
Hello, B.

My child, we have got these games here.

(Points to intact puzzles which she has placed one behind the other)
Do you see these two games?
(Looks at child)

(Small nod)

Yes!
(Nods head)

(Looks at camera/researcher)

Listen, I want you to do this one.
(Turns one puzzle upside down to dislodge pieces and places empty template in front of child)

Do you see?

Yes. (Said very softly.
Small nod)

MOTHERCHILD

I want you to do this one
similar to this one.
(Places skeleton of car in
front of child)

Do you see?

Yes. (Said
very
softly.
Small nod)

To look like this one.
(Moves skeleton away to side
of template and moves the
model to a position directly
behind the template)

(Fits the
skeleton)

(Looks at what the child
has done)
Wait.
(Places the pieces to the
right of the child's
template)

(Removes
the
skeleton.
(Examines
it)

Do you see these colours?
(Continues placing the pieces
template)
beside the child)

(Places
skeleton in
template)

Do this thing quickly.

Do you understand?

(Reaches
for a piece
in front of
her mother
and places
it)

In the above illustration (Extract 1), the kind of data analysed in the research programme of which the present project is a part, highlights what may be an important qualification to Ricoeur's model of interpretation as it is applied to the domain of socio-psychology. Freeman (1985) interprets Ricoeur's scholarly development as possibly providing the basis to "vastly expand(ing) the domain of hermeneutics", in that Ricoeur extended his enquiry also to areas

the main focus of which was fundamentally linguistic, or at least capable of being conceptualised in linguistic terms, from structural anthropology to the philosophy of action (p.300).

Similarly, Thompson (1981) comments that the analogy which Ricoeur draws between a text and meaningful action, represents "a provocative attempt to extend the theory of interpretation to the field of the social sciences" (p.23).

The present empirical focus and also the kind of data customarily of interest to psychologists clearly falls within Ricoeur's "more general (than symbolic language per se, i.e., the phenomenology of religion and psychoanalysis) concern with the symbolic function of all language" (Freeman, Ibid., p.300). However, while a human scientist such as an historian would probably find the data in the above extract

uninteresting, the extract provides a potentially rich data source for a psychologist. This fact points to a vital difference between the data of the present project (and by extension, much of psychology¹ and socio-psychology) and that which Ricoeur seems to use for the explication of his model, namely that psychologists conventionally investigate what might be termed 'small-scale' actions as opposed to the 'large-scale' actions which historians, for example, study. Moreover, while the data contained in the extract above is considered to be important (as the author will attempt to demonstrate shortly), Ricoeur would certainly judge this data as being unimportant if one recalls his criteria for importance:

An important action, we could say, develops meanings which can be actualised or fulfilled in situations other than the one in which this action occurred ... Its importance is its durable relevance and, in some cases, its omni-temporal relevance (Ricoeur, 1981, p.208).

However, this qualification does not warrant rejecting Ricoeur's hermeneutical proposals per se. Freeman notes that Ricoeur's "new vision", that is, his desire to apply his hermeneutical proposals more broadly,

could not be embraced all at once; it could only emerge out of his continuing confrontation with tradition, the

'integration' of the concrete bodies of thought that could serve to catalyse his own incipient project (Ibid., p.301).

Indeed, could Ricoeur's hermeneutics be expanded, 'qualitative' analysis in the social sciences would be given the rigorous grounding which Ricoeur especially seeks.

The reader notices, upon examining Extract 1, that the child asks very few questions of her mother. A. does almost all the talking and B. merely nods her head or faintly answers (some of) her mother's questions in the affirmative. The analyst can construe that B's duty in the instructional setting is to obey her mother's instructions and to perform, that is, to execute the task at hand (cf. Kok, 1986). In this sense, one can speculate further, as Kok does, that A. and B. should perform as an efficient team in that each partner appears to have a separate function in the context of problem-solving activities. That is, 'mutually exclusive role division/exercise' is maintained: It is the mother's task to select the piece to be placed and the child's function to physically place the piece². The criteria for determining the efficiency of this strategy are, however, debatable: While the author's criteria may be based on speed and accuracy, the actors' criteria could be based on the enhancement of the mother-child bond or on the child's obedience to her mother, and hence on harmonious interaction (cf. Kok, 1986). A

further example of the utilisation of the data above, by a psychologist, could focus on the mother's introduction of the task to her child. A's use of the word "game", in reference to the puzzle, provided the author with an 'occasion for surprise' which was investigated by the author by means of asking A. her reason for using this particular word (cf. appendix 2, p.29). Hence the author moves 'behind the text', a strategy which Ricoeur rejects, and which is analysed further, below (see pp. 129-145). The above aspect of A's performance was investigated by the present author for two reasons: Firstly, it presented an 'occasion for surprise' for the author in that she construes the problem-solving apparatus utilised in the previous and present projects as work-like-tasks rather than as play-objects. Secondly it is a basic fact of interpretation that subjective meaning is not always equivalent to the 'dictionary meaning' of a term; that is, a person's subjective meaning and use of particular words is determined by their specific socio-psychological histories. From her discussion, with A., the author ascertained that A. used the word "game" because she expects B. to construe the execution of the tasks as "play" (as opposed to "work") and moreover, as an enjoyable activity. The psychologist can then begin to speculate on the function that introducing the task as an enjoyable activity, rather than as a task (in the sense of work), might serve.

The foregoing interpretation contains only a few examples of possible analyses of the data which could be undertaken by a researcher. Further examples are provided below (see also appendices 1 - 4).

Extract 2: From the transcript of a discussion between the author and a mother (Appendix 2, pp. 37-38).

In the discussion which precedes this excerpt, the researcher and A. have been discussing the factors to which a child's enthusiasm during task performance can be attributed. The conversation continues as follows:

- R : Do you think it's an important part, how the mother or teacher presents the task? How you start it?
- A : Very important.
- R : Do you think if you just did it for her (B.) or if you sat back, she wouldn't be as interested in it?
- A : She wouldn't be so interested because she doesn't know, she doesn't know what it is about. You must introduce the what-do-you-call-it, the task, or the game or what ever it is you are going to introduce to the children, in the way that they will see it. And you must, and you can see, you can look at, you can see their faces if you have introduced it in the right way or it may not be the right way.

What will tell you, what will tell you that you have introduced it in the right way, it's the way they will catch it.

R : Right, so you would say that because she's getting excited and doing it quickly and everything, she has "caught it", as you say?

A : She has caught it somehow.

In the above extract, the issue concerning the mediator's manner of introducing a task to a child, is pursued further. A's opinion in this regard is that the way in which a mother presents a task to her child, will determine the child's performance thereafter. The mother will be able to ascertain how successful she has been in this regard, A. maintains, both from the child's demeanour ("their faces") and from the child's performance ("the way they ... catch it"). A. places great importance on a mother's presentation of a task to her child, and this theme was encountered numerous times during the group discussion and during A's discussion with the author (cf. appendix 2, pp.40; 57-58; 78).

The above extract (Extract 2) and analysis is presented to provide an example, from a further data base, of the kind of data which psychologists may examine and to suggest the manner in which this examination or interpretation might proceed.

In the following excerpt (Extract 3) taken from an 'exercise in interpretation', the analysis provides an example of the kind of explanation-understanding attempted in the present project.

Extract 3: From the text of an exercise in interpretation (Appendix 3, pp. 117-118).

The following extract begins with an excerpt from the transcript of the focus video-tape. A. has just removed a block from B's hand and the excerpt starts with A's instruction to B. to choose another block.

TABLE 23 : REFUSING TO 'GATHER
INFORMATION'

(The following interaction occurs during
the execution of task 2)

Mother

Child

Put.
(Shuffles remaining
'unused' blocks)

Which one are you going
to put now?

(Touches a
block and
looks at
mother)

No, I don't know. I
just don't know.

As illustrated in the above extract (Table 23), at an occasion for instruction, A. deliberately refuses to provide the information which her child asks for. On three other occasions, A's reply to her daughter's queries was, "Angazi", "I don't know" or "Don't ask me" (cf. appendix 1, pp.25;27). In other instances, A., as it were, creates the possibility for a state of disequilibrium for the child by pointing out when the child is about to make / has made an error: She says, "I disagree!" or "No", but refuses to explain exactly what B. has done wrong (cf. appendix 1, pp. 3; 10; 11; 12; 18; 20; 23; 25; 27). Thus, while A. creates the possibility for a state of disequilibrium (in the Piagetian sense), it is clear that she does not truly lead the child to appreciate why she is making / has made an error and so does not provide ways of surmounting the disequilibrium. The incident presented in Table 23 above, for example, ends with A. giving B. the correct block to place and helping B. to align it on the stick (cf. appendix 1, p. 24).

In the above interpretation the author moves 'in front of the text' as opposed to moving 'behind' it. That is, the author imposes meaning on the action-events observed, by speculating about the possible effects or outcome of the aspect of A's mediational style under examination, her refusal to provide B. with information-rich clues. Extract 3 continues however, with a discussion of A's reasons for this mediational strategy and hence the analysis moves 'behind the text' (cf. appendix 3, pp. 118-121). So here the analysis shifts from a focus on "the epistemic subject, the cognitive

nucleus which is common to all subjects at the same level", to "the individual subject", A. (Piaget, 1970, p.139).

In the example from the data used in this project, presented below (Extract 4), an illustration is provided of analysis-in-action, as it were. In this analysis the mother A. participates as a contemporary of the actors being discussed.

Extract 4: From the transcript of a group discussion during the interpretation fo the original video-tapes (data base 2).

The following discussion is based on a mother who is viewed on a video-tape. This particular mother provides explicit or information-rich clues to her child such as, "Take a round red piece with a red hole". A. claims that this mother, whom the other group members (cf. p.13 above) regard as the best mediator of all the mothers viewed on the original video-tape, confuses her child. The conversation continues as follows:

(In the following extract, R_1 refers to the author and R_2 to the author's supervisor.)

- R₁ : Don't you think she is making it clearer for the child?
- A : No. No, she doesn't make it clear for her.
- R₁ : She's pointing at what is important.
- A : I think they think they make things easier for the children, whereas, in my opinion, they are making things hard for the children. If they just leave them to do them and they make mistakes, it would be better.
- R₂ : You put lots of importance on allowing the child freedom, the child must be free to choose?

The discussion continues a little later as follows:

- R₂ : If you put the piece there, the child won't learn?
- A : If you take the piece and put it there, it's just the same as telling the child, "And fit it", the same as telling the child, "You take the piece, you take the red piece and put it there". That's why I say, it differs slightly that the child puts the piece herself, but you told her where to put it, isn't it?
- R₁ : Don't you think the difference might be that if you say, "It's red and it must have a square hole and it's a square shape or circle", that you are helping the child because you are telling her what is important is the task? You are helping her to see what's important - even though she is not making a decision herself - you are still drawing her

attention to the fact that holes are important, colours are important, shape is important. So even if it is helping, the child is still choosing the piece. You don't think that?

...

A : The fact is that the teachers and the parents are just doing the what-you-call, the task for them. The only difference is that you have got your own way to do it, I've got my own way to do it.

The discussion which occurs in this extract affirms Ricoeur's conception of an action as an 'open work' and the prejudices which operate in the act of interpretation. A. concludes the discussion given in the extract, "... you have got your own way to do it, I've got my own way to do it" which is tantamount to saying that my prejudices are different to yours. In terms of A's 'theory' of teaching-learning, a 'good' mother should not provide explicit clues to her child, nor should she do the puzzle for the child. A., in fact, equates these two styles of mediation; that is, physically placing the pieces is the same, in A's opinion, as verbally providing information-rich clues to the child. Hence the latter style of mediation, which corresponds to the other group members' conception of good mediation, is regarded by A. as poor mediation.

The above extracts and the analyses which follow them were presented to illustrate both the kind of data which psychologists ordinarily utilise and the type of interpretations which they might construct.³ With regard to the data, it was pointed out that the type of action which psychologists conventionally interpret, is 'small-scale' in the sense that it consists of what might be termed 'micro-actions' as opposed to 'macro-actions' such as wars or uprisings. Furthermore, the typical action-events studied by psychologists have an immediacy or a "here-and-now" quality in that ongoing or recently performed action is conventionally investigated. This 'immediacy' seems to 'force' the world behind an action more directly on the observer than may be the case with 'macro-actions'. Furthermore, as psychologists engaged in interpretation, we may use the insights of both those scholars who created the epistemological boundaries to our discipline (eg. Piaget as noted above) and also those lesser known interpreters who make public their interpretations (eg. Kok, as noted above, see p.110) to ground and validate our guesses.⁴

In the remainder of this chapter Ricoeur's proposals for the interpretation of action are discussed in terms of their application to the empirical data (see appendices 1-4). The reader is referred to specified pages in the appendices which are relevant to the discussion.

APPLYING RICOEUR'S MODEL OF ACTION-INTERPRETATION

The primary dialectic which Ricoeur presents between distanciation and appropriation is focussed on four modes of distanciation and two 'attitudes' comprising appropriation. Each of these six components of Ricoeur's theory are interpreted (where Ricoeur's theory becomes the object of knowledge) while using them to interpret a body of empirical data. This methodological strategy is central to the present project and has to be clearly understood. When a subject is presented with an object to interpret, that is, an object about which to construct knowledge, a pair of scissors for example, an important part of the process of interpretation involves the deliberate application of the object to a variety of tasks. To use the analogy of a pair of scissors, the subject would have to experiment with the object by attempting to cut various media, for example, paper, glass, stone and vegetation, in order that the potentiality of the instrument be determined. In Piagetian terminology, this activity can be termed goal-directed praxis, that is, praxis which is directed specifically at an object of knowledge in order to determine the peculiarities (or specific package of resistances) of the object; Piaget (1977) terms the outcome of this process 'accommodation'. Continuing with the scissors analogy, it can

be said that one cannot 'cut in the air': While it is possible to literally perform this operation (cutting in the air) one does so at the risk of not determining the specific resistances of the object of knowledge, that is, what the object is capable of doing.

Similarly, in order to 'test the limits' of Ricoeur's hermeneutical proposals for socio-psychology, these proposals are juxtaposed to "concrete bodies of thought"⁵ (cf. Freeman, 1985, p.301).

3.2. DISTANCIATION

The decision as to where to 'point the camera', that is, the selection of a particular problematic for investigation, (already) involves a kind of distanciation. The selection of one and not another aspect of meaningful action as the object of knowledge requires that the researcher first 'stands back', as it were, from being one human among others and from all interpretable kinds of action, to investigate the chosen interpretandum.

In the present study, the main object of knowledge is the act of interpretation; more specifically, the author attempts to determine the limits of Ricoeur's proposals as regards the conditions which make possible the interpretation of meaningful human action within a specific domain of study - socio-psychology. In reviewing the past projects (which are discussed briefly in appendix 4), the following needs became manifest to the present author:

- 1) To attempt to validate the appropriations achieved in these projects;
- 2) To attempt to transcend the 'qualitative' - 'quantitative' dichotomy in the social-sciences and socio-psychology; and
- 3) To formulate a methodology for the study of change as a central aspect of socio-psychology.

These needs 'forced' the present author to 'point the camera' at a meta-analysis of the process of interpretation.

3.2.1. The fixation of action

For Ricoeur, distanciation proper begins with the fixing of action-events. Ricoeur proposes that "meaningful action is an object for science only under the condition of a kind of objectification which is equivalent to the fixation of a discourse by writing" (1981, p.203). The action-events analysed in the present study were literally fixed in two ways, both of which are analogous to writing. Firstly, the action-events were recorded on video-tape and secondly, both the original video-tapes and the focus video-tape were transcribed and thereby literally became texts. Appendix 1 then stands as the literal inscription of the action-events which became (in this form) open to interpretation.

Ricoeur proposes that action-events become objectified when they are inscribed, that is, when "action is no longer a transaction to which the discourse of action would still belong" (Ibid., pp. 203-204). Ricoeur asserts that action "constitutes a delineated pattern which has to be interpreted according to its inner connections" (Ibid., p.204); this delineation of action into its inner connections involves the application of speech-act theory to action-events. Ricoeur proposes that an action-event is fixed for interpretation when the meaning of the action-event is preserved through the

formulation of a criteriology of the noematic structure (the meaning-content) of the action in terms of its locutionary, illocutionary and perlocutionary content.

In order to fix the action so that "the meaning be detached from the event of the action", this being Ricoeur's main sense of the term 'fixation', the present author and her supervisor determined the "inner connections" or "inner traits" of the action recorded on video-tape. That is, it was attempted to analytically decompose the action observed on video-tape into its locutionary, illocutionary and perlocutionary components. The 27 hours of original video-tape served as a data base for this decomposition task (see 1.2.1.2, pp.12-13). The video-tape was stopped at the end of every short action episode, for example, where a mother placed a piece of the puzzle for the child, removed this piece and then 'sat back'. Using speech-act terminology, this action-event can be described as follows:

Locutionary act

The mother picked up a green triangular-shaped piece which she placed in the top right corner of the template. She then removed the piece and returned it to the pile of 'unused' pieces.

Illocutionary act

The mother placed the green triangular-shaped piece correctly and then removed it and allowed the child to continue with the execution of the task.

The example above represents a strict Ricoeurian analysis in that the emphasis is placed on the criteria which define any particular action rather than on the actor's intentions in performing a particular action. The latter emphasis is more in line with the traditional sense of an illocutionary act (cf. Coulthard, 1977, p.20). Coulthard would probably provide the following illocutionary description of the action: The mother indicated, by means of demonstration, where the green triangular-shaped piece should be positioned. She intended that the child observe her action and thereby learn the correct position of the piece. The mother then sat back so as to allow the child to continue with the execution of the puzzle and more specifically, with the placement of the green triangular-shaped piece.

Perlocutionary act

A result of the described action-event, which is only one of many possible results/effects, can be hypothesised: Where a mediator prevents a child from discovering information for herself through experimentation during the process of problem-solving, but instead indicates to the child, either

verbally or non-verbally, exactly where to place any particular piece, the child is unlikely to learn to "visually transport"; that is, the child does not acquire the technique of forming a cognitive representation of how a particular piece should be placed, prior to motorically or operatively placing the piece.⁶

As can be seen from the above example, Ricoeur's suggested approach to action-interpretation by means of the application of speech-act theory to action-events, produces, with the exception of the analysis of the perlocutionary act, little more than a static documentation of the contents of the video-tape.

Ricoeur only mentions the perlocutionary act (which refers to the effect of an action) in the context of action-events; one can safely conclude that the reason for Ricoeur's underemphasis of the perlocutionary act in the domain of action-interpretation, as in the domain of text-interpretation, is because the perlocutionary act, is "the least inscribable element" (Ricoeur, 1981, p.135). This under-emphasis of the perlocutionary act has severe consequences for a socio-psychology which is dedicated to determining the effects of any action/event on an actor and/or co-actor(s). Ricoeur states explicitly that in fixing an action, "interaction is overcome" (1981, p.203). The implication of Ricoeur's thesis is that the effects (both

intended and unintended) of any action on a co-actor, are not amenable for scientific investigation. Craig (1985) however shows that perlocutionary effects are in fact inscribable; meaning can be imposed on these effects. She explicates various "mediational operators" (Ibid., p.207) and in so doing enables the reader to "see" these perlocutionary effects. That is, by inventing a possible perlocutionary meaning to be imposed, the action is fixed in a perlocutionary form.

What is important in the foregoing application of Ricoeur's proposals regarding the fixation of meaning is not his choice of the speech-act theory as the means of the fixation of action, but his insistence on detaching the meaning of any action-event from the event itself so that it (the event) can "become an object to interpret". Ricoeur, in suggesting the use of speech-act theory for this purpose, provides a possible model of fixation similarly to Harré and Secord's use of Chomsky's 'tree diagrams' and their notion of 'deep structure', for the analysis of action. That both attempts to 'concretise' their methodologies may prove inadequate, should not detract from the principle embodied in the attempts. This principle states that any manifest pattern of events/actions can be understood in terms of its underlying structure. Ricoeur presents a fascinating illustration of the application of structural analysis (to myths, cf. 1981,

p.154-156; 160-61; 216-217) which he regards as the vital mediating link between explanation and understanding.

In the case of using speech-act theory as a possible mode of fixation, what seems important is that different levels of analysis are possible when meaning is thus fixed.

1. The locutionary level will refer to a description of what is actually, physically done e.g. placing a particular piece of a puzzle; scolding a child. Ricoeur refers specifically to the verbs of action, for this purpose.

Refer to the behavioural categories of Kok and Beinart (1983) as an example of an analysis on the locutionary level (appendix 4, pp.142-143).

2. The illocutionary level will be concerned primarily with what is done in doing x; it will concern the intentions of the actor e.g. a mother criticising her child (1) In order to get him/her to respond to her (the mother's) command or in order to focus the child's attention on the task at hand. Under this section would also come a criteriology of actions, that is, the "constitutive rules" of any action (Ricoeur's definition of the illocutionary act).

Refer to Kok (1986) as an example of an analysis on the illocutionary level (appendix 4, p.146).

3. The perlocutionary act will refer to the unintended (Ricoeur's emphasis) and intended effects of the actor's actions (on the co-actor), for example, where the child focusses her attention back on the task (an intentional effect); activating a scheme in the child's mind (an unintentional effect).

Refer to Mindry (1984) and Craig (1985) as examples of analyses on the perlocutionary level (appendix 4, pp.143-145).

3.2.2. The autonomisation of action

While Ricoeur proposes that the central characteristic of a text is its semantic autonomy (which refers to the disconnection between the author's mental intention and the meaning of the text), he does not commit what he calls "the fallacy of the absolute text : the fallacy of hypostasising the text as an authorless entity" (1976, p.30). He claims that "this main characteristic of discourse", that is, that discourse is told by somebody "to someone else about something (is) impossible to cancel out" (Ibid., p.30). Ricoeur proposes that there is a dialectic between authorial meaning and verbal meaning, both of which must be construed in terms of

each other and he concedes that "the concepts of author and authorial meaning raise a hermeneutical problem contemporaneous with that of semantic autonomy" (Ibid., p.30). Ricoeur acknowledges that these concepts are problematic - that they "raise a hermeneutical problem" - but he does not explore their implications for his theory of interpretation. Thus because Ricoeur's model for action-interpretation seems to be potentially useful, the present project specifically addresses the problem of "(actor) and (actor's) meaning". While it might be acceptable to temporarily lay aside these concepts when dealing with the interpretation of texts and large-scale, de-individualised action, the author would like to propose that in the interpretation of socio-psychological data comprising 'micro-actions' in the 'here-and-now', the 'world behind' the actor is less easy to dismiss. In order to clarify the role of the 'subjective pole' in interpretation, an important distinction should be drawn between the biological, social and psychological "lifelines" (cf. Craig, 1985) which criss-cross our hermeneutical condition. These "lifelines" indicate different domains of analysis. While in the record of social history and the evolutionary record, an individual agent's intentions bear little relevance for interpretative activity, this is not always the case for the individual, psychological record.

Certainly Napoleon I's intentions and reasons are not vital today to understand the meaning of the wars in which he

partook. Similarly, Miller's intentions (as the originator in the Psychology Department at the University of Natal, Durban, of the study of the development of self-regulation in children (1984)) in producing video-tapes of mothers mediating the activity of their children during problem-solving activities, are not a necessary data source for the subsequent interpretation of these video-tapes. Indeed, the very fact that these video-tapes has been utilised differently by different researchers in their respective interpretative endeavours implies that the video-tapes do have a semantic autonomy.⁷ However, whether or not one wants to, in the analysis of contemporaneous action-events in the domain of psychology, one does, at some stage, confront the issue of the intentions of the performing actors. The immediacy of the actions which are observed, being performed by essentially intentional beings, 'forces' the analyst to acknowledge this intentionality and to reflect on the reasons 'behind' the performance which she witnesses. This is not to deny, however, that actors do not always perform self-consciously: Often actors, propelled by their socio-psychological history, act without knowing why they act as they do. This issue is readdressed shortly. It seems probable that the quality of the action usually investigated by psychologists, may not, in fact, be the same kind of action that Ricoeur analogises with a text. This point relates to that made earlier concerning the "unimportance" of psychological data (see p.109).

Bleicher (1980) elaborates on Ricoeur's conception of action in the human sciences:

He finds that in analogy to texts, meaningful actions can assume a fixed form, possibly, in habitual patterns of action. (p.231, emphasis added).

Freeman (1985) remarks that

For Ricoeur, in the analysis of actions, particularly those that are taken up in large-scale endeavours such as history, there is once again the contention that there needs to be a sort of objectification, a fixation, akin to writing (p. 305, emphasis added).

The metaphors which Ricoeur provides to indicate how action is inscribed, such as events 'leaving their mark on time' (Ibid., 205-206), the 'course of events' (Ibid., p.206), and 'archives' of history, indicate Ricoeur's emphasis on large-scale, de-individualised action, akin to the kind of 'marks' left on the social and evolutionary "lifelines" of change.

Ricoeur argues that the hermeneutical task (in the case of text-interpretation) is erroneously construed as the attempt to understand what an author meant at the time at which she wrote a text. This debate is still rife in the domain of text-interpretation (cf. for example, Hirsch, 1967). By analogy, Ricoeur proposes that the hermeneutical task (in

the case of action-interpretation) is erroneously construed as the attempt to understand what the actor meant at the time that she performed certain actions.

In terms of Ricoeur's analogy between text and action, it is important for the present endeavour to highlight a possible confusion between the consideration of the researcher as author (that is, Wertsch, Miller, Kok and Beinart, Mindry, Craig, and Kok) and the actor recorded on video-tape as author. If the researcher is considered, in the interpretative endeavour, as the author, in the sense of being the producer of her data and indeed her entire project, then her intentions in this production are less relevant for any subsequent researcher who utilises the first researcher's data for her own purposes. As indicated above, the present author's utilisation of appropriations achieved in the preceding interpretations of the original video-tapes (see appendix 4), could proceed without any recourse to the subjective intentions of the research programme co-ordinator whose idea it was to produce the video-tapes in the first instance. Ricoeur rightly claims that once it has been created, a text has an existence of its own, it develops a "semantic autonomy". The appropriations achieved from the original video-tapes then can be regarded as texts, their 'objective' meaning being constituted by something other than the subjective intentions of the researcher when he originally created them.

By contrast, the intentions of the actor (as author) 'behind' her productions (which are fixed on video-tape in the present case) are usually regarded as relevant for the construction of an interpretation. This is because actors are regarded as essentially intentional organisms who plan and execute their behaviour in an intentional manner (cf. Bhaskar, 1979; and Harré and Secord, 1972). This point brings us back to the fundamental differences between the biological, social and psychological "lifelines" and the various human sciences, as indicated above.

Because of the traditional status given to an actor's intentions in the interpretation of psychological data, it was decided to enter into discussion with a chosen actor about the reasons for her actions. Hence the focus video-tape was produced and thereafter the researcher, in a deliberate fashion, explored the actor's reasons or intentions for her actions recorded on the video-tape. An examination of appendix 3 - "An exercise in interpretation" - should indicate to the reader the degree to which the author's interpretation is based on the actor's reasons (as given in appendix 2).

The actor's reasons seem to contribute to the interpretative process in the following ways:

1. The establishment of an "intersubjectivity" (cf. Wertsch, 1984) between actor and analyst in order to clarify different definitions of the situation, task and object. Included in this task is the

clarification of word/phrase/term meanings which may embody the different socio-psychological realities of actor and analyst.

2. To provide verbal performances, specifically an actor's second and further order monitoring (cf. Harré and Secord), as a data base from which to 'explode' the illusions of the subject as imbedded in a particular socio-psychological history.
3. To incorporate the 'prejudices' (cf. Gadamer) of the actor in an explicit fashion in the interpretative process, similar to the inclusion of the analyst's references to theories and empirical findings.

McGinn (in Bolton, 1979) argues as follows:

We come to know an agent's reason in acting when we see from which desires and beliefs his action ... may be inferred ... Given those desires and beliefs we appreciate why the action was, for that agent then, a reasonable thing to do: if we had his desires and beliefs, we too should be disposed to act as he did, and reasonably (p.23).

When given an actor's reasons, the analyst is provided with some insight as to why the actor performs in the way that she does. The following extract illustrates such a case:

The extract is taken from appendix 2. The researcher and A. have just viewed on video-tape an incident in which B.

selected the appropriate piece of the puzzle but did not place it exactly where it fits. When B. turned to choose another piece to place, A. quickly moved the piece into its correct position without explaining this move to her child. The conversation continues as follows:

- R : ... she puts the piece at the top and you just move it down for her and carry on, you carry on, she carries on. Why don't you say to her, "No, this is wrong, you must move it down"? Why do you correct it for her, without telling her?
- A : Because she will still somehow be hurt if I tell her what she has done is wrong and I do it.
- R : So, this way she will still feel that she's doing it. If you say, "No, it's wrong. This is how it must be", she will feel that she hasn't done it. But are you trying not to make her see that she has made a mistake there?
- A : Not really. She must know where she made a mistake, somehow, but what I'm after is just to draw up her mind, just to concentrate on the puzzle and do it correctly. Where she can't do it ... she had that piece in the right place but it was somehow placed wrong, so that is why I decided to help her, just to fit it.
- R : Do you think she notices when she comes back, that you've moved it?
- A : Yes.

- R : So you don't think it's necessary to say, "See this goes here, this goes down a bit"?
- A : No.
- R : Just carry on. If you said that to her, what would happen? If you said, "No, this must come down a bit more", what would she feel? Do you think it will be different to the way you did it? You just did it without her seeing it, you just moved it down slightly, you didn't point it out to her. Do you think it would be different if you say, "No, you see I've moved it down a little bit because it was too high up"?
- A : Ya. It will make it a little bit different to her in that I was doing the puzzle for her.
- R : She would think that?
- A : She would think that somehow.
- R : But she doesn't want you to do it for her?
- A : No.
- R : Do you think that's just B., or all children? Do you think they like to think that they are doing it on their own? Do you think that's important to a child, that they like to feel that it's their puzzle and they're doing it on their own?
- A : I think that is very important. I think that's very important to a child, that whenever she does a thing, she must have a feeling that she did it. And it's up to you, as the teacher or the mother, how far she or he did it correctly, and you must see the

difference; if you can say she did it or he did it or she didn't do it or he didn't do it and you must try to teach the other ways of how to get the puzzle or the game to the child. Whenever the child does something, or you do something with her, when it's finished or it's complete, she doesn't say that you did it. She says, "I did it, Ma", "I did it, I made that what-do-you-call-it, that something for myself". "No, I made it for her". "No". Sometimes she even points what you did.

(See appendix 2, pp.48-49.)

Often the researcher's 'theory' of any phenomenon is different to the actor's. This may result in a conflict of interpretations between analyst and actor. However, were the researcher to 'have' the same theory (package of reasons) as the actor, and were she to perform the same tasks, the researcher would also act in the way that the actor does, and reasonably. Similarly, were the actor to 'have' the same theory as the researcher, say a Piagetian-Vygotskian theory of cognitive development, the actor would interpret action in the same way as the researcher does under certain conditions, and reasonably.⁸ And, of course, in such a case of complete intersubjectivity, the need for interpretation disappears (cf. Bhaskar, 1979, p.196 on the "Meno paradox").

While the present author regards the reasons which an actor provides as an important data source, this position needs to be qualified. The profundity of both Freud and Marx's contributions to an understanding of the illusions of the subject cannot be overstated. It would be naïve to expect an actor to be able to provide the 'real' reasons for her behaviour in a direct S-R (stimulus-response) fashion. Furthermore, the ideal of a 'truthful' interpretation, the author proposes, is an ideal which should be relinquished. Harré and Secord propose that "there is no application in ethogeny for the concept of 'absolute truth', since all accounts are revisable in principle" (1972, p.228). These authors suggest that the actors or "participants in a social episode ... take the dramaturgical standpoint with respect to their self-monitored performance" (Ibid., p.235). By this they mean that the actor, in commentating on her own performance, has to achieve something like 'role distance', that is, interpret her own actions as a subject, as an object of knowledge (Ibid., p.14).

As in the present study, these commentaries are retrospective accounts and as such, they are "open to two kinds of post hoc modifications" (Ibid., p.235) which explains why these accounts "may lack authenticity" (Ibid., p.228). The two kinds of post hoc modifications Harré and Secord suggest are as follows:

- a. A reason which was not considered at the time of the decision to perform the actions under scrutiny is provided in retrospective commentary.
- b. Even monitoring commentaries may be subject to consideration in the light of later considerations, particularly in the reidentification of emotions, since these are the meanings given to states of arousal, and their true meaning may emerge only under later negotiation (Ibid., p.228).

It is the first type of modification which is most relevant in the present study. In the "negotiation of accounts" situation, Harré and Secord elaborate, the participant is in danger of creating an explanation which is not true of the actual genesis of the action or sequences of action under investigation" (Ibid., p.235). This kind of post hoc modification relates closely to Marx's concept of 'false consciousness'. In that we are victims of our class, we often do not know the 'real' reasons for our actions, until we are conscientized.

In the present project, it might be argued that some of the reasons which A. provides to explain her actions, are not, in fact, the reasons which generated these particular actions. Very often we simply do not know why we act in particular ways. Thus the reasons which we provide cannot be accepted as providing 'the truth'. As will be suggested shortly, however, even these kind of reasons can serve a valuable function in the interpretative endeavour. Freud was particularly

concerned with the second kind of post hoc modification, postulating as he did that very often the 'real' reasons for our actions are not available for conscious introspection. This insight refers to the fact that we do not know our own hidden curriculum and it is fully acknowledged by Ricoeur (cf. Ricoeur, 1981, p.144). In the present project, for example, when the author asks A. what extra-task 'lessons'⁹ B. learns from doing the puzzle with the assistance of her mother, A. is clearly unable to provide this answer (cf. appendix 2, pp. 79-81 and appendix 3, pp. 103-104).

Bhaskar (1979) points out that in addition to "inconsistencies within reasoning processes", the "psychological sciences" have to consider the following possibilities:

(a) inconsistencies between subjects at any moment of time; (b) inconsistencies within subjects and over time; (c) inconsistencies between the roles assumed and the activities performed by the same subject; and, more generally, (d) inconsistencies between levels of structure (p.140).

Both (b) and (c) above are true of A's behaviour in the present study. While A. continually asserted the importance of a child doing a task unaided by the mediator, she sometimes intervened while B. was deliberating about the placement of a piece and placed the piece for B.. Upon being questioned

about this change in strategy, A. replied that B. would become confused and would then lose interest if she (B.) was unable to place a piece (cf. appendix 2, p.41). This reason does not explain why at other points during the execution of the tasks where B. similarly hesitated, A. did not intervene. Moreover, the reason A. provides is at odds with A's strategy of deliberate refusal to answer B's questions. This reason is possibly of the first type of post hoc modification discussed above. Point (c) above (cf. Bhaskar, 1979, p.140) can be understood in terms of the point made earlier concerning the difference between an actor's and an analyst's 'theories'. While A., for instance, certainly considers that her "activities performed" vis-à-vis mediation of her child's behaviour are in accordance with her desire to be good mother, this being one of the "roles (she) assume(s)", in terms of the author's prejudices vis-à-vis mediation, A's activities could be construed as being detrimental to B's development of self-regulation and hence at odds with her assumed role of 'good mother'.¹⁰

Harré and Secord suggest that social scientists learn to tolerate "the possibility of ambiguity while encouraging a negotiation of accounts in the attempt to resolve it" (Ibid., p.236). Neither in the social nor the physical sciences, they propose, can "the demand for final, absolute unrevisable truth" be met (Ibid., p.236). In conclusion, they postulate

that this demand is "not even viable as an ideal in psychology" (Ibid., p.228).

The use to which an actor's reasons may be put in the process of interpretation, seems to lie somewhere between Ricoeur's position - the view whereby an actor's intentions/reasons are regarded as irrelevant in the process of interpretation - and that of others who support the 'reasons as causes' debate, those who might be said to belong to the intentionalist school. The reasons provided by an actor do not necessarily explain that behaviour or action-event for which a reason was provided. However, reasons serve to further explode (further to actions observed) the illusions of the subject in a manner made explicit by Freud, for example. The reader is referred to the discussion in appendix 3 (pp. 110-112) as an interesting illustration of the illusions of an actor. The reasons A. gives in this case indicate to the researcher that A. has certain illusions which cannot be penetrated by her. Gadamer places great importance on "the disclosing and concealing power of language as it functions in living conversation" (Linge, 1976, p.lv):

In what we say and in what is said to us, beings disclose themselves, but they withdraw from us as well and are never fully manifest, for what is spoken has about it the circle of the unsaid (Ibid, p.lv).

Reasons, therefore, provide further data on what the object of our knowledge (an actor in this case) may do or can do - how she can perform. The provision of reasons, therefore, adds to the construction of the resistances offered by the object to the subject and in this manner, can be seen to add to the subject's interpretation.

Hekman (1984) contrasts Gadamer's hermeneutical theory with that of Ricoeur. Gadamer's central thesis is that understanding a text involves "the fusing of the conceptual schemes of author and interpreter" (Hekman, 1984, p.333). Gadamer, by way of contrast with Ricoeur, "definitively reject(s) the positivists' injunction to ignore the actor's meaning" (Ibid., p.336). The horizons of both the interpreter and the interpreted are fused in the process of interpretation, hence understanding is construed as a dialectical process (Ibid., p.337). Gadamer does not however uphold the Romantic tradition of trying to "get inside the author's mind"; it is not the subjective intentions of the author, but the "cultural setting in which the author writes", that provides the horizon of meaning on the one side of the interpreted-interpreter dialectic (Ibid., p.338). This is where Ricoeur's theory, as a consequence of his anti-historicist stance, differs from Gadamer's.

The present author fully acknowledges the actor's socio-historical background, that is, her "cultural setting".

In addition, the author does explore the strategy of attempting to "get inside the actor's head" as a grounding for interpretation, but does not uphold the data thereby gleaned as being final; instead, the author proposes that an actor's reasons provide one data base (among others) from which to reconstruct those 'mechanisms' which produce the subject's performance (intentions included). The incorporation of the phenomenological viewpoint is regarded as an important methodological strategy in the domain of socio-psychology. This issue will be readdressed in 3.3..

3.2.3. Relevance and importance: The non-ostensive references of action-events

Gadamer extends the historicist argument "that all meaning must be interpreted historically, to include the interpreter as well as the interpreted" (Hekman, 1984, p.338). Ricoeur claims that a text/action is "an atemporal object which has broken its moorings with all historical development" thereby acquiring an "objectivity of meaning" (1981, p.185). Furthermore, for Ricoeur "the act of 'understanding' is less 'historical' and more 'logical'" (1981, p.184). Gadamer, by comparison, takes an implicit historicist position. He claims that

... although the text has a horizon of meaning, it cannot be said to have an objective meaning because it is interpreted differently in different historical periods (Hekman, 1984, p.338).

Ricoeur states that he takes the "anti-historicist trend into account in (his) own efforts and that (he) agree(s) with its main presupposition concerning the objectivity of meaning in general" (1976, p.91. It is because of "the objectivity of meaning of oral discourse itself" that "the semantic autonomy of written discourse and the self-contained existence of the literary work" (Ibid., p.91) is possible.

The present author proposes that in the process of the interpretation of action (as opposed to a literary text), in as much as the actor's intentions contribute significantly to the interpretation constructed, so too do the socio-historical parameters of the actor(s). The importance of the latter focus is illustrated by the convention whereby a researcher documents the age, educational background and other biographical details of her subjects. Campbell (in progress), for example, examines the influence of socio-political consciousness of mothers, on their style of mediation. Thus the meaning of the action-events which transpire between mother-child dyads is investigated in terms of the socio-historical circumstances of the actors. Craig (1985) asserts that when "human action is considered as both

intentional and meaningful it is necessary to consider the reasons for actions in terms of the social meaning of action and its historical development" (p.33).

The fact of historical development/change represents the rationale behind Vygotsky's experimental-development method by which it is attempted to reveal the essence of any phenomenon (cf. Vygotsky, 1978, pp. 61-62). Vygotsky's experimental-developmental method represents an attempt to retrace the genesis and development of 'fossilised' behaviour. Ricoeur proposes that "cultural distance" is transformable "into an epistemological instrument" (1976, p.89), a project achieved by both Vygotsky and Piaget. Similarly the methodological strategy in which subjects who are unfamiliar with a particular task, are required to execute such a task, enables the researcher to determine how "we manage to do our tricks" (Miller, 1984, p.21) and moreover, "how doing tricks is possible" (Craig 1985, p.129).

These insights are possible because of the fact that "their" method of doing our task, as opposed to "our" method, does not involve automated or 'fossilised' behaviours. Moreover, the research design in which an adult mediates a task to a child, enables the analyst to observe the process of task execution more finely. This principle is illustrated by the method adopted in the previous projects and the present

one, in which the actors were deliberately presented with unfamiliar tasks. In order to execute these unfamiliar tasks, the actors are forced to 'distanciate' themselves from the task at hand.

As indicated above, the socio-historical parameters, those features which contextualise any action, are not dismissable in the domain of action-interpretation, which is what Ricoeur proposes. However, Vygotsky's developmental method represents Ricoeur's notion of "productive distanciation" converted into a methodology and thereby into "an epistemological instrument" (Ricoeur, 1976, p.89). Similarly, this principle of "productive distanciation" underlies Piaget's rationale behind his method of presenting children with problems which he knew to be beyond their capabilities.

3.2.4. Human action as an 'open work'

Human action, Ricoeur proposes, is open to a myriad of interpretations. He discusses the "plurivocity" of human action (1981, p.213) which refers to the fact that human action, as an 'open work', has a universal range of addressees. Consequently, numerous differing interpretations are possible, although the "field of possible constructions is always limited" (Ibid., p.213). The sense in which interpretations are always limited, was clearly illustrated in the

interpretation of data base 1 (the original video-tapes) where the analysts tended to repeat those categories used by previous interpreters to analyse the behaviour observed (cf. appendix 4). It is also profoundly recognised that analysts with other 'prejudices' may interpret the same data differently (as occurred in both the group discussion and in the author's discussion with A.) and that theories constructed before (for example, the various 'fixations' presented in appendix 4), are open to re-interpretation and for validation or experimental falsification.

Thus Ricoeur's concept of an 'open work' is certainly valid in the sense that a work, that is a text or action, is 'open'; it is forever amenable to "fresh interpretations" from which it receives "fresh relevance" (1981, p.208). Moreover, Ricoeur proposes that the most valid interpretations are those yet to be constructed, claiming as he does that the meaning of an event is the sense of its forthcoming interpretations (Ibid., p.209, emphasis added). Hence the meaning of a text/action is considered to be 'in suspense' (Ibid., p.208). Ricoeur proposes that "the judges (of the meaning of human action) are not the contemporaries, but ... history itself" (1981, p.208). Ricoeur hereby advocates an untenable methodological practice, namely the retrospective interpretation of only long-lapsed actions, or the speculation about future interpretations of an object of knowledge.

The unsuitability of this methodological practice for psychology, can be attributed to the kind of action referred to by Ricoeur in this analogy between a text and meaningful action. In this analogy the author would like to propose, there is reference to a different kind of action than the type of action studied in the domain of socio-psychology. In evolutionary history, the 'marks on time' (Ricoeur, 1981, p.206) are centuries apart and an early adaptation or mutation must await centuries before its relevance can be demonstrated or understood. This is true also of social history and the marking events which propel social life forward, although in this case the time-scale is somewhat less than that for evolutionary history. The third "lifeline" involves individual or psychological change, in which products both of the first two "lifelines" intervene. However, by contrast with the evolutionary and social record, the time scale that the social scientist confronts in interpreting human action, on the psychological level of analysis, seems to be a far shorter one. The interpretation she constructs is, however, also open to re-interpretation, this phenomenon attesting to the fact that individual action also adds to the social record and so may become part of the longer process of constructing reality. Furthermore, the appropriations achieved of psychological data can become part of the social record, as is the case with Freud's work, for example.

Ricoeur insists that "the meaning of an event is the sense of its forthcoming interpretations" (1981, pp.208-209, emphasis added). However, because at any moment when one observes the biological, social or psychological record of human life, one is denied access to the future of these developmental trajectories, one cannot, in principle, include "future visions" in the method of interpretation. At best, one can allow for the fact that "human action is an open work, the meaning of which is 'in suspense' (Ricoeur, 1981, p.208), by making one's interpretation public: By publishing it, presenting it at conferences and by entering into negotiation about its meaning. In terms of the present project, both the author's interpretation of Ricoeur's hermeneutics and her interpretation of A's behaviour is open to debate and revision. In all of these instances, the judges are contemporaries (although, of course, they are not the only judges). We can, therefore, allow for dialogue or debate in the future and in the present; we cannot, however, suspend "contemporaries" or the notion of "intentions", as the social and individual components of an interpretation, at the moment of interpreting a 'here-and-now' sequence of actions. In other words, as much as the ongoing process, the continuous nature of interpretation/understanding indicates new realities in front of all understanding, this cannot become a methodological principle for engaging in the object of the social sciences prospectively. It can indicate, however, as

it did for Vygotsky, that the 'fossils' of the present too have developed: Vygotsky adopted the notion from P.P. Blonsky that "behaviour can be understood only as the history of behaviour" (Vygotsky, 1978, p.65).

One may see this as an indication that present meanings or interpretations could and should stand as a future of another past. The social scientist's task can thus be seen as attempting to unravel 'being' in order to explicate 'becoming', so as to explain-understand 'being'. This is the essence of the approach to human behaviour which explores generative mechanisms. The experimental-developmental method advocated by Vygotsky, and the principles inherent in it, allow for a method of interpretation which uses Ricoeur's insight into "meaning in suspense", retrospectively, so to speak. Exploring a 'fossil' with full knowledge that it developed and that others may develop, allows one to reconstruct the generative mechanisms of 'fossils'. The content of a specific 'fossil' or 'token'¹¹, as an empirical focus, cannot be generalised; However, looking through 'tokens' at generative mechanisms and thereby providing an explanatory account of the generation of a 'type'¹¹, is a possible direction to pursue. When one looks at 'tokens' and thereby provides a descriptive account, one cannot access the genesis/development of the fossil. One can only do this indirectly in the sense that 'tokens' become data for the question, "What generates manifest forms?". This brings us

back to the three "lifelines" of change and to that which generates the form of mind which meets resistances in a certain way (eg. Piaget's project) and to the form of society (for example, Marx's theory of social change), and the form of biology (for example, Darwin's theory of evolution). These "lifelines" criss-cross to produce serendipitous developments.

This elaboration of Vygotsky's proposals regarding a suitable methodology for socio-psychology, forms the substance of a project on methodology in the social sciences (cf. Craig and Miller, in progress). The different levels of analysis, that is, the psychological, social, and biological, are mentioned here in order to emphasise a methodological problem (and its possible solution) in Ricoeur's insistence on the primacy of 'future interpretations' in the process of knowledge construction.

When viewing changing knowledge, or the transitive dimension as Bhaskar (1979) refers to it, Ricoeur is, of course, correct. Over time, with successive amendments and revisions of an original interpretation, as well as in the light of new knowledge, new insights are possible. It is therefore more useful to view this part of Ricoeur's theory as a condition for the possibility of changing knowledge, than as a methodological imperative. Harré and Secord propose that

The possibility of endless reinterpretation must always remain and it must always be admitted that each interpretation has some explanatory power (Ibid., p.236).

The author would like to propose that like "perlocutionary characterisation of human agency (characterisations of what is done by it)", interpretations of human behaviour "are always liable to be reversed or superseded in the 'pile of debris' wrought by the accordian effects of actual history" (Bhaskar, 1979, p.105). It cannot be denied that with the passing of time, more insightful and complex interpretations of any meaning given to action can be constructed. This does, however, not imply that the judgements of contemporaries (or the reasons of an actor) have no place in the process of interpretation. In this sense, while Ricoeur's hermeneutical proposals with regard to human action as an 'open work' are undoubtedly valid for the conditions under which interpretation proceeds in the broadest sense, these proposals do not provide the researcher in the domain of socio-psychology, with a useful methodological tool.

The author would like to propose that Ricoeur's concept which refers to the fact that the meaning of any action is 'in suspense', could provide an alternative methodological direction: This alternative corresponds to the Vygotskian experimental-developmental method in which the meaning of a

present or existing action is held to be 'in suspense' until the historical development of the action has been retraced.

The present author would like to propose that all of the following constitute data which may be utilised to construct an interpretation and to validate that construction of knowledge: (1) The manifest action (as in the locutionary description of the action); (2) the actor's reasons/intentions 'behind' her manifest actions; (3) the illusions of the subject (both individual and social, as explicated by Freud and Marx, respectively) and (4) rival interpretations (produced, for example, during an 'argument' by contemporaries about a particular object of knowledge).¹²

Any pattern produced from all of the four modes of distanciation discussed in this chapter, may be regarded as requiring a generative analysis in that such an analysis would provide some indication of how functional structures on the psychological and social level, may produce manifest patterns in behaviour (which may include the actor's (physical) actions, her reasons/intentions, and her judgements as a contemporary, in the process of interpretation).

3.3. APPROPRIATION

3.3.1. The explanation-understanding dialectic

Ricoeur presents understanding and explanation as two moments of a dialectic which he explores in both directions:

1. From understanding to explanation :

Ricoeur states that because "the objective meaning (of a text) is something other than the subjective intention of the author, it may be construed in various ways" none of which, he adds, involve "a simple return to the alleged intention of the author" (1981, p.211).

In the following excerpt from appendix 3, a typical exercise in interpretation, as practised in the present study, is illustrated. Firstly, an action-event is transcribed in terms of the task, the setting, and the verbal and non-verbal acts:

TABLE 26 : PLACING A PIECE OF A
PUZZLE FOR A CHILD

(The following action-events occur during the execution of task 1 just after B. has picked up a piece of the puzzle:)

Mother

Child

Where is that?

MotherChild

Look properly.
(Points to template)

Look properly at this car.
(Points to model)

Look properly at this car.
(Points to model)

Where is this colour?
(Points to template and to
piece child is holding)

And put.
(Places piece for child.
Removes hand)

(Moves piece
into
position)

(See appendix 3, p.121).

Next, the author interprets A's behaviour above in terms of A's reasons for her teaching strategy illustrated above.

A. believes that the mother should always allow the child to choose her plan of action and leave the child to execute it. However, as illustrated in the above extract, the mother must intervene when a child has attempted to place a piece of a puzzle, and after two or three trials, has failed to do so successfully. In such cases, the mother should simply take the piece from the child and place it for her and should instruct the child to choose the next piece. A. maintains that in these instances there should be no discussion between the pair about the principle(s) involved in the correct placement of the piece. The above extract (Table 26) illustrates A's belief, as asserted in the group discussion, that if a child cannot after a short while and/or two three

attempts, successfully place a piece, then she has failed in that part of the task: A. implied that in such circumstances, the child is evidently unable to place the piece correctly and so spending further time on that part of the task would be wasteful.

(See appendix 3, p.122).

In the next section of the excerpt, the author's interpretation of A's teaching 'strategy' illustrated in Table 26, is compared to 'expert' theories:

Again A's. 'theory' and method of learning-teaching provides a marked contrast with both Piaget and Vygotsky's theories of learning: A. certainly does not provide the means for her child to surmount a non-balance in the Piagetian sense. Nor does she propel her child into a zone of potential development in the Vygotskian sense. A's use of the word "helping" to describe her behaviour in the above extract, takes on an ironic sense in the light of this interpreter's prejudices. In terms of Craig's mediational operator, 'discovering causal relationships', A. can be seen to be depriving her child of the opportunity to exercise her initiative. Craig proposes that the participants in a problem-solving task require "an appreciation of the possible effects of actions on objects, or objects on objects" (1985, p. 253). What is important is that the child realises the consequences of her actions for the solution of a problem-solving task. Craig proposes that trial-and-error or random behaviour, that is, the behaviour that occurs in an instructional situation where the mediator fails to mediate the essential features of the task to the child" (p.255), is the opposite of 'discovering causal relationships'. Trial-and-error behaviour

is in fact encouraged by A. in the present study, as she believes that one only learns through self-discovery. (See appendix 3, pp.122-123).

In the construction of the interpretation presented in this excerpt, the author's 'guess' about the meaning of A's behaviour is pitted against both A's 'guess' about her behaviour, namely the provision of her ('subjective') reasons for her behaviour and experts' (or 'objective') guesses.⁴ Hence, while the construction of an interpretation is not achieved solely by "a simple return to the alleged intention of the author", this strategy does contribute, in an important sense, to the interpretative endeavour. Ricoeur analogises understanding with the process of guessing and he analogises explanation with validation, in the juridical sense. The fact that the meaning of human action may be 'guessed' differently by different interpreters, points to the "specific plurivocity belonging to the meaning of human action" (1981, p.213). Ricoeur proposes that in terms of this direction of the dialectic, "I understand what you intended to do, if you are able to explain to me why you did such-and-such" (Ibid, p.213). Hence one enters the debate concerning the purposive and the motivational dimensions of action. In the attempt to validate one's guess, Ricoeur notes

that what can be (and must be) construed in human action is the motivational basis of this action, i.e., the set of desirability-characters which may explain it ... (Ibid., p.214).

This mode of explanation of action by its motives" (Ibid., p.214) underlies the 'reasons as causes' paradigm adopted in the methodology for socio-psychology suggested by Bhaskar, and Harré and Secord. In appendix 3, the 'exercise in interpretation' and data base 2, the group discussion, interpretation proceeded as follows:

1. The 'guessing' about the meaning of an action-event involved almost inevitably speculating about the intentions or "desirability - characters" (Ricoeur, 1981, p.214) which may underly the action;
2. The 'validation' of a guess may involve deliberately obtaining the actor's reasons, as was undertaken in data base 4 (appendix 2) but it also involves referring to other empirical work, other theoretical propositions, 'fresh hypotheses un-grounded in explicit bodies of knowledge and reference to coherence criteria, that is, the fitting of one, or a particular action-event into the general form or style of the author's performances (behaviours, non-verbal and verbal including her stated reasons/intentions/motives/beliefs/desires).

At no point in any of the above moments of validation does the interpreter achieve an objective criterion or set of criteria on the basis of which to validate her 'guess'. However, when the guess is supported with considerable evidence from any of those moments in validation mentioned in 2 above, the interpreter tends to accept that the 'guess' has been validated. The hermeneutical problem - the grounding in fact of an interpretation - remains a problem and it seems doubtful that recourse to structuralism - which precludes the subjective pole - or alternatively recourse to a generative analysis - which includes the subjective pole - will resolve the problem. The 'problem' seems contained and limited when as much data as possible is elicited from the object of knowledge, data which displays as many performances of an organism/actor or data which allows access to as many of the resistances which the organism/actor can emit. In this regard, the present proposal is that obtaining the reasons for action(s) from an actor, provides further data to the actions observed and may provide an important mode of distancing for the interpreter. This mode of distancing would create a distance between the interpreter's 'guess' about the meaning of an action and attempts to validate the 'guess'. Moreover, the present author proposes that the explanatory function does not end with the understanding of an actor's motives 'behind' a particular behaviour. Motives/reasons/intentions themselves

must be explained. Hence the explanatory function extends necessarily to a generative analysis in which the underlying structures and functions which produce all behaviour or performances (including an actor's intentions) are explicated.

Pascual-Leone presents five different levels of analysis in terms of which an explanation might proceed. These different 'epistemological levels' seem to unlock the stalemate between Ricoeur's position and the 'reasons as causes' debate in that Pascual-Leone deliberately incorporates in his model all possible modes of constructing knowledge of an object. Craig (1985, pp.71-73) summarises these levels as follows: The first level of analysis Pascual-Leone refers to is called "Objective" and it refers to a descriptive account of manifest behavioural phenomena. He calls the next level "Phenomenological", which refers to an account of the experiences of the individual, from the individual's point of view, during or about the task execution. This level is exclusively concerned then with an actor's intentions or reasons for her behaviour. The third level is called "Subjective" and has two aspects; a structuralist aspect (eg. Piaget's earlier work) which emphasises the organisation of schemes operating in the "machinery" of the cognitive system of the individual; and a process structural aspect (eg. Piaget's later work) in which the emphasis is on the

introduction of real time in the operation of schemes. Within the next level, the "Ultrasubjective", the analyst confronts the possibility of executive schemes which must operate on action schemes in order to allow the cognitive system to function independently in problem-solving. The fifth level of analysis is called "Metasubjective" and at this level Pascual-Leone explains the hierarchy of schemes and the psychogenic constructivity of the psychological "machinery" by suggesting "silent operators" that generate novel and truly novel responses. If a subject should proceed through all these epistemological levels in the process of interpretation (not necessarily in the stated order), the object of interpretation could be said to have been appropriated (for the time being).

The last three levels of analysis, the "Subjective", the "Ultrasubjective" and the "Metasubjective", refer to a generative level of analysis. While a generative analysis is not undertaken in the present study, when a researcher is provided with sufficient data on the actor/organism's performances, she becomes equipped to do so (cf. Craig, 1985).

2. From explanation to understanding:

In his presentation of "this second figure or Gestalt of the dialectic between explanation and comprehension" (1981, p.218), Ricoeur, in effect, undermines his previous presentation of the dialectic examined from understanding to

explanation (as regards the interpretation of action). He states explicitly that it is this second direction of the dialectic, from explanation to understanding which "has a strong paradigmatic character which holds for the whole field of the human sciences". (Ibid., p.218, emphasis added). The essence of this figure of the dialectic rests on the structural model as fulfilling the explanatory function. Ricoeur proposes that structural systems imply "relations of quite a different kind" to the classical causal model, that is, "correlative rather than sequential or consecutive", and he argues that if this is true, then "the classical debate about motives and causes which has plagued the theory of action these last decades loses its importance" (Ibid., p.219).

Ricoeur proposes that structural analysis performs the function of leading the interpreter from a surface semantics to a depth semantics. While structural analysis explains an action, Ricoeur proposes that an action is only understood when the interpreter has appropriated the non-ostensive references of the action, that is, when she has acknowledged the "aporias of social existence" and has thereby fully understood "the dynamic meaning released by the explanation" (Ibid., p.220).¹³

Structural analysis is indeed a valid methodological strategy to employ in the psychological enterprise, as

exemplified by Piaget. While this mode of interpretation has significant explanatory power, Ricoeur recognises and acknowledges that it cannot alone provide the means for the interpreter to appropriate or fully understand any action she analyses. However, this weakness is not necessarily true of the structural analyses which Piaget conducted. Piaget did not focus on speech-acts in his analyses of an actor's performances; instead, he described the generative mechanisms for any praxis (included amongst which could be the generative mechanisms underlying the performance of speech-acts).¹⁴ While Ricoeur states that one cannot end the interpretative endeavour with a structural analysis, exactly how one moves along the path from explanation to understanding proper (appropriation) is not made clear in terms of his hermeneutical proposals. The author is proposing here that while Ricoeur provides a useful insight into the conditions for interpretation in the transcendental sense, he does not provide equally useful methodological guidelines for this project.

An important principle derived from the second figure of the explanation-understanding dialectic concerns the function of the explanatory 'attitude'. Ricoeur proposes that "the main task of explanation" is "the search for correlations within semiotic systems" (1981, p.219). Indeed, Ricoeur proposes that because "the classical debate about motives and

causes" is based on "the classical causal model" and hence "sequential or consecutive" as opposed to "correlative" relations, this debate

which has plagued the theory of action these last decades loses its importance (1981, p.219).

The present author would like to suggest that the phenomenological viewpoint, which is based on "motives and causes", need not lose importance in the interpretative endeavour. Instead, the phenomenological viewpoint could be incorporated as a stage in the process of interpretation, especially where an attempt is made to exhaust all interpretative possibilities in the construction of an interpretation (see p.161 above).

Ricoeur insists that "a text (and by analogy an action) has to be construed because it is not a mere sequence of sentences (or acts), all on an equal footing and separately understandable" (Ibid., p.211). The present author fully endorses Ricoeur's dictum that a text, and by analogy an agent's behaviour, has to be construed as "a whole, a totality" which "may be reached from different sides" (Ibid., p.211). Ricoeur states that "the judgement of importance" as regards the choice of which particular aspect of a text, and by analogy, which particular action to focus on in the

interpretative endeavour, "is a guess" (Ibid., p.211). He proposes that "a specific kind of onesidedness is implied in the act of (interpreting action)" (Ibid., p.212).

This point relates crucially to that made earlier, namely, that a human being should be regarded as an organism which emits a unique package of resistances or constraints which cannot be immediately grasped or explained by an analyst. Hence the importance of deriving as many data sources as possible on the various performances of an actor, each of which provides a different access point for the interpreter. This technique was exploited in the present study in which the performances of a chosen actor, A., were examined from different vantage points:

1. A. participated in a group discussion which was transcribed for interpretative purposes (data base 2);
2. A. was video-recorded while engaging in problem-solving activities with her child. This focus video-tape and the transcript thereof represent data on her actions/behaviour (data base 3);
3. A. partook in a discussion based on her own actions. In this discussion, A's reasons for her actions were deliberately investigated (data base 4).

Ricoeur would certainly object to the third methodological practice above and, to some degree, the first.

However the present author would like to qualify the use to which A's reasons are put: These reasons were never regarded as functioning to provide 'the true' explanation for her behaviour in the manner of a linear-causal model. Instead, her reasons are regarded as one data base, one point of access, one judgement of importance - and a mode of distanciation - for the present author. Such a data base may be termed the 'phenomenological viewpoint' and may be regarded as a necessary stage in the appropriation of an object of knowledge. If all possible levels of understanding-explanation of an object may be explicated, and if an interpreter could engage in constructing the knowledge required and permitted in each of these levels, then one may postulate that an object of knowledge will be understood-explained as best as possible, given the resistances of the subject, the resistances of the object, and the construction of knowledge possible in the interaction between these resistances.

It seems unnecessary to preclude, a-priori, one level of possible engagement between subject and object. In this regard, omitting the subjective pole, which is what Ricoeur proposes, seems to support Hekman's criticism of Ricoeur: Even though it appears that Ricoeur uses the word 'objective' in "objective meaning of a text" in a non-conventional manner, Hekman asserts that he fails to

definitively dispel the ideal of objectivity embodied in the scientific method of the natural sciences (Ibid., p.343).

Hekman asserts further that

Ricoeur implicitly accepts the model of knowledge embodied in the scientific method and attempts, in effect, to fit the social sciences into that model ... he makes it clear that objectivity is his goal (1984, p.343).

In ordinary interpretative experience, the understanding of any phenomenon accumulates over time. Horton (1979) celebrates the metaphorical power of Noguchi's sculpture, Cubic Pyramid (referred to earlier, see p.57) and claims that Noguchi "has succeeded completely in making time a crucial factor in the appreciation of his piece" (Ibid., p.22). Horton asserts that "reading is sequential and temporal. It happens in time and over time" (p.22). Interpretation, however,

must inevitably do violence to the sequential nature of reading. Patterning is, by definition, a process of pulling some things out of their sequential position (Ibid., p.24).

In the present study, for example, A's 'theory' of learning-teaching (cf. appendix 3) was constructed from the patterns in her behaviour and her stated reasons for her

actions. A's behaviours were not necessarily performed sequentially, nor were her intentions reported at the time at which they are assumed (by her) to have operated.

Bhaskar (1979) asserts that action has an "accordian effect" by which he means that "in a single action, a number of different acts (some intentional, some not) are performed" (p. 105). As interpreters and actors, we cannot at any one moment in time, know the 'true' or 'objective' meaning of any action. Bhaskar proposes that "perlocutionary characteristics of human agency (characterisations of what is done by it) are always liable to be reversed or superseded in the 'pile of debris' wrought by the accordian effects of actual history" (Ibid., p.105). Horton proposes that given this process, "it is sensible to assume "that meaning or significance will necessarily be seen as an accretion, an exfoliation, or a gradual revelation of what is 'really there' in the text" (1979, p.23). This suggests that it is necessary to build a non-parallel or non-linear model of understanding- explanation into one's methodology. It is vital, in fact, to deliberately violate the principle that a meaningful inter- pretation of human action can be constructed in a linear or once-off, 'here-and-now' manner. While the incorporation in the interpretative endeavour of the subjective pole needs to be qualified, so too does the incorporation of a structural analysis, as Ricoeur admits. It is proposed by the present author that because the path from structural analysis to

appropriation is not explicated methodologically, there remains a gap in Ricoeur's hermeneutical proposals when they are deliberately 'translated' into a methodology. The present author suggests that Phenomenology could provide a potentially useful addition to a methodology of the interpretative endeavour as applied to socio-psychology.

Whereas Ricoeur's elaboration of the explanatory attitude is well taken and certainly is exemplified by one of the most profound contributions to Psychology - Piaget's project - in reversing the dialectic between explanation and understanding, Ricoeur lands himself in a weak methodological position in that understanding has to 'await revelation'. Whichever way the dialectic proceeds in any interpretative task, however, seems less important than to emphasise (as Ricoeur does) that appropriation consists of two attitudes. In this regard, it is explicitly suggested in the present project that an exploration of the subjective pole provides both an important mode of distanciation and a method or means by which understanding and explanation - that is, appropriation - can be achieved. In this regard, Pascual-Leone's epistemological levels are useful: These levels seem to suggest that there may be at least three 'attitudes' which comprise the process of explanation. These 'attitudes' are summarised in this project as a descriptive, phenomenological and generative analysis.

NOTES :

1. While the author acknowledges the veritable divisions within the domain of psychology, where reference is made in this manuscript to 'psychological data', the conventional data studied by the majority of psychologists is being referred to, that is, those actions performed in the 'here-and-now' by individuals.
2. The construction of an interpretation of data, such as that presented above, is termed "thick description" by Geertz (1973). The author has attempted to indicate the richness of the data contained in extract 1 and hereby validate her earlier claim that this data is both interesting and important for a psychologist.
3. The word 'psychology' translates to 'the study of the mind'; hence, by contrast to the discipline of history, for example, in the discipline of psychology, by definition, what is investigated is the world 'behind' the manifest action-events which are investigated. The 'cult of subjectivity' investigated by psychologists can, however, refer both to the reasons/intentions, etc. of an actor (cf. Bhaskar and Harré and Secord's projects) and to mental functions and or structures (cf. Piaget's project).

4. 'Guess' is used in each case to illustrate the first moment which Ricoeur explicates in the process of interpretation. It is realised, of course, that all guesses are not equal and that some guesses have already been validated.

5. The main empirical data in the present case revolves round the investigation of mothers' regulation of children during problem-solving (an object of knowledge), a focus which addresses the interface between 'mind' and 'culture' in the domain of socio-psychology. The selection of this particular focus was determined partly by convenience (in that there exists a body of data on mother-child transactions during joint problem-solving activities); more importantly, this focus was chosen because of the centrality of the process of interpretation to the confrontation between a developing child and pre-existing social forms in which both the child's mother (or mediator) and the problem-solving situation are imbedded.

6. The ability to visually transport "a missing part from a given distance or by choosing the complementary missing part from a number of alternatives" (Feuerstein, 1980, p.101) is considered an important requirement for the execution of tasks such as those utilised in the present study.

7. However, if the object of knowledge is the kind of research projects designed by a specific author, the issue of the author's intentions 'behind' the production of these projects may, of course, become central. This 'subjective pole' is then also often a point of debate at the public presentation/defence of a particular research programme.
8. This argument is central to the method adopted by Craig (1985).
9. Extra-task 'lessons' refer to those 'extra-task goals' that are not intrinsic to the performance of the task per se, such as parental respect and obedience and the importance of speed, for example.
10. This conflict of interpretations underlines Harré and Secord's notion that all accounts are revisable in principle. This is a problem which remains whether or not an actor's reasons are obtained, and is readdressed shortly in the manuscript.

11. The terms "token" and "type" are borrowed from the domain of linguistics (cf. Lyon, 1979). "Tokens" can be regarded as particular instances of a larger generic category, the "type". These terms are similar to Pascual-Leone's (1986) distinction between mereo-logical and logo-logical structures, respectively.
12. 'Action', 'actor', 'subject', and 'contemporaries' refer here to any deliberate engagement of a person(s) in the process of knowledge construction about an object of knowledge. These sources of data may all be considered as legitimate sources from which to reconstruct an explanation of the manifest patterns in behaviour; not one source seems sufficient and not one irrelevant. Instead, all may be necessary for an appropriation of the object of knowledge by (any) subject.
13. The "aporias" Ricoeur refers to may achieve greater significance when understood in terms of Pascual-Leone's notion that "When you are studying humans ... there is a deep sense in which you are studying yourself. When you clarify psychology, you clarify yourself" (1986).

14. In contrasting Piaget's and Ricoeur's structural analyses of an object of knowledge, one obtains a clearer understanding of the necessity to test Ricoeur's proposals against specific bodies of data. A model for interpretation could perhaps not succeed if it is aimed at the "whole field of the human sciences" (Ricoeur, 1981, p.218). In this regard, Habermas' project might prove more useful in formulating a methodology for socio-psychology in that he specifically grounds his psychology of action in the work of Piaget.

CHAPTER 4 : THE NECESSARY CONDITIONS FOR
INTERPRETATION IN THE DOMAIN
OF SOCIO-PSYCHOLOGY

4.1. DISTANCIATION

- 4.1.1. The fixation of action
- 4.1.2. The phenomenological viewpoint on action
- 4.1.3. The interpretation of action as a developmental process
- 4.1.4. Human action on an 'open work'

4.2. APPROPRIATION

- 4.2.1. Descriptive analysis
- 4.2.2. Phenomenological analysis
- 4.2.3. Generative analysis

4.3. CONCLUSION TO PROJECT

4.1. DISTANCIATION

The primary dialectic in the process of interpretation occurs, for Ricoeur, between 'distanciation' and 'appropriation, the former phenomenon consisting of four modes and the latter of two 'attitudes'. In this chapter the present project is concluded with an elaboration of Ricoeur's model for application in the domain of socio-psychology.

It is necessary to point out that Ricoeur's theory of the interpretation of action is formulated to apply to "the social sciences", across "the field of the human sciences" (Ricoeur, 1981, p.197). Ricoeur does not make the distinction that Bhaskar, for example, draws between the 'individual' and 'society' as objects of knowledge. Thus it is necessary to apply Ricoeur's hermeneutical theory to specific disciplines - in this case, the terrain of socio-psychology - in order to both "expand the domain of hermeneutics" (Freeman, 1985, p.301) and to provide a sound basis for the interpretative task in specific domains.

4.1.1. The fixation of action

Action is fixed whenever we impose some kind of order or meaning on action-events. The order or meaning imposed on action-events will, however, be constrained or limited by a number of factors which are crucially related to the construction of knowledge from the transaction between (any)

subject and (any) object. In the first place, the discipline/domain in which research is undertaken, limits the possible interpretations which will be produced. In socio-psychology, for example, the action-events studied are small-scale, they usually occur in the 'here-and-now' and they are "unimportant" in terms of Ricoeur's criterion of importance. Secondly, when one decides what aspect of a phenomenon to investigate, the potential interpretations of the phenomenon are further circumscribed within particular parameters. The type of action-events recorded, or the decision as to where to 'point the camera' - for example, at the transactions occurring between mother and child - provides specific conditions for interpretation. Furthermore, the mode of fixation used, video-tape recordings for example (as used in the present study), further determines the kind of meaning imposed.

In her paper on video-tape analysis (cf. Craig, 1985b), Craig explores different 'orders' of the imposition of meaning on, or modes of fixation of, events. She regards the initial viewing of video-tapes "as a first step in the process of analysis (which) is crucially related to a first order imposition of meaning on the stream of actions recorded on video tape" (Ibid., p.9). The second stage of video-tape analysis Craig presents, involves identifying illustrative extracts from the video-tape viewed in the first stage of

analysis. "The identification of these extracts", Craig proposes, "represents a second order imposition of meaning on the data and describe action sequences which provide manifest forms of some assumed underlying process/structure/function" (Ibid., p.17). A third order imposition of meaning is achieved when the compiled tape consisting of all the illustrative extracts, is transcribed and thereby turned into a text (Ibid., p.18). Craig advocates as the fourth stage of the analysis of video-tapes, the application of "thick description". This term was used by Geertz (1973) "to refer to the application of a coherent story to a 'bit' of data" (Craig, 1985b, p.20). Thus the construction of "a coherent story of the data" (Ibid., p.20) represents a fourth order imposition of meaning. The fifth and final stage of the analysis of video-tapes Craig proposes, involves the construction of an explanatory account of the action sequences, and preferably, a generative analysis. At this most abstract level of analysis, a fifth order imposition of meaning is achieved.

In the present project the action-events which transpired between a focus mother-child dyad were literally fixed both on video-tape and in a written transcription (or text). The 'exercise in interpretation' presented as appendix 3, corresponds, in part, to Craig's fourth order imposition of meaning, the application of "thick description"; a "coherent

story": A's theory of learning - teaching was constructed from "'bit(s)' of data" (Craig, 1985b, p.20).

4.1.2. The phenomenological viewpoint on action

The present author's objection to Ricoeur's denial of the importance of an actor's intentions in the construction of an interpretation, has been indicated throughout this report. This objection was qualified, however, both in terms of Freud and Marx's projects based on the illusions of the subject and in terms of the rejection of the stand which advocates that intentions/reasons cause behaviour in a linear, S-R manner. Ricoeur does not fully enter into the debate about the "hermeneutical problem" raised by the concepts of "author and authorial meaning" (Ricoeur, 1976, p.30), although he does acknowledge the "problem". The present author proposed that the quality or level of action which Ricoeur refers to in his theory of the interpretation of action-events, appears to be decidedly different to the type of action which psychologists conventionally study. While it might be acceptable to lay aside the "problem" of actor's meaning when interpreting literary texts and large-scale, de-individualised action, the author would like to propose (in the tradition of Bhaskar, (1979), and Harré and Secord, (1972)) that in the interpretation of socio-psychological data comprising micro-actions in the 'here-and-now', the individual actor, and consequently her intentions, are less easy to dismiss. This

is because in the interpretation of action, whether it is observed as it occurs or whether it is recorded on video-tape, the "immediate vocal, physiognomic, or gestural expression" (Ricoeur, 1976, p.126) of the actor is preserved. Whereas with writing, "the human fact disappears" and "material 'marks' convey the message" (Ibid., p.26), in video-tape inscription, "the human fact" remains; the message is conveyed not by "material 'marks'" which represent a transformation of the form of the original data, but by the force of the actors themselves. This point indicates a weakness in Ricoeur's analogy between a text and action, when the analogy is examined in terms of its application to socio-psychological data.

The foregoing discussion emphasises the importance which the present author accords to the actor's reasons/intentions in the process of the interpretation of action. The validity of the methodological 'move' whereby actors either provide a commentary on their own actions, or enter into a "negotiation of accounts" with the researcher, is "acknowledged in the best practice of all the psychological sciences" (Bhaskar, 1979, p.44). Habermas, in his model of interpretation, emphasises the necessity of determining the actor's reasons for her behaviour:

The interpreter (even the social scientific interpreter who deals with linguistically

formed data) does not understand his or her symbolically pre-structured objects (in the normal case, communicative utterance) if he or she does not also understand the reasons related to their validity claims (1984-1985, p.238).

Entering into "negotiation" with actors can be "regarded as a process of elaboration within a phenomenological level of analysis (cf. Pascual-Leone's levels of analysis elaborated above, pp.162-163), or a checking procedure for the validity of the account 'fashioned' by the researcher. Thus an actor's reasons provide more data on what an object of knowledge can do, what resistances she emits. It is thus warranted to enter into the 'phenomenological viewpoint' as a stage in the interpretative endeavour. The 'phenomenological viewpoint' can be obtained either by asking an actor about her intentions 'behind' her actions in the tradition of Harré and Secord, or by reconstructing these reasons from other discussions entered into with an actor (cf. Craig, 1985; and Kok, 1986).

By contrast to Ricoeur's thesis that the meaning of any text or action-event is derivable without recourse to the author's/actor's intentions, Feagin (1982), in her discussion of the interpretation of art, assigns the artist's intentions an important role in the interpretative endeavour.¹ She presents a fascinating argument in favour of "interpreting art intentionalistically". Her main thesis is that an artist's

intentions, on the whole, play an important role in the interpretation of art, but that this is not true of every single case. She presents this thesis as follows:

... although it seems reasonable in general to use the absence of (particular) artist's intentions to rule out proliferating interpretations, there may be individual cases where it is most reasonable to base an interpretation on factors independent of the intent of the artist. Intentions cannot be cited as providing the only criterion for deciding between a multiplicity of interpretations... (p.73).

Feagin is "convinced ... that a consideration of an artist's intentions represents something fundamental of our dealing with art" (Ibid., p.73). The author would like to propose that this statement is equally true of our dealing with human behaviour, both in ordinary life and in formalised research programmes.

Meaningful human behaviour, like art can be defined as "the product of the human endeavour to achieve some goal such as communication, the display of skill, etc. ..." (Feagin, Ibid., p.65). Consequently, Feagin argues, "Why define art (and by extension, action) as a product of human endeavour if we are not interested in what the human beings who created it were endeavouring to do?" (Ibid., pp.65-66).

Feagin's argument provides the researcher in the domain of socio-psychology with an attractive methodological option for the interpretation of action.

It is proposed that Gadamer's notion of the "fusion of horizons" between the world of the text/action, and that of the interpreter, is possibly a more useful metaphor to use in the context of the process of the interpretation of meaningful human action, than is Ricoeur's concept of semantic autonomy. Gadamer rejects the proposal that an actor's meaning can be ignored; he construes the act of interpretation as a dialectical process in which the horizons of meaning of both the interpreter and the interpreted, are fused. Gadamer proposes that the cultural setting in which the actor behaves, provides the horizon of meaning of the actor. This puts Gadamer's historicist approach into direct contrast with Ricoeur's avowed anti-historicist leanings (see 4.1.3. below).

An actor's reasons for a specific action (A., for example, explained that she removed an extra piece of the puzzle to avoid confusing B.) may not (as of course it also may) clarify that action, but her reasons will contribute to a data base comprising patterns in her reasons. In the case of this study, A's 'theory' of learning-teaching was derived from the identified patterns in A's stated reasons.

Where a researcher puts her "wants and beliefs at a distance" (Ricoeur, 1981, p.214) in order to "hear" the reasons which an actor provides to explain her behaviour, she (the researcher) is provided with further data concerning the possible performances of an actor (that is, the resistance of the actor).

4.1.3. The interpretation of action as a developmental process

The present author endorses Ricoeur's proposal that "cultural distance" is transformable" into an epistemological instrument" (Ricoeur, 1976, p.89) but rejects Ricoeur's anti-historicist stance according to which he regards a text, and by analogy, action, as being essentially a-temporal and as having an objective meaning which can be construed independently of the socio-cultural-historical circumstances in which the text/action was produced. Gadamer insists, by comparison, "that all meaning must be interpreted historically, to include the interpreter as well as the interpreted" (Hekman, 1984, p.338).

'Prejudice', Gadamer defines as "the preunderstandings" that are the necessary condition of all human understanding" (Hekman, 1984, p.339) and argues that "the awareness of the role of prejudice in the process of interpretation entails self-reflection" and ultimately "self-understanding" (Ibid., p.340). Gadamer proposes that interpreters "specifically

examine the 'prejudices' informing their interpretive stance" (Ibid., p.246). One way of doing this, is to make explicit the theories which one adopts. However, exactly how one, in practice, determines one's other informing prejudices, is left unclear by Gadamer. This is a further example of the difficulty experienced in 'translating' concepts derived from the domain of philosophy into a method in the domain of psychology.

One's informing prejudices will constitute the one horizon of meaning - that of the interpreter - this horizon having an historical and "a specific ideological perspective" (Ibid., p.348). Equally important a task in interpretation, Gadamer proposes, is the investigation of the "historical and cultural horizon of the actors involved in the event" (Hekman, 1984, p.348). This will constitute the other horizon of meaning.

Neither of these two horizons is "immediately given":

Both are subject to interpretation and both are established by appeal to the intersubjective, common meanings that constitute the everyday world ... (Ibid., p.346).

While Gadamer's theory of interpretation certainly provides some interesting points of contrast with Ricoeur's, it presents similar problems in that it is fundamentally a philosophical theory and thus, to use, Harré & Secord's

terminology, a 'conceptual' as opposed to an 'empirical' language. This presents the psychologist with the onerous task of 'translating' theoretical concepts into an empirically usable method. For example, Gadamer's central tenet of 'the fusion of horizons', despite the fact that some definition of the components of this operation are provided, proves to be one such difficult concept to apply empirically. Again, while philosophically seductive, such a concept is problematic in an empirical enterprise. This problem may derive from the fact that psychologists lack a repertoire of qualitative methods which would enable them to 'translate' concepts derived from naturalist philosophy, into empirically usable methods. This then also embodies the rationale for this study.

While the present author finds problematic - as a methodological proposal in the domain of socio-psychology - Ricoeur's concept that any important action-event transcends its own time and should be interpreted from a 'future vantage point', that is, retrospectively, the following methodological option was proposed: It was suggested that the principle of a 'future vantage point' be used retrospectively, so to speak. In other words, it is proposed that in order to interpret current action-events, their genesis and historical development must be examined by adopting the developmental-

experimental method explicated by Vygotsky. This methodological practice may be termed 'the interpretation of action as a developmental process'.

4.1.4. Human action as an 'open work'

The present author fully supports Ricoeur's thesis that human action is open to a myriad of interpretations, although the "field of possible constructions is always limited" (Ricoeur, 1981, p.213). The fact that analysts make their work public and enter into debate about the meaning of their own and past appropriations suggest that the meaning of any text is never 'closed'. Furthermore, the existence of different schools of analysis of human behaviour, suggests that human action is truly 'open' to varying interpretations. However, while the present author agrees, in principle, with this proposal of Ricoeur's, she rejects Ricoeur's tenet that an actor's contemporaries should not act as "judges" of the actor's behaviour. The interpretations of these contemporaries - like an actor's reasons - may be used, it is proposed here, to provide a moment of distanciation for the analyst from her reading (understanding-explanation) of an object of knowledge. In this sense, an actor's contemporary does provide additional access (for the analyst) in that she (the contemporary) too will emit the resistances determined by that time - the socio-historical patterns ('culture') of the actor. The force of Marx's class analysis certainly attests

to this fact, namely that contemporaries display the 'marks' of their history.

The qualification above, however, does not imply that an interpretation made contemporaneously with the performance of any action-event is a-priori superior to an interpretation made years later. However, insisting that contemporary interpretations should be excluded from the interpretative endeavour would, in effect, negate the validity of many human sciences, including socio-psychology. In this regard, both an actors reasons and the judgements of contemporaries, could be used to explode the 'illusions' of an epoch in which both the psychological and social histories, or 'mind' and 'culture', determine performances; these performances may be used as occasions for the explication of that which generates the manifest patterns.

Because each interpreter's life-experiences and socio-historical background differ, what is familiar or interesting or important to one interpreter, might be quite alien or uninteresting or unimportant to another. Ricoeur claims that "there is no necessity and no evidence concerning what is important and what is unimportant, what is essential and what is unessential. The judgement of importance is a guess" (1981, p.211). Every interpreter confronts the object of knowledge from a different perspective. The concept of un/familiarity is captured in Gadamer's concept of the

historicity of an interpreter's horizon of meaning. Each interpreter imposes her taken-for-granted view of reality on the interpretative situation, and consequently experiences differing aspects of the data as "surprising" or "interesting". This results in a conflict of interpretations between interpreters, which can only be resolved when the interpreters are prepared to fully confront, and seriously consider, the reality espoused or presented by another interpreter or object. This preparedness to "seriously consider" an alien or unfamiliar reality, is similar to Craig's concept of 'genuine curiosity' (1985b, p.12). It is the present author's contention that the interpreter evidences 'genuine curiosity' when she 'uses' both an actor's reasons and the interpretations of contemporaries to confront reality, that is, when she makes a "guess" about the meaning of any action-event. Craig argues that when one evidences 'genuine curiosity', "one provides a framework or starting point for a serious quest to 'let the data speak'" (Ibid., p.12). 'Genuine curiosity', which cannot be proved but which is conspicuous by its absence in the interpretative endeavour, Craig explains, is operative when "the analysts may be regarded as seriously involved in an attempt to decipher the meaning of the data" (Ibid., p.13, emphasis added).

While the analysts in an interpretative endeavour should be encouraged to enter into negotiation or debate about the meaning of the data they confront - the fictive, ideal outcome of this process being consensus - it should never be expected that they will ever construct the truthful or correct interpretation. Craig stresses that "at no stage in the construction of a reading of the data is the emergent idea or ideas regarded as final or the truth or absolutely certain" (1985b, p.12). Horton (1979) writes that "certain interpretive fictions and conventions ... are both inherent in and a necessary part of the process of interpretation" (p.3). She elaborates as follows:

That interpretation consists in the retrieval of what was 'really there' or what 'really happened' is one of the fragile fictions upon which the whole enterprise of interpretation depends. These fictions are simply easier to see and easier to admit when they are going on in someone else's yard (Ibid., p.3).

4.2. APPROPRIATION

We have the genius of Piaget to thank for the insight that a subject or an interpreter does not construct knowledge of any object in a 'once-off' manner. Instead, the subject constructs knowledge in an accumulative manner, partly through the generative power of transaction, partly through the power (or the intrinsic generative mechanisms) of the mind and partly through the resistances offered by 'Reality'. This model of knowledge construction applies equally to the formal interpretative endeavour and to the everyday interpretative endeavour, for example, in the case of the developing child.

In what is to follow, the appropriation of an object of knowledge is presented in terms of Pascual-Leone's epistemological levels (see pp.162-163 above). However, whereas he postulates five moments, it seems useful to reduce the last three into a 'generative level' of analysis after Bhaskar (1979). The resultant three epistemological levels - 1) descriptive analysis, 2) phenomenological analysis; and 3) generative analysis - constitute what may be termed three modes of knowledge construction. These modes incorporate both forms of distanciation and attitudes in appropriation, each of which is discussed separately below.

4.2.1. Descriptive analysis

An action-event is described when its manifest qualities are recorded. In this sense, the recording of these manifest features corresponds to Ricoeur's notion of fixing. However, while Ricoeur proposes that it is the meaning of action-events which is retained when the events are fixed according to his proposals, the present author uses the term "descriptive analysis" to refer to the record of the event itself.

In the procedure section of the present project (cf. 1.2.), the action-events recorded on the focus video-tape are described: (1) In terms of the subjects who participated in the study; (2) in terms of the problem-solving tasks which were presented to the subjects; (3) in terms of the context in which the execution of the tasks proceeded; and (4) in terms of the verbal and non-verbal action-events performed by the subjects.

4.2.2. Phenomenological analysis

A phenomenological analysis involves exploring an actor's reasons/intentions/desires/beliefs, and may also involve the judgements of contemporaries about particular actions. Such an analysis is thus exclusively concerned with the subjective pole or the 'world behind' any action.

In the present project the phenomenological viewpoint was obtained from: (1) the discussion between A. and the author about A's behaviour recorded on the focus video-tape.

In this discussion, A's reasons etc. were deliberately elicited; and (2) The group discussion in which A., as a group member, interpreted the action-events observed on the original video-tapes.

While the explanatory function can proceed at the phenomenological level, by providing "a coherent account of why the actions were performed from the actors' points of view" (Craig, 1985b, p.25), Craig advocates (from Pascual-Leone) that a further level of explanation be undertaken. At this level, the generative mechanisms which underlie and produce both an actor's reasons for her behaviour, and the behaviour itself, are investigated. Behind the extension of a phenomenological account of behaviour into a generative framework, lies a belief in the ability of the functional structures (which are assumed to produce all action) to "provide a sound basis for the analysis of intentional and meaningful action" (Craig, 1985b, p.26). Craig proposes that "the formulation of the generative mechanisms of intentional and meaningful behaviour is ... achiev(able) through a co-ordination between Pascual-Leone's and Vygotsky's theories" (Ibid., p.32), a project which Craig deliberately addresses (cf. Craig, 1985).

4.2.3. Generative analysis

A goal of modern human sciences is to solve the puzzle of the psychological organism, i.e., what is the very active system of organismic functional structures which allows a human to know, to act upon and, sometimes, to change intentionally his environment, perhaps making it more satisfying to him if not to others? (Pascual-Leone, 1976, p.110).

While Ricoeur suggest a useful methodological 'move' in the form of a structural analysis, and while it is possible to undertake such an analysis in the manner suggested by Ricoeur, Piaget's structural analyses provides a superior model for psychology, and also socio-psychology.

It is proposed in the present project that a generative analysis (which includes a structural analysis) provides a considerable grounding for any of a subject's performances. A generative analysis, when successfully undertaken, will reveal the mechanisms that underly and produce the manifest patterns of action which are described in the first stage of an analysis (cf. 4.2.1).

Vygotsky advocated that

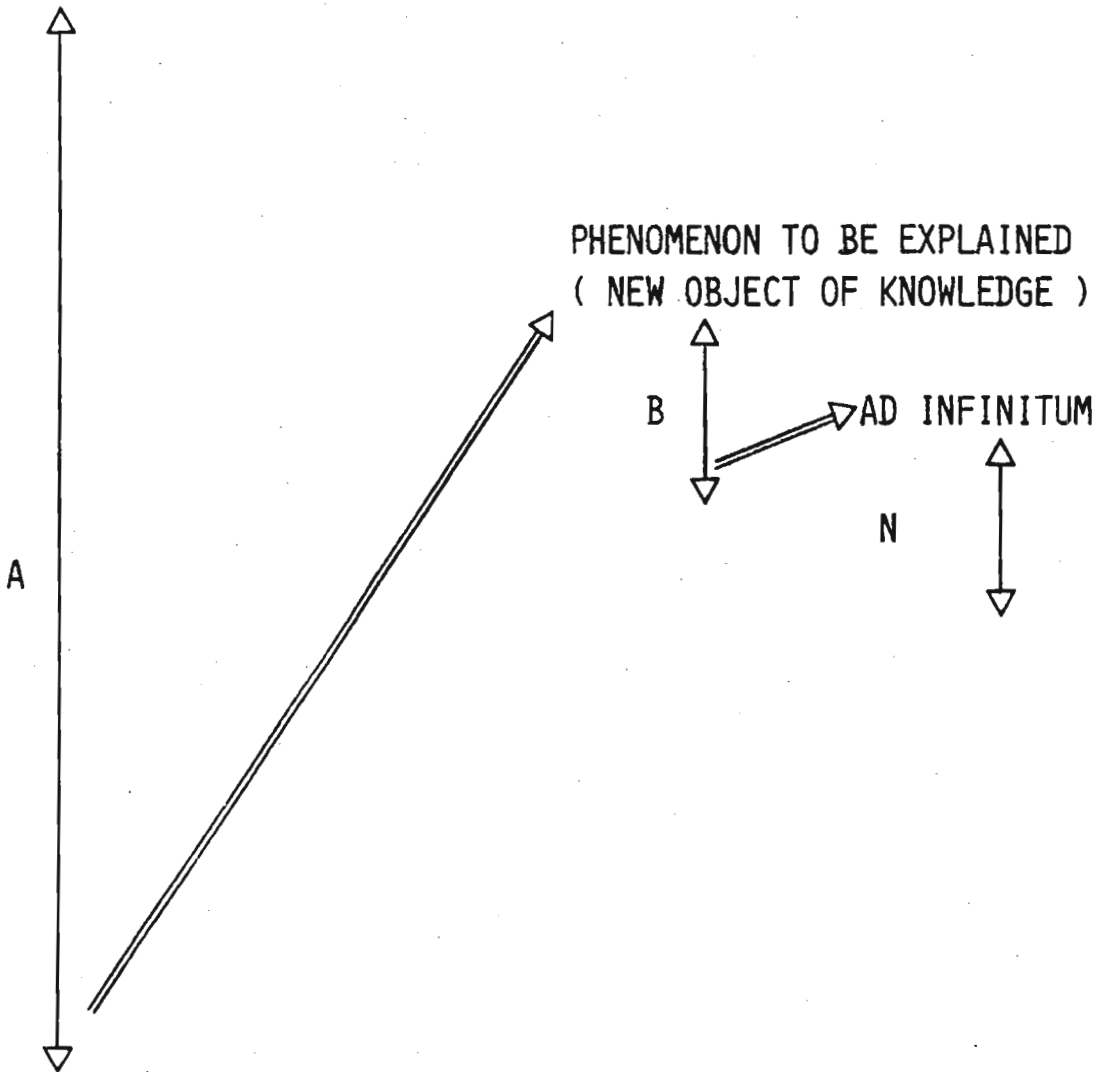
if we replace object analysis by process analysis, then the basic task of research obviously becomes a reconstruction of each step in the development of the process; the process must be turned back to its initial steps (1978, p.61).

It should not be presumed that generative mechanisms are easily accessible. Many are completely inaccessible, while others are only partially accessible (cf. Harré and Secord, 1972). In the case of those generative mechanisms which are quasi-accessible, Harré and Secord propose that the researcher endeavours to formulate models through the disciplined use of the imagination (cf. Bunge, 1973). Craig's mediational operators discussed in this report (see appendix 4), are one example of such models. At this stage, the process of analysis is held in check, as it were, and the models, offered in an explanatory capacity, being fixed, are themselves opened to debate, revision, reformulation or rejection (cf. Bhaskar, 1979, p.15 for an account of the continuous growth and construction of knowledge). The models proposed are thus to be regarded as 'open works'.²

It should be emphasised that Ricoeur stresses the dialectic between distanciation and appropriation. When a descriptive, a phenomenological and a generative analysis has been conducted, that is, when an interpretation has been constructed, the object of knowledge has been appropriated. Henceforth, this appropriation becomes an object of knowledge from which to distanciate (cf. figure 9, p.198).

DISTANCIATION

1. FIXING THE EVENT OF ACTION
2. THE PHENOMENOLOGICAL VIEWPOINT
3. ACTION AS A DEVELOPMENTAL PROCESS : FIXING THE MEANING
4. HUMAN ACTION AS AN 'OPEN WORK': NEGOTIATING THE MEANING



APPROPRIATION

1. DESCRIPTIVE ANALYSIS
2. PHENOMENOLOGICAL ANALYSIS
3. GENERATIVE ANALYSIS (EXPLANATION)

A; B; ... N REPRESENT THE CONTINUOUS DIALECTIC BETWEEN DISTANCIATION AND APPROPRIATION

FIGURE 9 : A DIAGRAMMATIC REPRESENTATION OF A PROPOSED MODEL FOR THE INTERPRETATION OF SOCIO-PSYCHOLOGICAL DATA

All that can be achieved in the process of interpretation is "the best possible solution or most likely suggestion about what the data may mean" (Craig, 1985b, p.12). The most "probable" interpretation, Ricoeur asserts, "can easily be derived from the logic of subjective probability" (1976, p.79). However, the "most plausible" or "best possible" interpretation achieved, is correctable in the light of further 'evidence'. Engels proposed the following in this regard:

The great basic idea that the world is not to be viewed as a complex of fully fashioned objects, but as a complex of processes, in which apparently stable objects, no less than the images of them inside our heads (our concepts), are undergoing incessant changes ...

In the eyes of dialectical philosophy, nothing is established for all time, nothing is absolute or sacred (cited in Vygotsky, 1978, p.121).

Any "final interpretation" reached, Ricoeur proposes, is analogous to a "verdict" in the juridical context, "to which it is possible to make appeal" (1981, p.215), Ricoeur proposes that, "like legal utterances, all interpretations in the field of literary criticism and in the social sciences may be challenged" (Ibid., p.215). However, unlike in the tribunal where "the procedures of appeal are exhausted", "such a last

word" either in literary criticism or in the social sciences, is not possible. "If there is any (last word)", Ricoeur claims, "we call that violence" (Ibid., p.215).

The 'conflict of interpretations' experienced between different analysts in the interpretative situation, also occurs between different authors who write about the same topic or object of knowledge. In the final analysis, Ricoeur's theory of interpretation must also stand as an object of interpretation. The author has attempted in this study to demonstrate, that like all objects of interpretation, Ricoeur's theory is subject to a conflict of interpretations. There is no last word: "It is because absolute knowledge is impossible that the conflict of interpretations is insurmountable and inescapable" (Ricoeur, 1981, p.193).

4.3. CONCLUSION TO PROJECT

Chomsky used the implicit knowledge of the native speaker of a language, as the basis from which to reconstruct the competence (deep structure) which produces performance (surface structure). Piaget used errors in the logical judgement of children to reconstruct the structures of logico-mathematical thought and to explicate the development of knowledge in terms of what may be called "intrinsic generative mechanisms" (cf. Craig, 1985). Vygotsky emphasised the "extrinsic generative mechanisms" (Ibid.) which co-determine the individual's construction of knowledge in a process where 'mind' and 'culture' instantiates each other. He also formulated the framework for a methodology within which present patterns in behaviour and nature are regarded as occasions for reconstructing their history, and with this project created a sound epistemological basis for socio-psychology.

The past projects (Kok and Beinart (1983); Mindry (1984); Craig (1985) and Kok (1986)) used a co-ordination between the Piagetian and Vygotskian paradigms to construct knowledge of the interface between social and individual history. In the present project the author used the hermeneutical theory of Ricoeur as the means to distanciate herself from the process.

of knowledge construction, in order that a meta-analysis of the process of interpretation and Ricoeur's model for the interpretative task might be achieved.

The engagement in and product of the confrontation between the subject (the author in the present case) and the main object of knowledge (the process of interpretation) have been presented above. The attempt to 'translate' philosophical concepts and conceptual models into empirically usable methods and procedures for a specific domain of study seems to be an important undertaking if Psychology is to shed its methodological paralyses: The present project represents one move in this direction.

Furthermore, the author endorses current projects being undertaken which 'use' Habermas and Gadamer's hermeneutical theories (cf. Craig and Miller, in progress). Habermas's theory appears to be especially important in that he specifically uses Piaget's theory to ground the domain of Psychology; Habermas's proposals are therefore suitable as regards the research tradition in which the present project is located. Gadamer's proposals are of interest in terms of his debate with Habermas, and also because he provides some seductive concepts in the context of the process of interpretation, as mentioned in this report.

In conclusion, the construction of knowledge must be seen as a cumulative process; because knowledge is continually developing and changing, the attempt to explicate the operation of the process of interpretation or knowledge construction, must be a continuous endeavour. It is impossible to write a method or an epistemology which can stand as final, as "the last word". No social science, it is proposed, should exist without a continuous meta-analysis of its methodological practices. In this regard, the present project seems to contribute to the ongoing research programme being conducted in the Psychology Department at the University of Natal, Durban. The ultimate aim of the master project of which the present study forms a part, is the creation of an interface between, and an epistemology for, the methods and procedures of socio-psychology. In that a meta-analysis of the process of interpretation is presented, the present study can be regarded as providing a mirror-in-construction in which the methodology of the research programme referred to above, is partially reflected.

The search for method becomes one of the most important problems of the entire enterprise of understanding the uniquely human forms of psychological activity. In this case, the method is simultaneously pre-requisite and product, the tool and the result of the study (Vygotsky, 1978, p.65).

NOTES

1. Bhaskar (1979) asserts that generative mechanisms, usually opaque, become more visible during periods of rapid social change. In South African society, at present, socio-historical forms are indeed in a process of rapid transformation. As regards the role of intentions and the judgements of contemporaries in the interpretative endeavour, a recent "National Book Week" held in Cape Town for notable writers and poets and their audiences, is interesting. These producers of texts were called upon to defend their intentions behind and positions in the process of transformation in society. They were, in effect, held responsible for the potential meaning(s) of their works!

2. It is interesting to note that when a researcher (as author) defends or explains her models, the phenomenological viewpoint gains importance.

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A META-ANALYSIS OF THE PROCESS OF INTERPRETATION

APPENDICES : THE ENGAGEMENT IN AND THE PRODUCTS
OF THE PROCESS OF INTERPRETATION

LAUREN DEBRA SMITH

BY WAY OF INTRODUCING THE APPENDICES, AN IMPORTANT POINT MADE IN THE BODY OF THE MANUSCRIPT, MUST BE RE-ITERATED: THE DATA CONTAINED IN THE FOLLOWING PAGES SHOULD NOT BE REGARDED AS MERELY AN ADJUNCT TO THE MANUSCRIPT; ON THE CONTRARY, THIS SECTION OF THE THESIS DOCUMENTS THE ACT OF INTERPRETATION OR ENGAGEMENT IN THE PROCESS OF KNOWLEDGE CONSTRUCTION AND, THEREFORE, FORMS AN INTEGRAL PART OF THE RESEARCH PROJECT.

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DATA BASES

1. THE ORIGINAL VIDEO-TAPES OF MOTHER-CHILD DYADS ENGAGED IN JOINT PROBLEM-SOLVING ACTIVITIES
2. GROUP DISCUSSION OF DATA BASE 1 (THE ORIGINAL VIDEO-TAPES)
3. THE FOCUS VIDEO-TAPE: A VIDEO-RECORDING OF A MOTHER (A.) AND HER CHILD (B.) ENGAGING IN TWO PROBLEM-SOLVING TASKS
(APPENDIX 1 IS THE TRANSCRIPT OF THIS VIDEO-RECORDING)
4. DISCUSSION BETWEEN THE AUTHOR AND A., ABOUT DATA BASE 3 (THE FOCUS VIDEO-TAPE)
(APPENDIX 2 IS THE TRANSCRIPT OF THIS DISCUSSION)

FIGURE 1 : THE DIFFERENT DATA BASES
USED IN THIS PROJECT

APPENDIX 1 : TRANSCRIPT OF VIDEO-TAPED INTERACTION
BETWEEN SUBJECT A. AND HER CHILD, B.
(DATA BASE 3)

TASK 1MOTHER

(Scratches head and looks at researcher).

YA, B.

Hello, B.

MNTANAMI SINALEMIDLALO LANA.
My child, we have got these games here.

(Points to intact puzzles which she has placed one behind the other)
UYAYIBONA LEMIDLALO YONUBILI?
Do you see these two games?
(Looks at child)

EHE!

Yes!

(Nods head)

IZWA, NGIFUNAKE UKUTHI
UNGENZELE LONA.
Listen, I want you to do this one.
(Turns one puzzle upside down to dislodge pieces and places empty template in front of child)

UYABONA?

Do you see?

NGIFUNA UNGENZELE LONA UFANE
NALONA.

I want you to do this one similar to this one.
(Places skeleton of car in front of child)

CHILD

(Small nod)

(Looks at camera/researcher)

EHE.

Yes. (Said very softly.

Small nod)

MOTHER

UYABONA?
Do you see?

UFANE NALONAKE SISI.
To look like this one.
(Moves skeleton away to side of
template and moves the model to
a position directly behind the
template)

(Looks at what the child
has done)
KAHLEKE.
Wait.
(Places the pieces to the right
of the child's template)

ANGITHI UYAYIBONA LEMIBALA?
Do you see these colours?
(Continues placing the pieces
beside the child)

UYENZE LENTO USHESHISE.
Do this thing quickly.

UYEZWA?
Do you understand?

EHE (disagree).
No.

AWUYIFAKANGA KAHLE LENTO.
You did not put this thing
properly.
(Points to template)

PHENDULA UYIBHEKISE NGAPHA.
Turn and make it face this
way.

CHILD

EHE.
Yes. (Said very
softly.
Small nod)

(Fits the skeleton)

(Removes the skeleton.
Examines it)

(Places skeleton in
template)

(Reaches for a piece
in front of her mother
and places it)

MOTHER

PHENDULA.

Turn.

(Gestures direction with hand)

KUPHENDULE FUTHI.

Turn again.

(Touches the skeleton)

KUPHENDULE FUTHI.

Turn it again.

(Gestures)

EHE.

Yes.

BUKE LA UBUKE LA UKUTHI
KUNJANI.Look here and look here
and see how it is.

(Points to model)

EHE.

Yes.

THATHAKE UFAKE.

Take it then and put.

(Rearranges 'unused' pieces
next to child so that they
can all be seen)

(Takes a piece)

FAKAKE ZONKE LEZINTO YONKE
LEMIBALA.Put then, all these things
and all these colours.

(Points to model)

(Looks at camera/researcher)

(Pushes mother's arm
away.Fits outer wheel of
car)

UNGAMBUKI LOWAYA!

Don't look at that one!

(Mother looks up towards
camera/researcher and
gestures)

(Looks up)

FAKA WENA, MAMA.

You put it, Mummy.

MOTHER

FAKA.
Put.

UBHEKE LAPHAYA.
Look there.
(Points to model)
UBUKELE LANA UKWENZE
KUFANE NALOKUYA.
Copy from this one and do
it similar to that one.
(Points to model and template)

UYEZWA?
Do you understand?

MMHM.
Yes.

FAKA.
Put.

THATHA NOMA IKUPHI LOKHU.
Take any of these.
(Gestures towards 'unused'
pieces)

NJENGOBA UBONA LANA.
As you see it here.
(Points to model)

THATHA OMUNYE UMBALA
OWUBONA UFANA NALAPHAYA
UWUFAKE.
Take another colour which
you see is similar to
that and put it.
(Points to model and
template)

CHILD

(Takes a piece which
she holds in her lap
and reaches for
another piece - the
other outer wheel -
which she fits)

(Nods head)

(Places inner wheel)

(Sifts through pieces)

(Continues looking
and touching 'unused'
pieces)

(Picks up green
piece and places
it tentatively)

MOTHER

FAKA LAPHO UKHONA LOMBALA.
Put it there where that
colour is.
(Gestures vaguely towards
model)

FAKA.
Put.

FAKA.
Put.

MMHM.
Yes.

(Turns the piece around)

THATHA OKUNYE FUTHI UFAKE.
Take another one again
and put it.

MMHM.
Yes.

KULAPHI LOKHO?
Where is that?

MMHM.
Yes.

YAFAK' INTOMBAZANE.
The good girl put it
correct.

FAKA OMUNYE FUTHI.
Put another one again.

CHILD

(Puts green piece back
on pile.
Picks up black piece
and fits it)

(Turns the piece
around)

(Pushes
mother's arm
away)

(Picks up green piece
from the pile)

(Places green piece)

(Picks up another
piece)

(Places piece)

(Picks up another
piece and places it
correctly)

(Picks up another
piece and places it)

MOTHER

PHENDULA FUTHI BHEKISA
PHEZULU.
Turn it again and make it
face up.

MMHM.
Yes.
(Sits back with arms crossed)

FAKA OMUNYE FUTHI.
Put another one again.

BHEKA LAPHAYA UBONE UKUTHI
LOWOMBALA ULAPHI.
Look there and see where
that colour is.
(Points to model)

EHE.
Yes.
(Gestures vaguely towards
model)

FAKA.
Put.

FAKA.
Put.

FAKA OKUNYE FUTHI.
Put another one again.

KULAPHI LOKHO?
Where is that?

BUKISISA KAHLE.
Look properly.
(Points to template)

CHILD

(Turns it and tries
to fit it.
Fits it correctly)

(Sifts through
remaining pieces)

(Picks up another
piece)

(Tries to fit piece)

(Drops piece)

(Picks up another
piece, holds it and
looks at template)

MOTHER

BUKISISA LEMOTO.
Look properly at this car.
(Points to model)

BUKISISA LEMOTO.
Look properly at this car.
(Points to model)

ULAPHI LOMBALA?
Where is this colour?
(Points to template and to
piece child is holding)

UFAKE.
And put.
(Places piece for child.
Removes hand)

MMHM.
Yes.

QHUBEKA FUTHI.
Carry on again.

PHENDULA KUPHENDULE.
Turn it, turn it.
(Turns piece for child)

PHENDULA FUTHI.
Turn it again.

MMHM.
Yes.
(Said when piece is
positioned correctly)

BUYISELA LOKHU.
Replace this one.
(Fiddles with template
pieces they have been
working on)

BUYISELA LOKHU OKUKADE KUKHONA.
Replace this one which was
there.
(Child and mother both working on the template but on different pieces)

CHILD

(Moves piece into
position)

(Picks up piece)

(Tries to fit piece)

(Tries to fit
another piece)

MOTHER

ASIKUYEKEKE LOKHU.
Let us leave this one.
(Said after working
unsuccessfully on the
positioning of the corner
pieces. Gestures with hands)

ASIKUYEKE LOKHU OKUSONISAYO.
Let us leave this one which
makes us wrong.

QHUBEKA NALOKHU.
Carry on with this.

QHUBEKA NALOKHU OKUNYE.
Carry on with this other one.

ASIKUYEKE LOKHU OKUSONISAYO,
SIZOKUBONA.
Let us leave this one which
is wrong. We will see it
afterwards.

FAKA LA KUKHONA LOKHO.
Put there where that
one is.
(Guides child's hand
momentarily)

KULAPHI LA KULEMOTO?
Where is it here in this car?
(Points to model)

KULAPHI?
Where is it?
(Points to model)

KUFAKE LANA.
Place it here.

MMHM.
Yes.
(Fiddles with pieces)

CHILD

(Removes some
of
the
pieces)

(Sifts through
'unused' pieces and
selects another piece)

(Places piece)

MOTHER

LOKHU OKUSONISAYO KUYEKE.
SIZOBUYE SIKUBONE.
This which makes us wrong,
leave. We will look at it
afterwards.
(Fiddles with pieces)

ISIKHATHI SETHU SIYAHAMBA.
Our time is going.

KUYEKE.
Leave it.
(Fiddles with pieces)

YEKA.
Leave.
(Fiddles with pieces)

YEKA KULUNGILE.
Leave, it is okay.

QHUBEKA ... FAKA.
Carry on ... put.
(Touches template pieces)

EHE (disagree).
No.

KULAPHI LOKHO?
Where is that?
(Holds child's left hand)

FAKAKE FAKA.
Put it, put.

EHE, KULAPHI LOKHO?
Yes, where is that?

FAKA.
Put.

FAKA LA KUKHONA.
Put it where it is.

KUYEKEKE.
Leave it then.

THATHA OKUNYE.
Take another one.

CHILD

(Places a piece)

(Tries

to

fit

piece)

(Drops piece)

(Chooses another
piece. Looks at
template)

MOTHER

THATHA OKUNYE.
Take another one.

EHE, YA QHUBEKA.
Yes, yes, carry on.
(Points to a particular
place on the template)

FAKA OKUNYE FUTHI. FAKA.
Put the other one again. Put.

THATHA LOKHO, KUFAKE LA
KUKHONA.
Take that, put where it is.

KUPHENDULE.
Turn it.
(Manipulates piece briefly.
Gestures)

KUPHENDULE FUTHI, UKUBHEKISE
PHEZULU.
Turn it again, face it upwards.

KUBHEKISE PHEZULU.
Face it upwards.
(Helps child fit piece)

EHE, THATHA OKUNYE FUTHI.
Yes, take another again.

FAKA.
Put.

MMHM (disagree).
No.

FAKA LAKUKHONA.
Put where it is.

KULAPHI LOKHU?
Where is that?
(Points to model)

CHILD

(Drops piece)

(Picks a piece and
places it.
Takes another piece)

(Drops piece and
sifts through pieces)

(Chooses a piece and
tries to fit it)

(Fits piece.
Chooses another
piece)

(Shows a piece to
mother)

(Places it)

MOTHERCHILD

KULAPHI LOKHU?
Where is that?
(Points to model)

KUFAKE LAKUKHONA LOKHU.
Put it as you see it here.
(Points to part of the
model)

(Places piece)

EHE (disagree).
No.

KUFUNELE INDAWO YAKHO.
Look for its place.

(Removes piece.
Holds it)

BUKA LOKHU UBUKE LOKHU
UBUSUFAKA LOKHUKE FUTHI
NJENGOBA UBONA NJE KANJE.
Look at this one, and then
this, and put this one
again.
(Points to model and
template over and over)

(Child looks at
template)

FAKAKE FAKAKE LOKHU OKUMNYAMA.
Put then, put this black one.
(Points to template)

KUBEKE FUTHI NAKHO.
Put this one again.
(Touches the child's hand
in which she is holding the
piece)

SIZOBUYE SEKUTHOLELE INDAWO YAKHO.
We shall find its place.

THATHA OKUNYE FUTHI.
Take another one again.
(Touches the remaining 'unused'
pieces)

ONGAKAKUTHATHI.
The one you haven't taken.

MOTHER

EHE, KUFAKE LOKHO.
Yes, put that one.

AWUBONIKE QHUBEKA FUTHI.
If you can't fit it, take
another one.

(Helps child fit it
correctly)

FAKA LOKOKE FUTHI.
Put that again.
(Helps fit the piece)

THATHA OKUNYE FUTHI.
Take another one again.

FAKA LOKHU OKWAKHONA.
Put this, it is for here.

BUKA LOKHU BESE UFAKE LOKHOKE.
Look at this and then put
that one.
(Points to template and model)

FAKA.
Put.

KULAPHI LOKHU?
Where is this?
(Points to a particular place
on the model)

AWUBHEKISISE LOKHU.
Look carefully at this.
(Points to a particular place
on the model)

CHILD

(Picks up piece.
Drops it.
Fits it)

(Picks up piece.
Puts it down and
picks up another.
Drops piece onto
template)

(Chooses another
piece.
Hesitates while look-
ing at the template)

MOTHER

KULAPHI LOKHU?
Where is this?
(Points to a particular place
on the model)

EHE (disagree).
No.
(Removes hand)

BHEKISISA LOKHU, NALOKHU BESE
KUBA ILOKHU, KUBE ILOKHU.
Look carefully at this, and
this, and then this, and this.
(Points to model and then to
template (twice))

KUFAKEKE.
Then put it.

(Fits the piece as child
hesitates)

FAKA LOKHOKE MANJE.
Put that one now.

I think the problem for her
is that this thing is not
fitting right. See now.
We are going back to this.
You see. Why?
(Attempts to fit corner
pieces)

It fits. It must fit. Remember, we did it before? (Voice of researcher)

It must fit. Ya.
(Continues attempting to
fit pieces)

YA, FAKAKE.
Yes, put then.

CHILD

(Points to the wheel
in the template)

(Puts piece down
amongst the 'unused'
pieces and picks up
another)

(Picks up the last
piece and tries to
fit it)

NGIZOKUFAKAPHI LOKHU?
Where will I put it?
(Looks on)

MOTHER

CHILD

IMAKE, BHASOBHA.
Stop now, be careful.
(Moves child's hand away.
Takes piece from child's
hand. Fits the last piece)

Finished? (Voice of researcher)

Finished.
(Smiles)

(Moves completed
template away and
moves the model in
front of her and
looks at it)

TASK 2MOTHERCHILD

(Moves template board in front of child. Model is behind the template board)

UYALIBONA LELIBHODI?

Do you see this board?

(Points towards board)

(Nods)

UYABONA UKUTHI HYEFANA

NALELI?

Do you see that it looks exactly like this one?

(Points towards model)

(Nods)

SIZODLALA LOMDLALO, LOMDLALO
LA OFANA NALONA.

We are going to play this game, this game which looks exactly like this one.

(Points to template and then to model)

UYEZWA?

Do you understand?

(Nods)

NAZIKE IZINTI ZAKHONA.

Here are the sticks for this one.

(Gathers the sticks)

UYAZIBONA LEZUMBHOBO UKUTHI
AZIFANI?

Do you see that these holes do not look the same?

(Points to the holes on the template)

(Nods)

UBHEKEKE IZINTI OZOZIFAKA
LANA.

You must look for the sticks you are going to put here.

(Points to the template board)

UZIFAKE NGENDLELA YAZO

NJENGOBA KUFAKWE LEZIYANA.

You must put them correctly, just the same.

(Points to template)

MOTHER

FAKAKE.
Then put.

CHA. QALA NGOKUFAKA IZINTI
ZONKE KUQALA.
No. First start by putting
all the sticks.
(Looks at researcher)

EHE! ASIQALEKI SIFAKE, KE.
Yes! Let us begin to put.

UYABONA?
Do you see?

EHE! SIBUKE LAPHAYA SIFAKE.
Yes! You must look at that
and put.
(Points to model and to
template)

PHENDULA.
Turn.
(Gestures)

PHENDULA KUFAKE KUZONGENA.
Turn. Put. It will go in.

EHE. KUNGENA OKUNJANI?
Yes. Which one goes in?

CHILD

(Picks up a stick)

(Places stick in
hole.
Takes a red block.
Looks at mother)

(Puts block down and
picks up a stick.
Fits the stick. Fits
another stick.
Before fitting the
fourth stick, looks
at the bottom of it)

(Picks up red block
and looks at mother.
Begins placing block
on stick)

(Continues fitting
block)

(Has difficulty
fitting block and
begins putting it
down)

(Picks up the same
block and fits it)

(Picks up white
block)

(Holding the block,
looks at mother)

MOTHER

(Moves all 'unused' pieces
closer together)

BUKA LAPHAYA!

Look there!

(Points to model)

EHE! UBUSUYAFKA.

Yes! And then put.

HAYI! NGIYAPHIKA MINA.

No! I disagree.

NGIYAPHIKA MINA! FUNA FUTHI.

I disagree! Look again.

NGIYAPHIKA MINA! BEKA LOKHO.

KUBEKE.

I disagree! Look there.

Put that down.

(Points to model)

KUBEKE.

Put it down.

EHE (disagree).

No.

SIFUNA OKUNJANI?

Which one are we looking for?

BUKA LAPHA.

Look here.

(Points to stick on model
which corresponds to stick
on which child is presently
working)

CHILD

(Drops white block)

(Chooses black block
and begins fitting
it. Turns it)

(Continues trying to
fit block. Looks at
mother)

(Puts piece down.
Begins sorting
through remaining
blocks)

(Continues sorting
through remaining
blocks)

MOTHER

BUKA LOKHU ZONKE LEZINTO.
Look at this, all these
objects.
(Points to unused pieces)

ANGITHI SEWUKUFAKILE LOKHU?
Isn't it you have already
put this?
(Points to red block child
has already placed correctly)

FUNA OKUNYEKE OKULANDELA LOKHU.
Look for the other one which
comes after this one.
(Points to red block again)

Do you hear what she says?
(Looks at researcher)

What does she say? (Voice of researcher)

You didn't give her all the
what-you-call-it, the objects.

CHILD

(Picks up a block,
then drops it)
(Fiddles with
remaining pieces)

MA, AWAPHELELE
LAMATHOYIZI.
Mummy, these toys are
not complete.

AWAPHELELE LAWAWA.
These are not
complete.

They're all there. That's why I did it
in front of her. (Voice of researcher)

AWAPHELELE LAWAWA.
These are not
complete.

APHELELE, MA. FUNA! FUNA!
They are complete, Mummy.
Look! Look!
(Shuffles remaining 'unused'
pieces)

KUPHELELE. FUNA! FUNA!
It is complete. Look! Look!
(Shuffles remaining 'unused'
pieces)

AWAPHELELE.
They are not
complete.

MOTHERCHILD

THATHAKE NOMA IKUPHI UFAKE.
Take any and put.
(Shuffles remaining 'unused'
pieces)

KUNJANI LOKHU?
How is this?
(Points to model)

THATHAKE, FAKAKE.
Take then, and put.

(Takes a white block.
Fits it)

EHE! OKULANDELAYO.
Yes! The following.

FAKA OKULANDELAYO.
Put the following.
(Points to model)

(Fiddles with 'unused'
pieces)

AYI! NGIYAPHIKA MINA.
No! I disagree.

(Picks up black
block. Looks at
mother)

NGIYAPHIKA MINA.
I disagree.

(Puts down black
block)

BUKA LAPHAYA UKUTHI KUNJANI.
Look there and see what it
is like.
(Points to model. Shuffles
'unused' pieces)

UBUSUTHATHA OKUFANA NAKHONA.
And then take one which looks
like the one there.

IKUPHI?
Which one?
FAKAKE.
Put then.

THATHA, THATHA LOKUYA.
Take, take that one.

(Looks at mother.
Picks up a block)

MOTHER

FAKAKE.
Put then.

EHE. SESIQEDILE.
Yes. We have completed.

(Extends child's arm so as
to determine whether child
can reach sticks on template)

YA, FAKAKE.
Yes, then put.

UZOFAKA KUPHI MANJE?
Which one are you going
to put in now?

UZOFAKA KULUPHI ULUTHI MANJE?
On which stick are you going
to put?

KULOLO?
To that?
(Said as the child touches
the first stick)

RIGHT.

FAKAKE KULOLUYALUTHI OTHE
UZOFAKA KULONA.
Then put on the stick you
said you are going to put.
(Points to one of the sticks
in the template)

BUKA LAPHAYA UKUTHI KUNJANI
OKWAKHONA.
Look there and see what it is
like.
(Points to a completed stick
in the model)

KUNJANI?
How is it?

CHILD

(Fits it success-
fully)

(Picks up white
block. Looks at
mother. Puts it
down)

(Looks at mother)

(Touches all three
'unused' sticks on
model)

MOTHER

NAZ'IZINTO.
Here are the objects.
(Shuffles the 'unused' blocks)

HAYI. KUNJANI OKWALAPHAYA?
No. What is it like for that
one?
(Points to a completed stick
in the model)

UFUNA UKUSUKUMA?
Do you want to stand up?

FAKAKE FAKA LAPHAYA, PHEZ,
PHEZ PHESHEYA.
Then put there, up, up
over there.

FAKA LAPHAYA LA UTHE UZOFAKA
KHONA.
Put it over there where you
said you are going to put it.
(Removes piece from child's
hand and points to a
particular stick on the
template)

FAKA.
Put.

EHE, FAKA.
Yes, put.

(Sighs. Holds child.
Gets up. Sits down)

CHILD

(Picks up a block and
fits it on the stick
which she has already
completed)

(Put down block)
(Looks at model)

(Shakes head)
(Picks up block)

(Has picked up a
block)

(Holds up block for
mother to see)

(Tries to place
piece. Experiences
difficulty in align-
ing it correctly)

(Fits block)

MOTHERCHILD

FUNA OKUNYEKE FUTHI.
Look for the other one
again.
(Points to model)

(Looks

KUNJANI OKULANDELAYO?
What is the following one
like?
(Points to model)

at

BHEKA OKULANDELAYO UKUTHI
KUNJANI.
See what the following one
looks like.
(Points to model)

model)

OKULANDELA LAPHAYA LA
UFAKA KHONA.
The following one for there,
where you are putting.
(Points to model. Shifts
model slightly)

(Looks at correspond-
ing stick on model.
Fits a white block)

AYI! NGIYAPHIKA.
No! I disagree.

(Looks at mother)

KUYAGCINA LOKHO.
That is the last one.

(Stick falls out of hole)

KHIPHA.
Take out.

(Removes red block
which was fitted
previously on the
stick which has now
fallen out)

KAHLE!
Wait!
(Stands up. Fits stick.
Fits red block)

KUBEKE ECELENI LOKHO.
Put that one aside.
(Takes the white block from
the child's hand)

MOTHER

FAKA.

Put.

(Shuffles remaining 'unused' blocks)

UZOFAKA OKUNJANI MANJE?

Which one are you going to put now?

AYI, ANGAZI. PHELA MINA ANGAZI.

No, I don't know. I just don't know.

KUNJANI OKULANDELAYO

LAPHAYA?

How is the following one there?

(Points to corresponding stick on model)

MM, UYAKUBONA UKUTH' KUNJANI?

Yes, do you see what it is like?

(Gives child a black block)

EHE.

Yes.

(Nods. Helps child align the block properly)

FAKAKE LOKO OKADE UKUFAKA KUQALA.

Then put the one you have put at the beginning.

CHILD

(Touches a block and looks at mother)

(Looks at stick. Touches stick on template which has been completed.)

(Nods. Begins to fit the block)

(Turns the block and fits it with her mother's help)

(Picks up white block. Looks at mother)

LOKHO?
This?

MOTHER

CHA, UMGABUZI KUMINA.
No, don't ask me.

FAKA. ANGAZI MINA, FAKA.
Put. I don't know, put.

(Shifts the model so that it
is in line with the template)

IKUPHI OKULANDELAYO MANJE
OSUZOKUFAKA?
Which is the following one?
(Removes the fourth stick
from the template)

YA.
Yes.

CHA, NGIYAPHIKA MINA!
No, I disagree!

FAKAKE OKWAKHONA.
Then put the one for here.

URED?
The red?

CHILD

(Continues looking
at mother)

(Fits the block.
Picks up another
block)

(Points to the
remaining 'unused'
stick on the
template)

(Puts the black block
down. Picks up a
white block. Looks
at the template, to
the stick which she
fitted first.
Puts the white
block down.
Shuffles 'unused'
blocks)

ANGIKUBONA OKWALA,
KWALA. URED?
I don't see the one
for here.
The red one?
(Points to bottom
of stick on
template)

EHE.
Yes.

MOTHER

AKUYENA URED LOWO
OWALAPHAYA.
The red one is not for there.

AYI, URED WALANA UFAKWA
SEKUPHEZULU.
No, the red is for here,
you put it up there.
(Points to the position
B. is pointing at. Gestures
upwards)

FAKA OKUFANELE KUBELANA.
Put the one which is
supposed to be here.
(Points to corresponding
stick on model)

UYABONA OKULA UKUTHI,
KUNJANI?
Do you see the one here,
how it is?
(Points to corresponding
stick on model)

KUFAKEKE, FAKA OKUNYE.
Then put, put another one.
(Keeps her finger pointing
to the corresponding block
on the model)

MM, FAKA OKUNYE.
Yes, put another one.
(Helps child fit the block)

FAKA OKULANDELAYO.
Put the following.
(Points to the next block
on the corresponding stick
on the model. Helps child
align the block)

(Looks smilingly at researcher)

CHILD

NGISHO OWALA MINA.
I mean for this one.
(Points to bottom
of 'unused' stick on
template)

EHE.
Yes.

(Picks up a block.
Holds it. Fits it
with mother's help)

(Chooses the correct
block. Fits it with
mother's help)

MOTHER

FAKA OKULANDELAYO.
Put the following.
(Points to the last block
on the corresponding stick
on the model)

AYI, NGIYAPHIKA MINA!
No, I disagree!

AKUKHONA OKWAKHONA.
This is not the right one
for here.

FAKA URED WAKHONA.
Put the red for here.

ANGAZI ZAMA! FAKA PHELA.
I don't know! Try to put it.
(Looks briefly at researcher)

BHEKA LA UFAKA KHONA,
IKHONA KUZONGENA.
Look here where you are
putting so that it goes in.

FINISHED. GOOD GIRL.

AWUBONIKE, INTOMBAZANE EKWAZI,
UKUBHEKA IBONE UKUTHI KUNGENA
OKUNJANI.
You see, good girl, you look and
you can find the right one to
go in.
(Points to model)

CHILD

(Picks up a red block
and begins fitting
it)

(Puts the block down)

(Picks up another red
block)

(Looks at mother)

(Continues looking at
mother. Fits block
successfully)

(Continues fiddling
with 'unused' sticks
and blocks)

(Continues fiddling
with 'unused' sticks
and blocks)

APPENDIX 2 : TRANSCRIPT OF DISCUSSION BETWEEN SUBJECT A. AND
THE AUTHOR ABOUT THE FOCUS VIDEO-TAPE
(DATA BASE 4)

THE SECTIONS IN CAPITAL TYPE ARE EXTRACTS FROM THE VIDEO-TAPE RECORDING (REFER TO APPENDIX 1) WHICH A. AND THE RESEARCHER/AUTHOR (REFERRED TO AS R.) VIEW DURING THEIR DISCUSSION. (THE CHILD) B'S WORDS ARE ENCLOSED IN BRACKETS SO AS TO DISTINGUISH THEM FROM A'S WORDS.

- R : A., we are just going to go through the tape and at certain times I am going to stop it and say to you, "Why did you do that?". Not big questions, just: "What do you think?"; "Why did you stop her?"; "Why did you say, 'I disagree'?"? "What is your reason for saying that?"; "What do you think the result will be?" or "What do you think will happen because you said that or did that? Or did something?". "What do you think will happen?". OK?

(TASK 1)

A. (to B.) : DO YOU SEE THESE TWO GAMES?

YES! LISTEN, I WANT YOU TO DO THIS

ONE.

- R : OK, first of all, why did you call it a game? I'm not testing you, we're just interested in your reasons. Why do you consider it a game? Why did you use that word, "game"?
- A : I used that word because it's something which she is going to play with.
- R : Right. So are you saying that it is not like work? It's more like fun, something which she's going to play with?
- A : Yes, which we are going to play with and enjoy. I think she will enjoy it, especially the colours.

R : Right. So you think of it as a game more than work?
OK.

A. (to B.) : DO YOU SEE? I WANT YOU TO DO THIS
ONE SIMILAR TO THIS ONE. DO YOU
SEE? TO LOOK LIKE THIS ONE.
(MOTHER MOVES THE MODEL TO A
POSITION DIRECTLY BEHIND THE
TEMPLATE) WAIT. DO YOU SEE
THESE COLOURS? DO THIS THING
QUICKLY.

R : OK, two things. First of all, why do you put the
model in front of her and not at her side?

A : It is easy for her to look at the model in front of
her rather than looking at it, rather than looking
at it from the side. You see, her eyes must be
straight forward and she must do the thing. You
see, I thought it would be too difficult for the
small child like her to turn and come back, turn and
come back. So it's just to look and then do it.

R : So what do you think the effect will be of having it
in front of her?

A : It will be more easier for her.

R : In the sense that she doesn't have to keep looking?

A : ... keep looking at that. By the time she comes
back - she's a small child - by the time she turns
her eyes to this model she is working with, she
might have forgotten where to put the piece.

R : I see, so shorter for memory. She can look and do
it straight away? She's got to look and then turn
back otherwise.

A. (to B.) : TO LOOK LIKE THIS ONE. WAIT. DO
YOU SEE THESE COLOURS? DO THIS
THING QUICKLY.

- R : Why did you ask her if she could see the colours?
- A : I wanted her make, to realise that it makes the difference that she's going to use different colours. Well, with B. I said that because I know she knows some of the colours. "Put it like that first", she knows. With the other child, I don't think I was going to say that. With my daughter, I have already taught her some of the colours like yellow, brown, green ...
- R : So what do you think telling her, drawing her attention to the colours, will do for her? Make it seem like a game? Or do you think the colours are an important part of doing the puzzle? Why did you actually say, "the colours"?
- A : No, I didn't mean that the colours are an important part of the game. Drawing her attention to the colours she must realise, she must know and realise that she must put exactly the same colour where that colour is (in the model).
- R : Don't you think that the colours are important? They're an important part of the thing? If she gets the colours wrong, the pieces will be wrong.
- A : Somehow, somehow, ya, the pieces will be wrong. But if she has got the what-do-you-call, the, if you have given her the idea of the colours that she must really consider, the colours, which colour she must put there, I think it would be easier for her. I thought it would be easy for her.
- R : OK. And then you say to her, "We must do this thing quickly". Why do you say that?
- A : To tell her to do this thing quickly, I want to make her know, whenever she does a thing, as soon as you start it, it must come to an end. Not to say that she must just do it as long as she does it. She must finish it no matter how she finishes it, but to

do it quickly. She must do it quickly and finish it. I want to see it when it's complete, whether wrong or right, it's all right.

As a child it might happen that she just take the colours and fiddle with them. Ya, just like that. You must just tell her, "You must do this thing quickly. I want it finished".

- R : And what do you think that does to her, when you say that? What do you think happens when she hears you say to her, "Do it quickly"? How do you think she feels? Or what happens with what she thinks?
- A : I think it will work her brains. It will work her mind to do the things quickly and try to do them in the correct way.
- R : I see.

A. (to B.) : YOU DID NOT PUT THIS THING
PROPERLY. TURN AND MAKE IT FACE
THIS WAY. TURN. TURN AGAIN. TURN
IT AGAIN. YES. LOOK HERE AND LOOK
HERE AND SEE HOW IT IS. (MOTHER
POINTS TO MODEL) YES.

- R : Why do you tell her to "Look here and look here"?
- A : She must, I want her to see. I've been telling her to turn it, turn it around. So every child, she might be turning and it has just come by accident that it came all right, then I want her to look there and look here and see if it, see ...
- R : Point out that it's the same?
- A : Ya, if it's the same.

A. (to B.) : YES. TAKE IT THEN AND PUT. PUT
THEN, ALL THESE THINGS AND ALL
THESE COLOURS. DON'T LOOK AT THAT
ONE! (YOU PUT IT, MUMMY.) PUT.
LOOK THERE. COPY FROM THIS ONE AND
DO IT SIMILAR TO THAT ONE. DO YOU
UNDERSTAND? YES. PUT.

R : You keep saying to her, "Do you understand?", "Do you see?". Do you think it's important that she answers you? Do you say it expecting her to answer you? When you say, "Do you understand?", do you want her to say, "Yes"?

A : Yes, yes, I want her to tell me if she understands and if she doesn't understand she must tell me, she must say "No".

R : Do you think she can say "No"? Or will she be too scared to say "No"?

A : I think in the place of saying "No", she will just keep quiet and I will consider that as "No", with my child.

R : Now, if she does keep quiet and you consider that as "No", what will you do?

A : Then it means that she doesn't understand. I will have to explain it again.

A. (to B.) : DO YOU UNDERSTAND? YES. PUT.
TAKE ANY OF THESE. AS YOU SEE IT
HERE. TAKE ANOTHER COLOUR WHICH
YOU SEE IS SIMILAR TO THAT AND PUT
IT. PUT IT THERE WHERE THAT COLOUR
IS. PUT. PUT. YES.

- R : Why don't you show her where to put it? You just leave that up to her.
- A : I just leave that to her because I want to see if she understands the model. If she can understand the model and if she can do it. And if I take the model and put it for her, it means that I'm not teaching her anything. I'm just doing the game for her, as I called it, a "game".
- R : So what do you consider, teaching (to be)? If you teach her, what would happen?
- A : If I consider teaching, I think what I want to see is that the child understands what she is doing.
- R : In other words, does that mean to leave her to do it on her own?
- A : Leave her to do it on her own, then you just help where you see it, ya she's stuck or And you mustn't leave her to get stuck for a long time because that might make her scared, after a while.
- R : And what do you think the effect is for her if she's just left on her own? You say, "Take any piece you want, put it. Look at the model and put it in the same place as the model. Put it where you want". What do you think the effect is?
- A : I think that ...
- R : What is it that the instruction does for her? What does she think when you say that?
- A : First of all, I think that instruction relaxes her mind.
- R : Relaxes?
- A : Ya, it relaxes her mind and she will try to do the thing. I can't say she will do it. It relaxes her mind, then she's not scared, she's not frightened of anything. Inside of her, as she is a child, definitely she is, it's just within, that she's frightened of what she's going to do, being, standing in front of me and sitting in front of you. But by telling her that she must just do the thing on her own anyhow, it relaxes her mind and she will try it.

- R : So do you think that if you did it for her, she wouldn't be relaxed, she'd be anxious?
- A : Yes, she would be anxious and if I do it for her she won't know anything. I think I would have to do it three of four times and then she starts realising that these can go there, these can go ...
- R : Do you think this is a shortcut then?
- A : To make her do things on her own, I think it's a shortcut, to have the children, to make the child do it.
- R : Do you think she'll learn quicker than if you did it with her three of four times?
- A : No, she will learn quicker - for me she will learn quicker if she does it herself. I only help her.

A. (to B.) : PUT IT THERE WHERE THAT COLOUR IS.
PUT. PUT. YES. TAKE ANOTHER ONE
AGAIN AND PUT IT.

- R : OK. Do you see there she pushed away your hand? You were trying to ... She sort of went like that (gestures). Did you see?
- A : She was trying to show me that she can see where to put this thing.
- R : On her own. She doesn't need your help?
- A : She doesn't need my help in that piece.

A. (to B.) : TAKE ANOTHER ONE AGAIN AND PUT IT.

YES. WHERE IS THAT? YES. THE

GOOD GIRL PUT IT CORRECT.

R : OK, you say there, "Good girl", and "Yes", and that type of thing. Why do you do that?

A : That I want to stimulate her, just stimulating her to see that see that she is doing right.

R : Right, and keep her going? I see. And what do you think it does for her when you say, "Good girl, that's right"?

A : I think that makes her, it makes her interest, getting interested in the game, and again it makes, it makes her to like what she is doing.

R : Because you're telling her she's good at it?

A : She's good at it and she's doing it in the right way.

R : You think it makes her feel better about doing it?

A : (Nods)

A. (to B.) : YES. THE GOOD GIRL PUT IT CORRECT.

PUT ANOTHER ONE AGAIN. TURN IT

AGAIN AND MAKE IT FACE UP. YES.

PUT ANOTHER ONE AGAIN. LOOK THERE

AND SEE WHERE THAT COLOUR IS.

R : Did you see, she was going like this (gestures a quick sorting movement) with the pieces? Why do you think she does that?

- A : She want to see the right colours she wants to take. At the same time I think she's interested in the colour that she ... As she is so small she knows and she concentrates and she thinks which colour she must take, as she must. She can take any colour that she wanted. In her mind she was, she wanted to take orange, so now she's looking for the orange colour.
- R : Right. Why do you think she does it so fast? Why do you think she does that? Is she in a hurry to find the right piece?
- A : She's in a hurry to find the piece she's looking for.
- R : Do you think she's excited by the task?
- A : No. I think she's getting more stimulated, getting more interested in the game.
- R : As it goes along. Do you think that's got anything to do with, that it's due to the game itself? Is it carrying her along or is it you keeping her stimulated? Why do you think she is suddenly picking up and getting excited?
- A : I think I'm keeping her stimulated. It's the way I gave the game to her. The way it works makes her get stimulated.
- R : So it's both? Both you and the game itself?
- A : ... and the game itself.
- R : Do you think all children will be like that? Or does she particularly like games?
- A : Not all children.
- R : Do you think it's an important part, how the mother or teacher presents the task? How you start it?
- A : Very important.
- R : Do you think if you just did it for her (B.) or if you sat back, she wouldn't be as interested in it?

- A : She wouldn't be so interested because she doesn't know, she doesn't know what it is about. You must introduce the what-do-you-call-it, the task, or the game or what ever it is you are going to introduce to the children, in the way that they will see it. And you must, and you can see, you can look at, you can see their faces if you have introduced it in the right way or it may not be the right way. What will tell you, what will tell you that you have introduced it in the right way, it's the way they will catch it.
- R : Right, so you would say that because she's getting excited and doing it quickly and everything, she has "caught it", as you say?
- A : She has caught it somehow.
- R : OK. What do you think would happen if she is a child who likes doing puzzles and she's always enthusiastic anyway and she's quick and she's clever? Say it wasn't your child? Or say it was your child, whatever, but you just decided that you were not going to say a word, that you were going to sit back. Do you still think she would get excited and do it nicely? Or do you think because you're not getting her excited, it wouldn't be enough? Do you think it's important that you must have an enthusiastic child and the mother? Or if is she enthusiastic anyway, doesn't it really matter so much about the mother or the teacher, whoever's presenting or giving her the task? Do you know what I'm asking?
- A : I think, yes, I think I understand. I think that at some stage when you have started with the task with your child, you must see how she gets it or how he gets it, and then there must be the time when you just withdraw slowly, not just sit back.
- R : And if you did? If you just said, "OK, here's the task. You do it like the model. You do it on you own". You didn't say a word, and she was a child who was clever and enthusiastic and she loves puzzles and she's quick. Do you still think she would do it as well?
- A : No.
- R : No. So you think the mother is important?

- A : The mother is important, the teacher is important. But R., I think with my child, as I have said, it's just an extra-ordinary, an outstanding child. Yesterday we went to Kwa Mashu, and in the house we went to (it's just a couple, no children), I think after a few seconds or after a few minutes she came round: "Ma, you see now you didn't bring my toys, you didn't bring anything of mine, no pen, no book, now what am I going to do?". Every time we go I must carry the box of blocks. Ya, I must take those blocks and put them in a plastic bag. I must take the, there's another box with puzzles and there's another box with small, small animals. I'm teaching her this is an elephant, this is a cat. She expects me to carry all those things when I'm going with her. When I come into your house, I must put those things down.
- R : She likes to play?
- A : Mhmm, that's why I'm saying. Well, it might be easy with this one because it's my child. Maybe if I was, if you gave me another child, somebody's child three years old, it was not going to be like this, definitely not.
- R : Do you think she is like that because she was born like that?
- A : No, she wasn't born like that. Well, it means that she is intelligent somehow by birth, but you've got to help her, to stimulate that intelligence.
- R : So if she was born like she is, she's the same child and she's somebody-else's child and this woman doesn't know about stimulating children and think it's important. Do you think she wouldn't be as bright or interested?
- A : No, she wouldn't be as bright, ya, ya.
- R : So you see the mother's role as very important?
- A : The mother's role is very important. You must play your role.
- R : Do you see yourself as doing that here? In the task? Do you see yourself as playing an important role? With the puzzle?

- A : Yes. Just by talking, keeping on talking: "Do that, put, put, put", you just stimulate, stimulate the child. Somehow she will put, she can be clever, that's my daughter just. But if you are not there, she can just put one piece, then look around, try to play with some other things at the side. Just by sitting next to her, "No, put it, put it there, turn it around, do this, do this and that". Yes, it helps. So the mother or the teacher must be there.
- R : What do you think then when children play on their own? I mean, most of the time children play on their own. Like if you're cooking or cleaning or washing or something and she plays on her own, or she's colouring in. How do you think she's learning then - if you're not there - if you think the mother is so important?
- A : I think just to leave the child to do, to play on her own, colouring in and doing these things, with my child, it's that I just wanted her to know the colours, that's all. Or with her I give her the same, the pictures. I'll give her that picture, then I say, "You must colour it the same way as this thing is coloured". Then when she is finished she will run and give it to me and if it's wrong, I'll say, "It's wrong". I'll help to take the picture and say, "Is this thing the same?".
- R : Do you think that if there's no mother - just say the mother goes to work in the morning and the child is left at home all day, just stays with a granny or somebody, but they don't play with the child or talk to the child - do you think that if a child on her own sits and does puzzles and draws and paints and whatever, do you think she's not going to learn anything? Or do you think it's not as good as if the mother's there?
- A : It is not as good as if the mother is there, because there will be nobody to see if she has done the puzzle right. She is just doing the puzzle to collect the pieces and put them. When they are finished, it is finished. Wrong or right, she doesn't know. So it's not enough.

A. (to B.) : LOOK THERE AND SEE WHERE THAT
COLOUR IS. YES. PUT. PUT. PUT
ANOTHER ONE AGAIN. WHERE IS THAT?
LOOK PROPERLY. LOOK PROPERLY AT
THIS CAR. LOOK PROPERLY AT THIS
CAR. WHERE IS THIS COLOUR? AND
PUT.

- R : There you seem to wait a while for her to try it, and you say, "Look at the model. It must be like that. OK, put it". She tries, she can't put it and then you help her place it. Why do you do that?
- A : I don't want her to get - how am I going to put it - I don't want her to lose her interest in what she is doing.
- R : You think that if she ...
- A : If she, if she keeps on fiddling and it doesn't come right, it might make her lose the interest.
- R : So you think she'll get frustrated and give up or something?
- A : And give up everything.
- R : So you're careful to always keep her interested?
- A : Keep her interest.
- R : Interested and motivated?
- A : Interested and motivated in what she is doing.
- R : Is that what you are doing by helping her? By placing it for her? And then what effect do you think that has on her mind when you say, "Put it, put it. OK, I'll do it"?

- A : I think she had a piece in her head and she could see that it was the right piece, but she couldn't fit it, so rather than taking the piece away I decided that I must help her. So if I was taking the piece away I was getting, I was going to get her muddled.
- R : Right.
- A : Because she had the right piece and she could see that she has got the right piece.
- R : She didn't know which way to put it, and if you took it away you would confuse her? But if it was the wrong piece and she had a round black piece and she tried hard?
- A : I would say, "Try, try another one", if it doesn't fit, just like this. I am not going to say, "It's not the right piece". "Try another one", if it doesn't fit.
- R : Now, when you say to her, "OK, this is how it goes", and you fit it for her, what does she think when she sees it's right?
- A : I think she thinks that the mother, or that the teacher, has just helped her.
- R : But does she learn? Do you think she learns? Does she think, "Ahah, it goes like that"?
- A : Yes, she must see that it goes like that.
- R : Do you think she learns anything?
- A : She was trying the piece all wrong, the only thing, she couldn't fit it.
- R : So do you think she feels now she's done it properly?
- A : Yes, yes.
- R : And do you think she learns as much as if she put it on her own the first time?
- A : No, no.
- R : No. If she did it herself, if she looked at it and she put it herself, she learnt more than if after a while, you put it for her?

- A : She learnt more than when you put it for her.
- R : So you think the less you do for a child, the more she learns?
- A : The more she learns.

A. (to B.) : WHERE IS THIS COLOUR? AND PUT.

(MOTHER PLACES BLOCK FOR CHILD WHO
MOVES IT INTO POSITION) YES.

- R : OK, there you put it for her but she still wants to put it herself. Why do you think she does that? She doesn't want you to put it there.
- A : I think she wants to do that thing, she wants to do the game on her own and if you interesting her, and she will be proud if she has done it for herself.
- R : Oh, so she wants to feel that she's done it alone?
- A : She's done the whole thing for herself.
- R : Does she think it's her puzzle, or your puzzle together? Both of yours', or does she think that it's her puzzle?
- A : She thinks it's her puzzle.
- R : Her job?
- A : Her job.

A. (to B.) : YES. CARRY ON AGAIN. TURN IT,
TURN IT. TURN IT AGAIN. YES.
REPLACE THIS ONE. REPLACE THIS ONE
WHICH WAS THERE.

R : What do you think is happening here? Why do you think this is happening? There were ... Do you think she's confused? Or do you think she's learning by moving them and changing them (the pieces)? What happened with that corner?

A : She was trying to ...

R : ... place the white piece, and ended up with the orange piece, and then it didn't fit.

A : She is trying to get it right on her own. She is trying to get it right on her own, but I think that the corner is a bit difficult for her.

R : And now do you think she gets confused because it's wrong now and she thought it was right, and then she put the fourth piece and now it's all wrong and she has to change it all? Do you think she's getting confused? Or not?

A : I don't think she is getting confused because I want the child to run away from that. I always try to run away from that, from the fact that she does it until she becomes confused, by helping her.

R : That's why you help her with this muddle? Because it's a big muddle now. You're doing some, she's doing some, adding and taking. So you think by helping her here, you are going to try and stop her from getting anxious and losing interest?

A : Yes.

R : OK.

A. (to B.) : LET US LEAVE THIS ONE. LET US
LEAVE THIS ONE WHICH MAKES US
WRONG. CARRY ON WITH THIS. CARRY
ON WITH THIS OTHER ONE. LET US
LEAVE THIS ONE WHICH IS WRONG. WE
WILL SEE IT AFTERWARDS.

- R : What did you do there? She's getting a bit confused and at some stage you decided, "stop", and you said to her, "Let's place this one from another part of the puzzle".
- A : I said, "No, it's not from that corner". I said she must leave the corner, "Let's concentrate on the other part".
- R : Why do you do that? Why do you decide to stop with that and rather do something else?
- A : That corner will make her lose interest and then she won't be able to do that, the other piece.
- R : So it's more the interest than the confusion?
- A : Yes, I think it's what-you-call, the teacher or the mother must concentrate on.
- R : On keeping the child interested?
- A : On keeping the child interested, that you try to make the child to be interested in, getting interested in the what-you-call, in the game. When you see she's interested, you must be careful of confusing her or letting her do the what-do-you-call, the wrong thing for a long time. If you see that she can't do it, then you must try and help. For in that corner it means I was, as the teacher, not too sure of it, so just leave it and carry on with some other pieces.
- R : What do you think she'll feel now that you're doing something else? What do you think? What happens to her when you say, "OK, leave it and do something else"?
- A : And then we'll go back to that, ya.
- R : How do you think she, what does she think? She is doing it and you say, "Stop. You're not doing this, you're not doing that, you're doing something else". What does she think? Or how does she feel?
- A : I think she will feel a little bit upset, but because I didn't stop her totally, that she can't do it, it will just be over.

- R : She'll get upset for a while?
- A : Just for a while.
- R : And carry on?
- A : And carry on again.
- R : So do you think that she'll still be interested in the puzzle?
- A : Yes, you'll have to make her interested.
- R : But she'll still be interested? She won't have given up?
- A : No.

A. (to B.) : LET US LEAVE THIS ONE. LET US
LEAVE THIS ONE WHICH MAKES US
WRONG. CARRY ON WITH THIS. CARRY
ON WITH THIS OTHER ONE. LET US
LEAVE THIS ONE WHICH IS WRONG. WE
WILL SEE IT AFTERWARDS.

- R : OK, now she listens to you. She didn't say to you, "Mummy, I want to finish this corner". You just said, "Leave it", and she did. You said, "Just carry on", and she took another piece. She listens to you very well. Why do you think she listens to you like that?
- A : Because she wants to learn the puzzle. If she doesn't listen, she won't learn it.
- R : And you taught her that? That she must listen to you when you're teaching her, otherwise she is not going to learn? So she respects you then?
- A : Yes.

- R : So what would you do if she said, "No, I don't want to do it. I want to first fix this corner up and I want to carry on"? Would you be cross? Or would you think, "That's clever"?
- A : I'll just keep on asking her to leave the corner. So it means somehow I'm cross, but to a certain extent, you mustn't show it.
- R : So you mustn't show a child when you're cross with them?
- A : When you're playing with them a game.
- R : Why? Why do you say that?
- A : They will just lose interest, get confused and do the more wrong things if you are cross with them and you fight with them. You must just be cool and take things steady.
- R : OK. Why do you think that she listens like that to you? Is she scared to disobey you? Or would you say she's been taught that you must listen to the teacher or the mother when doing a puzzle, because they're trying to help you to do it right?
- A : It's because she has been taught - not, not only when she is doing the puzzles or what - whatever I speak to her, she must listen and she must respect. She must do what I'm telling her to do. She mustn't do what I say she mustn't do.
- R : So she's being obedient like she normally is, like with anything else you do with her? OK.

A. (to B.) : LET US LEAVE THIS ONE. LET US
LEAVE THIS ONE WHICH MAKES US
WRONG. CARRY ON WITH THIS. CARRY
ON WITH THIS OTHER ONE. LET US
LEAVE THIS ONE WHICH IS WRONG. WE
WILL SEE IT AFTERWARDS. PUT THERE

WHERE THAT ONE IS. WHERE IS IT
HERE IN THIS CAR? WHERE IS IT?
PLACE IT HERE. YES. THIS WHICH
MAKES US WRONG, LEAVE. WE WILL
LOOK AT IT AFTERWARDS. OUR TIME IS
GOING. LEAVE IT. LEAVE. LEAVE,
IT IS OKAY. CARRY ON ... PUT. NO.
WHERE IS THAT? PUT IT, PUT. YES,
WHERE IS THAT? PUT. PUT IT WHERE
IT IS. LEAVE IT THEN. TAKE
ANOTHER ONE. TAKE ANOTHER ONE.
YES, YES, CARRY ON. PUT THE OTHER
ONE AGAIN. PUT.

- R : There she plays and she gets to know that it is the wrong piece ... She takes it away if she can't fit it. Then she puts the piece at the top and you just move it down for her and carry on, you carry on, she carries on. Why don't you say to her, "No, this is wrong, you must move it down"? Why do you correct it for her, without telling her?
- A : Because she will still somehow be hurt if I tell her what she has done is wrong and I do it.
- R : So, this way she will still feel that she's doing it. If you say, "No, it's wrong. This is how it must be", she will feel that she hasn't done it. But are you trying not to make her see that she has made a mistake there?
- A : Not really. She must know where she made a mistake, somehow, but what I'm after is just to draw up her mind, just to concentrate on the puzzle and do it correctly. Where she can't do it ... she had that piece in the right place but it was somehow placed wrong, so that is why I decided to help her, just to fit it.

R : Do you think she notices when she comes back, that you've moved it?

A : Yes.

R : So you don't think it's necessary to say, "See this goes here, this goes down a bit"?

A : No.

R : Just carry on. If you said that to her, what would happen? If you said, "No, this must come down a bit more", what would she feel? Do you think it will be different to the way you did it? You just did it without her seeing it, you just moved it down slightly, you didn't point it out to her. Do you think it would be different if you say, "No, you see I've moved it down a little bit because it was too high up"?

A : Ya. It will make it a little bit different to her in that I was doing the puzzle for her.

R : She would think that?

A : She would think that somehow.

R : But she doesn't want you to do it for her?

A : No.

R : Do you think that's just B., or all children? Do you think they like to think that they are doing it on their own? Do you think that's important to a child, that they like to feel that it's their puzzle and they're doing it on their own?

A : I think that is very important. I think that's very important to a child, that whenever she does a thing, she must have a feeling that she did it. And it's up to you, as the teacher or the mother, how far she or he did it correctly, and you must see the difference; if you can say she did it or he did it or she didn't do it or he didn't do it and you must try to teach the other ways of how to get the puzzle or the game to the child. Whenever the child does something, or you do something with her, when it's finished or it's complete, she doesn't say that you did it. She says, "I did it, Ma", "I did it, I made that what-do-you-call-it, that something for myself". "No, I made it for her". "No". Sometimes she even points what you did.

- R. : She likes to feel like it's her work and she's done it on her own, that's important. But you realise that it's important, that she must feel that it's her work or her whatever?
- A : But don't end there R., that she must feel that it's her work. You've been working with her, you saw the mistakes and you saw how fast she went with the work.
- R : So you didn't think it was a terrible mistake? You just thought it was a little mistake? This way was better because she could still feel she was doing it on her own?
- A : I thought it was a little mistake because she had the, what-you-call, the pieces in the right places and she fitted it correctly. The only thing, it was a little bit up or a little bit down, so I just shifted it.
- R : To make her feel like she was still doing it? Like she, if she did it right, it was still hers? OK.

A. (to B.) : LEAVE IT THEN. TAKE ANOTHER ONE.

TAKE ANOTHER ONE. YES, YES, CARRY ON. PUT THE OTHER ONE AGAIN. PUT. TAKE THAT, PUT WHERE IT IS. TURN IT. TURN IT AGAIN, FACE IT UPWARDS. FACE IT UPWARDS. YES, TAKE ANOTHER AGAIN. PUT. MMHM. PUT WHERE IT IS. WHERE IS THAT? WHERE IS THAT? PUT IT AS YOU SEE IT HERE. (MOTHER POINTS TO THE MODEL)

- R : Why do you point to the model? She's thinking now, "Where must I put it?" Why do you say, "Look here"?
- A : She was just thinking where to put it and she has forgotten that, as a child, she seems to have forgotten my instructions that she must look at the model. And she was just standing and thinking, looking at the, the what-do-you-call, the piece, so I must remind her to where is that piece.
- R : So once you said that to her, what do you think happened in her mind? In her head? What do you think? You said to her, "Look at the model, look at the model". What does she think then? Or how does she feel? Because she doesn't know where to put the piece. You say, "Look at the model", she looks and then what does she think? What does she know now? Or what does she, what's different?
- A : By looking at the model, that will make her see and know where to put the piece, but just by thinking she won't know.
- R : You're drawing her attention to where it is in the model? You say she'll feel now she knows the answer and she will place it.
- A : She will place it where it should go.

A. (to B.) : MMHM. PUT WHERE IT IS. WHERE IS THAT? WHERE IS THAT? PUT IT AS YOU SEE IT HERE. NO. LOOK FOR ITS PLACE. LOOK AT THIS ONE, AND THEN THIS, AND PUT THIS ONE AGAIN. PUT THEN, PUT THIS BLACK ONE. PUT THIS ONE AGAIN. WE SHALL FIND ITS PLACE. TAKE ANOTHER ONE AGAIN.

- R : Why do you do that? You let her look for the place, and you say, "Look at the model, look at the model, look". She still doesn't place it. You say, "OK, put it down, take another one". Why do you do that?
- A : I just want her to take another shape piece to see if she can fit it, because she couldn't fit that piece. If she, maybe if she, if she gets another piece with another shape and fit it, then she'll be able to fit that other one, the one that I said she must put back.
- R : Why do you say that? Why do you say if she can fit the one, then she'll know how to fit the other? Aren't they different shapes, those two?
- A : Yes, the one she had in her hand, the black one. I think there were two left on the one side of different shapes and then if she can just leave that one and take another one before she gets muddled up, she will be able to fix the other one.
- R : So you want her to do the one that she can fit. Do you think that if she can fit that one more easily then she will be able ...
- A : ... then she will go back to that one. I don't want to fit it for her.
- R : Why?
- A : As I'm teaching her, I just want to see how far her, how far her brains, and how far can she concentrate in doing things.
- R : You don't think she'll get confused or muddled now because you say, "Do it, no don't do it, put it away, do another one"? Like before, when she got stuck, you placed it for her. Now you don't place it. You say to her, "Do another one".
- A : Before when she got stuck, she got stuck with the what-you-call. She didn't place this black one, she was just holding it as she doesn't know where to place it. Now, I don't want to show her where to place it. With the one she can place, but she can't ...
- R : Get the position right?

- A : Yes, get the position right. I help her. That one she had was black. So that's why I said she must just put it aside until she finds it's place and then when she has found the place and she just can't get it into position, then I'll help.
- R : So you say because she didn't have any idea now what to do ...
- A : She didn't ...
- R : She didn't know where it should go even, so if you did it for her, she wouldn't learn?
- A : She won't know anything.
- R : She must first try?
- A : She must first try and see and fit it and put it somewhere, even if the place is wrong. She must put it somewhere. Just that I don't believe in taking it from her hand and putting it.
- R : Because? If you did that?
- A : I don't think that she will get anything in this way.
- R : Because you think that to learn, she must try it herself?
- A : She must try it herself.
- R : Because learning involves doing it for yourself, not somebody else doing it for you, and you seeing?
- A : OK, what I was just saying is that I believe that the child must learn by doing the thing.
- R : By doing the thing, not by watching?
- A : Not by watching.
- R : You don't think she'll learn by watching? If I said, "B., I want to teach you how to do this puzzle. You see, you take the black piece then you take the green, you see it's like the model? We'll do the whole thing together, do you understand?" "Yes, I understand". You don't think at the end of that, she has learnt?

- A : No, I don't think ... It will take time this way.
- R : She might learn, but it's time-consuming, so it's quicker and she'll learn better if she does it herself and learns what we called, "the hard way", if she does it all herself? OK.
- A. (to B.) : ... PUT THIS ONE AGAIN. PUT THEN,
PUT THIS BLACK ONE. PUT THIS ONE
AGAIN. WE SHALL FIND ITS PLACE.
TAKE ANOTHER ONE AGAIN. THE ONE
YOU HAVEN'T TAKEN. YES, PUT THAT
ONE. IF YOU CAN'T FIT IT, TAKE
ANOTHER ONE. PUT THAT AGAIN.
(MOTHER HELPS CHILD FIT THE PIECE)
TAKE ANOTHER ONE AGAIN. PUT THIS,
IT IS FOR HERE. LOOK AT THIS AND
THEN PUT THAT ONE. PUT. WHERE IS
THIS? LOOK CAREFULLY AT THIS.
WHERE IS THIS? NO. LOOK CAREFULLY
AT THIS, AND THIS, AND THEN THIS,
AND THIS. THEN PUT IT. PUT THAT
ONE NOW.
- R : There she didn't place it. She didn't know where,
but you took it from her and you placed it for her.
Why did you do that?
- A : I think B. could see where to put, to fit what-you-
call, and towards the end of the game the spaces are

too small, so that's why the child fiddles so much. She can't fit the what-you-call, the pieces in the right place, unlike when she still learns at the beginning of the puzzle. All the spaces and things, it's what I think now.

R : Do you think that if it was earlier, you would put it for her? If there was lots of space left?

A : No.

R : If she was confused?

A : No, I will take another piece and try and fit it, and she will fit it easy. So once the game is towards the end, there's a small little spaces for the pieces to fit in and it's too difficult for a child.

R : Then you think it's all right to put it for the child? What do you think she thinks, when you put it for her and she sees it's right?

A : I think my child sees that it's right, because as far as I see, she can see that what-you-call, the places, the model and she can see the places. It's only the position to fit in these things. When it's about two or three pieces left, it is so difficult to see the places.

A. (to B.) : IT MUST FIT. YA. YES, PUT THEN.

STOP NOW, BE CAREFUL.

R : Why do you say that: "Stop now, be careful"?

A : I want her to have a good look at the shape, for she has got the right pieces in the right position, but she must just, as I say, she must be careful of how she places the what-you-call, the pieces. She must try and get the right position.

R : So you draw her attention ... You say, "Don't carry on doing it, think, think"?

A : Yes.

R : "Look"?

A : Yes.

A. (to B.) : STOP NOW, BE CAREFUL.

: You actually placed the last piece for her. You sort of picked it up when there was a mistake. Do you think she saw? Then why did you do that? You sort of did the end for her.

A : I was helping her get the pieces in position.

R : They were right, but she just couldn't get that one in the right place.

A : I think she had, she got the what-you-call, the game, quite right but the only thing, she couldn't place, she just left it incorrectly. Because if, I think if there was anything not, say coming right in that, just in that corner, she was going to take out all the ... If she was not too sure of all of the pieces she had, she was going to fiddle up with all the pieces in that model. But she was, I think she was quite sure that she has got all the right pieces but she couldn't fit them right.

R : So if you had left her, what do you think she would have done? She would have began to undo all of it and that would waste time?

A : That would waste time and then I was going to ask her to start afresh and that might do something else, lose interest or what.

R : So now, because you finished the puzzle off for her, she didn't do the last bit herself ...

A : Yes.

R : ... you did it for her, do you think she still feels like she did it?

A : She had the pieces, she has been fiddling with the what-you-call. Only that thing was not getting into the position and only she knows that she did it herself.

- R : Do you think she felt happy about it? Do you think by the end of that, she was feeling alright?
- A : She was feeling alright, she was very happy.

(TASK 2)

A. (to B.) : DO YOU SEE THIS BOARD? DO YOU SEE THAT IT LOOKS EXACTLY LIKE THIS ONE? WE ARE GOING TO PLAY THIS GAME, THIS GAME WHICH LOOKS EXACTLY LIKE THIS ONE. DO YOU UNDERSTAND?

- R : Why do you say, "Look at this board. You see this board? They are the same. We are going to play this game"? What's your purpose in saying that?
- A : I want to draw her attention towards what we are going to do now. It's quite different from what we've been doing.
- R : So you're trying to say, "Look, see it's different, something different now", just to point it out to her?
- A : Ya, just, yes, it's just a different task from what we've been doing and this one is played with the board.
- R : You're just orientating her? Just to get her to start? OK. What do you think that does for her? When you say, "OK, this is what we're doing", you set it out for her, how do you think it makes her feel?
- A : I think I want her to know that different things are done in the different ways. She must just, as a child, she must just forget of what she was doing, she is doing something else now.

- R : So do you think, are you saying then, if you say that to her, it's focussing her mind on the new task?
- A : On the new task, yes.
- R : How does she feel about starting a new task? If you say, "OK, we are going to play a game". Do you think you're helping her by telling her what you are doing? What will you actually, what do you think she feels now that you've told her? Once you're told her, how does she feel?
- A : I think she feels that, it means that she has done the other what-you-call, the other game, correctly and properly in as much that we are proceeding onto something else, not going back to the same thing.
- R : And do you think that, like you said before, it focusses her attention? You are starting the thing by saying, "OK, this is what it's all about"?
- A : Yes.
- R : And does that focus her mind? Is she now ready to begin?
- A : You have just make her ready to begin. We don't know whether she will cope up, or, we will see as we go on.

A. (to B.) : WE ARE GOING TO PLAY THIS GAME,
THIS GAME WHICH LOOKS EXACTLY LIKE
THIS ONE. DO YOU UNDERSTAND? HERE
ARE THE STICKS FOR THIS ONE. DO
YOU SEE THAT THESE HOLES DO NOT
LOOK THE SAME? YOU MUST LOOK FOR
THE STICKS YOU ARE GOING TO PUT
HERE. YOU MUST PUT THEM CORRECTLY,

JUST THE SAME. THEN PUT. NO.
(SAID AFTER CHILD HAS PICKED UP A
BLOCK) FIRST START BY PUTTING ALL
THE STICKS.

R : Why do you do that? She wants to start with a block; you say, "No, you must start with the sticks".

A : To start by putting all the sticks, I think R., it will help her to see clearly the shapes of the sticks as well as to see the shapes of the blocks. It will be difficult if she just put one, one stick and just look around, to look, looking for the block. Then she will see the stick, what shape, what is the shape of the stick and she will look and see which block she can take.

R : Are you doing this to draw her attention to the different block shapes? The different shapes?

A : Yes.

R : And now once you do that, you think she can see that?

A : Yes.

A. (to B.) : YOU MUST LOOK FOR THE STICKS YOU
ARE GOING TO PUT HERE. YOU MUST
PUT THEM CORRECTLY, JUST THE SAME.
THEN PUT. NO. FIRST START BY
PUTTING ALL THE STICKS. YES! LET
US BEGIN TO PUT. (CHILD PICKS UP A

BLOCK AND LOOKS AT MOTHER) DO YOU
 SEE? YES! YOU MUST LOOK AT THAT
 AND PUT. TURN. TURN. PUT IT. IT
 WILL GO IN. YES. WHICH ONE GOES
 IN? (CHILD HOLDS A BLOCK AND LOOKS
 AT MOTHER) LOOK THERE!

- R : So there she asks you a direct question. (R. is referring here to the way in which B., while holding a block, looked at her mother.) She says, "Which one? This one?" and you don't say "Yes" or "No". You say, "You just look". Why do you do that?
- A : I just want her to look and find out and see if she can get the right block to the right stick.
- R : But she is trying. She's saying, "I think this is the right one. Mummy, is this right?". She asks you a question. You don't say "Yes", you don't say "No", you just say, "Look there". Why do you do that?
- A : Just because I want her to learn. I just want her to learn to do the task, or to try and do the task on her own.
- R : On her own, not by helping her?
- A : On her own, that is it.
- R : To try and work it out by looking at the model? What do you think that does for her when you say, "I'm not going to tell you the answer. Look, look"? What do you think she does now? What does she think? What does she feel? What effect does it have on her? She asks you a question; you say, "I'm not answering the question, look".
- A : I think that she knows she must try and do this thing on her own.
- R : It's like an instruction from you?
- A : Yes.

R : At the same time you're saying to her, "I'm not going to give you the answer", you are also saying, "This is how I'm teaching you. I'm not giving you answers, you do it yourself"?

A : You're going to do it yourself.

R : Are you teaching her a rule there? Are you saying, "Don't ask me a question, do it yourself". Do you think that's what you're saying?

A : Yes.

A. (to B.) : TURN. PUT. IT WILL GO IN. YES.

WHICH ONE GOES IN? LOOK THERE!

YES! AND THEN PUT. NO! I

DISAGREE. I DISAGREE! LOOK AGAIN.

R : It's our famous "ngiaphika mina"(I disagree)!

A : Ngiaphika mina, ngiaphika mina!

R : Why do you say that to her?

A : I'm helping her. To try to help her to know that that's not the right block. She must look for another one. It's not the right colour. It's not the right shape.

R : Why do you use the words, "I disagree"? Why don't you say, "That's wrong"?

A : I think, R., to say, "That's wrong, that's wrong", it does something to the child.

R : Like what?

A : It makes the child feel unhappy and she may not be able to do the puzzle.

R : In other words, it is like saying, "You can't do it, you don't know how to do it"?

A : Yes.

- R : And your way, saying, "I disagree", is not as hard as saying, "That's wrong!"?
- A : It's not as hard. I think my word, my word is polite.
- R : What effect do you think ... how does she feel when you say that, "I disagree"? She looks at you. What do you think she's thinking? Because you say, if you say, "You're wrong, no, that's wrong", then she would get upset or sad or something. She feels she can't do it, but if you say, "I disagree" ...
- A : "I disagree, I disagree".
- R : ... then what does she think? She won't feel upset? Do you think she'll still feel sad that she can't do it? Or upset? Or will she feel differently?
- A : I think she'll feel differently.
- R : Like how?
- A : She must think of trying something else, whereas when I say, "That's wrong, that's wrong", she will just be completely upset.
- R : And want to give up? This way she will still want to carry on?
- A : Just because I want to give her, I will just still want to carry on. I must, I must be calm. I must be a little bit sweet and warm to her.
- R : About that: I notice that with her, you're never strict or like a teacher. You don't shout at her and say, "Naughty girl!" or "Don't be stupid!". You're very patient and warm. Why do you think that's important? That the mother or teacher should be like that, not shout and say, "You're wrong, stupid" or whatever?
- A : With the small children, I think it helps because they get confused quickly.
- R : So you are saying that small children may be confused quickly?
- A : They get confused quickly, and I think with the small children, as the mother (or even if you are a mother or a teacher, the teacher must act as a mother), they quickly get upset and get into the state, the state of disliking you. So just by looking at you, they just can remember what you've been doing to them.

- R : So you want your child to feel kindly towards you and don't want her to think of you as being a strict woman? What do you think it does to their minds if you're like a teacher, if you say, "You silly child, that's absolutely wrong! You're not concentrating. Listen carefully. Think about what you are doing"? If you're like that? What do you think that does?
- A : It disturbs their minds and they will not learn. If you have done that thing in the morning, you must know that the little child like B. will never gain anything the whole day.
- R : It upsets her for the whole day?
- A : It upsets her for the whole day.
- R : And if you're not too strict?
- A : ... because at the time she will go out for a break, she goes to play, she forgets everything and the moment she comes and sees your face, everything, the things come back again.
- R : But if you're not too strict, you don't hit her, or you ... Just say she's doing the puzzle and you say to her, "No, that's wrong. I'm sorry, that's wrong. You must think now. Think very carefully. That is not right, you're not concentrating". You're not hitting her, you're not saying, "You stupid idiot" or anything. You're not very strict, but you're saying, "No, no you must concentrate. It's not good enough. You're not thinking hard enough. Think nicely now". Do you think that upsets her? Or do you think it sharpens her mind to do it better?
- A : I don't think so, it sharpens her mind. It upsets her.
- R : So you think a warm, loving atmosphere is the best?
- A : Is is the best.
- R : Because? For what reason?
- A : It keeps the child going and she looks happy and interested in what she is doing, looking forward to seeing what the teacher or the mother is going to say or do for her.

R : Do you think if you shout, then you distract the child and they think about what you've said, rather than about the puzzle? If you're nice, they keep their minds on the puzzle? Is that what you're saying?

A : Yes.

A. (to B.) : YES! AND THEN PUT. NO! I
DISAGREE. I DISAGREE! LOOK AGAIN.
I DISAGREE! LOOK THERE. PUT THAT
DOWN. PUT IT DOWN.

R : Why do you say, "Put it down"? She's trying to do it and she can't fit it on, and you say, "OK, put it down now". You told her, "I disagree, I disagree". Did she get another piece when you said that? Did she actually put it down and get another one? Or was it the same one?

A : No, it was the same one.

R : The same one?

A : It was the same piece.

R : She tried a bit ...

A : She tried, she couldn't fit it, so I told her to put it down.

R : Because?

A : Because it doesn't fit.

R : And if she carries on, what will happen? If it doesn't fit?

A : If she carries on, it was just a waste of time.

R : A waste of time, is this what you're saying? It's a waste of time? So you think that this just wastes time, so that's why you say ...

A : ... she must just put it down and try another one.

R : You don't think that it's a way of learning? That she might think: "Oh see, it doesn't fit" and she'll think, she might think, "Why doesn't it fit?" and then see that the shapes are different? You don't think she's going to learn by doing it like that, "the hard way"?

A : She is going to learn something, but after I've said "No, I disagree".

R : What would you like her to do when you say, "No, I disagree"? Would you like her to put it down and try another piece?

A : Put it down and try something else.

R : But you didn't stop her; she still wanted to try so you let her try, and then after a while you said, "That's enough now".

A : "That's enough now".

R : You already said, "I disagree, I disagree", because she'd spent about two minutes on it already.

A : And then I said, "Stop now".
I think she was satisfied that it doesn't fit.

R : Do you think she found that helpful?

A : Mm.

A. (to B.) : LOOK AGAIN. I DISAGREE! LOOK
THERE. PUT THAT DOWN. PUT IT
DOWN. NO. WHICH ONE ARE WE
LOOKING FOR? LOOK HERE. LOOK AT
THIS, ALL THESE OBJECTS. ISN'T IT
YOU HAVE ALREADY PUT THIS? LOOK

FOR THE OTHER ONE WHICH COMES AFTER
THIS ONE. (MUMMY, THESE TOYS ARE
NOT COMPLETE.) DO YOU HEAR WHAT
SHE SAYS? What does she say?
(Voice of researcher) YOU DIDN'T
GIVE HER ALL THE WHAT-YOU-CALL-IT,
THE OBJECTS. (THESE ARE NOT
COMPLETE.) They're all there.
That's why I did it in front of her
(Voice of researcher) (THESE ARE
NOT COMPLETE.) THEY ARE COMPLETE,
MUMMY. LOOK! LOOK! IT IS
COMPLETE. LOOK! LOOK! (THEY ARE
NOT COMPLETE.)

- R : Who's saying that? B.?
- A : B. said it. Did you notice when she was just saying,
playing with those blocks, and after that she turned
out and looked at me: "Mummy, these toys are not
complete"? So that means that we haven't got all
the objects, all the right blocks.
- R : That's interesting. Why does she say that?
- A : Because she couldn't ...
- R : Couldn't do it?
- A : She couldn't find what she wanted.
- R : So it is there, but she is getting frustrated, so
she thinks it can't be there?

A : So she thought we haven't got all the blocks. Because she couldn't find what she wanted, and I said to her, "They are there, you just look. Pick the one".

A. (to B.) : (THESE ARE NOT COMPLETE.) THEY ARE COMPLETE, MUMMY. LOOK! LOOK! IT IS COMPLETE. LOOK! LOOK! (THEY ARE NOT COMPLETE.) TAKE ANY AND PUT. HOW IS THIS? TAKE THEN, AND PUT. YES! THE FOLLOWING. PUT THE FOLLOWING. NO! I DISAGREE. I DISAGREE. LOOK THERE AND SEE WHAT IT IS LIKE. AND THEN TAKE ONE WHICH LOOKS LIKE THE ONE THERE.

R : There you say, "I disagree, I disagree", so she puts it down and she takes another one. So what would you say the effect of your saying, "I disagree" is? What does it do for her? Do you think she realises it's wrong when you say, "I disagree"? Is she just being obedient? Is she just being obedient or does she really think, realise, "Oh, it must be wrong"? Or does she, when you say, "I disagree", know that you mean: "Stop it and do something else"?

A : And then she put it down and she took another one.

R : Ya.

A : So she realised that it was wrong.

R : Did she realise that it was wrong?

A : Mm, that she realised it was wrong, in effect that she put it down and she tried another one.

- R : So you think she wasn't just obeying you because you said it was wrong. Did she really herself also think it was wrong? Do you think she realised it was wrong? Or was she just listening to you?
- A : After I said, "I disagree", then she realised that that it was wrong. Maybe if she says she disagrees, because it's wrong, let me take another one.
- R : Do you think she does realise it's the wrong one?
- A. : Mm.

A. (to B.) : PUT THEN. TAKE, TAKE THAT ONE.
PUT THEN. YES. WE HAVE COMPLETED.
(MOTHER EXTENDS CHILD'S ARM SO AS
TO DETERMINE WHETHER CHILD CAN
REACH THE STICKS ON THE TEMPLATE)

- R : And there you're just seeing that she can reach?
- A : Yes, I just wanted to see if she can reach, or else I make her stand up.

A. (to B.) : YES, THEN PUT. WHICH ONE ARE YOU
GOING TO PUT IN NOW? ON WHICH
STICK ARE YOU GOING TO PUT? TO
THAT? RIGHT. THEN PUT ON THE
STICK YOU SAID YOU ARE GOING TO
PUT. LOOK THERE AND SEE WHAT IT IS
LIKE.

- R : Why do you do that? You make sure she knows which stick she's going to work on next.
- A : There are two or three sticks in front of her so she must choose for herself the one she feels she wants to start with.
- R : Did you let her choose? Did she choose it?
- A : She chose, and I said, "Right, you can go on now".

A. (to B.) : HERE ARE THE OBJECTS. (CHILD PICKS UP A BLOCK AND FITS IT ON THE STICK WHICH HAS ALREADY BEEN COMPLETED)

- R : And there she goes to the wrong stick. She was carrying on with this one (the one on which she had already placed the required number of blocks).
- A : I wanted her to just do it.
- R : She carried on there, I think.
- A : But I told her she is finished with that one.
- R : Yes, I see. I think she put that on. That makes the fourth one.

A. (to B.) : LOOK THERE AND SEE WHAT IT IS LIKE.
HOW IS IT? HERE ARE THE OBJECTS.
NO. WHAT IS IT LIKE FOR THAT ONE?

(CHILD PUTS DOWN THE BLOCK SHE HELD AND LOOKS AT MOTHER) DO YOU WANT TO STAND UP? THEN PUT THERE, UP, UP OVER THERE. PUT IT OVER THERE WHERE YOU SAID YOU ARE GOING TO PUT IT. PUT. (CHILD HOLDS UP BLOCK FOR HER MOTHER TO SEE)

- R : Why does she check with you like that? Because before she didn't check with you?
- A : No, she didn't check with me before.
- R : Why do you think she does that? Do you think she's scared of you, that you might, she might put the wrong piece? Or do you think she's just less sure on this puzzle? The other one was easier for her, she doesn't know as much (with regard to the present puzzle)?
- A : I think this one is a bit, a bit harder for her than that which one.
- R : Do you think she's uncertain? Is she asking you if it's the right one? Or is she asking you, "Can I put it?"?
- A : She's asking me if she can put it.
- R : But do you think she's also asking you if it's the right one? She thinks it's the right one. Or do you think she's asking you, "Is this the one?". Is that what she's saying, "Is this the one?". Or is she saying, "Can I put this one?" or something like, "Do I have permission, Mummy, can I do it?"? Is she saying, "Mummy, is this the right one?" or both? What do you think she's saying?
- A : It might be both, "Is this the right one?" or "Can I put it?". Not that, "Can I have permission?". No.

R No?

A : No. "Is this the right one?" or "Can I put it?".

R : She's asking if it's the right one. She just wants to make sure she's doing it properly. Is that what you're saying? And why don't you say to her, "Well, try"? You say to her, "Yes". Do you answer her, "Yes"?

A : Yes, I answered her, "Yes".

A. (to B.) : YES, PUT. LOOK FOR THE OTHER ONE
AGAIN. WHAT IS THE FOLLOWING ONE
LIKE? SEE WHAT THE FOLLOWING ONE
LOOKS LIKE.

R : If you want to say something about what you're doing (in the video-recording), you can say it as we're going along.

A. (to B.) : SEE WHAT THE FOLLOWING ONE LOOKS
LIKE. THE FOLLOWING ONE FOR THERE,
WHERE YOU ARE PUTTING.

R : Are you drawing her attention to the model?

A. (to B.) : NO! I DISAGREE. THAT IS THE LAST ONE. TAKE OUT. WAIT! PUT THAT ONE ASIDE. PUT. WHICH ONE ARE YOU GOING TO PUT NOW? NO, I DON'T KNOW. I JUST DON'T KNOW. HOW IS THE FOLLOWING ONE THERE?

R : She's saying that?

A : I'm saying that.

R : You say, "I don't know" or is she saying it?

A : No. I said, "I don't know". She was asking me about the objects, which one to ... "Can I take this one?". Or even if she didn't say or she pointed at one, one block there, I said, "I don't know".

R : Why do you say, "I don't know"?

A : I want her to find out for her own which one is the right one to put.

R : You wanted her to try?

A : She must try.

A. (to B.) : YES, DO YOU SEE WHAT IT IS LIKE?

YES. THEN PUT THE ONE YOU HAVE PUT AT THE BEGINNING. (THIS?) NO, DON'T ASK ME. PUT. I DON'T KNOW, PUT. WHICH IS THE FOLLOWING ONE?

R : Are you checking on her? That she knows which one she is going to work on next?

A : (Nods)

A. to B.) : (MOTHER REMOVES THE FOURTH STICK FROM THE TEMPLATE) YES. (THIS IS SAID AS THE CHILD POINTS TO THE REMAINING 'UNUSED' STICK ON THE TEMPLATE)

R : There we see she put four sticks in. You pulled out one. Before you said, when you moved the block down, it wasn't a terrible mistake and you don't want to waste time, so you just quickly took it away. Do you not think it's necessary to say, "Look, you see, there's only three (sticks), there must only be three here. Now why have you put four? Let's take one out"?

A : (Shakes her head)

R : You don't think that? Would you do that with an older child? Or wouldn't you do that at all? Do you think that's confusing? Or do you think with an older child ...?

A : But with an older, I think it would be better. It would be a good thing to do that with an older child, but with these little ones it will confuse them.

R : Why do you think it's alright for an older child? Do you think they'll learn from it? By pointing out their errors?

A : I think with an older child, you've got to teach her different, in a different way to this one. You must just tell her, which, what is right and you must

just tell her where she or he has done wrong and then he or she will realise. With these small ones you must, as I'm doing that, "I disagree, I disagree" stage. If I just tend to use the hard words, they get confused and everything will be messed up.

- R : The older child wouldn't get confused?
- A : Not so much, because I think the brain or the mind is developed a little bit wider.

A. (to B.) : THEN PUT THE ONE FOR HERE. (I DON'T SEE THE ONE FOR HERE. THE RED ONE?) THE RED? (YES.) THE RED ONE IS NOT FOR THERE. (I MEAN FOR THIS ONE.) NO, THE RED IS FOR HERE, YOU PUT IT UP THERE. PUT THE ONE WHICH IS SUPPOSED TO BE HERE. DO YOU SEE THE ONE HERE, HOW IT IS? (YES.) THEN PUT, PUT ANOTHER ONE.

- R : Now you're doing something different. On the last stick, you're pointing to the model. You're not saying, "Look at the model". You're saying, "Now we're doing this one, now we're doing this one". Why do you do that? Not to say, "Look at the model, look at the model. I'm not telling you". You say, "OK, let's do this one". When she does it right you say, "Right, now we are going on to this one". What's your reason for doing that?
- A : My reason for doing that; I think that I've asked her too much to look at the model, so I was just trying the other way of teaching her.

- R : Do you think it makes it clearer? Or what? Does it help her by saying, "Here, here", because you are showing her exactly where now? You're not just telling her to look at the model. You're saying, "Here, exactly here". Do you think that makes it easier for her?
- A : Yes, the last thing, the one I'm doing now at the end, it makes it easier for her now.
- R : Would you do that at the beginning as well?
- A : No, I won't.
- R : Is it only something you do at the end?
- A : At the end.
- R : Because? Why can't you do it at the beginning?
- A : I know I couldn't do it at the beginning. I wanted her to find out on her own and now, towards the end, I think I'm satisfied with what she has been doing. She can't be confused or puzzled with the, with what I'm doing at the end and I think I'm helping her mostly at the end, towards the end, because I'm thinking she is more or less tired.
- R : You're making it easier for her, in a way? How do you think she feels now when you've showed her? Does she find it easier? Or what happens to her mind?
- A : Yes, she finds it easier. But as I'm pointing at the model, as she sees it, a white, what-you-call, the white thing, and she goes and picks up the white, rather than saying, "You find it out for yourself".
- R : Do you think she's learning as much this way? Does she learn more when you say, "Do it all on your own"?
- A : No. She learns much from the beginning.
- R : So you're saying that you teach a child differently throughout the task: In the beginning you try and get the child to do more on her own and when you're satisfied that she's learnt enough during the task, you can help her towards the end. Is that what you're saying?

- A : Yes.
- R : But you wouldn't want - although it helps her, you're saying it helps her, pointing - you wouldn't want to do that in the beginning because you would be helping her too much and she wouldn't learn?
- A : Yes, it would be helping her too much so it won't be of any help to her in doing the task.
- R : She won't learn how to do the task? But you say she's already learnt how to do it. You just want to speed things up a bit before she gets bored or whatever?
- A : (Nods)

A. (to B.) : THEN PUT, PUT ANOTHER ONE. YES,
PUT ANOTHER ONE. PUT THE
FOLLOWING. PUT THE FOLLOWING. NO,
I DISAGREE!

- R : Why did you say there, "I disagree"? Did she take the wrong one?
- A : I said, "I disagree, that that doesn't go there".
- R : So she changed it for something else?
- A : (Nods)

A. (to B.) : PUT THE FOLLOWING. NO, I DISAGREE!
THIS IS NOT THE RIGHT ONE FOR HERE.
PUT THE RED FOR HERE. I DON'T

KNOW! TRY TO PUT IT. LOOK HERE WHERE
YOU ARE PUTTING SO THAT IT GOES IN.
FINISHED. GOOD GIRL. YOU SEE, GOOD
GIRL, YOU LOOK AND YOU CAN FIND THE
RIGHT ONE TO GO IN.

R : Do you think she's realised (that the task is complete)?

A : Yes, she realises.

R : Right. Now I want you to just say, to summarise, to finish what you think about teaching a child, a child of three. What you must do to teach a child. And then what effect it has on a child. If you tell a child to do it like this then the child ... and if you tell the child to do it like this, then the child thinks this or feels this or whatever. Just speak for a few minutes about teaching a child. In other words, just summarise anything you've said today, or any new ideas you've got.

A : Teaching a small child is not an easy job, easy work. First, you must try and see if the child, you must try and explain to the child what you are going to teach about, and see, have the ways to find out if the child has understood.

R : Is that by checking, by saying, "Do you see?", "Do you understand?"?

A : Yes, like teaching the puzzles and the games that you have been doing. And you must explain to the child clearly what you are going to do, how you want it to be done. And don't forget to tell her about the time, that she must do it quickly, and finish it. You don't want it half-and-half. What you mustn't forget, you must be an easy teacher or an easy mother, not too difficult to the child. You must have the ways of teaching the small child.

R : What kind of ways are those? Like being, how?

- A : You must be nice to the child, you mustn't be hard, using hard words that will make the child frustrated and wild. You must always try and see that the child is still with you.
- R : That's important? How do you see if the child is still with you? How do you make sure of that?
- A : To see that the child is still with you, it's the way, it's the way you teach the child and you see how interested she is. Is she getting more interested, or is she getting bored?
- R : So you do it indirectly? You don't ask her? You just watch?
- A : No, you don't ask her. You just watch her face and how fast she does it.
- R : Watch her face and how fast she does it?
- A : How fast she is and that will be, that will depend on how you present that, you present your what-you-call, your teachings towards the child.
- R : You don't - do you believe in asking the child: "Did you understand?", "Do you see what I mean?"?
- A : I don't believe it.
- R : You don't?
- A : No.
- R : You do that a few times though in the video.
- A : Yes, I don't believe in it so much as I should keep on asking if she put one piece, I ask her if she understands or what. I don't believe in it. But at times ...
- R : You see for yourself. But at times ...?
- A : ... at times where you see or you feel it was a bit too difficult for her and you help her. Maybe ask her if she understood that what-you-call.
- R : What do you think about a child that learns without the mother? We're talking about the mother now. The mother being warm, friendly, not too strict. What do you think? How does a child feel when they're doing a task?

- A : If the mother is?
- R : If the mother is like you say she is. If she's warm. She says, "I disagree", when you're wrong. She doesn't say, "You're wrong, you stupid child. Stop it, you idiot". She's nice and warm and helpful but tells the child when they're wrong in a nice way and not : "That's wrong!". How do you think the child feels?
- A : The child feels nice and happy.
- R : And that they're doing well?
- A : That, yes, that they are doing well in as much that they are looking forward to see what's going to happen next.
- R : And if you say, "You stupid child, you're so stupid!", then what happens to the child?
- A : It spoils everthing. The child gets annoyed and she can mess up everything in that way.
- R : How much do you think a child ... Do you think a child learns a lot doing a puzzle like that? Do you think it's a good thing for a child to do a puzzle like that?
- A : Yes, I think so.
- R : What do you think she learns from doing that puzzle? Or from doing that task with you? By the end of it, what do you think is new in her brain?
- A : She knew that, well, I think she learnt to know that the, something like a car, it's not just a, just one thing. It's just made up of different parts, different parts and she gets to know to learn the colours.
- R : So she learns how the car is made up, of shapes?
- A : Made up, the shape, and different shapes: There's an engine, there's a one in the car, so those are the parts.
- R : So she's actually learning about cars? She's also learning about colours?

- A : Yes.
- R : What else is she learning about, do you think? Is she learning anything else?
- A : I said about all the thing, the cars, the colours.
- R : What about you? Do you think she's learning anything about you? About her and you? Or about being a girl? Being a daughter? Or being a child? Do you think she's learning any rules from you?
- A : She is learning other rules from me and she's getting how, what kind of a mother am I, or what kind of a teacher has she come across.
- R : Do you think she's learning anything else, like how to be a good child? She's learning how to act when you're teaching her something? Although you're teaching her how to "do" a car, do you think you're also teaching her how to be a good child?
- A : Well, it helps, it helps to teach her how to be a good child, because it starts from home. You just can't start it in the school, how to be a good child, just to make her understand or listen to you. It just helps.
- R : Do you think it is important?
- A : Yes, it is important.
- R : If you do that with her, you're actually teaching her: I'm your mother, you must listen to me. When I say it's wrong, you must put it down. You're teaching her things like that?
- A : Not especially because I'm your mother. Anybody who's teaching you the right thing or something or other. Long as it's older. It can't be a small child like her, but an elderly person who's teaching you or telling you something.
- R : So this is the way you get taught by an older person? Is that what you're teaching her? What's the most important thing that she learnt during doing this puzzle? Is it more important that she learnt about the cars and colours? Or about how to do a puzzle when somebody else is teaching you and you have to listen to them because they are going to help you and ... What do you think is more important?

- A : Just to learn how to do the puzzle was important.
- R : The first one or the second one? The first one is how a car is made up and its colours and what colours there are, which one's red and which one's yellow etc.. The second thing I said, is how to interact with another person, how to listen to things, how to behave with another person, especially in a teaching role, when they're teaching you a puzzle or something like that. What do you think is more important? The first one? Or the second one? Or both the same? Or don't you think the second one is important?
- A : The first one is much more important.
- R : That she learns how to do that task? Not how to do tasks in general?
- A : No.
- R : Are you happier that she knows how to do the car at the end of it, and if she did it again, she can do it well?
- A : She could do it well, then I can get another task to teach her. Rather than taking the task, doing them, doing them for her, not even think for on her own, she can't do them. I'm happier, I'm more happy that she can do the task that I taught her, then I'm able to teach her another one.
- R : Let's talk about this video. How do you feel about talking about what you did before? Did you feel that you always knew why you did something? Or did you think, "I don't know why I did that, I don't remember", or "I really don't know"? Did you feel that sometimes watching yourself?
- A : When I was talking with, when I was with B.?
- R : No, now, when you watched it again. When you watched yourself and I kept on saying: "Why are you doing that?", "Why are you doing that?". Did you sometimes think: "I don't know why I did that", "I don't remember", or "I don't know why I did that, I just did it"?
- A : No.

- R : Did you always know why you were doing it?
- A : Yes, I always know why I am doing it just for the benefit of my daughter.
- R : You're consciously doing it. You think a good mother should, so you always knew what you were doing and why you were doing it?
- A : (Nods)
- R : Would you say it was easy for you now, looking back?
- A : Yes.
- R : You could say, for example, "I think if I didn't do that, it would confuse her". Did you find it easy doing that? You didn't find it difficult?
- A : No.
- R : You didn't think sometimes, "I don't know, I'll just say something"?
- A : No.
- R : You always knew exactly why you did it?
- A : Yes.
- R : Some people find it difficult to do that.
- A : Yes, I know.
- R : They don't remember. Even if they thought forever, they would still not know why they did it. They'd say, "I just don't know". You don't feel like that?
- A : No.
- R : You know exactly why you were doing it?
- A : Yes.
- R : Is there anything else you want to say? About teaching? Or B.? Or about what we did today? Or about things you have said? Is there anything that you haven't said, that you want to say?
- A : No.

APPENDIX 3 : AN EXERCISE IN INTERPRETATION
DATA BASES 1, 2, 3 AND 4 ARE
USED IN THE 'EXERCISE IN
INTERPRETATION' WHICH FOLLOWS

The following discussion begins with an account of various theories of learning-teaching.

THEORIES OF LEARNING-TEACHING

1. Actor A's account¹

The following account was derived² from data sources 2, 3 and 4.

A's basic premise as regards learning is that one learns something by doing it oneself, which is what she terms "learning the hard way". In A's view, one does not learn when one is taught something by another person: One can only learn by doing a task oneself, by 'discovering' for oneself what the correct solution is.

This is not to imply however that the mother's/teacher's role in the learning process is unimportant. A. explicitly attributes a major role to the mother/teacher in this regard. The mother's role³ can be summarised as follows:

- 1) To make the circumstances in which a child performs any learning task as congenial as possible

A. believes that the mother should attempt to make things as easy as possible for the child. This does not imply that the mother should tell the child exactly how to proceed, but rather that all distracting influences should be removed so that the child is able to devote her full attention to the task at hand. The mother should endeavour to create the right atmosphere for task engagement.

- 2) To introduce a task appropriately

The way in which a mother introduces a task to her child is deemed to be crucial to the efficient execution of the task. If introduced appropriately, the child will evidence interest in the task to be performed and will consequently perform enthusiastically and quickly. A. also uses the word "introduce" to convey her belief that the mother's 'attitude' towards the teaching situation or her

'style of mediation' is vital to efficient performance on the child's part. Included under this label are issues such as the mother's management of her own frustration and/or anger resulting from the child's unsatisfactory performance.

3) To encourage a child to do any task on her own

A. does not uphold the view that children learn by observation and imitation nor that the provision of vital cues to the child will result in the child learning something. Instead, A. firmly believes that a child learns by doing, by independently making choices and putting them into action. If a child is left to perform independently, she will learn by discovering for herself how to do any particular task. A. maintains that a child left to do a task on her own will "see" how to do the task. However, if the child has failed to discover these principles after two or three attempts, then she is unlikely to discover them at all. In that she is considered in such circumstances to have already failed, the mother should swiftly intervene and solve the problem for the child so that she (the child) can continue with the task. Because it is vital that a child discovers on her own, all queries addressed to the mother should be answered by saying, "I do not know", so that the child is forced to use her own resources. However, when a mother sees that her child has made an error which the child does not recognise, she should point this out to the child using appropriate terminology, namely, "I disagree" and not "That is wrong!". Still the mother should not tell the child why she is wrong. This would be tantamount to doing the task for the child and the child would learn nothing. A child should always be left to her own resources.

4) To maintain the child's interest

The mother should at all times prevent the child from losing interest and from becoming frustrated, anxious or afraid. One way of doing this is by not giving the child explicit instructions or commands as to how to proceed. Instead, the mother should always remain interested without dominating the interaction. The mother should continually provide prompts to the child, such as positive reinforcements. Small children generally need to be 'prodded' into action, as it were, and thereafter kept interested in the task at hand.

5) To maintain 'cognitive balance' in the child

While a child should always be left to do a task on her own, there comes a time when her mental and/or energy resources cannot meet the task demands. To prevent the child from becoming confused, the mother should quickly intervene and "help" the child, that is, do the task (or more specifically, a particular part of the task) for the child without explanation.

Explanation, A. maintains, would only confuse the child further. A. believes that small children become confused very easily and this confusion should be prevented at all costs.

6) To teach the child to be conscious of time and to always complete any task as quickly as possible

Time is considered to be of vital importance in the execution of tasks and in daily life in general. This is because if a child is not taught to become aware of time, her life will proceed at a slow and unproductive pace. Secondly, if a mother does not consistently stress the time factor to a child engaged in a task, the child will tend to work more slowly and become more prone to distraction and boredom and hence less likely to complete the task.

IT IS IMPORTANT TO NOTE THAT THE ABOVE 'THEORY' WAS NOT GIVEN BY A. 'AS IS'; NOR WAS IT OBTAINED IN A STEP-BY-STEP MANNER THROUGH A QUESTION-AND-ANSWER STRATEGY. INSTEAD, THE ABOVE 'THEORY' WAS RECONSTRUCTED FROM THE SUBJECT'S ACTIONS OR PERFORMANCE, FROM HER INTERPRETATION OF OTHER SUBJECTS AND FROM HER GIVEN REASONS FOR HER OWN ACTIONS.

THUS THE SIX TENETS PRESENTED ABOVE, WHICH, IT IS PROPOSED, CHARACTERISE A'S THEORY OF LEARNING-TEACHING, MUST BE RECOGNISED AS THE RESULT OF THE PROCESS OF INTERPRETATION. THE QUESTION THAT THIS POINT MAKES PRIMARY, RELATES TO THE POSSIBILITY OF DERIVING KNOWLEDGE ABOUT SOMETHING WHICH IS NOT MANIFEST - FOR EXAMPLE, A'S THEORY OF LEARNING - FROM THAT WHICH IS MANIFEST - THAT IS, A'S VERBAL AND NON-VERBAL ACTIONS, AS WELL AS HER STATED REASONS FOR ACTIONS, AND HER COMMENTS ON THE ACTIONS OF THE MOTHER-CHILD DYADS OBSERVED ON THE ORIGINAL VIDEO-TAPES.

2. Experts'⁴ accounts

In the previous projects described in appendix 4, a Piagetian and Vygotskian framework was adopted both at the design and analysis stages. Hence it was deemed appropriate to adopt this framework in the present project. It is interesting to contrast A's 'theory' of learning-teaching with Piaget and Vygotsky's theories of cognitive development as they pertain to the learning-teaching context.

The concept of equilibration is a central postulate of Piaget's theory of knowledge construction. Equilibration is defined as "a process ... leading from certain states of equilibrium to others, qualitatively different, and passing through multiple 'non-balances' and reequilibrations" (Piaget, 1977, p.3). Piaget postulated that the organism actively strives towards a balance between external events and objects and their representation in internal cognitive schemes. Where the organism cannot achieve this balance, disequilibrium or "non-balance" is created, and this leads eventually to the establishment of a balance, or a "reequilibrium" at a higher level. Piaget stressed that equilibration "is constantly attempting to achieve a better equilibrium" (Ibid., p.31). This explains how development is possible.

Assimilation, the "incorporation of an outside element ... into the subject's sensorimotor or conceptual scheme" and accommodation, "the result of the necessity to consider the particularities characteristic of the elements that are to be assimilated", "form the components of any cognitive equilibrium" (Ibid., pp.6-7). When there is a balance between the above two processes, the "new fact" will "produce no modification in the system" (Ibid., p.65). When there occurs a non-balance between the above two processes, however, the subject is forced "to go beyond his present state and to seek new equilibriums" (Ibid., p.12). Thus non-balance is "the driving force of development" (Ibid., p.13). Equilibration is achieved when the passage from non-balance to coherence has been completed. Disturbances are regarded as the source of non-balance. A gap in one's knowledge can lead to a regulation such that the gap

becomes a disturbance when it indicates the absence of an object, the lack of conditions necessary to accomplish an action, or want of knowledge that is indispensable in solving a problem (Ibid., p.19).

The result of a regulation is compensation which "works in an opposite or reciprocal direction to that of the disturbance" (Ibid.,p.28) and compensation inevitably involves construction in that "any knowledge raises new problems as it solves preceding ones" (Ibid.,p.30). Piaget's theory of knowledge acquisition has received experimental confirmation: Inhelder, Sinclair and Bovet (1974), for example, confirmed that

the most fruitful factors in the acquisition of understanding were the results of disturbances producing conflicting situations ... (Piaget, 1977, p.39).

Piaget asserts that "it is worthwhile to note that however the non-balance arises it produces the driving force of development" (Ibid., p.13, emphasis added). It appears that Piaget's theory of cognitive development is concerned exclusively with what may be termed intrinsic generative mechanisms (cf. Craig, 1985) to the extent that the social context in which knowledge acquisition takes place, is regarded as 'given'. However, the above quotation does allow for the possibility of formulating a theory of knowledge acquisition which co-ordinates both intrinsic and extrinsic generative mechanisms. This task is explicitly addressed by Craig (1985) who proposes that

the 'non-balance' in the cognitive system to which Piaget refers may be produced by a mediator emphasising discrepancies between task demands and system resources which may activate the psychological mechanisms in the case of a child to achieve a higher equilibrium (cf. Piaget, 1977). If the mediator, however, presents the task in a non-conflicting manner, the non-balances may not arise and resolutions may in some way, be impeded (p.299).

In terms of Piaget's theory, only the transaction between person (subject) and object is addressed whereas Vygotsky emphasises the transaction between people in his theory of the social origins of mind. Adopting a Piagetian framework, the extent of B's. learning as a result of her engagement in the tasks presented to her, is analyseable strictly in terms of her transactions ⁵ with the object of knowledge, the culturally autogenous tasks. In addition to the Piagetian perspective, it is necessary to consider Vygotskian principles of learning which explicate the social context of knowledge acquisition, thereby providing the extrinsic generative mechanisms for cognitive development. Vygotsky (1978) proposed that a "Zone of Proximal Development" is established when a child and an adult, or a more capable peer, engage in joint activity. This zone he defines as follows :

It is the distance between the actual developmental level as determined by independent problem-solving and the level of potential development as determined through problem solving under adult guidance or in collaboration with more capable peers (Ibid., p.86).

The zone of proximal development refers to the ability of the child or, by extension, any 'uninitiated' person, to be 'extended' to a higher level of functioning and concerns

those functions that have not yet matured but are in the process of maturation, functions that will mature tomorrow but are currently in an embryonic state (Ibid., p.86).

Vygotsky's theory of the origin and growth of mind focusses on mediation, the process whereby an adult presents the world of stimuli to a child in a particular way through the process of social interaction and communication. Wertsch (1984) proposes that a change in the zone of proximal development primarily involves a shift in the participants' basic understanding of the objects and events in a situation. He refers to this concept, as "intersubjectivity" (Ibid, p.12)

and proposes that in the process of mediation, intersubjectivity is negotiated. The mechanism by which negotiated intersubjectivity is achieved, Wertsch proposes, is "semiotic mediation", or mediation by means of language. The way in which a particular component of the task is talked about, by the adult in particular, will determine the parameters of the zone of proximal development. Wertsch's proposals, which refer to the mediational setting, are equally relevant in the context of interpretation in general. There is a large degree of overlap between Wertsch's proposals as presented above, and Harré and Secord's concept of "the negotiation of accounts" (1972, p.235) as well as Habermas' emphasis on the importance of negotiated meaning in the construction of an interpretation. In all the above 'versions' of how interpretation might proceed, the central emphasis is the dialogue. Wertsch relates Vygotsky's dictum that instruction creates a zone of proximal development, to his concept of semiotic mediation as follows:

... a particular way of talking about the objects and events in a setting automatically sets the level at which intersubjectivity is to be established. It is in this sense that speech can create, rather than merely reflect, an intersubjective situation definition (1984, p.14).

Feuerstein, also working within the Vygotskian paradigm, has emphasised the role of the mediator in the process of knowledge acquisition. The mediator, Feuerstein asserts, provides "mediated learning experience" (1980, p.15) which he defines as follows:

By mediated learning experience (MLE) we refer to the way in which stimuli emitted by the environment are transformed by a 'mediating' agent, usually a parent, sibling, or other caregiver. This mediating agent, guided by his intentions, culture, and emotional investment, selects and organises the world of stimuli for the child. The mediator selects stimuli that are most appropriate and then frames, filters and schedules them; he determines the appearance or disappearance of certain stimuli and ignores others (Ibid., p.15).

Cognitive development, Feuerstein maintains, is dependent on the quality and temporal scheduling of MLE. If MLE is lacking, the child will develop deficient cognitive functions. Using the deficient cognitive functions Feuerstein proposed, Craig (1985) reconstructed a theory of 'mediational operators' which she defines as

the dynamics of the zone of proximal development or necessary components of an ideal instructional process (Ibid., p.207).

These ideal adult mediational strategies should produce "in the child efficient problem solving skills" (Ibid., p.210). Craig formulated ten mediational operators which are listed in appendix 4 (p. 145).

A'S 'THEORY' OF LEARNING-TEACHING WILL NOW BE ILLUSTRATED USING DATA FROM DATA BASES 2, 3 AND 4. IN ADDITION, A'S TENETS WILL BE CONTRASTED WITH THOSE OF 'EXPERTS', AS DISCUSSED ABOVE. THE INTERPRETATIVE PHENOMENON THIS PRACTICE HIGHLIGHTS IS THAT A SUBJECT (THE RESEARCHER IN THIS CASE) SEEMS COMPELLED TO CONTRAST EXPERIENCES, OR TO COMPARE A NEW EXPERIENCE/LEARNING WITH AN OLD EXPERIENCE/LEARNING. THIS POINT RELATES CRUCIALLY TO PASCUAL-LEONE'S CONCEPT OF 'EPI-REFLECTION' WHICH REFERS TO THE FACT THAT OUR EXISTING MENTAL SCHEMES MEDIATE OUR INTERPRETATIVE ACTIVITIES. SIMILARLY, PIAGET WROTE THAT A SUBJECT ALWAYS ACCOMMODATES TO A SCHEME OF ASSIMILATION (1977, p.7). SIMILARLY, GADAMER EMPHASISES THAT OUR PREJUDICES OPERATE IN EVERY ACT OF INTERPRETATION, INDEED THAT "PREJUDICES, IN THE LITERAL SENSE OF THE WORD, CONSTITUTE THE INITIAL DIRECTEDNESS OF OUR WHOLE ABILITY TO EXPERIENCE" (1960, p.261, CITED IN LINGE, 1976, p.xv).

1. To make the circumstances in which a child performs any learning task as congenial as possible

A. believes that a task should be performed by a child under the most ideal circumstances. The mother's role in this regard is to make the task easy for the child. At the very beginning of the first task, A. moved the model from the child's left-hand side to a position directly behind the template on which she (the child) was to construct a copy of the model. A's. response to the researcher's question concerning this gesture (Table 1), indicates her concern to make the circumstances of task engagement as conducive as possible.

TABLE 1 : MAKING THE CIRCUMSTANCES OF TASK ENGAGEMENT
CONDUCTIVE TO LEARNING

- R : First of all, why do you put the model in front of her and not at her side?
- A : It is easy for her to look at the model in front of her rather than looking at it, rather than looking at it from the side. You see, her eyes must be straight forward and she must do the thing. You see, I thought it would be too difficult for the small child like her to turn and come back, turn and come back. So it's just to look and then do it.
- R : So what do you think the effect will be of having it in front of her?
- A : It will be more easier for her.
- R : In the sense that she doesn't have to keep looking?
- A : Keep looking at that. By the time she comes back - she's a small child - by the time she turn her eyes to this model she is working with, she might have forgotten where to put the piece.
-

This theme of "making things easy" for the child is very pervasive throughout all conversations held with A.. Small children, A. asserted, are easily distracted and have a very limited capacity to concentrate so it is the mother's task to make the conditions under which task performance occurs, as conducive as possible. What A. refers to here as "making things easy" for B. is partly what Feuerstein means when he says that the "mediating agent ... selects and organises the world of stimuli for the child" (1980, p.15). "The mediator", Feuerstein explains, "selects stimuli that are most appropriate and then frames, filters and schedules them; he determines the appearance or disappearance of certain stimuli and ignores others" (Ibid., p.15). While A. is prepared to perform this function at the beginning of the tasks, she deliberately refuses to provide mediation, in the Feuersteinian sense, during the performance of the task. In the group discussion A. also stressed the importance of making things "easy" for a child by explaining that the mother should consciously attempt to make the child feel comfortable in the

mother's (and especially the teacher's) presence so that the child can concentrate on the task at hand. The following extract (Table 2), taken from the group discussion, illustrates this tenet of A's:

TABLE 2 : MAKING THE CHILD FEEL COMFORTABLE

A : ... the child can't even look at you. To begin with, she is frightened of the teacher, first point. Before the child starts you must try and talk something that will make the child feel comfortable. But don't waste time.

In conclusion, from both the way that A. interacted with B., and from her reasons given in data bases 2 and 4, it is clear that A. places importance on the mother's role of enhancing the atmosphere in which task performance proceeds. The importance of a conducive atmosphere was particularly emphasised during A's "negotiation of accounts" with the researcher. This tenet of A's 'theory' of teaching/learning provides a subtle, interesting contrast with the essence of her theory in this regard, namely that a child must "learn the hard way" otherwise she will not learn, or, at most, will learn more slowly. In other words, the mediator should not provide information-rich clues to the child. A's tenet of mediation under discussion in this section, namely that the mediator should "make things easy" for the child, in fact complements her tenet that a child must learn "the hard way": From the reasons given by A. in data base 4 in particular, the interpreter is able to reconstruct how these two tenets complement rather than contradict one another. A's. reasoning can be presented as follows: If one makes the climate for task engagement as conducive as possible for efficient problem-solving, then a child will be well equipped to "learn the hard way", that is on her own, by means of trial-and-error behaviour. Thus A. regards the preparatory phase of task engagement as being vital. This explains A's emphasis on "introducing the task correctly"; on using the appropriate language to point out the child's errors; on hiding one's own anger/frustration from the child and on keeping the child's interest focussed on the task. These factors will create the right atmosphere for task engagement where a child is forced to learn "the hard way". If the atmosphere is conducive, the child will best be able to proceed with the execution of a problem-solving task without guidance (mediation) as to the intricacies of the task.

The above discussion focussed on an actor's reasons and the role of this source of data in the interpretative process. McGinn (in Bolton, 1979) expresses this argument as follows:

We come to know an agent's reason in acting when we see from which desires and beliefs his action ... may be inferred ... Given those desires and beliefs we appreciate why the action was, for that agent then, a reasonable thing to do: if we had his desires and beliefs, we too should be disposed to act as he did, and reasonably (p.23).

THUS GIVEN AN ACTOR'S REASONS WE ARE BETTER EQUIPPED TO UNDERSTAND WHY SHE ACTS IN THE WAY THAT SHE DOES. OFTEN THE RESEARCHER'S 'THEORY' OF ANY PHENOMENON IS DIFFERENT TO THE ACTOR'S. THIS RESULTS IN A CONFLICT OF INTERPRETATIONS. HOWEVER, WERE THE RESEARCHER TO 'HAVE' THE SAME THEORY (PACKAGE OF REASONS) AS THE ACTOR, AND WERE SHE TO PERFORM THE SAME TASKS, THE RESEARCHER WOULD ALSO ACT IN THE WAY THAT THE ACTOR DOES, AND REASONABLY. SIMILARLY, WERE THE ACTOR TO HAVE THE SAME THEORY AS THE RESEARCHER, SAYS A PIAGETIAN-VYGOTSKIAN THEORY OF COGNITIVE DEVELOPMENT, THE ACTOR WOULD INTERPRET ACTION IN THE SAME WAY AS THE RESEARCHER DOES UNDER CERTAIN CONDITIONS, AND REASONABLY. IT IS IMPORTANT, HOWEVER, TO EMPHASISE THAT THE STATED REASONS RARELY DISPLAY A LINEAR AND/OR PARALLEL INFORMATIVE FUNCTION IN TERMS OF OBSERVED ACTIONS. THE ANALYST/RESEARCHER USES REASONS FROM ANY (TEMPORAL) POINT IN THE TRANSACTION, TO 'FASHION' (CF. GEERTZ) THE SUBJECTIVE REALITY BEHIND THE MANIFEST BEHAVIOUR. FURTHERMORE, THE RESEARCHER'S ACCESS TO POSSIBLE CONSEQUENCES OF ACTION, THROUGH HER ACCESS TO THEORIES OF THE KIND REVIEWED ABOVE, INDICATES THAT IT IS THE ANALYST'S TASK TO ALSO INTERPRET 'IN FRONT OF THE TEXT'.

2. To introduce a task appropriately

An important part of the teaching task, as A. construes it, is to present the task to the child correctly, to introduce the task in an appropriate manner. This could be termed 'task preparation'. A. introduced both tasks to her child, B. as "games". In the following extract (Table 3), A's introduction of the first task to her child, is presented:

 TABLE 3 : INTRODUCING A TASK APPROPRIATELY

<u>Mother</u>	<u>Child</u>
Hello, B.	
My child, we have got these games here.	
(Points to intact puzzles which she has placed one behind the other)	
Do you see these two games? (Looks at child)	(Small nod)
Yes! (Nods head)	(Looks at camera/researcher)
Listen, I want you to do this one. (Turns one puzzle upside down to dislodge pieces and places empty template in front of child)	
Do you see?	Yes. (Said very softly. Small nod)
I want you to do this one similar to this one. (Places skeleton of car in front of child)	
Do you see?	Yes. (Said very softly. Small nod)
To look like this one. (Moves skeleton away to side of template and moves the model to a position directly behind the template)	

<u>Mother</u>	<u>Child</u>
(Looks at what the child has done)	(Fits the skeleton)
Wait. (Places the pieces to the right of the child's template)	(Removes the skeleton. Examines it)
Do you see these colours? (Continues placing the pieces beside the child)	(Places skeleton in template)
Do this thing quickly.	
Do you understand?	(Reaches for a piece in front of her mother and places it)

In the above extract (Table 3), A. communicates to B. that the task is a game to be played with and "enjoyed" (see appendix 2, p. 29). She also stresses that the aim of the task is to copy the model. In addition, A. draws B's attention to the colours of the component pieces and to the importance of doing the task quickly.

TABLE 4 : INTRODUCING A TASK CORRECTLY

(At the start of task 2, A. gives B. the following "introduction" to the task:)

<u>Mother</u>	<u>Child</u>
(Moves template board in front of child. Model is behind the template board)	
Do you see this board? (Points towards board)	(Nods)
Do you see that it looks exactly like this one? (Points towards model)	(Nods)

MotherChild

We are going to play this game, this game which looks exactly like this one.
(Points to template and then to model)

Do you understand?

(Nods)

Here are the sticks for this one.
(Gathers the sticks)

Do you see that these holes do not look the same?
(Points to the holes on the template)

(Nods)

You must look for the sticks you are going to put here.
(Points to the template board)

You must put them correctly, just the same.
(Points to template)

Then put.

(Picks up a stick.
Places stick in hole.
Takes a red block.
Looks at mother)

In Table 4, A. emphasises that in the "game" they are about to "play", the aim is to copy the model. A. also draws B's attention to the fact that there are different shaped holes in the template board and she tells B. to look for the sticks which are to be placed in this board.

As can be seen by examining Tables 3 and 4, B., the child, only vocalises twice during the first phase of task 1 and only nods during the corresponding phase of task 2. While later in the task B. does vocalise, on the whole she speaks very little during the performance of the task. In this regard, she is typical of the children seen engaging in the task on the original video-tapes, and very different to those North American children who participated in Wertsch's (1980) study. This 'occasion for surprise' on the part of the researcher can be regarded as a 'prejudice' in that the researcher expected B. to ask her mother many questions during the execution of the task.

Part of what A. implies when she uses the phrase "introducing the task correctly", is captured by Craig's mediational operator, 'task readiness' which refers to the "willingness or eagerness to engage in the task" (1985, p.214). Both A. and B. evidenced 'task readiness'. A. began giving instructions to B. immediately after she was told by the researcher that she could begin. B. began playing with the puzzles immediately the researcher removed them from their boxes and remained enthusiastic throughout the completion of both tasks, the first task in particular. B. also continued playing with the tasks after video-recording has ceased. B. certainly evidenced "a general orientation ... to engage in problem solving situations" (Craig, 1985, p.216).

In the following extract (Table 5) taken from appendix 2 (A's. discussion with the researcher), A. explains why she considers the way a mother introduces a task, to be important in the teaching-learning situation.

TABLE 5 : THE IMPORTANCE OF AN APPROPRIATE INTRODUCTION

- R : Do you think it's an important part, how the mother or teacher presents the task? How you start it?
- A : Very important.
- R : Do you think if you just did it for her (B.) or if you sat back, she wouldn't be as interested in it?
- A : She wouldn't be so interested because she doesn't know, she doesn't know what it is about. You must introduce the what-do-you-call-it, the task, or the game or whatever it is you are going to introduce to the children, in the way that they will see it. And you must, and you can see, you can look at, you can see their faces if you have introduced it in the right way or it may not be the right way. What will tell you, what will tell you that you have introduced it in the right way, it's the way they will catch it.
-

In the above extract (Table 5), A. expresses her belief that small children are not naturally action-orientated. A. claims that if a task is not introduced appropriately, the

child "wouldn't be so interested because she doesn't know, she doesn't know what it is about. You must introduce the ... task ...". This statement indicates A's belief that for task execution to proceed, it is necessary for the mediator to introduce the task appropriately.

Success in the performance of a task, A. claims, is largely dependent on an appropriate task introduction and a mother should be able to ascertain if she has introduced a task properly by the way that the child performs. Interestingly, A. maintained in the group discussion that if a child performs badly this is because the mediator introduced the task inappropriately. A. remained very reluctant to label a child viewed on video-tape who performed incompetently, either 'stupid' or 'slow'. The fault lay, she insisted, with the child's mother. A. frequently criticised the mothers/teachers on the original video-tapes for failing to introduce the tasks appropriately. Often when a child appeared to be experiencing difficulty, A. claimed that this was due to an inadequate introduction to the task. The following extract (Table 6), taken from the group discussion, illustrates this point.

TABLE 6 : ATTRIBUTING DIFFICULTY IN TASK EXECUTION TO THE MOTHER'S INTRODUCTION OF A TASK

(The present author's supervisor is referred to in the extract below as R₂)

R₂ : This task gave the teachers and the parents terrible problems. Have you seen it on the other video's before? Have you seen this one? Why do you think it gave them so many problems? They just have to put the sticks in and then put the blocks onto the sticks.

A : They don't introduce it in the right way. The teacher doesn't introduce the task, I think, the way I can introduce it to the child. They do not say it the right way ...

As well as using the term "introducing the task" to refer to the literal introduction of a task to a child, which is the sense in which A. uses the term in the above extract (Table 6), A. also uses this term to refer to the mother's attitude towards the teaching situation and the specific task, and

moreover, to her style of teaching. In the following extract taken from data base 2 (Table 7), A. voices her disapproval of the style of teaching of a mother who provides vital clues to her child, namely what the colour, the shape and the internal dimensions are of the next block to be placed⁶.

TABLE 7 : AN INAPPROPRIATE TEACHING STYLE

A : I think if she - that's why I said - I think they are giving the introduction, the way they introduce the task to the children, I don't agree with them. The way they sit, they tell the children, "Here is the task, it's what and I want you to make something like this". You just tell them, as I told my child: "This board is the same as this one, because it has got three different shaped holes", and then just put the stick, she must find out the shapes of the holes compared to the hole on the board. I think that is enough and then you, you will be able to help the child.

A's. argument, presented in Table 7, relates to the point made earlier concerning the importance of introducing the task properly and thereby creating the right climate for learning "the hard way". A. maintains that while it is acceptable and moreover necessary to provide information at the beginning of the task, it is inappropriate to do so during the task. The mediator, A. asserts, should provide no clues or explanations during the execution of the task. In the extract given in Table 7, A. explains that providing vital clues is tantamount to the mother doing the task for the child. Ironically, what A. terms "help" in this extract, refers to the mother's placement of the pieces of a puzzle for the child.

The above extract (Table 7) brings us to the essence of A's 'theory' of teaching-learning, namely that a child must be left to discover how to do any task on her own.

Another important part of the mother's attitude or style, for A., concerns how the mother behaves towards the child during task performance, particularly when the child has made an error or is "stuck". During the performance of task 1,

after B. and A. had both struggled unsuccessfully with the right-hand corner pieces of the puzzle, A. gave B. the following instruction (see Table 8 below):

TABLE 8 : REDIRECTING A CHILD'S UNSUCCESSFUL ATTEMPTS

<u>Mother</u>	<u>Child</u>
Let us leave this one. (Said after working unsuccessfully on the positioning of the corner pieces. Gestures with hands)	
Let us leave this one which makes us wrong.	
Carry on with this.	(Removes some of
Carry on with this other one.	the pieces)
Let us leave this one which is wrong. We will see it afterwards.	
	(Sifts through 'unused' pieces and selects another piece)

B. in fact obeyed her mother's instructions which are presented in Table 8. The researcher asked A. what her reaction would be had B. disobeyed these instructions. A's. response to this question is presented in Table 9 below:

TABLE 9 : REMAINING CALM DURING TASK PERFORMANCE

- A : I'll just keep on asking her to leave the corner. So it means somehow I'm cross, but to a certain extent, you musn't show it.
- R : So you musn't show a child when you're cross with them?

- A : When you're playing with them a game.
- R : Why? Why do you say that?
- A : They will just lose interest, get confused and do the more wrong thing if you are cross with them and you fight with them. You must just be cool and take things steady.
-

The most important thing to bear in mind as a mediator, A. maintains, is that small children are very prone to confusion and boredom and are easily upset. A. asserted that if a mediator reprimands a small child during task performance, the child is likely to become so upset and/or confused as to give up performing the task.

As is illustrated in Table 9, it is most important that the child's interest is maintained even if it means that the mother has to suppress her (own) frustration/anger. In the group discussion, A. asserted that a mother should always bear in mind, when teaching her child, that the child's interests come first:

TABLE 10 : THE PRIMACY OF THE CHILD'S INTERESTS

(The group has just viewed on video-tape a mother who, besides teaching her child how to do the task, provides additional information which relates the object depicted in the puzzle to the world-at-large.)

- A : She is confusing the child ...
- ...
- I think the child's mind is just limited. She has been doing the task. She has completed it, now she's going, she's getting into the other task ... about how the car moves.
- ...
- She musn't think of herself, she must think of the child.
- ...
- ... what the child was supposed to be learning is gone off now.
- ...

Definitely that has gone off now.

...
 ... you must just, must always keep you mind, think of that somebody you are sitting with. Three-year old, she must ... keep it in her mind.

...
 That's why I say, she's, she's getting, she's not thinking of the child, she's thinking of herself. She is not thinking of the child, ...

...
 She's thinking of herself mostly, of what she can do, not that the child must learn this thing.

In this extract (Table 10), A. once more asserts her belief that small children have a very limited learning capacity and that they easily become confused. A., despite much persuasion from the rest of the group, would not accept the possibility that the mother, by teaching her child additional information, might be acting in the child's interest.

Craig's mediational operator, 'specifying means and goals', refers to the means and goals of any task which can be depicted hierarchically (cf. Craig, 1985, p.224). This goal hierarchy may be either implicit or explicit. On the whole, it appears that A. does not deliberately pursue extra-task goals. This was confirmed in the "negotiation of accounts" discussion conducted between the researcher and A. and is illustrated in the following extract (Table 11):

TABLE 11 : PURSUING TASK GOALS

R : ... What's the most important thing that she learnt during doing this puzzle? Is it more important that she learnt about the cars and colours? Or about how to do a puzzle when somebody else is teaching you and you have to listen to them because they are going to help you and ... What do you think is more important?

A : Just to learn to do the puzzle was important,

- R : The first one or the second one? The first one is how a car is made up and its colour and what colours there are, which one's red and which one's yellow etc.. The second thing I said, is how to interact with another person, how to listen to things, how to behave with another person, especially in a teaching role, when they're teaching you a puzzle or something like that. What do you think is more important? The first one? Or the second one? Or are both the same? Or don't you think the second one is important?
- A : The first one is much more important.

THIS EXTRACT ILLUSTRATES AN IMPORTANT QUALIFICATION IN THE 'REASONS AS CAUSES' DEBATE. IT CERTAINLY WOULD HAVE BEEN SURPRISING HAS A. REPLIED TO THE RESEARCHER'S QUESTION PRESENTED IN THE ABOVE EXTRACT (TABLE 11), THAT LEARNING HOW TO INTERACT WITH/RESPECT/OBEY OTHERS WAS THE MORE IMPORTANT LESSON TO BE LEARNT, BY B., FROM DOING THE TASKS. WHILE PERFORMING ANY TASK IT IS DIFFICULT TO SIMULTANEOUSLY EXAMINE ONE'S BEHAVIOUR CRITICALLY, IN THE SENSE OF UNCOVERING ONE'S 'HIDDEN CURRICULUM'. THIS POINT IS CAPTURED IN BHASKAR'S COMMENT THAT "ONE CAN ONLY SEE THE FLY IN THE FLY-BOTTLE IF ONE'S PERSPECTIVE IS DIFFERENT FROM THAT OF THE FLY" (1978, p.8). THESE QUALIFICATIONS WHICH MUST BE ADDRESSED IN INVESTIGATING THE ROLE OF 'REASONS AS CAUSES' IN THE INTERPRETATIVE PROCESS, STILL LEAVES OPEN THE DEBATE BETWEEN REJECTING THE SUBJECTIVE POLE (AS RICOEUR DOES) AND REGARDING REASONS AS GENERATIVE MECHANISMS IN THE DOMAIN OF PSYCHOLOGY, AS HARRE AND SECORD AND BHASKAR DO.

A. refused to accept the other analysts' proposal concerning the value of extra-task instruction, giving as her reason the 'fact' that small children have minds of very limited capacity. The extract presented in Table 10 continues as follows:

TABLE 12 : FOCUSING ON A CHILD'S LIMITED CAPACITY TO LEARN

- A. : This child can't take, this child is three years old. She can't take two tasks at the same time as she was doing. She must give her a chance to relax and grind this thing what she has been doing.

Not only does A. consider children to have limited-capacity minds, but also stresses that they have fragile emotions which must always be considered. In the discussion between A. and the researcher, A. claimed that reprimanding a young child might result in the child becoming so upset that she gives up doing the task. Table 13, which illustrates this part of the discussion, follows:

TABLE 13 : USING APPROPRIATE LANGUAGE

(During the execution of task 2, A. has responded to an error B. has made, by saying: "I disagree, I disagree". In the discussion between A. and the researcher which follows, the researcher investigates A's reasons for using this terminology:)

R : Why do you use the words, "I disagree"? Why don't you say, "That's wrong"?

A : I think, R., to say, "That's wrong, that's wrong", it does something to the child.

R : Like what?

A : It makes the child feel unhappy and she may not be able to do the puzzle.

R : ...
And your way, saying, "I disagree", is not as hard as saying, "That's wrong!"?

A : It's not as hard. I think my word, my word is polite.

...
Just because I want to give her, I will just still want to carry on. I must, I must be calm. I must be a little bit sweet and warm to her.

...
It (harsh reprimands) disturbs their mind and they will not learn. If you have done that thing in the morning, you must know that the little child like B. will never gain anything the whole day.

...
If I just tend to use the hard words, they get confused and everything will be messed up.

In this extract (Table 13), A. asserts her young children are very sensitive to the language their mothers use to point out the child's errors. A. reprimands her child harshly, risks the possibility of the child becoming so upset that she (the child) is unwilling to continue performing the task. A warm atmosphere, A. maintains, is essential for performance. The creation of a conducive atmosphere is the 'strategies' which a mother should use to make the task "easy" for the child so that the latter can proceed with the business of task execution "the hard way".

There is a subtle orientation in the argument in Table 13: The child's feelings are considered important as, if not more important than, the task itself. Without the reasons for her actions provided by A. and which are given in Tables 11 and 13, A's actions could possibly be given a different interpretation.

THE PROVISION OF AN ACTOR'S REASONS FOR AN ACTION IS A DEFINITE NUANCE AND CLARITY. THE PRESENT AUTHOR IS NOT SUGGESTING THAT REASONS ARE ALWAYS IN A S-R RELATIONSHIP, THAT IS, THAT THE REASON(S) FOR AN ACTION IS/ARE AN ACTOR'S REASON(S) FOR A PARTICULAR ACTION WHICH IS/ARE AN ANALYST'S UNDERSTANDING OF THAT ACTION THERE-A-

3. To encourage a child to do any task on her

TABLE 14 : EMPHASISING UNGUIDED PROBLEM-SOLVING

(The following extract is taken from the transcript of an interaction which occurred during task 1:)

<u>Mother</u>	<u>Child</u>
	You put
Put.	(Take she 1 and another other which

MotherChild

Look there.
(Points to model)

Copy from this one and
do it similar to that one.
(Points to model and template)

Do you understand?

(Nods head)

In the above extract (Table 14), A. makes it clear to B. that B. will have to do the task on her own and that she (A.) will not do the task for B. either physically/non-verbally or verbally. This principle is related to A's belief, presented earlier, that there is very little difference between a mediator who physically places a piece of the puzzle for the child, and one who provides the child with information-rich verbal instructions such as, "Take the round black object with a square hole". In A's opinion, the mother is doing the task for the child in both cases and in both cases the child will learn nothing from this type of mediation. Instead, A. claims, by referring the child to the model, the child will be able to "see" for herself how to proceed with the task. This point provides an interesting 'occasion for surprise' in terms of the point made earlier concerning Vygotsky's dictum that instruction creates a zone of proximal development, and in terms of Wertsch's assertion that the way that the task is talked about, will determine the parameters of the zone of proximal development. A. refuses to discuss the task or to provide B. with vital clues; she is, on the whole, only prepared to refer B. to the model or to place a piece of the puzzle for her. This teaching strategy is most clearly demonstrated in those cases in which B. asks A. for assistance or information, and where A. deliberately refuses to perform this function. The following extract (Table 15) is one such instance.

 TABLE 15 : REFUSING TO PROVIDE RELEVANT INFORMATION

(The following extract is taken from a point near the end of the execution of task 2:)

<u>Mother</u>	<u>Child</u>
No, I disagree!	(Picks up a red block and begins fitting it)
This is not the right one for here.	(Puts the block down)
Put the red for here.	(Picks up another red block)
I don't know! Try to put it. (Looks briefly at researcher)	(Looks at mother)

It is evident from the above extract that A. refuses to provide vital information to the child. A's. most prevalent theme throughout all discussions, her 'thematic path', is that a child only learns "the hard way", that is, by doing the task at hand for herself. Pascual-Leone, Goodman, Ammon and Subelman (1978) point out that "at the core of the equilibration process, as Piaget describes it, is the child's own, self-regulatory activity. Consequently it is often suggested that the instructional activities of pupils should be self-initiated" (p.250). The "essential idea" throughout "variations on this same theme", such as Murray's concept of "'discovery' learning" and Reid's concept of "learning through exploration", is that "those instructional activities that grow out of the pupil's natural curiosity and interests will lead to greater developmental progress than those that are imposed on the pupil at the behest of a teacher" (Ibid., p.250). Hence there are certain similarities between A's 'theory' of learning-teaching and that of a particular group of 'experts'.

Returning to A's tenet, learning "the hard way", A. explains that she does not provide assistance to B. when she asks for it, for the following reason (see Table 16 below):

 TABLE 16 : LEARNING BY DOING

A : Just because I want her to learn. I just want her to learn to do the task, or to try and do the task on her own.

This point relates to that made later in the discussion concerning A's desire to extend B's present level of spontaneous performance, rather than to 'propel' her into a higher level of functioning (see pp.127-128).

In addition to a child learning by doing a task on her own, much time is saved this way, A. maintains. In her discussion with the researcher, A. elaborated as follows:

 TABLE 17 : SAVING TIME

A : ... if I do it for her she won't know anything. I think I would have to do it three or four times and then she starts realising that these can go there, these can go ...

R : Do you think this is a shortcut then?

A : To make her do things on her own, I think it's a shortcut, to have the children, to make the child do it.

R : Do you think she'll learn quicker than if you did it with her three or four times?

A : No, she will learn quicker - for me she will learn quicker if she does it herself. I only help her.

A. maintained in both her discussions with the researcher and the group, that if the mother leaves her child to do a task on her own, the child will "see" how to do it. This explains why A. simply tells B. to copy the model and leaves

her to construct the template on her own. In terms of Craig's mediational operator, 'specifying means and goals', A. provides information about an end or goal, but purposely will not provide information about the means to achieve this goal.

In the following extract (Table 18) taken from data base 4, the researcher questions A. about this teaching strategy:

TABLE 18 : "SEEING" THE CORRECT SOLUTION

R : You said to her, "Look at the model, look at the model". What does she think then? Or how does she feel? Because she doesn't know where to put the piece. You say, "Look at the model", she looks and then what does she think? What does she know now? Or what does she, what's different?

A : By looking at the model that will make her see and know where to put the piece, but just by thinking she won't know.

In this extract (Table 18), A. indicates that it is sufficient for a mediator to merely stress that the child should copy the model. If the child does this then she will soon "see" how to proceed, and by doing whatever is necessary, the child will learn the principles involved in that particular part of the task.

In the episode given in Table 15, A. refuses to provide B. with any more information, other than pointing to the relevant block on the model. With regard to this episode, an important aspect of the stick-and-block task should be pointed out, namely that blocks with the same shape and colour, have different internal dimensions. In the episode presented in Table 15, A. does not draw B's. attention to this fact, but merely stresses that B. has chosen the wrong block and that she should look at the block on the model which A. has indicated. Again this extract indicates A's belief that by looking at the model, a child should be able to "see" what to do next and how to do it.

The following extract (Table 19), taken from the group discussion, illustrates this tenet of A's 'theory' of learning-teaching:

TABLE 19 : LOOKING AND "SEEING"

(The discussion centres around a mother observed on video-tape who tells her child what colour block to take next.)

A : The child must look at the what-you-call-it, at the complete, the complete object and see where, where she must put the what colours.

...

... I don't understand why does she say, "You take the yellow one, take the green one, take the white". I think she must leave the child - this is yellow, pink and green - to do the thing. Look at that, look at that one, and the complete object and see how it's done, and the child must see how it is: there is a yellow colour and the yellow colour, so the yellow colour is ...

The other interpreters explained to A. that because of the nature of the more complex stick-and-block task (which was not used in the present study), in which two particular blocks have to be placed in a certain way to achieve a particular effect (for example, two non-triangular blocks are placed together so as to constitute a triangle), it is impossible to simply "see" how the pieces should be placed. They suggested that it is necessary for the mediator to explain to the child that the internal dimensions of the blocks have to be considered in their placement. A. retorted that if a child could successfully place a block on a stick earlier in the task, then she had understood the principles involved in placement and hence could "see" the correct solution without the mother's help. Despite persuasion from the other group members, A. would not accept the possibility that explanation, addressed to the child, is vital for the successful completion of this particular puzzle. This is one instance in which A. refused to accept the proposals suggested by other group members.

EACH INTERPRETER COMES TO ANY KIND OF INTERPRETATIVE ACTIVITY WITH HER INDIVIDUAL SET OF PREJUDICES OR HER UNIQUE 'HORIZON OF MEANING' (IN THE GADAMERIAN SENSE). THIS SET OF PREJUDICES COULD BE TERMED THE INTERPRETER'S 'THEMATIC PATH', AND IN THE ACT OF INTERPRETATION, AS IN THE GROUP DISCUSSION IN THIS STUDY (DATA BASE 2), EACH INTERPRETER PURSUES HER PARTICULAR 'THEMATIC PATH', A PHENOMENON WHICH RESULTS, WHERE INTERPRETERS PURSUE DIFFERENT OR OPPOSING 'THEMATIC PATHS', IN A CONFLICT OF INTERPRETATIONS. EXPRESSED ANOTHER WAY, A., LIKE ANY OTHER INTERPRETER, 'CAN ONLY DO WHAT SHE CAN DO', THAT IS, SHE IS CONSTRAINED IN HER ACTIONS AND BELIEFS BY WHAT KNOWLEDGE AND EXPERIENCE OR MENTAL SCHEMES SHE 'HAS' AT THE MOMENT OF TRANSACTION. AS INTERPRETERS WE ARE ESSENTIALLY HELD CAPTIVE BY OUR KNOWLEDGE. PASCUAL-LEONE (1979) WRITES ABOUT THE 'PRINCIPLE OF ASSIMILATORY PRAXIS' WHICH REFERS TO THE FACT THAT "THE PSYCHOLOGICAL ORGANISM IS A VERY ACTIVE INSTRUMENT FOR PRAXIS" (p.3). SCHEMES "STORED IN THE PSYCHOLOGICAL ORGANISM", PASCUAL-LEONE WRITES, ARE "HIGHLY ACTIVE UNITS : UNLESS PREVENTED BY SOME OTHER DOMINANT SCHEMES THEY WILL RUSH TO APPLY UNDER MINIMAL CONDITIONS OF SATISFACTION. THIS RUSHING-TO-APPLY DISPOSITION IS THE FUNCTIONAL PROPERTY WHICH PIAGET HAS CALLED ASSIMILATION" (IBID., pp.4-5) IN THIS SENSE, BEING 'VICTIMS OF OUR MINDS' AND 'CULTURES' IMPLIES THAT WHATEVER SCHEMES WE BRING TO BEAR ON AN OBJECT WILL BE APPLIED UNTIL OR UNLESS WE ARE FORCED TO CONFRONT THE UNFAMILIAR REALITY IN TERMS OF THE INHERENT QUALITY OF THAT REALITY, AND HENCE TO CHANGE. UNLESS WE ARE OPENED TO 'OCCASIONS FOR SURPRISE' WE WILL NEVER ALLOW OURSELVES TO BE CONFRONTED BY A DIFFERENT REALITY, AND HENCE TO CHANGE.

In the following extract (Table 20) taken from data base 4, A. explains why she is reluctant to do the task for her child, having just fitted a piece of the puzzle for B. during the execution of task 1:

TABLE 20 : ENCOURAGING A CHILD TO DISCOVER
INFORMATION ON HER OWN

- R : ... do you think she (B.) learns as much as if she put it on her own the first time?
- A : No, no.

R : No. If she did it herself, if she looked at it and she put it herself, she learnt more than if, after a while, you put it for her?

A : She learnt more than when you put it for her.

R : So you think the less you do for a child, the more she learns?

A : The more she learns.

...

... I believe that the child must learn by doing the thing.

In light of the above extract (Table 20), it was not surprising that A. asserted that the least effective mother (in terms of the extent of the child's Learning) out of all of the mothers viewed on the original video-tapes, was the mother which Craig (1985) and the other analysts considered to be the most effective mediator! In terms of A's 'theory' of Learning-teaching, this mother, who embodied many of Craig's mediational operators, acted 'unreasonably'. However, if A. 'held' Craig's 'theory' of mediation, A. too would have interpreted this mother's behaviour as most reasonable. Thus once again, different prejudices (in the Gadamerian sense) will give rise to different interpretations. An interpreter's prejudices comprise an important part of her 'horizon' and should therefore, Gadamer proposed, be scrupulously examined, as far as this is possible, in order to better understand how interpretation proceeds.

IN THIS STUDY, A. WAS BOTH AN OBJECT OF INTERPRETATION FOR THE RESEARCHER AND THE SUBJECT OF INTERPRETATION IN THE CONTEXT OF HER INTERACTION WITH B.; IN THE CONTEXT OF HER DISCUSSION WITH THE RESEARCHER ABOUT HER OWN BEHAVIOUR; AND AS A PARTICIPANT IN THE GROUP DISCUSSION. IN ORDER TO CONSTRUCT A'S 'THEORY' OF LEARNING BY WHICH TO UNDERSTAND HER BEHAVIOUR AS AN OBJECT OF INTERPRETATION, IT WAS NECESSARY THAT A. ACTED AS A SUBJECT OF INTERPRETATION, BY PROVIDING HER REASONS FOR HER BEHAVIOUR. THIS OCCURRENCE POINTS ONCE MORE TO THE VALUE, FOR A RESEARCHER, OF BEING PROVIDED WITH AN ACTOR'S REASONS. THE REASONS PROVIDED BY AN ACTOR OPEN UP HER 'HORIZON OF MEANING', THEY REVEAL HER 'PREJUDICES' AND HENCE HER SUBJECTIVE REALITY. HOWEVER, AS SUGGESTED PREVIOUSLY, CERTAIN QUALIFICATIONS ARE REQUIRED WHEN AN ACTOR'S REASONS ARE USED IN THE INTERPRETATIVE PROCESS. RATHER THAN USING 'REASONS AS CAUSES' (IN THE MANNER SUGGESTED BY BHASKAR AND

HARRE AND SECORD), AN ACTOR'S REASONS MAY BE RECOGNISED AS CONSTITUTING WHAT MAY BE TERMED A 'PHENOMENOLOGICAL' VIEWPOINT⁸.

A. reiterated in the group discussion, her tenet that a child can only learn if she is left to discover information on her own. An extract which illustrates this tenet, follows:

TABLE 21 : LEARNING "THE HARD WAY"

A : The child must, must be able to choose the right block with the right, with the correct shape. And if I just take the block and the child didn't see it, I just give it, just to fit, I don't think she will learn.

...

I believe that most things are learnt by doing it and to make mistakes and you get somebody to correct, and there are fewer mistakes and you redo it again, try not to make mistakes.

Again, in Table 21, A. asserts her belief that for learning to occur, a child performing a task must herself "see" the correct solution. When the mediator simply gives a piece of the puzzle to the child to place, or tells her which piece to place, the child is not given the opportunity to "see" which the correct piece is and hence will not learn. It is only by means of self-discovery that learning is possible. Table 21 illustrates A's belief that trial-and-error behaviour, coupled with the supervision of the mediator, is an efficient programme for learning in that it is self-correcting.

A's. tenet concerning the necessity to learn "the hard way" stands in marked contrast to many of Craig's mediational operators, especially 'gathering information', 'making the problem explicit' and 'attending to detail'. A's 'theory' and method of teaching will now be illustrated using each of the above mediational operators.

'Gathering information' involves "the mediation of the essential features of the task to the child" (Craig, 1985, p.216). The provision of this information should lead "to the resolution of a problem solving situation" (Ibid., p.216). As illustrated in the extract below (Table 22) A., at the outset of both tasks, appears to evidence this mediational operator:

TABLE 22 : 'GATHERING INFORMATION' AT THE BEGINNING
OF THE TASK

(After having been told to begin, the instructional process
in task 2 proceeds as follows:)

<u>Mother</u>	<u>Child</u>
(Moves template board in front of child. Model is behind the template board) Do you see this board? (Points towards board)	(Nods)
Do you see that it looks exactly like this one? (Points towards model)	(Nods)
We are going to play this game, this game which looks exactly like this one. (Points to template and then to model)	
Do you understand?	(Nods)
Here are the sticks for this one. (Gathers the sticks)	
Do you see that these holes do not look the same? (Points to the holes on the template)	(Nods)
You must look for the sticks you are going to put here. (Points to the template board)	
You must put them correctly, just the same. (Points to template)	

Mother

Then put.

No. First start by putting
another all the sticks.
(Looks at researcher)

Yes! Let us begin to put.

Do you see?

Yes! You must look at that
and put.
(Points to model and to
template)

Turn.
(Gestures)

Turn. Put. It will go in.

Child

(Picks up a
stick

(Places stick
in hole)

(Takes a red
block.
Looks at mother)

(Puts block down
and picks up a
stick. Fits the
stick. Fits an-
other stick.
Before fitting
the fourth stick,
looks at the
bottom of it)

(Picks up red
block, and looks
at mother.
Begins placing
block on stick)

(Continues
fitting
block)

(Has difficulty
fitting block and
begins putting it
down)

(Picks up the
same block and
fits it)

<u>Mother</u>	<u>Child</u>
	(Picks up white block)
Yes. Which one goes in?	(Holding the block, looks at mother)
(Moves all 'unused' pieces closer together)	(Drops white block)
Look there! (Points to model)	
Yes! And then put.	(Chooses black block and begins fitting it. Turns it)

In the above extract (Table 22), A. does 'gather information' for B., telling B. as she does about the template board and the model board and the fact that the aim of the task is to construct the former to resemble the latter. In addition, A. shows B. the sticks, points out that the holes on the board have different shapes and that she (B.) will have to find the correct sticks for each hole. A. also tells B. to begin by placing the sticks in the holes. Here 'gathering information' corresponds to A's tenet concerning an appropriate task introduction. However, once the task is in progress, A., in general, deliberately refuses to "gather information" for B. A typical instance of this 'strategy' is illustrated below:

TABLE 23 : REFUSING TO 'GATHER INFORMATION'

(The following interaction occurs during the execution of task 2:)

<u>Mother</u>	<u>Child</u>
Put. (Shuffles remaining unused blocks)	

Mother

Which one are you going
to put now?

No, I don't know. I just
don't know.

Child

(Touches a block and
looks at mother)

As illustrated in the above extract (Table 23), at an occasion for instruction, A. deliberately refuses to provide the information which her child asks for. On three other occasions, A's reply to her daughter's queries was, "Angazi", "I don't know", or "Don't ask me" (cf. appendix 1, pp.25;27). In other instances, A., as it were, creates the possibility for a state of disequilibrium for the child by pointing out when the child is about to make / has made an error: She says, "I disagree!" or "No", but refuses to explain exactly what B. has done wrong (cf. appendix 1, pp.3; 10; 11; 12; 18; 20; 23; 25; 27). Thus, while A. creates the possibility for a state of disequilibrium (in the Piagetian sense), it is clear that she does not truly lead the child to appreciate why she is making / has made an error and so does not provide ways of surmounting the disequilibrium. The incident presented in Table 23 above, for example, ends with A. giving B. the correct block to place and helping B. to align it on the stick (cf. appendix 1, p.24). In fact, in instances where A. intervenes and places a piece of the puzzle for B., A. never explains her corrections: In her discussion with the researcher, A. explained her reasons for not doing so: Claiming that B's errors were only minor ones, A. asserted that if she did point out B's errors, B. would feel as if she (B.), was not really doing the task herself and would most likely feel upset. This belief points once more to the social orientation of A's 'theory' of learning-teaching.

The mediational operator, 'making the problem explicit', is defined by Craig as follows:

In the case of instruction from mother to child, it is necessary for the mother to make explicit to the child that the task as a whole and the different facets of the task demand specifiable responses that will solve the problem (1985, p.231).

Perhaps the most characteristic feature of A's teaching is that she fails to 'make the problem explicit'. In line with her belief that one only learns how to do something by doing it oneself, that knowledge results only from self-discovery, A. very rarely provides B. with the vital clues for the solution of a problem. In fact, during the group analysis of the original video-tapes, when A. viewed a mother who provided very explicit cues to her child, she (A.) expressed the view that this mother's child would learn very little from her. A. asserted that the mother's constant talking "disturbs the child" and "confuses the child". The following extract (Table 24) is taken from the group's discussion about the mother described above:

TABLE 24 : THE IMPORTANCE OF LEARNING BY SELF-DISCOVERY

- R : Don't you think she is making it clearer for the child?
- A : No. No, she doesn't make it clear for her.
- R : She's pointing at what is important.
- A : I think they think they make things easier for the children, whereas, in my opinion, they are making things hard for the children. If they just leave them to do them and they make mistakes, it would be better.
-

A. very patently does not believe that it is necessary, in mediating a task to a child, for the mediator to "alert the child to the necessity to appreciate first the nature of the problem before attempting to engage in task oriented behaviour", which is how Craig describes the essence of the mediational operator, 'making the problem explicit' (1985, p.235). A. believes that it is important that a child learns by making mistakes, that is, by trial-and-error behaviour. Again the interpreter encounters a subtle distinction between what A. terms "making things easy" for the child, and forcing the child to learn "the hard way". So while A. is prepared to create a conducive atmosphere for task engagement, she refuses to provide vital clues to the child.

The mediational operator, 'attending to detail', is based on Craig's claim that "instructions which emphasise precision are necessary for the execution of complex problems" (1985, p.235). As discussed above, A. does not believe, that a mediator should provide clues to the child, especially very descriptive clues such as: "Look for a black block with a round hole". In the extract below (Table 25), taken from the group discussion, A. asserts her belief that there is a negligible difference between those mothers who physically place the pieces of a puzzle for the child, and those mothers who attend to precise details in the instructional process:

TABLE 25 : DOING A TASK FOR A CHILD

(R₂ refers here to the author's supervisor.)

R₂: ... If I pick up a piece, and put it on the child's thing, it's the same as when I say to the child, "Look at the model, you must take a red one with a square hole and you must put it on this stick"?

A : It's the same.

R₂ : It's the same as when I pick up the piece and actually put it for the child?

A : It's just the same.

...
That's why I say it differs slightly that the child puts the piece herself, but you told her where to put it, isn't it?

The above extract (Table 25) makes clear A's belief that the only way that a child learns, is by self-discovery. If a mediator provides precise details regarding the components of the task, because the child has not discovered these details for herself, she will not learn much.

Piaget stated that a non-balance will be created where a gap in one's knowledge "becomes a disturbance when it indicates ... want of knowledge that is indispensable in solving a problem" (1977, p.19). B. frequently turned to her mother to provide this knowledge, always to have her enquiries

answered with a refusal to provide this information. In this sense, A's style of mediation is not conducive to the surmounting of non-balances created 'in' B.. Frequently, when B. does not know where to place a piece, rather than providing clues, A. instructs B. to put down the piece that she is holding and to choose another one. On being questioned about this strategy by the researcher, A. stated that her child must at least know where to place a piece, even if she is unsure as to its exact positioning: A. is only prepared to help B. with the latter task once B. has positioned the piece on the template. However, at times, when B. hesitated, A. merely placed the particular piece for B., as illustrated below (Table 26):

TABLE 26 : PLACING A PIECE OF A PUZZLE FOR A CHILD

(The following action-events occur during the execution of task 1 just after B. has picked up a piece of the puzzle:)

Mother

Child

Where is that?

Look properly.
(Points to template)

Look properly at this car.
(Points to model)

Look properly at this car.
(Points to model)

Where is this colour?
(Points to template and to
piece child is holding)

And put.
(Places piece for child.
Removes hand)

(Moves piece into
position)

During B's execution of the task, A. merely drew B's attention to the latter's errors but did not explain why she (A.) considered them to be errors. Besides repeatedly telling B. to look at the model and copy it, A. did not "change the task-inherent structure to become consistent with existing schemes/knowledge" (Craig, 1985, p.301). A's main strategy was to point out a discrepancy and thereby create a non-balance, but she did not provide the means to overcome the non-balance. She left B. to resolve the task by "recombining existing schemes/knowledge in a novel application" (Ibid., p.301).

A. believes that the mother should always allow the child to choose her plan of action and leave the child to execute it. However, as illustrated in the above extract, the mother must intervene when a child has attempted to place a piece of a puzzle, and after two or three trials, has failed to do so successfully. In such cases, the mother should simply take the piece from the child and place it for her and should instruct the child to choose the next piece. A. maintains that in these instances there should be no discussion between the pair about the principle(s) involved in the correct placement of the piece. The above extract (Table 26) illustrates A's belief, as asserted in the group discussion, that if a child cannot after a short while and/or two three attempts, successfully place a piece, then she has failed in that part of the task: A. implied that in such circumstances, the child is evidently unable to place the piece correctly and so spending further time on that part of the task would be wasteful. Again A's. 'theory' and method of learning-teaching provides a marked contrast with both Piaget and Vygotsky's theories of learning: A. certainly does not provide the means for her child to surmount a non-balance in the Piagetian sense. Nor does she propel her child into a zone of potential development in the Vygotskian sense. A's use of the word "helping" to describe her behaviour in the above extract, takes on an ironic sense in the light of this interpreter's (the present author's) prejudices.

In terms of Craig's mediational operator, 'discovering causal relationships', A. can be seen to be depriving her child of the opportunity to exercise her initiative. Craig proposes that the participants in a problem-solving task require "an appreciation of the possible effects of actions on objects, or objects on objects" (1985, p. 253). What is important is that the child realises the consequences of her actions for the solution of a problem- solving task. Craig proposes that trial-and-error or random behaviour, that is, the behaviour that occurs in an instructional situation where the mediator fails to mediate the essential features of the task to the child" (p.255), is the opposite of 'discovering

causal relationships'. Trial-and-error behaviour is in fact encouraged by A. in the present study, as she believes that one only learns through self-discovery. The lack of the type of behaviour referred to by the mediational operator, 'discovering causal relationships', is epitomized in the present study, by the interaction which occurs during the execution of the first task when both mother and child simultaneously and randomly attempt to fit the pieces comprising the right-hand side of the puzzle. While A. asserts that it is important to allow the child to choose which piece to place, and to encourage her to position it herself, she does not allow much time for experimentation on the part of the child and in this sense discourages initiative in the child which "may inhibit the discovery of causal relationships" (Ibid., p.256). An example of this type of instruction is given in the following extract (Table 27):

TABLE 27 : DISCOURAGING INITIATIVE

(During the execution of task 2, the following interaction occurs. The child has just picked up a block:)

<u>Mother</u>	<u>Child</u>
Yes! And then put.	(Chooses black block and begins fitting it. Turns it)
No! I disagree.	
I disagree! Look again.	(Continues trying to fit block. Looks at mother)
I disagree! Look there. Put that down. (Points to model)	
Put it down.	(Puts piece down. Begins sorting through remaining blocks)

In the above extract, A. can be seen to be discouraging initiative in the child. Thus what A. does (that is, how she instructs B.) provides a marked contradiction with what she says. The essence of A's. 'theory' of learning-teaching which was derived from the reasons she provided for her actions recorded on video-tape, is that learning proceeds by means of self-discovery, or through trial-and-error. A. explained that it is necessary, in the teaching situation, for the mother to allow the child to execute the task as she (the child) feels fit, and to thereby allow the child freedom of choice. This would in turn result, A. postulated, in the child learning where the various pieces belonged in the puzzle. Yet, in practice, A. does not fully permit this kind of behaviour. For example, while she claims that the mother should allow the child to choose how she (the child) would like to begin the task, in the second task, where B. proceeded by fitting a block on the stick which she had placed in the board, A. told her to first fit all the sticks. More important is the observation that, in effect, A. does not really allow B. time to experiment and thereby learn where particular pieces belong in the template.

THE DISJUNCTION WHICH IS SOMETIMES FOUND BETWEEN STATED REASONS AND MANIFEST ACTIONS, IS TO BE EXPECTED, AND CERTAINLY DOES NOT NECESSITATE THAT AN AGENT'S INTENTIONS BE IGNORED OR UNDERPLAYED IN THE PROCESS OF THE INTERPRETATION OF ACTION, WHICH IS WHAT RICOEUR PROPOSES. MERTON AND NISBET (1961) STATE THAT "ATTITUDES AND BEHAVIOUR NEED NOT ALWAYS BE CONGRUENT; PARTICULAR SITUATIONS CAN STRUCTURE HOW MOST PEOPLE BEHAVE IN SPITE OF THE ATTITUDES THEY MAY HARBOUR" (p.448). LAPIERE (1934) CONDUCTED A PIONEERING STUDY IN WHICH HE EXAMINED VERBAL VERSUS ACTUAL DISCRIMINATION IN THE U.S.A. TOWARDS THE CHINESE COMMUNITY. HE FOUND THAT PEOPLE FREQUENTLY BEHAVED DIFFERENTLY IN PRACTICE AND IN PRINCIPLE. THUS IT IS NECESSARY, WHEN INTERPRETING HUMAN BEHAVIOUR, TO EXAMINE BOTH WHAT PEOPLE SAY (THEIR BELIEFS) AND WHAT THEY DO (THEIR BEHAVIOUR), AND MOREOVER, ESPECIALLY IN INSTANCES OF CONTRADICTION BETWEEN THE TWO, TO ASK PEOPLE FOR THEIR REASONS FOR THEIR BEHAVIOUR. THE REASONS ACTORS PROVIDE SHOULD NOT, HOWEVER, BE REGARDED AS FINAL 'TRUTHS'. THEY DO, HOWEVER, BECOME AN IMPORTANT DATA BASE (AMONG OTHERS) IN WHICH TO DELINEATE PATTERNS FOR THE RECONSTRUCTION OF GENERATIVE MECHANISMS (CF. BHASKAR, 1979).

4. To maintain the child's interest

Having introduced the task properly, the mother, A. maintains, has to work hard at keeping the child's interest focussed on the task. One way of doing this, is to positively reinforce the child's efforts. In the following extract (Table 28) taken from appendix 2, A. explains why positive reinforcement is important:

TABLE 28 : MAINTAINING THE CHILD'S INTEREST

(The following conversation ensued after having viewed A. on video-tape saying to B.: "Yes. The good girl put it correct", after B. had correctly placed a piece of the puzzle comprising task 1.)

- R : OK, you say there, "Good girl", and "Yes", and that type of thing. Why do you do that?
- A : That I want to stimulate her, just stimulating her to see that she is doing right.
- R : Right, and keep her going? I see. And what do you think it does for her when you say, "Good girl, that's right"?
- A : I think that makes her, it makes her interest, getting interested in the game, and again it makes, it makes her to like what she is doing.
- R : Because you're telling her she's good at it?
- A : She's good at it and she's doing it in the right way.
-

A. reiterates the importance of positive reinforcement at another point in the discussion where she explains why "a warm loving atmosphere is the best" atmosphere for teaching a child:

TABLE 29 : THE IMPORTANCE OF A WARM ATMOSPHERE IN THE TEACHING SITUATION.

A : It keeps the child going and she looks happy and interested in what she is doing, looking forward to seeing what the teacher or the mother is going to say or do for her.

A. maintains that children are not naturally interested in doing puzzle-like tasks and that it is therefore important that a mother does everything in her power to get the child interested and to keep her motivated. In the present study however, B. completed both tasks with great enthusiasm and interest. At no stage during the performance of the tasks did B. appear to become bored. Yet, A. maintains that small children (younger than five years) do not naturally enjoy doing tasks such as those presented to B. in the present study. She believes that it is the mother's responsibility to 'prod' the child into action, as it were, and then to utilise all sorts of 'prompts' to maintain the child's interest during the execution of the task. Hopefully, the child will then be seduced into enjoying doing the task. There is thus an interesting lack of convergence between how the child B. responded to the tasks in the present study, and her mother's beliefs about her (B's) response style. This contradiction is interesting both in terms of being 'victims of our minds and cultures' and as regards the possibility for change to occur in social actors. As regards the first point, it is important to note that B., having attended crèche, is familiar with the culturally autogenous tasks presented to her in this study. A., however, having a different social history to her child, is, like almost every other mother in the other projects, unfamiliar with these kinds of tasks. It is almost as though A. projects her unfamiliarity with the tasks, onto B., whom she describes as being uninterested in learning tasks of this nature. A. has not, as yet, at least in the context of instruction, allowed herself to be confronted with B's. enthusiastic response style. At the point at which A. is opened to this confrontation, her entire set of associated reasons will be forced to undergo a transformation. Being confronted with B's response style, however, necessarily involves A. making B's action a genuine object of knowledge.

The following discussion (Table 30) between A. and the researcher, illustrates the role that A. assigns to the mother.

 TABLE 30 : THE ROLE OF THE MOTHER

- R : So you see the mother's role as very important?
- A : The mother's role is very important. You must play your role.
- R : Do you see yourself as doing that here? In the task? Do you see yourself as playing an important role? With the puzzle?
- A : Yes. Just by talking, keeping on talking, "Do that, put, put, put", you just stimulate, stimulate the child. Somehow she will put, she can be clever, that's my daughter just. But if you are not there, she can just put one piece, then look around, try to play with some other things at the side. Just by sitting next to her, "No, put it, put it there, turn it around, do this, do this and that". Yes, it helps. So the mother or the teacher must be there.
-

In Table 30, A. emphasises the necessity for the mother to keep the child interested in the task. If she is not constantly stimulated or 'prodded' by the mother, the child, not being action-orientated, will soon become distracted. Consequently, A. asserts, the child will not be able to complete the task.

A's ideas on the mother's role represent some advance on the mother's role as postulated in the indigenous theory Craig reconstructed. In the latter study the majority of mothers interviewed did not maintain that the mother's role is important in the teaching situation. While A. has a very firm belief in the importance of the mother's role in "stimulating that (the child's) intelligence", that is, she has this goal, she appears to lack the means to propel her child into the zone of proximal development. It appears that A's goal in teaching B., is to 'stretch' B's present level of spontaneous functioning as far as it can extend and not to propel her into a higher level of spontaneous functioning. In her discussion with the researcher, A. expressed this goal as follows (see Table 31):

TABLE 31 : EXTENDING A CHILD'S PRESENT LEVEL OF SPONTANEOUS FUNCTIONING

A : As I'm teaching her, I just want to see how far her, how far her brains and how far can she concentrate in doing things.

It appears, both from her reasons and beliefs provided, and from her behaviour, that A. does not intend to propel B. into a higher level of functioning, into "the level of potential development" (Vygotsky, 1978, p.86). In this sense, a zone of proximal development is not created, one can speculate, in that there will not be a difference between B's "actual developmental level as determined by independent problem solving and (her) ... level of potential development as determined through problem solving under adult guidance" (Vygotsky, Ibid., p.86). One can even speculate, judging from B's competency in performing the task, that A's style of mediation restricts B's level of spontaneous functioning.

A's desire to keep the child's interest focused on the task, also explains why A. intervenes and "helps" the child, that is, places a piece for her when the child is "stuck":

TABLE 32 : "HELPING" A CHILD

R : There you seem to wait a while for her to try it and you say, "Look at the model. It must be like that. OK, put it". She tries, she can't put it and then you help her place it. Why do you do that?

A : I don't want her to get - how am I going to put it - I don't want her to lose her interest in what she is doing.

R : You think that if she ...

A : If she, if she keeps on fiddling and it doesn't come right, it might make her lose the interest.

R : So you think she'll get frustrated and give up or something?

A : And give up everything.

Again A. expressed her belief that a small child easily becomes bored when performing a task. If a child becomes "stuck" during the performance of a task, she is likely to lose interest in the task, A. maintains, and to refuse to continue further with the task.

A., when she fears that B. might not want to finish the task on which she is working, is prepared, it appears, to provide the kind of assistance she normally refuses B.. For instance, towards the end of task 2, where B. appears to be having some difficulty, A. assists her by pointing to the exact block on the relevant stick on the model which B. is to find and place on the corresponding stick on the template (see Table 33 below).

TABLE 33 : PROVIDING ASSISTANCE

(The following interaction occurs during the execution of task 2:)

<u>Mother</u>	<u>Child</u>
Put the one which is supposed to be here. (Points to corresponding stick on model)	
Do you see the one here, how it is? (Points to corresponding stick on model).	Yes.
Then put, put another one. (Keeps her finger pointing to the corresponding block on the model)	
Yes, put another one. (Helps child fit the block)	(Picks up a block. Holds it. Fits it with mother's help)

Put the following.

(Points to the next block on the corresponding stick on the model. Helps child align the block)

(Chooses the correct block. Fits it with mother's help)

(Looks smilingly at researcher)

Put the following.

(Points to the last block on the corresponding stick on the model)

While A. provides assistance to B. in the above episode, this is certainly not her dominant style of mediation.

In the following extract (Table 34) taken from appendix 2, A. justifies her assistance to B. in this example, as follows:

TABLE 34 : JUSTIFYING ONE'S ASSISTANCE IN TASK EXECUTION

(The researcher has just asked A. why she did not provide the kind of assistance illustrated in Table 33, above, at the beginning of the task. A. replies as follows:)

A : I know I couldn't do it at the beginning. I wanted her to find out on her own and now, towards the end, I think I'm satisfied with what she has been doing. She can't be confused or puzzled with the, with what I'm doing at the end and I think I'm helping her mostly at the end, towards the end, because I'm thinking she is more or less tired.

As mentioned earlier (see pp.93; 101; 102; 104-105), A. always considers what she regards as the fragile emotions and limited cognitive capacity of her child, and adjusts her style of teaching accordingly. Interestingly, A., throughout the group discussion, criticised the mothers viewed on video-tape for changing their style of instruction during the performance of the task. Yet this is precisely what A. does, as illustrated in Table 33. Moreover, A. justified the change in her style of instruction during the task (see appendix 2, pp.74,75). This provides another instance of the disjunction

often found between an actor's beliefs and actions. In these instances, the provision of the actor's reasons for her behaviour in a particular context can add subtlety and clarity to the interpretation of her action.

5. To maintain 'cognitive balance' in the child

TABLE 35 : MAINTAINING 'COGNITIVE BALANCE'

(The following episode occurs during the execution of task 1:)

<u>Mother</u>	<u>Child</u>
	(Tries to fit another piece)
Replace this one. (Fiddles with template pieces they have been working on)	
Replace this one which was there.	
(Child and mother both work on the template but on different pieces)	
Let us leave this one. (Said after working unsuccessfully on the positioning of the corner pieces. Gestures with hands)	
Leave this one which makes us wrong.	
Carry on with this.	(Removes
Carry on with this other one.	some of the pieces)
Let us leave this one which is wrong. We will see it afterwards.	(Sifts through 'unused' pieces and selects another piece)

In the above extract (Table 35), both A. and B. experience great difficulty in completing the corner section of task 1. A. instructs B. to leave that particular section and to proceed with another section. In her discussion with the researcher, A. explained her reasons for this instruction. This part of the discussion is presented in Table 36, below.

TABLE 36 : PREVENTING CONFUSION

- A : That corner will make her lose interest and then she won't be able to do that, the other piece.
- R : So it's more the interest than the confusion?
- A : Yes, I think it's what-you-call, the teacher or the mother must concentrate on.
- R : On keeping the child interested?
- A : On keeping the child interested, that you try to make the child to be interested in, getting interested in the what-you-call, in the game. When you see she's interested, you must be careful of confusing her or letting her do the what-do-you-call, the wrong thing for a long time. If you see that she can't do it, then you must try and help.
-

In the above extract (Table 36), it is clear that A. regards the child's confusion as being integrally related to her (the child's) lack of interest in the task. For A., confusion is something which must always be avoided, for if a child becomes confused, she might give up completely. In her discussion with the researcher, A. asserted that if you leave a child "to get stuck for a long time" she will become scared. Consequently, A. claimed that she "always (tries) to run away from that, from the ... that she does it until she becomes confused, by helping her" (see Appendix 2, p.44).

Rather than viewing confusion as the prelude to learning, that is, as a non-balance in the Piagetian sense, which, if surmounted would result in development, A. regards confusion as a negative condition which must be avoided, not confronted. The interpreter, being informed by a different 'theory' or set of 'prejudices' (in this case, a Piagetian framework) than the

actor, once having obtained the agent's reasons for her behaviour, partially resolves the 'conflict of interpretation' experienced. Learning A's reasons for intervening as she does in the child's behaviour, enables the interpreter to interpret her behaviour, "in the light of" these reasons, as being reasonable.

6. To teach the child to be conscious of time and to always complete any task as quickly as possible

TABLE 37 : EMPHASISING TIME

(A. gives B. the following instruction in task 1, soon after her "introduction" to the task:)

Mother

Child

Do this thing quickly.

Do you understand?

(Reaches for a piece
in front of her mother
and places it)

(During the performance of the task, A. gives B. the following instructions after having attempted unsuccessfully to position a piece:)

This thing which makes us
wrong, leave. We will look
at it afterwards.
(Fiddles with pieces)

Our time is going.

Leave it.
(Fiddles with pieces)

Leave.
(Fiddles with pieces)

As the above extract (Table 37) indicates, A. is always conscious of time, and of wasting it, and as is illustrated in the following extract taken from appendix 2 (Table 38), time

is considered to be of great importance in the execution of a task. In Table 38 below, A. explains her reasons for her assertion that time plays such an important part in efficient task performance.

TABLE 38 : THE IMPORTANCE OF A SENSE OF TIME

A : To tell her to do this thing quickly I want to make her know, whenever she does a thing, as soon as you start it, it must come to an end. Not to say that she must just do it as long as she does it. She must finish it no matter how she finishes it, but to do it quickly. She must do it quickly and finish it. I want to see it when it's complete, whether wrong or right, it's all right.

...

I think it will work her brains. It will work her mind to do the things quickly and try to do them in the correct way.

As well as attempting to teach her child B. a 'sense' of time in general, A. appears to believe that working at a rapid rate, increases productivity. This point is related to a point made previously concerning the child's interest in the task, namely that if you instruct a child to work quickly, she will be prevented from becoming bored and losing interest in the task. A. maintains that the speed with which a child executes a task is dependent on the way in which the task is presented (see Table 39 below):

TABLE 39 : THE IMPORTANCE OF AN APPROPRIATE INTRODUCTION

A : How fast she is and that will be, that will depend on how you present that, you present your what-you-call, your teachings towards the child.

A. criticised the majority of mothers viewed on video-tape during the group analysis for the way that they "presented their teachings towards their children". One of A's recurring criticisms was that these mothers appeared to lack a 'sense' of time. In the following extract (Table 40), A. explains why a sense of time is so important:

TABLE 40 : TEACHING A CHILD TO DEVELOP A SENSE OF TIME

A : ... from the word go you must teach your child to, to do the thing on a specific time, to finish and get on with something else. Not to think that the time is yours if you are sitting down and eating, you can eat the whole day. If you are playing you can play the whole day, that is not right.

In the above extract (Table 40), A. clearly indicates what might be termed 'task-orientation'. In the following extract (Table 41) taken from the group discussion, A. elaborates on her criticism of the majority of mothers viewed on video-tape.

TABLE 41 : AN ELABORATION ON THE SALIENCE OF TIME

(R₂ refers here to the author's supervisor.
Z₂ refers to a third analyst (cf. p. 13 of main body of this manuscript)).

A : These people don't care about time, as long as they do all these things, as long as the model is done. If a child is asking for something else, she gives the child, she doesn't object.

R₂: But you think it is bad?

A : It is bad.

R₂ : In what way is it bad?

- A : She must tell the child, "No, let's do this and finish it, we will see the other things later", and the child forgets. Whatever you do, you must think of the time ...
- R₂ : Why is time so important to you?
- A : Definitely time is important, everything has got to be, it's got it's own time.
- R₂ : But we never said to these people that they must finish in a certain time.
- A : No, no, nooooo, the teacher must just have that, without being told ...
...
- R₂ : Why? What goes wrong in the child's mind, or the child's ...?
- A : The child gets bored and she doesn't have the concentration.
- R₂ : This child is not bored, so the time is not making her bored.
- A : That's what I say; It's not with the child, it must be with me, with the teacher or the parent. I am going to do this with this child. I'm, and then I must know, myself, without telling the child, I must do it for the certain, for the certain time and then I must be finished.
- R₂ : Why?
- A : I must get the child free, must free the child from this.
- R₂ : But sometimes learning takes a long time.
- Z : Why is that? Is that because you believe that the child can only take things in for a short time?
- A : For a short time.
-

In the above extract (Table 41), A. not only reveals her belief that time is a very important factor to be considered in the performance of any task, but also reiterates her claim that young children do not enjoy doing puzzle-like tasks, or learning tasks in general. Her statement, "I must get the child free, must free the child from this" makes this very clear. This is interesting in terms of the notion of a 'culturally autogenous task' in that this notion specifically highlights different possible experiences of a task given the task's imbeddedness in a particular social history. The tasks included in the present study are all specifically for children of B's age. A. implies that children cannot concentrate for very long and in this regard, she attributes much importance to the mother who should ensure that the child works at a rapid pace.

THE QUESTION WE ARE NOW FACED WITH IS AS FOLLOWS: HOW IS IT POSSIBLE TO DERIVE KNOWLEDGE OF THE KIND PRESENTED IN THE FOREGOING DISCUSSION? THAT IS, WHAT ARE THE ESSENTIAL CONDITIONS WHICH MAKE POSSIBLE THE INTERPRETATION OF ANY ACTION-EVENT AS AN OBJECT OF KNOWLEDGE, IN THIS CASE, A'S MEDIATION OF HER CHILD'S BEHAVIOUR DURING PROBLEM-SOLVING ACTIVITIES?

NOTES

1. As far as possible an attempt is made to retain A's phraseology and terminology. However, it is often necessary to use words and/or phrases different to those used by the actor in order to capture more accurately her intended meanings as negotiated through discussion.
2. The notion of the "derivation" of an account, is related to the concept of rational reconstruction. Geertz (1973) points out that interpretations of any phenomenon are fictions in the sense that they are "'something made', 'something fashioned'" (p.15). A's 'theory' of learning presented in the present study was fashioned from the "raw data" contained in data bases 2, 3 and 4.
3. Henceforth, only the term 'mother' will be used to refer to both mother and teacher, that is, to the mediator.
4. The terms 'ordinary' and 'everyday' are used to refer to people in their capacities as actors performing in their daily lives. The term 'expert' is used to refer to the specialist roles which may be occupied by people such as "scientists". In the context of this study, the term "expert" is generally used to refer to theorists whose theoretical proposals contribute to the understanding of the operation of the process of interpretation.

Craig (1985) presents a diagrammatic representation of the research paradigm that she utilised in her study. This diagram, presented below, graphically contrasts the 'ordinary' and the 'expert' approaches discussed above.

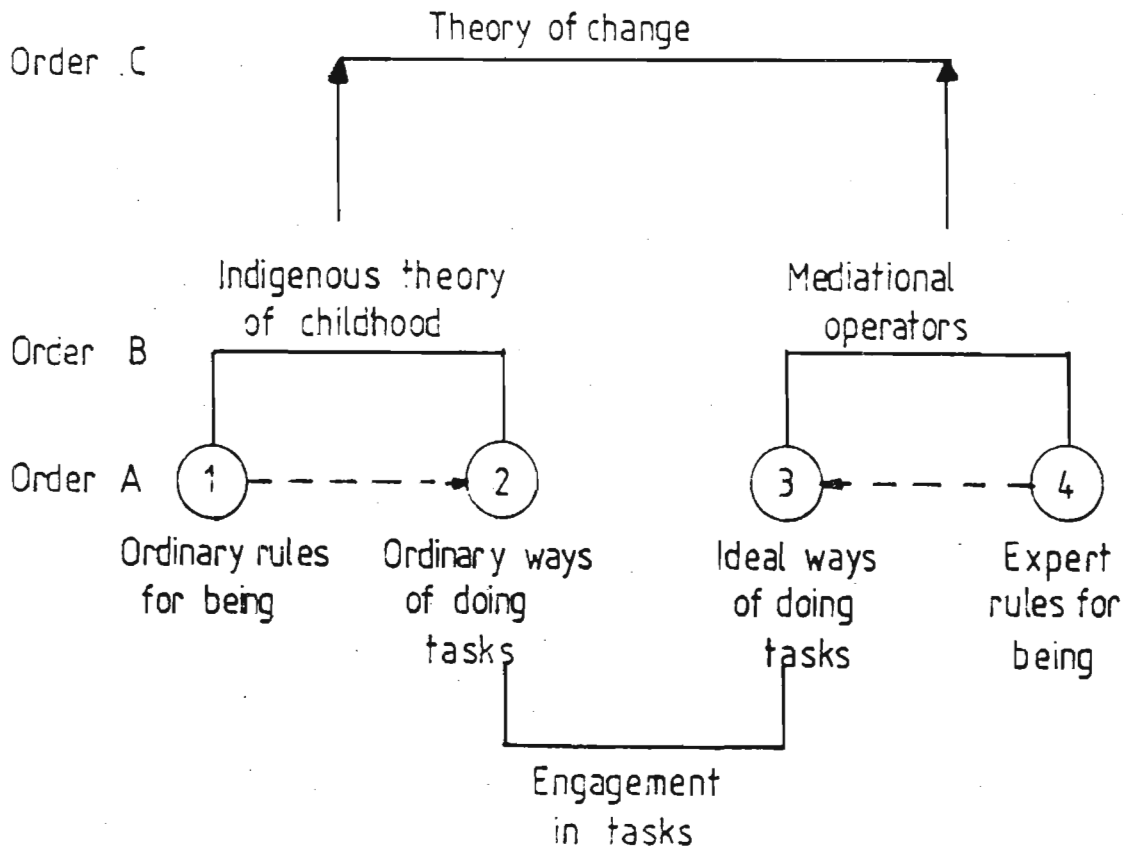


FIGURE 2 : THE STUDY OF THE POSSIBILITY OF CHANGE: 'ORDINARY' VERSUS 'EXPERT' 'THEORIES' AND PRACTICE (Craig, 1985, p.121).

5. The notion of a 'culturally autogenous task' conveys the idea that there is a distinctive or unique development of certain activities that emerge as part of the historical development of a group in a society.
6. This particular mother is referred to in the discussion as "the most efficient mediator" (in R., Z. and Y's judgement), (see pp.113; 116; 119).

7. A 'thematic path' may be defined as the imposition of known or explicitly held schemes/notions/ideas on an object, in a manner which characterises that person's way or style of understanding. A thematic path is, furthermore, often pursued in the face of contradictory 'evidence' or contradictory injunctions emitted by the object of knowledge.
8. This term refers to the subject's and/or contemporaries' perspective on any action/task/situation.
9. On the whole, however, in the way that A. mediates her child's behaviour, she represents an embodiment of the 'central tendency' in all the mothers who participated in the past projects.

APPENDIX 4 : APPROPRIATION FROM PREVIOUS PROJECTS

INTRODUCTION

The 'original project' was conducted by Wertsch et al. (1980) in which the interaction of 18 mother-child dyads was video-taped and analysed for verbal and nonverbal devices used by the adult to regulate the child's behaviour. The child's eye gaze to the model was used as a measure of how well he or she was following an effective strategy (p.1215).

The instructional setting was chosen as the focus for the research programme which began in 1983 in the Psychology Department at the University of Natal, Durban, and which is described below. In this programme - which investigates the development of self-regulation in children - the link between the individual and society is scrutinised. Miller, the programme founder and co-ordinator writes that

The interface between mind and culture is the process of instructionn by means of which individuals become part of social groups and, as such, contribute to their vitality (1984, p.19).

The subsequent projects, conducted in this tradition, are as follows:

- 1) Kok and Beinart (1983)
- 2) Mindry (1984)
- 3) Craig (1985)
- 4) Kok (1986).

These projects are discussed below.

1. Kok and Beinart (1983)

These authors video-taped mother-child dyads engaged in the same joint problem-solving activities as those utilised in Wertsch's study. Data was coded using seven main categories which were devised by the analysts, namely:

- 1) Executions (all behaviours involved in the selection and placement of a piece);

2) Directives (direct instructions - usually from the mother - relating to the placement of a particular piece without any reference to the model and/or any other source of information);

3) Questions (any question directed from one member of the dyad to the other);

4) Demonstrations (instances in which the mother actually places a piece correctly and then removes it to allow the child to repeat her actions);

5) Mediation (attempts by the mother to refer the child to the actual model or some other relevant reference as a source of information for the selection and placement of pieces);

6) Confirmation/Negation (the mother's confirmation or negation of the child's activity. Confirmation and negation could be verbal or non-verbal);

7) Other (behaviours that are not related to the execution of the task, such as aimless activity, chatter, and non-task activity).

As regards the central concern of the present project, namely how interpretation is possible, Kok and Beinart's study poses interesting questions. The devisal by the authors of the seven categories utilised for the purpose of analysis, represents an important moment in the interpretation of the data. From the mass of data confronting them, Kok and Beinart extricated seven trends which they 'saw' in the data; these categories represents their fixation of the meaning the events had for them, the analysts.

2. Mindry (1984)

Mindry analysed video-tapes of teachers 'teaching' children the same tasks utilised in previous projects, as well as an additional complicated version of the three-dimensional stick-and-block task. She analysed extracts from the video-tape transcripts in terms of a set of cognitive functions elaborated by Feuerstein (1980) namely:

1) Blurred and sweeping perceptions (the perception of stimuli that is marked by a blurredness of the various dimensions that characterise or define them);

2) Verbal skills (verbal instructions which organise and structure the environment);

3) Egocentric communicational modalities (the display of a lack of differentiation which prevents the individual from seeing her partner as different from herself);

4) Trial-and-error responses (random responses whereby the individual's attention is diverted and she is distracted from the relationships to be discovered);

5) Impulsivity and passivity (unplanned and unsystematic exploratory behaviour and passive compliance to the mediator's instructions);

6) Precision and accuracy (the clear definition of the attributes of stimuli and the collection of all the necessary data to perform a task);

7) Experiencing the existence of a problem (the awareness of the existence of a state of disequilibrium);

8) Selecting the relevant cues which define a problem (recognising the relevant details that define a problem);

9) Pursuing logical evidence and planning behaviour (attending to the relevant cues so as to pursue a logical sequence of events and the setting of goals as well as the dissociation of the means and goals);

10) Spontaneous comparative behaviour (the organisation and integration of discrete units of information into co-ordinated thought).

The researcher found episodes on the tape which illustrated the cognitive functions elaborated by Feuerstein. Thus the categories which Mindry used to interpret the data and in terms of which she 'saw' the data, were theoretically derived constructs. Mindry thus made her 'theoretical prejudices' explicit. In fact, one could argue that in this instance, the researcher deliberately applied her theoretical 'prejudices' in the Gadamerian sense.

The focus in this project was on explicating the process of instruction. Mindry stated her aim as being to "capture the instructional process in terms of what the children could possibly learn given the nature of the instruction" (p.4). By extricating episodes on the video-tape which she used to

illustrate the cognitive functions described by Feuerstein, Mindry 'fixed' the meaning of these action-events in the two senses mentioned above; she imposed a theory-guided meaning or order on the data, and she compiled a tape to illustrate her categories.

3. Craig (1985)

In this project, Craig analysed video-tapes in order to explicate moments in the instructional process. Like Mindry, she 'fixed' the meaning of the tapes: Firstly, in her production of a compiled tape comprising selected extracts from the original video-tapes; and secondly, by means of the theory of mediational operators which she constructed and which she illustrated using episodes from the compiled video-tape. These mediational operators, some of which are discussed in appendix 3, (cf. pp.98; 103; 114; 118; 119; 122) are as follows:

- 1) Task readiness
- 2) Gathering information
- 3) Specifying means and goals
- 4) Making the problem explicit
- 5) Attending to detail
- 6) Visual transport
- 7) Emphasising invariant aspects of the task
- 8) Dealing with different sources of information
- 9) Discovering causal relationships
- 10) Co-ordination and integration.

4. Kok (1986)

This author focusses on indigenous operators which were reconstructed from the indigenous theory of childhood (Craig, 1985). The indigenous operators explicated by Kok are as follows:

1) Maintaining mutually exclusive role division/exercise (the recognition of and adherence to one's exclusive role by each participant in the problem-solving situation);

2) Emphasising the manifest task demands (an emphasis, on the part of the mediator, that the outward appearance of the task is the appropriate focus for the regulation of the child's actions towards successful problem-solving);

3) Embedding instruction in a know-how (practical) paradigm (an emphasis on learning through doing and instruction based on creating opportunities for action);

4) Embedding instruction in a know-it paradigm (the encouragement of the development of intuition and sensitivity to another person's unexpressed intentions and plans);

5) Providing an accepting environment for guided discovery (creating a warm, tolerant and accepting environment that is appropriate and conducive to learning);

6) Construing the task in terms of social motives and goals (the mediator's perception of her role as being one of teaching the child ways of dealing with instruction).

In the four projects described above, meaning was fixed in four ways:

1) By video-taping only certain aspects of reality, that is mother-child dyads engaged in joint problem-solving activity: Deciding where to "point the camera" represents what may be termed a first-order imposition of meaning or the creation of the pre-conditions for subsequent fixation.

2) The data recorded on video-tape is literally fixed in an analogous way to writing, both in terms of the 'inscription' of the data on video-tape and in terms of the production of transcriptions of the action-events.

3) The production of a compiled video-tape. The selection of particular episodes for the compiled video-tape represents a second-order imposition or fixing of meaning and involves theory-guided 'discovery'.

4) The 'final interpretation' given to the data, whether in terms of behavioural categories (Kok and Beinart, 1983); cognitive functions (Mindry, 1984); mediational operators (Craig, 1985) or indigenous operators (Kok, 1986), represents a third-order imposition of meaning, and may be regarded as the appropriation achieved in previous projects.