Does Body Language Exist?: The Assignment of Meaning to Non-verbal Behaviour

Heather Smith

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Abstract

This thesis examines how we assign meanings to non-verbal behaviours. The first part is a critical review of three current trends in research on non-verbal behaviour. Three different explanations of the relationship between meaning and non-verbal behaviour and the appropriate supporting research are examined. The second part is an empirical study of participants' accounts for other people's behaviour and situations that highlights the weaknesses of the traditional theoretical models. It is proposed that a discursive perspective provides a more fruitful method for understanding how we use and define non-verbal behaviour in our descriptions and explanations. The thesis concludes with a preliminary analysis of "body language" as an interpretive resource and offers suggestions for future research.

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Studies of various non-verbal behaviours and their possible meanings have filled Social Psychology journals. Even if we rely on our personal experience rather than on empirical research, it seems clear that we use non-verbal cues to make sense of situations and other people's behaviour. However, how we assign meanings to non-verbal behaviours in ordinary descriptions and explanations has yet to be properly examined. This thesis has two objectives. First, it will critically review current explanations of the relationship between meaning and non-verbal behaviour. Second, it will propose a discursive approach as a more fruitful alternative for examining how we assign meanings to non-verbal behaviour. The need for a new approach will be demonstrated by the critical review of the current theoretical perspectives on non-verbal behaviour and by a study which presents empirical data that will highlight the weaknesses of these traditional models. Finally, this empirical study will be a preliminary step in a discursive analysis of how we use and define non-verbal behaviour in social interactions.

Traditional psychological studies look for systematic differences between non-verbal behaviours and psychological states or for systematic differences between non-verbal behaviours and perceptions of personality. These studies share a similar idea that meanings for non-verbal behaviour can be treated as an objective trans-situational code. This treatment of meanings for non-verbal behaviour as a code leads to a research methodology that attempts to identify single gestures, facial expressions, instances of touch and so forth as potential

components of this code. This thesis will illustrate how such an assumption ignores the variety and complexity of the meanings that can be assigned to non-verbal behaviours. Moreover, this assumption ignores any contextual influences.

If the research aim is to examine how people assign meanings to non-verbal behaviour, it seems most appropriate to use people's accounts as the primary data for analysis. A discursive perspective suggests that traditional research relies on simplified coding sheets, rating scales or content categories to reduce the complexity of human action (Abraham, forthcoming; Heritage, 1984). When verbal data is reduced to numbers and percentages, the subtle nuances and common sense distinctions that are part of verbal language are lost (Potter and Mulkay, 1985). Furthermore, when verbal accounts are simplified, certain meanings or interpretations are often classified as "correct" and others as "incorrect". Therefore, only a small portion of people's verbal accounts, those classified as correct, will ever be examined. A discursive approach acknowledges the complexities of social interactions by stressing the importance of examining discourse as a topic in its own right rather than as a researcher's resource (Potter, forthcoming; Mulkay et. al., 1983). Furthermore, discourse analysis provides a method for the close analysis of participant's explanations and descriptions. By looking at complete interpretations for other people's behaviour, the different ways in which non-verbal meanings are defined and used to create and support explanations of other people's behaviour and situations can be identified. The

complexity of how meaning is assigned to non-verbal behaviour will become clearer after we review the three theoretical trends in non-verbal research and the accompanying research results.

THEORETICAL REVIEW

The Individual Difference Approach

The individual difference approach is a traditional psychological approach to meanings for non-verbal behaviour (Rosenthal, et. al, 1979; Archer and Akert, 1977; Buck, et. al., 1974). This trend in non-verbal research began with the psychological research interest in emotion and emotion recognition. Emotion recognition research attempts to establish the assumed link between specific emotions and particular non-verbal cues. Early emotion recognition studies tried to correlate facial expressions with specific emotions in some sort of consistent code. For example, Eckman (1978) suggests that there are seven universal facial expressions that we recognize as the following emotions: anger, disgust, happiness, sadness, fear, surprise and contempt (Eckman (1985) classifies "contempt" as the only one of the seven to be a "distinctly" human emotion). Individual difference research extends the emotion recognition work with facial expressions to body movement, gesture, vocal intonation and vocal pitch. Just as facial expressions can be correlated with specific emotions, other non-verbal behaviours (gaze, interpersonal space, posture, etc.) might be correlated with particular meanings. Similar ideas are the basis for the pop view of "body language" (Morris, 1977, Fast, 1970).

Individual difference research attempts to find individual or group differences in the ability to understand non-verbal behaviour. People's ability to understand the non-verbal behaviour "code" is treated as a stable personality trait.

"Decoding" tests have been developed with the idea of "objectively" measuring individual "sensitivity" to non-verbal behaviours and their appropriate meanings. This sensitivity to non-verbal behaviour or non-verbal decoding ability has been described as a type of "social intelligence" (Archer, 1980). Decoding ability or decoding skill refers to the higher scores some individuals tend to receive on the tests developed for these individual difference studies.

Decoding accuracy research relies on a crucial distinction between the initial recognition and then interpretation of non-verbal cues. Certain facial expressions, (such as Eckman's seven universal emotions) gestures or body positions are said to carry meanings that can be isolated both from the surrounding situations and any possible relationships between the observer and the observed. Recognition of meaning in these instances is a primary step un-influenced by situational interpretations. We then use these "recognized" meanings to produce appropriate "interpretations" for a specific situation. Our skill at recognizing meanings for non-verbal behaviour should be a separate but important pre-requisite for our skill at interpreting non-verbal behaviour. By eliminating context from decoding tasks, researchers hope to pinpoint the exact information different individuals use to initially understand non-verbal cues.

The individual difference perspective is the only approach to focus directly on the way meaning is assigned to non-verbal cues, or rather the inaccuracy or accuracy of these meanings. For this reason, it is worthwhile to describe in detail the type of studies and their results this perspective has produced. Research studying individual accuracy in judging non-verbal cues spans the past 60 years (Landis, 1924). This area of research has simply tried to supply "valid" and "objective" measurements of decoding ability. One can trace the development of these non-verbal decoding studies as a continual attempt to fine-tune methodological techniques. Researchers have criticized previous decoding measures for a variety of methodological reasons. And each, in turn, has offered a new more valid measure for testing non-verbal decoding ability. The three decoding tasks described below can be seen as the culmination of this attempt.

Three Decoding Tasks

1. The Profile of Non-verbal Sensitivity

One of the most widely used tests in decoding research is the P.O.N.S. (Profile of Non-verbal Sensitivity) developed at Harvard University (Blank, et. al, 1981; Rosenthal, et. al., 1979; Knapp, 1978). The measure was created to be a test of individual differences in decoding ability. By 1979, over 200 different samples of subjects had been tested. The measure is still widely used in current research to to correlate and even assess the validity of various personality scales (Boney, 1982;

Rankin, 1981). The P.O.N.S. shows subjects 220 different two second video-taped scenes. After each scene, subjects must match the scene to one of two descriptions presented for that particular scene. The scenes were created to reflect the two major dimensions of non-verbal behaviour as determined by the researchers; dominance and positivity. A typical scene might show a woman "expressing gratitude", (positive-submissive) or the same woman nagging a child (dominant-negative, descriptions are quoted from Rosenthal, et. al., 1979). Each scene is presented in several ways, or channels: visual only of the face, the body or both, audio and visual of the face, body or both, or audio alone (any verbal content is made unintelligible by splicing and resplicing the audio tape or muffling the sound so that individual words can not be distinguished).

One methodological advantage for the P.O.N.S. test is the set of criteria used for evaluating each scene's correct emotional label. Previous decoding studies used limited criteria. For instance, some studies use the emotion a person (usually an actor or actress,) intended to encode as the "correct" answer. Other studies base the "correct" answer on beliefs of what emotion a particular situation should stimulate (early work in the twenties included shooting a pistol behind a subject's head, (Dunlap, 1927) or decapitating a live rat (Landis, 1924) to generate particular emotions). In contrast, the correct emotional label for each situation presented in the P.O.N.S. test was derived from a combination of measures: the "encoder's" intended emotion, the researcher's "opinion", the

average ratings of a panel of judges and the original encoder's self-description when she reviewed the scenes. The P.O.N.S. researchers used a combination of judgement criteria to avoid the potential susceptibility to idiosyncratic labels for different emotions that the use of just one judgement procedure might produce.

The researchers also can claim that the P.O.N.S. test includes a wider range of emotions than other decoding studies. The P.O.N.S. scenes include "everyday" emotions, ("ordering food in a restaurant") as well as the typical "dramatic" emotions included in previous work ("expressing jealous anger", descriptions quoted from Rosenthal, et. al., 1979, p. 48).

Finally, the scenes were created to emphasize the identification of a particular emotional situation rather than the identification of a specific emotion. (Subjects are asked to choose whether the scene depicts "someone talking about the death of a friend" or "someone leaving on a trip", two situations, as opposed to choosing between grief and excitement, two emotions.) The researchers felt that identifying specific emotions was more problematic and ambiguous than identifying emotional "context" (Rosenthal, et. al., 1979, p. 22). However, this is a curious contradiction of intentions since the context was to be eliminated to insure more validity for the test.

2. Communication of Affect Receiving Ability

The C.A.R.A.T. (Communication of Affect Receiving Ability Test, Buck, 1974) introduces a slightly different measurement technique. The task uses two groups of subjects, "encoders" and "decoders". Each encoder is secretly filmed while viewing and then describing their emotional reactions out loud to one of four types of slides: sexual, scenic, unpleasant and unusual. The second set of subjects, the "decoders", view 23 second scenes of just the "encoders" faces. Afterwards, the "decoders" must decide which type of slide was originally viewed. This measure has also been divided into audio, visual and audio-visual channels (no semantic content is included).

Buck stresses three methodological improvements. First, this measure utilizes a greater number of encoders. This would prevent any influence of a single idiosyncratic encoding style on the validity of the measure. (Buck (1983) has criticized the P.O.N.S. test for using a single female encoder.) Second, the C.A.R.A.T. measures skill at decoding "realistic" spontaneous emotions rather than "unnatural" posed expressions created when rehearsing a reaction to a hypothetical situation. Finally, the C.A.R.A.T. claims to use a "less" ambiguous criterion for determining decoding accuracy than the P.O.N.S. In the C.A.R.A.T., the correct decoding answer is to choose the type of photograph that was actually presented to the "encoder" (each photograph was assigned to one of the four categories). Of course, this assumes that every time an "encoder" views a

"sexual" photograph, his or her spontaneous expression is an encoding of "sexual" not "unusual" nor "unpleasant"!

In response to Buck's criticisms of possible P.O.N.S. limitations, several versions of the original P.O.N.S. test were created. The results from different versions of the P.O.N.S. reveal striking differences. An audio P.O.N.S. test using a male encoder was created and compared to a shorter audio version of the female encoder on the original P.O.N.S. test. This particular version of the P.O.N.S. only presents the two audio channels for each of the twenty scenes. The subjects' scores on both tests correlate positively. However the presentation of the randomly spliced male voice (the tape is spliced and respliced) was more accurately decoded by subjects than the randomly spliced female voice. The opposite was true for the presentation of the male and female content filtered voices (the voices sound as if they're being heard through a wall, Rosenthal et. al., 1979, p. 143). These results suggest that differences between the full P.O.N.S test using different "encoders" would be even more complex.

In response to Buck's preference for the greater realism of spontaneous expressions, the P.O.N.S researchers point to some comparison studies which have found that people who are "good" at tasks that require spontaneous expressions are also "good" at tasks that require judgement of posed expressions (see Rosenthal, et. al., 1979). The researchers also point out that in everyday life we are faced with decoding both intentional as well as unintentional cues. Unfortunately, the P.O.N.S. scores and

C.A.R.A.T. scores can not be consistently correlated (Buck, 1983).

3. Social Interpretations Task

Both the P.O.N.S. and the C.A.R.A.T. measure decoding accuracy in judging emotional cues. Archer and Akert (1977) who developed the S.I.T. (Social Interpretations Task) argue that measures using emotion as a criterion will never be able to generate unambiguous criteria for accuracy. Their test uses biographical information as the criterion for accurate decoding. The test presents twenty 30 to 60 second video-taped sequences of "naturalistic" behaviour edited from much longer video-taped sequences. For each scene, (which might include one or more individuals) subjects must choose the correct answer to a particular interpretive question. The correct answer to each question is based on some objective piece of information. For example, one scene shows a woman talking on a telephone. Subjects are asked whether she is talking to a) her boyfriend or b) her mother. This measure also attempts to redress the lack of context cues in the other decoding tasks. First, the S.I.T. presents some verbal content (though the researchers claim that it is not enough to aid in choosing correct answers). Second, the scenes depict "naturalistic" situations (one scene is filmed outdoors on a basketball court).

This task differs from the previous two measures in several ways. First, the researchers characterize this decoding task as an "interpretation" task rather than as an emotion "recognition" task. This distinction is based on the sequential model of meaning hypothesized by individual difference/personality researchers. We first "recognize" a non-verbal behaviour and an associated meaning and then we interpret this meaning appropriately after considering other non-verbal cues and the specific situation. The S.I.T. research goal is to study the second step of the two step process of determining meaning. Second, Akert and Archer (1984) view emotion as "a vehicle to accurate interpretations" of situations and behaviour, (p. 135) but they consider emotion only one of several such vehicles. Emotion recognition, eye contact, proxemics, and environmental cues all carry potential meaning that individuals are able to "decode" with different amounts of skill and then combine accurately or inaccurately.

Research Results

The findings from studies using such decoding measures have been mixed. After reviewing and criticizing previous research, Rosenthal and his co-authors could only conclude the following: (1) some emotions could be more accurately decoded than others from non-verbal samples of the face, body or voice, (2) some channels of non-verbal information (the face) are easier to decode than others, (the body) and (3) individuals differ in their abilities to "decode" non-verbal information (Rosenthal,

et. al. 1979). The vagueness of these conclusions may reflect the incompatibility of research results obtained by different methods. Several attempts have been made to correlate different decoding measures (Sternberg and Smith, 1985; Buck, 1983; Feldman and Thayer, 1980). None of these studies have found any significant consistencies between "decoding" measures. In some cases, even the first and second versions of the same decoding test have not been consistent (Kagen, 1977 cited in Buck, 1983). The lack of correlation between different results creates problems for a conception of decoding ability as a single stable personality trait.

The research findings replicated in the P.O.N.S., S.I.T. and Eckman's emotion recognition work do suggest that people can accurately interpret situations and emotions significantly more often than chance level with just pieces of video or even portions of slides (Rosenthal, et. al., 1979; Knapp, 1978). Rosenthal and his colleagues have steadily decreased the exposure time for each P.O.N.S. scene to one frame length. They found that even with such brief exposures, accuracy scores were consistently greater than chance level. They did find a jump in scores if the exposure time was increased from one frame length to three frames, however scores remained constant even after the exposure time was increased from three to nine or even twenty-seven frames. Rosenthal suggests that the initial increase in accuracy could be due to either the introduction of motion or longer visual access. However, the researchers use this lack of significant difference between lengths of exposure

to support the introduction of a "still" version of the P.O.N.S. Furthermore, most of the data Archer presents in his research with the S.I.T. test is based on still photographs (Archer, 1980). Finally, an earlier emotion recognition test created by Eckman and Friesen (Eckman, 1978) presents slides to subjects for only 1/30 second via a tachistoscope. Eckman and Friesen claim that such brevity is similar to spontaneously emitted facial cues.

These findings suggest that movement and audio information is not as important to constructing non-verbal meanings as individual difference researchers originally hypothesized. This does not mean that movement and paralinguistic information does not carry meaning. Several studies have shown that differences in pitch, (Apple, et. al, 1979) intonation, (Batston and Tuomi, 1981) and movement (Bull, 1983) influence person perception. However it appears that "accurate" meanings can be constructed without access to "full" non-verbal information.

The inconsistencies found when comparing measures have prompted some researchers to focus on methodological problems as the cause for inconsistency (Archer and Akert, 1980; Rosenthal, et. al., 1979). Feldman and Thayer (1980) emphasize procedural techniques as a reason for the lack of correlation between measures. Other researchers have resolved the discrepancy between measures by concluding that each measure is sensitive to a different aspect of non-verbal "decoding ability" (Buck, 1983; Bull, 1983; Knapp, 1978). In one sense, the area of decoding research is like a marketplace with several products competing

for use in future studies. The focus has been on tightening up methodological techniques rather than examining the theoretical assumptions that support the idea of a testable non-verbal sensitivity.

Even close examination of the results from studies using a single measure of "decoding skill" reveal some interesting inconsistencies. So far, age, gender, cultural background and pathology have been the best over-all predictors of P.O.N.S. scores (Rosenthal, et. al., 1979). However the sample that has obtained the highest average score on the test was a group of male and female graduate students enrolled in a non-verbal communication course who were tested **before** starting the course (Rosenthal, et. al. 1979, cited in Bull, 1983). Studies investigating correlations between personality differences and P.O.N.S. scores have had less success. The range of results obtained in these studies can be illustrated by describing the best and worst predictors of an individual's P.O.N.S. score. Research has found no consistent relationship between the P.O.N.S. scores and extroversion, need for approval, self-ratings of non-verbal sensitivity, therapeutic style, machiavelli scales or self-monitoring (Rosenthal et. al., 1979). The three best predictors of P.O.N.S. scores include; (1) the comparison of a teacher's score on the test and his or her principal's ratings of the amount of encouragement he or she gives to pupils, (.76, n=38) (2) self ratings of success with the opposite sex, (.62, self ratings of success with same sex showed no relationship, n=369) and (3) an individual's willingness to

volunteer and appear for future research (.40, n=56). Each of these three findings can be adequately explained by noting the potentially advantageous relationship between non-verbal sensitivity and, for instance, success with the opposite sex. However, there are equally (if not more) advantageous relationships possible between non-verbal sensitivity and success with the same sex, need for approval and so on. Although any of the P.O.N.S. results can be explained, they can't be predicted.

The P.O.N.S. results also show unexpected inconsistencies in individual abilities to decode single and combined channels of non-verbal information (Rosenthal, et. al., 1979). For example, developmental P.O.N.S. studies show a positive relationship between decoding skill and age with females typically showing an advantage (samples ranged from United States third graders to middle-aged adults, Zuckerman, et. al., 1980, Rosenthal, et. al., 1979). However during adolescence women begin to lose their decoding advantage over men, but only in certain channels of non-verbal information (De Paulo, et. al., 1982; Rosenthal, et. al., 1979). Another unexpected result occurs when test scores of one school grade are compared with other school grades. The younger subjects are "too good", (receive higher scores) relative to older subjects, at decoding the face and the body together or no face and no body. Yet when just the face or just the body is presented, these younger subjects are "too bad" relative to the older subjects (Rosenthal, et. al., 1979). A simple linear increase in the development of decoding skills can not explain nor predict the higher scores of younger subjects in some

"channels" and the lower scores of these same subjects in other "channels". Nor can it explain the decrease in women's scores, relative to men's scores, in some channels and not in others. Furthermore, a single individual may be "better" at decoding faces relative to the norm but "worse" at decoding the face and body together (Rosenthal, et. al., 1979).

These results challenge the original conception of non-verbal decoding skill as a single stable personality trait. To explain this discrepancy, researchers have modified the original single trait hypothesis. One new hypothesis suggests that decoding ability is a conglomorate of smaller specific decoding abilities. These specific abilities might mean a skill at understanding a particular channel of information (face rather than body cues) or a skill at understanding a particular message class (negative rather than positive emotions). This new definition still views decoding ability, or abilities, as a stable personality characteristic that can be "objectively" assessed.

The original research hypothesis also treated the various channels of non-verbal information are redundant or additive. The more information you saw, the more accurate you should be. But this hypothesis can not explain why accuracy does not increase in a straightforward linear fashion. Instead, Rosenthal and his colleagues have offered the accommodation hypothesis to explain these discrepancies (Zuckerman, et. al., 1980). The accommodation hypothesis suggests that we learn to ignore certain channels of non-verbal information. According to this

hypothesis, it is not always advantageous for an individual to be too good at decoding non-verbal cues, it could disrupt personal relationships and cause "unnecessary" tension. Results have shown a positive correlation between high P.O.N.S. scores and self reports of less satisfying personal relationships (Rosenthal, et. al., 1979). This idea has been further extended to suggest that some channels of information are "leakier" than others. In other words, "leakier" channels carry information that is under less "conscious" control relative to other channels. Therefore leaky channels are more likely to carry information that could be disruptive to a relationship. In other words, it is not always advantageous to know when someone is lying. According to Rosenthal and his colleagues, the channels of information where women lose their advantage relative to men are these "leaky" channels or the channels that carry the most potentially disruptive non-verbal information.

The accommodation hypothesis and the additive hypothesis both suggest that some channels will carry more important information than other channels. Certain isolated behaviours will lead to accurate interpretations while others will not. Therefore, subjects seeing the "significant" channel of information should be more accurate. Unfortunately, recent research undermines this simple version. Archer and Akert (1980) have found that no single channel can be consistently linked with a greater number of accurate or inaccurate interpretations than any other channel of information. Their work suggests that the addition of more information or the presence or absence of a

significant clue doesn't explain how individuals decode accurately or inaccurately. Instead, accurate or inaccurate decoding might depend on how the various channels of information are interrelated (De Paulo, 1978). The most recent P.O.N.S. work has paired inconsistent P.O.N.S. channels together to study differences in decoding deception (Eckman, et. al., 1980). Yet if non-verbal information depends on the consistency or inconsistency of several channels of information, techniques of isolating behaviour become theoretically weak.

Interpretation and Recognition

The three decoding tasks described above treat meaning for non-verbal behaviour as a two step sequential process. There are meanings for particular facial expressions, gestures, or body postures that can be "recognized" regardless of the surrounding situation. Individuals may then interpret these "recognized meanings" for non-verbal behaviour differently in different contexts. This distinction between recognition and interpretation provides crucial support for the usefulness of these decoding tasks. Testing individual accuracy at "decoding" isolated non-verbal cues makes sense only if "recognizing" the meaning of separate non-verbal cues is an important first step of "interpreting" other people's behaviour. Even the S.I.T., an "interpretation" task, makes the same distinction between "recognition" and "real social interpretation [which] consists of processing, combining and reducing a large array of contexted

[recognized] cues" (Akert and Archer, 1984, p. 123).

This distinction between recognition and interpretation of non-verbal cues presents two difficulties. Do we actually first recognize and then interpret non-verbal cues? And if this is so, how can a researcher distinguish between these two processes? Critics have questioned this assumption that we first recognize and then interpret emotions. Frijda (1969, 1985) argues that people actually tend to think in terms of the emotional implications of specific situations and not in terms of abstract emotions. He suggests three different ways the meaning of a facial expression might be perceived or "recognized". First, we might perceive a facial expression in terms of predictive responses; "she looks as if she's frightened of the coming avalanche". Second, we might recognize facial expression in terms of interactional opportunities; "he has an open face, she looks frightening". Third, we might perceive emotions according to our personal experiences; "I feel he's tensed up". In Frijda's analysis, interpretation and recognition become indistinguishable.

Even if the processing of non-verbal meaning could be broken down into two steps, how does one distinguish recognition from interpretation? In the P.O.N.S., subjects "recognize" when someone is ordering food in a restaurant or talking about their upcoming wedding. But in the S.I.T., subjects "interpret" who is married or not married or who someone might be talking to on the phone. It would appear the distinction between interpretation and recognition is a potentially arbitrary one.

The Ecological Approach

A second and more recent approach to non-verbal behaviour and meaning is the ecological view (Buck, 1983; McAuthur and Baron, 1982). The ecological approach adapts Gibson's work on perception (which itself stems from an ethological tradition) to social perception and meaning. Ecological researchers propose that we are evolutionally adapted to be selectively responsive to our environment. As humans, for example, we all share a similar environmental niche. Therefore we should share similar selective responses to certain human signals. Early research attempted to identify universal meanings for non-verbal behaviours. Eckman's work (1979) on identifying universal facial expressions and the associated meanings is one example. Eibl-Eisfeldt's work (1979) on a possible universal eyebrow flash during greetings is another. This approach also proposes a mechanism to explain individual differences in specific decoding abilities. It is advantageous for us to pay particular attention to any environmental information that is relevant to our own behavioural goals or intentions. This view would interpret the higher average female score compared to the average male score on non-verbal decoding tasks as indicative of the greater adaptive advantage for females to be non-verbally sensitive than for men to be non-verbally sensitive. (Women as potential mothers need to be better interpreters of their infants' cries.)

The ecological model distinguishes between two types of social perception; direct and mediated social perception. The first describes the innate decoding ability always present when recognizing non-verbal meanings. The second describes those movement patterns, meanings or display rules that individuals must learn. However this learning is only a cultural gloss over the original innate perceptions. Direct and mediated perception both contribute to non-verbal receiving ability (the ecological counterpart to decoding skill).

The ecological perspective stresses that all information is located in environmental stimuli; meaning exists in the original signal, gesture or expression and we respond appropriately. Therefore, this approach treats behavioural context as crucial. It is not personality traits that determine our decoding skills but rather our current behavioural environment. We select the information we need from the environment according to our personal goals but the type and amount of information available depends on our surrounding environment. If two people with the same goals are presented with the same non-verbal behaviour in the same situational context, their interpretations should be the same. More importantly, each individual's interpretations should remain the same as long as the situation and his or her motivation remains the same.

Ecological researchers define non-verbal meaning as a product of pervasive cultural and environmental influences. Therefore, they use methods and techniques that can "expose" the information we "receive" but we don't normally articulate. Berry

and McAuthur (1985) have attempted to correlate physiognomic variables measuring a stimulus face's "babyishness" with judges' ratings of the same stimulus face's level of maturity, naivete, warmth, innocence, and responsibility. The stimulus faces were yearbook photographs of male high school seniors and the judges were male and female college students. The physiognomic composite rating a face's babyishness was a good predictor of every trait but responsibility. Yet the physiognomic composite was not nearly as good a predictor of the traits attributed to a particular face as each judge's rating of the face's "babyishness".

Other ecological research has focused on how we might select perceptual information from our environment. Researchers asked subjects to watch a video tape and press a button every time the subjects thought they could interrupt the video-taped conversation, or every time they noticed a change in eye gaze (Buck, Baron, and Barette, 1982; Massad, et. al., 1979). The goal of this behaviour segmentation research is to pinpoint the individual patterns of different receivers' perceptual organization. The researchers hypothesized that different patterns of perceptual organization could be correlated with different levels of non-verbal "receiving" or "decoding" skill. This understanding should lead to understanding why some individuals "decode" non-verbal behaviour more "accurately". Furthermore, by comparing these results with a receiver's decoding accuracy, one should be able to specify the properties of a communicative non-verbal display.

The Buck, Baron and Barette study split the subject sample into two groups; one group first viewed the video tape to segment behaviour and then viewed the video tape a second time to "decode" the emotional expressions (the C.A.R.A.T. test is used). The second group did the same task in reverse order. The overall results from this research indicate that there is a high amount of consensus about which points mark meaningful behaviour. The results also suggest that higher numbers of breakpoints can be correlated with more "accurate encoding". For example, more breakpoints are noted when the stimulus person is female. This finding fits well with the other research that indicates woman are better "encoders" of emotions (Hall, 1978). However, not all the results are so easily explained by the initial hypothesis. The group that segmented behaviour after the "decoding" task, marked significantly more breakpoints, or boundaries of meaningful behaviour. The study's results also indicate that woman who are "better" decoders relative to other woman mark fewer breakpoints but men who are better "decoders" relative to other men mark a greater number of breakpoints. Neither result can be predicted by a straightforward relationship between segmenting behaviour and "non-verbal receiving ability".

Selectively Responsive Animals

The ecological model requires two important assumptions. First, one must assume that the surrounding environment and other people's behaviours carry specific meanings. These meanings are

products of large scale cultural and environmental influences. If the meaning of a non-verbal display changes, then long term environmental or cultural influences caused the change. The meaning for a non-verbal display should not change just because person A is now interacting with person C, when before she was interacting with person B.

Second, the ecological model treats observers as selectively responsive animals. The ways in which we perceptually organize the information in our environment is critical to how we understand behaviour or more specifically, how we "receive" non-verbal information. The ability to "decode" non-verbal behaviour parallels the Gibsonian principle "education of attention" (Buck, 1983). We either possess the innate ability or we become socialized to pay attention to certain behaviours as meaningful and not to pay attention to others. Therefore differences in patterns of "attention" should cause differences in "decoding" abilities. This emphasis on perceptual attention means that non-verbal receiving ability is considered an undeliberated environmentally determined response to particular non-verbal "displays". Such an emphasis leaves little room for any flexibility or diversity in how we assign meanings to non-verbal behaviour.

The Berry and McAuthur study attempts to test the idea that we selectively respond to an individual's measurable physical attributes; a broad forehead or a receding chin. Certain perceptions will lead us to make attributions of naivete, immaturity, and innocence to the individual. We might feel very

protective toward an adult member of our species without relating these feelings to certain immature physical features. It could be possible, however, that we might label some faces as babyish for whatever reason and then the label of "baby face" is linked to attributions of innocence, naivete, and immaturity. However, McAuthur and Berry attempt to link physiognomic variables with particular traits because they don't expect subjects to be able to articulate the link between a person looking "babyish" and their particular cluster of attributions.

This assumed sensitivity to non-verbal information that "can't" be articulated is also the basis of a methodological issue (Akert and Archer, 1984). Non-verbal researchers have long argued that people aren't able to adequately describe non-verbal behaviours. Yet most non-verbal research presents subjects with verbal descriptions of behavioural categories, asking subjects to do what non-verbal researchers claim we are unable to do! More importantly, what standards do researchers use in determining whether a description of non-verbal behaviour is adequate or not? It seems dangerous for them to rely on their own language capabilities since, presumably, we all suffer from this same inadequacy.

The claim that we are unable to adequately describe non-verbal behaviour supports the ecological research trying to correlate attributions with physical variables or decoding ability with attention levels. But the same research also depends on assuming a consistent transmission of single level meanings from stimulus person to "decoder" (for instance, the

degree to which a person attributes a trait or cluster of traits can be correlated with the degree to which certain physical features are present). This leads to an interesting dilemma. On the one hand, a direct link between meaning and a perceived behaviour must exist. Otherwise, it becomes difficult to claim that the research on behaviour segmentation is research exploring decoding or receiving ability. On the other hand, the reason for pursuing behaviour segmentation or physiognomic studies and not examining meanings directly is because we are unable to articulate this supposedly simple link between observation and attaching the appropriate meaning.

A Code of Meaning

Both the ecological and the personality approach share the assumption that meanings for non-verbal behaviour can be understood as a pre-determined communicative code. It underlies the accuracy based research of the personality approach and it is assumed by ecological research using behaviour segmentation techniques to evaluate attention to non-verbal "displays".

Bull (1983) begins his book on body movement by offering three different alternatives for understanding non-verbal behaviour's relationship to meaning. The first is that encoding might take place without decoding, suggesting that we are overlooking a valuable source of information (images of psychoanalytic spying)! The second is to conclude that non-verbal cues are perceived as conveying messages they "actually" don't convey. The third is to view non-verbal behaviour as "a shared signal system with both systematic encoding and appropriate decoding" (Bull, 1983, p. 1). Ideas of accuracy are embedded in all tnree definitions; objective information is either decoded, overlooked or misconstrued. The emphasis is on the final correct or incorrect interpretation rather than on the process of creating these interpretations. Such an emphasis on accurate encoding or decoding is a natural outcome of a model depicting non-verbal meaning as a communicative code.

Rime (1981) has proposed a three step test for determining if non-verbal behaviour carries meaning. First, research must determine whether non-verbal behaviour varies consistently with a sender's state. Second, non-verbal behaviour should generate consistent inferences among perceivers, and third, such inferences should be valid with respect to the sender's state. The first step has been tentatively explored by Eckman and Friesen (1975) in their facial affect research. The third step has been the most extensively explored by the accuracy based research using tests like the P.O.N.S., C.A.R.A.T. and S.I.T. described earlier. The second step has yet to be examined. The three-part test suggested by Rime illustrates nicely the leap over meaning made by previous decoding research. Researchers have assumed a set of straightforward accurate or inaccurate meanings that could be used to create objective tests of decoding ability. The I.Q. testing format and judging criteria of decoding tests are indicative of this assumption. The existence of these "culturally shared" meanings has been assumed rather than examined by non-verbal behaviour researchers.

This idea of a communicative code is supported by the very terms used in non-verbal research; decoding, encoding, leaky channels, receiving ability, decoding and encoding errors. Archer and his colleagues make this assumption explicit when they describe social skills training; training that will offer its trainees ways to "crack the code" and improve their social intelligence quotient (Archer, 1980, see also Argyle, 1975). This assumption of a code has been most clearly expressed in the

pop psychology of body language (Fast, 1970, Morris, 1977). Eckman and Scherer (1982) stress in their overview of methodological issues in non-verbal behaviour research that the "coding of non-verbal behaviour varies from, on the one extreme, language like coding to, on the other, very loose probablistic associations between behaviours and external referents" (p. 13). Eckman and Scherer consider the range of ways a non-verbal behaviour might be coded as a potential methodological difficulty but whether or not non-verbal behaviour and meaning can be viewed as a code at all is never an issue.

Part of the assumption of a code of meaning for non-verbal behaviour is the belief that objective non-verbal information can be "decoded" or "received". From this, it follows that yardsticks can be developed to determine an individual's accuracy in decoding pieces of non-verbal information. These traditional decoding tasks are, however, insensitive to the potential variety of meanings assigned to particular non-verbal behaviours. The choices and questions are limited to those alternatives originally chosen by the researchers. Therefore they do not allow for other possibly more complex or more unexpected interpretations. The emphasis on accuracy means that only pre-selected non-verbal meanings are acknowledged. (One measure has tried to address this problem by awarding some credit to "partially correct" answers (Kagen, 1977) but this method is still vulnerable to the same pre-selection problem.) The variety of alternative accounts are conveniently ignored as "inaccurate" or not as appropriate as others.

To assess decoding accuracy, researchers must determine beforehand the correct and incorrect meanings for a set of non-verbal behaviours. The difficulties of determining the accuracy or inaccuracy of particular non-verbal meanings becomes evident if we return to the methodological issues faced by the creators of the different decoding tests. The correct label for a particular scene may be chosen by a variety of different judgement methods or by averaging several judgement methods together (see page 6 for the P.O.N.S. procedure). But if photographs or video scenes are originally chosen because judges agree on their emotional content, it seems circular to report that these same photographs or video scenes produce a high rate of agreement across sexes, cultures or other samples of judges. Moreover, the scores on these tasks may not represent an actual "recognition" of an emotion as much as they match the judges' consensus on the type of emotion presented. The nature of the task forces researchers to rely on consensus information. However, dependence on consensus information also forces researchers to adopt very broad answer categories. For instance, the research on "universal" facial expressions uses emotional labels of happy, angry or sad. Such categories offer more opportunity for consensus but they don't allow any examination of subtle and even not so subtle emotional distinctions. A happy surprise versus a sad surprise are two very different emotions that would be classified as the same in the "universal" emotion categories listed above.

This is not meant to suggest that there is an alternative more "valid" method to test emotion recognition. I doubt that it is possible to create any social interpretation task that doesn't rely on, at the very least, the common sense of the researcher. However, it is a critical mistake to imply that decoding tasks measure ability by comparing scores with "objectively" determined criteria separate from any shared common sense assumptions. Our reliance on common sense needs to be acknowledged and explicated in psychological research.

The S.I.T. tries to overcome the accuracy criterion problem faced by the emotion recognition tasks by using "umambiguous" factual information as correct answers to each interpretive question. This shift from emotion recognition to "interpreting" natural sequences of behaviour might mean a greater change in theoretical direction than the simple methodological advantage the researchers claim. Emotion recognition tasks attempt to isolate and pinpoint the "channel" of non-verbal information that carries emotional meaning. The S.I.T. was not designed to be divided into different channels of behaviour, therefore the results can not link a particular "correct" meaning with a particular non-verbal cue. Nor is it meant for such reduction since the task emphasizes the use of context in "interpreting" non-verbal behaviour. These characteristics make it extremely difficult to reduce "correct" interpretations of a scene to "correct" recognitions of specific non-verbal cues. Since answers on the test are limited to multiple choice answers, the researchers can't know how and what cues might be used to reach

an interpretation for a particular scene. Perhaps the S.I.T. is not testing non-verbal sensitivity as much as it is testing participants "common sense" expectations of certain situations.

The limitation of choices in all of these measures is not nearly as problematic as the idea that accuracy in meaning can and must be assessed. Accuracy or inaccuracy can become irrelevant in a social interaction. If an individual defines some non-verbal cue erroneously, that definition can easily become a self-fulfilling prophecy. For example, I could label a hug intended as comforting, as amorous. My assessment may have been inaccurate according to the hugger's intentions but that doesn't lessen the influence my definition of the action will have on our future interaction.

Paterson's arousal model (1976) has emphasized the role of context in motivating non-verbal "intimacy" behaviours (eye gaze, touch and so forth). He begins his paper that describes this model by writing, "The act of smiling is usually considered to be a positive affiliative behaviour but there are other findings suggesting that smiling may also be an attempt to mask anxiety" (Paterson, 1976, p. 242). Paterson attempts to define the variability of plausible meanings (the alternative meaning of smiling masking anxiety is now scientifically verified) assigned to particular non-verbal intimacy behaviours (prolonged gaze, for example) as a function of the interpersonal history between person A and person B, and the situational context. This model shows how a non-verbal behaviour might be flexibly defined in different situations. Paterson's conclusions further suggest

that trans-situational accurate and inaccurate definitions underestimate the dynamic generative character of a social interaction.

Isolating Non-verbal Behaviour

The idea of a code of meaning for non-verbal behaviour has lead to research assessing individual "accuracy" at decoding. If a stable and clear cut code linking meaning to non-verbal behaviour exists, then it seems plausible to develop tasks that can assess people's "code-breaking" skills. This assumption has also lead to research attempting to isolate different bits of non-verbal behaviour as possible components of the communicative code. The traditional method used to identify possible code components is to systematically reduce the amount of information subjects see for a particular situation (Rosenthal, et. al., 1979; Eckman, 1978). Grief, for example, might be correctly identified by subjects who see the whole body and the face, just the body without the face, (but not the face without the body) and just the upper half of the body (but not the lower half). One might conclude that the non-verbal sign for grief is displayed in the upper half of the body. This attempt to isolate portions of non-verbal behaviour is clearly evident in the popular multi-channel methodologies used in decoding tasks. However, behaviour segmentation studies also attempt to isolate certain bits of behaviour from others. The identification of breakpoints or particular meaningful points in an ongoing interaction does not divide the filmed interaction into different channels of information as do the multi-channel methodologies, but it still assumes that some actions carry more meaning than others. Ecological researchers hope to isolate these breakpoints, or meaningful actions from the rest of the

interaction so that the parameters of non-verbal "displays" can be identified.

Isolating bits of behaviour requires that researchers treat context as a separable variable. If one specifies emotion recognition as a primary step to interpreting other people's actions, it becomes important to identify what information we use to recognize different emotions. Therefore it makes sense to divide a stimulus film into channels of information. This division of behaviour into separate "channels" of information creates two problems: (1) the later integration of these "channels" and (2) the treatment of context.

Integrating "Channels"

Some researchers argue that non-verbal behaviour can only acquire meaning by either enforcing or contradicting the speaker's verbal content (Akert and Archer, 1984; Rime, 1981). This figure/ground relationship (Rime, 1981; see also Schegloff, 1984) between verbal and non-verbal behaviour suggests that the channel isolation technique of non-verbal decoding tests is unrealistic. The method of cutting up an interaction into various pieces, correlating those pieces with meanings and then putting it back together again ignores any interactions between those pieces. Furthermore, this separation of various channels of "information" draws attention to cues that normally might be ignored.

Beattie (1983) illustrates how non-verbal researchers have used verbal content in notoriously simple ways. For instance, researchers who choose to use obvious hostile messages ("Die!") to compare with obvious hostile non-verbal behaviours (teeth clenched) might be ignoring the subtlties of ordinary social interactions! It seems more likely that we would use spoken language to communicate our hostility in less overt ways than the verbal message described above. This example also shows the problems in matching non-verbal behaviours to verbal messages of equivalent strength. It is difficult to argue for the dominance of non-verbal behaviour in "communicating" of interpersonal attitudes if studies have not explored the subtlties of spoken communication. Findings from such research might be attaching undue importance to particular non-verbal "channels" or "breakpoints".

Isolating Context

Isolating channels of non-verbal information for decoding tasks requires that contextual influences be eliminated. However, researchers in their attempts to "decontextualize" non-verbal cues may actually be replacing one type of context with another. This problem can be illustrated by adapting a linguistic argument that criticizes the grammatical study of sentences in isolation. In his argument, Stubbs (1983) first cites the following two sentences, one grammatical and one ungrammatical: (Grammatical, in this case, is defined as the use

of the simple present tense to refer future events **only** if they are predictable and certain, Stubbs, 1983, p. 121.)

1. Celtic play Rangers tomorrow.
2. Celtic beat Rangers tomorrow.

However, if the second sentence is placed in the context of the following local discourse, it becomes grammatical:

I've rigged everything, bribed the referee and the linesman: Celtic beat Rangers tomorrow - and then lose their next game.

Stubbs concludes that the change from ungrammatical to grammatical is here produced by context and not by an inherent property of the sentence. He further suggests that judgements about grammar are never actually made in isolation: "it is just that informants **imagine** their own judgements and some contexts are more **obvious** than others" (my emphasis, p. 122). If researchers want to treat non-verbal behaviour as communication, then they must acknowledge their vulnerability to the same problems that affect linguistic study. If we must imagine and use appropriate contexts when judging whether isolated sentences are grammatical, we must do the same in judging meanings of isolated non-verbal behaviour. Attempts to eliminate context may, at best, only be reducing context to the more obvious possibilities.

Even if it were possible to decontextualize non-verbal behaviour, (and that seems very doubtful) it might not make the meaning less ambiguous but actually eliminate the meaning. Paterson (1985) shows how individuals will label the meaning of a touch according to different situational variables, and as early

as 1963, studies showed how much a verbal description of a situation will influence "recognition" of an emotion shown in a photograph (Warries and Jeanus described in Frijda, 1969). The Warries and Jeanus studies asked subjects to freely interpret and then rate the emotion shown by a set of photographs (depicting only a woman's face). Subjects then interpreted and rated the emotion one might expect in a set of situations (presented as written descriptions). A week later, subjects returned to interpret and rate various combinations of these photographs and situations. The subjects appeared to resolve potential contradictions between situations by hypothesizing the occurrence of other events or expanding the meanings of the described situation or emotion. Results like these suggest that context is an integral part in the process of determining non-verbal meaning.

Context is simplified in similar ways by ecological researchers. Although the ecological theory places great emphasis on context and the information it conveys, ecological research continues to treat context as a variable that can be defined and separated. In the baby face studies, context is defined as the use of real human faces for judge's ratings after previous work on babyishness using schematic drawings. The researchers treat context as a variable that can be eliminated in the early stages of testing correlations between meanings and physical features.

Sabetelli, Buck and Dreyer's research (1982) defines context slightly differently, as the relationship between the observer and the observed. Understanding another's non-verbal behaviour might be related to how well you know that person. Consequently, these studies compare the ability of couples to "correctly decode" each other to "correctly decoding" strangers. The results do show that couples are "better" able to "decode" each other but this ability bears no relation to the length of time the couple has lived together. Moreover, Kreckel's research (1981) has shown similar differences between family members' and strangers' interpretations of other family member's verbal messages. Her results indicate that verbal content will not make the ongoing action any more transparent to strangers.

In the Sabetelli, Buck and Dreyer study, context is not the use of realistic stimuli but the potential effect of close relationships on "receiving" non-verbal information. Although it is a different definition (and that alone implies the potential complexity of "context variables") context is still defined as a single level variable that can be isolated and manipulated.

The Structural Approach

The third approach to non-verbal behaviour offers an alternative view to the idea of a shared trans-situational code of meaning adopted by the personality and ecological perspectives. The structural approach emphasizes the study of social interaction in its entire context and places most stress on the structure and temporal patterning of the interaction (Kendon, 1982; Birdwhistell, 1979). Ecological and personality researchers are interested in how we, as participants in a social interaction, assign meaning to non-verbal behaviour. The structural model's emphasis on contextual complexity and regular patterns of interaction leads to non-verbal behaviour only being considered meaningful if it influences the ongoing interaction in some way.

This difference in the structural's model's conception of meaning is best illustrated by an example from structural research. Condon and Ogston (1967) have carefully documented "interactional synchrony". Points of change in a speaker's body movement can be correlated with points of change in the speaker's speech. Larger body movement "waves" fit over larger segments of talk (words and clauses). Smaller body movement "waves" can be fitted over smaller segments of talk (syllables and sub-syllables). Listeners also move in similar ways. Interactional synchrony occurs when the boundaries of the body movement waves of the listener co-incide with the body movement waves of the speaker. If this occurs, the pair is in "synch" and if it doesn't occur, the pair is "out of synch". These waves of

movements (eye movements, blinking, head movements and so forth) are remarkably subtle and can only be detected by closely analysing small segments of film at very slow speeds. These waves of movement are unlikely to be detected by the ordinary observer, therefore such movements would not be "decoded" in the personality sense nor "received" in the ecological sense. However, structural researchers consider this synchrony "meaningful" because its presence or absence affects an interaction (Kendon, 1979).

In the structural model, the encoding/decoding distinction loses importance. Given structural research goals, it makes more sense to look at similar patterns of meaning across many different social interactions rather than divide communication into internal encoding and decoding processes. Understanding the "encoder's" underlying motivations, the focus of an ecological approach, is no longer important. Evaluating the level of non-verbal sensitivity, the focus of the individual difference approach, is also no longer important. Instead, research focuses on the way various non-verbal behaviours might influence ongoing interactions.

Structural researchers have examined non-verbal behaviour in two ways. The first research goal is to determine the systems into which behaviour seems to be organized. Researchers have attempted to identify systems of body motion, (kinesics) or inter-personal spacing (proxemics) that will parallel our linguistic codes (Birdwhistell, 1979; Hall, 1969). The second research goal is to attempt to give a detailed account of the

behavioural patterns and systems in an interaction. Duncan and Fiske (1977) have examined the role of eye gaze in controlling turn-taking during a conversation. Structural researchers see these two research goals as complementary. One can not give a full analysis of non-verbal systems without understanding interaction patterns, and one can not properly explain the organization of interactional events without some knowledge of the systems included (Kendon, 1982).

One early research goal was to find a unique communicative role for non-verbal behaviours and thereby legitimate the study of non-verbal behaviour. Research attempted to define functional differences between verbal and non-verbal communication. For example, Argyle (1975) suggests that non-verbal behaviour is responsible for communicating interpersonal attitudes, affects and sychronizing face to face interactions. Structural research has been hampered by this attempt to treat verbal behaviour and non-verbal behaviour as analogous. As Beattie (1983) has demonstrated, the specific communicative roles suggested for non-verbal channels can be fulfilled by linguistic communication. First, he shows how the decoding studies that claim to have found functional differences between non-verbal and verbal behaviour have relied on simplified and limited verbal content (spoken numbers or the alphabet are used in some cases). Second, these studies also focus their subjects' attention on non-verbal rather than verbal cues. Finally, Beattie questions the possibility of attempting to control the strength of various channels of information and still create a realistic interaction. He

concludes that the attempts to make non-verbal communication taxonomically distinct have ignored the subtlties of linguistic content.

As long as researchers attempt to analyse non-verbal behaviour separately from verbal content, they will be forced to assume that there are non-verbal codes of meaning, codes that might not exist. The underlying philosophy of the structural approach stresses the analysis of the temporal actions of an interaction in detail. However, the actual research has ignored the linguistic content in the temporal analysis of conversation. This approach stresses context and the complexities of behavioural organization of an interaction, but it does not follow this emphasis to its logical conclusion. A complete analysis of a face to face interaction can not ignore verbal content.

And Now For Something Completely Different

As I have argued, non-verbal research is supported either implicitly or explicitly by an assumption of a communicative code. Rime's three-part test illustrates how common inferences of meaning for non-verbal behaviours have been assumed rather than examined. Furthermore, the lack of consistency between results from different decoding studies suggest that decoding skill is much more complex than originally proposed. The differences documented between married couples decoding their partners versus decoding strangers indicate a further complexity. Finally, structural researchers' difficulty in pinpointing the exact communicative significance for any single isolated non-verbal behaviour suggest more problems for a simple view of non-verbal behaviour and meaning. (For an overview of the different classifications of non-verbal behaviours, see Knapp, 1978.) This combination of research results makes it difficult to sustain the original assumption of a straightforward link between non-verbal behaviour and meaning.

We need to return and examine these "common inferences" to see whether they exist and what forms they might take. Although the results from decoding tests do not correlate with each other, individuals participating in decoding tests and behaviour segmentation tasks can produce a significant proportion of accurate interpretations (as defined by the particular test). This suggests that these studies are tapping into some system of shared meanings for non-verbal behaviour. Previous decoding research has accepted these common sense meanings for non-verbal

behaviour without question. But any researcher that hopes to understand non-verbal meanings must first examine how we arrive at these "common sense" meanings.

To ask how we assign meaning to non-verbal behaviour is not simply to adopt a new research direction. The examination of people's interpretive procedures requires a method that will include the role of the researcher's interpretive procedures. The goal of ethnomethodological research is to make visible the process by which we make sense of the world (Pollner, 1974). Ethnomethodology attempts to explicate the background assumptions or common sense ideas that we take for granted (Garfinkel, 1972). The philosophy of ethnomethodology is evident in two different research methods; conversation analysis and discourse analysis.

Conversation Analysis

The weaknesses of the structural approach to non-verbal behaviour are best addressed by conversation analysis research (Zimmerman and West, 1982). I have argued that by ignoring verbal content, structural researchers are unable to completely examine any face to face interaction. A methodology that eliminates the verbal content of an interaction eliminates an important source of information used by participants in that social interaction. Conversation analysts define as their data all the information that was available to a participant in the interaction being studied. For example, early research examined detailed transcripts of telephone conversations. By tape recording phone calls, analysts could analyse and re-analyse data that was as "complete" as the data that was available to the original participants.

Conversation analysts treat the orderliness of conversation as the accomplishment of the participants. The research goal is to make explicit those mechanisms or constraints that are displayed in an individual's talk or behaviour that help achieve orderly social interactions. Conversations are analyzed so that the ways in which individuals orient and structure their conversations can be identified and explicated. For instance, Jefferson (1972) has identified how people construct side sequences (a listener may ask for a more explicit identification of a location mentioned in a speaker's story) as adjuncts to the main topic of conversation.

Recent research has extended previous conversation analysis to include the possible role non-verbal cues might have in organizing a conversation. This research has explored the sequential structure of non-verbal behaviour and how it relates to verbal content and functioning (Schegloff, 1984; Heath, 1984; Goodwin, 1981). These studies use a detailed transcription scheme for transcribing video-tapes of all kinds of natural interactions so that the relationship between subtle shifts in non-verbal behaviour and verbal content can be explored. Goodwin (1981) has closely analyzed video tapes of natural occurring interactions ranging from dinner table conversations to a bridal shower. Heath (1984) has examined films of medical doctor-patient consultations. Results have shown how movement is carefully designed according to a speaker's and a listener's circumstances. For instance, other non-verbal research studies have casually remarked on the co-incidence of gesture and the major stress of a sentence. This perspective would not consider such a co-incidence of gesture and speech as incidental but instead it would consider it an organized achievement of a speaker-listener interaction (Schegloff, 1984).

Conversation analysis offers a integrated method for mapping out the complexities of non-verbal behaviour's role in the organization and orientation of a conversation. Moreover, conversation analysis provides a method for pursuing the logical conclusion of a structural approach to non-verbal behaviour by analysing interactions in their total temporal context.

A number of ethnomethodological ideas are also at the root of an approach that analyses larger segments of discourse with the goal of revealing participant's interpretive practices. Discourse analysis and conversation analysis share an emphasis on treating naturally occurring discourse as the topic of analysis. However, the goal of conversation analysis is to explicate those mechanisms and organizational constraints of talk that can be formulated by any set of participants to apply whenever appropriate (Zimmerman and West, 1982). Discursive research looks at how accounts might be constructed to accomplish certain goals in particular social contexts, and integrates the study of talk with the study of a variety of other texts. Therefore, a discursive approach is a better response to the weaknesses of the personality and ecological models while conversation analysis is a better response to the weaknesses of the structural approach.

A Discursive Approach

The ecological and personality perspectives treat non-verbal behaviour and meaning as a communicative code. Therefore, researchers have developed tasks using "culturally shared" meanings as a research resource without questioning whether these meanings exist in such a straightforward way. One consequence of treating meanings as pre-determined components of a code that can be isolated and individually defined, is that these perspectives underestimate the complexity of contextual influences. Furthermore, the personality and ecological concepts offer very simple models of the subject. The ecological approach treats individuals as selective receivers of environmental information. The personality approach treats individuals as possessing consistent levels of skill at understanding non-verbal behaviour.

The most direct way to examine participants' use of non-verbal behaviour is to examine their verbal descriptions and explanations. A proper examination of verbal accounts requires an appropriate methodology. To use close-ended questions, specific verbal categories or bipolar rating scales, researchers must assume prior theoretical categories (Abraham, forthcoming). In such studies, subjects may adopt the researcher's categories, but they don't necessarily display the categories they would be most likely to use. The research results may be a better indication of the plausibility of the researcher's particular categories of non-verbal behaviour than as an indication of the ways in which subjects actually categorize non-verbal behaviour.

A discursive approach offers a way to analyse people's descriptions and explanations that can avoid the pitfalls of reductionist methods. The first important conceptual difference is the discursive emphasis on the function of language. People's accounts or descriptions are not seen as direct representations or mere causal products of an extra-linguistic reality (Potter, 1984). Instead, descriptions, explanations or any other types of discourse are considered actions. If a particular account can be categorized as a "mere" description, than that categorization is itself, an achievement of the account's organization and content. The suggestion that descriptions are not pure representations of an "underlying reality" but are interpretive actions has important methodological implications.

First, a discursive approach begins by taking the participants' accounts as the topic for analysis rather than as a resource for discovering "true" intentions and motives (Potter et. al., 1984; Gilbert and Mulkay, 1984). To study non-verbal meaning as a topic means to directly examine "culturally shared" meanings or "parameters" of non-verbal displays as they are defined, used and referred to by individuals in their talk. To use non-verbal behaviour as a resource means to rely on one's own "common sense" as to what meanings are culturally shared and what movements indicate non-verbal displays. If we distinguish between treating meaning as a topic and treating meaning as a resource, we can acknowledge the complexity of natural discourse and begin to explicate our reliance on common sense in assigning meanings to non-verbal behaviours.

By choosing to closely analyse discourse, researchers can stay closer to the data rather than introduce their own "common sense" categories. A proper analysis reproduces portions of the original transcripts to accompany the researcher's analysis (as opposed to descriptive summaries or statistics) so that the reader has equal access to the data being analyzed. In this way, the reader has the opportunity to evaluate the researcher's analysis with reference to the same data to which the researcher's analysis refers. Discourse analysis does not require that any version be considered the "correct" version; i.e., a version linked to some underlying objective definition for a particular event (Gilbert and Mulkay, 1984). Instead, discursive analysts looks at how accounts might be constructed to accomplish certain goals. With this method, we can begin to examine the "second" step of Rime's three-part test of non-verbal behaviour as a carrier of information.

Another important difference in the discursive perspective is the definition and treatment of social context. A discursive concept of context not only refers to the traditional research definitions of the surrounding environment, other individuals or previous relationships, it also includes the surrounding discourse. For example, context can include the particular situation, the histories of the individuals involved, their goals or motivations and the line of talk preceding and following a reference to a non-verbal meaning or behaviour.

More importantly, the discursive concept of context is not simply a proposal of greater contextual complexity. Such an idea implies that if all contextual factors could be defined, then one could predict how individuals would use or define meaning for a particular non-verbal behaviour. This position has several flaws. First, it fails to recognize the impossibility of defining the "complete" context. A researcher who attempts to describe all the contextual features of a situation "embarks on an indefinitely extendable task" (Drew and Aktinson, 1979, p. 30). Second, this position treats participants as responsive automota dependent on context rather than as highly competent social beings sensitive to context. Garfinkel argues that social science researchers view the psychological subject as a "psychological dope" (Garfinkel, 1972). As "psychological dopes" we are compelled to follow particular choices of action by our "psychiatric biography, conditioning history, or variables of mental functioning" (Heritage, 1984, p. 111). If psychological subjects are conceived in this way, then the reduction of a social interaction to a few simple causal relationships is plausible. Although if one argues that contextual influences completely determine a participant's actions, any originality, creativity or diversity becomes very problematic.

The issues of subjectivity and variability that a more complex model of the subject raises can not be adequately described and examined in this paper (see Henriques, et. al., 1984). However it is important to stress that a complete social explanation must include a participant's flexibility and

variability in how he or she choose to orient his or her actions to different contextual features.

In examining discourse, analysts attempt to explicate the forms of sense making and interpretive devices that are used to construct different accounts. Discourse analysts might show the inconsistency in different accounts and how these variations relate to particular social contexts (Potter and Reicher, unpublished; Potter et. al., 1984; Gilbert and Mulkay, 1984) or they might explicate the organization of discourse within single texts (Yearley, 1982; Smith, 1978). Although individual accounts of actions can be diverse as individuals organize and construct different interpretations according to particular contexts, certain recurrent interpretive forms or repertoires can be identified, described and documented.

Gilbert and Mulkay (1984) examined scientists' discourse gathered from interviews, letters, conferences, papers and textbooks in the research area known as bioenergetics. There were recurrent asymetrical variations in how scientists described their own and other scientists' actions and beliefs. For instance, beliefs labelled as true were explained as a straightforward development from experimental evidence. Beliefs labelled as false were explained through references to non-scientific factors (charismatic personalities and so forth). These two regular patterns of accounting are constructed through the use of different linguistic repertoires, a recurring set of phrases, descriptions and metaphors (Potter, 1982). Gilbert and Mulkay identified two repertoires evident in scientist's accounts

for error; the empiricist repertoire and the contingent repertoire. An example might be the use in a research paper of "It is suggested that..." from the empiricist repertoire, versus the use in an informal interview of "I think..." from the contingent repertoire.

Potter and Reicher (unpublished) examined the accounts of participants and observers in the St. Paul's riots in Bristol, 1980. Their analysis reveals the different ways in which community discourse can be constituted in people's explanations for the conflict. For example, if "community relations" are constituted as relations between people or groups within the community, the St. Pauls events can be categorized as an intra-group conflict. If "community relations" are categorized as relations between the community and the police, the St. Pauls events can be categorized as an inter-group conflict. This research shows how how certain types of accounts may be more prominent in particular contexts or use particular linguistic repertoires when trying to accomplish particular outcomes (Potter and Mulkay, 1985).

Smith (1978) examined the organization of a single text; a written reconstruction of an interview with a girl describing the onset of a friend's, K.'s, mental illness. Smith begins her analysis by proposing an alternative version of the account as K.'s reaction to being isolated by the growing friendship between the narrator and another girl. Smith then suggests how the first version of a developing mental illness is produced as obvious and natural by identifying the author's use of what Smith calls,

contrast structures in the text. The first part of a contrast structure provides the reader with a particular context for reading the second part. The following is an example of a contrast structure: "When asked casually to help in a friend's garden, she [K.] went at it for hours, never stopping, barely looking up." (Smith, 1978, p. 39). The first part of the sentence, casually helping in the garden sets up a contrast to highlight the strangeness of K.'s behaviour of "never stopping, barely looking up" in the second part.

In this thesis, it will be argued that the construction and use of non-verbal meanings can be better analyzed in terms of interpretive resources or repertoires which can be used in regular types of ways to describe non-verbal behaviour. By analysing accounts rather than coding answers to questions, we can avoid making the same assumptions used in previous decoding research. First, this approach will not classify certain explanations as correct or incorrect. Second, this approach will not deny the active nature of producing non-verbal meanings by limiting a person's choices to interpretations pre-selected by the researcher. Finally, this approach will focus on the varying ways in which interpretations for non-verbal behaviours are used and organized in different accounts rather than hypothesizing about levels of underlying sensitivity.

If we directly analyze people's accounts or descriptions of non-verbal meanings, we can start to identify how non-verbal meanings might be constructed. We can examine these accounts for possible regular patterns in the way people assign meaning to

non-verbal behaviours.

AN EMPIRICAL STUDY

Introduction

The preceding critique of the theoretical perspectives used for exploring non-verbal meaning has emphasized the impossibility of assuming a single consistent set of meanings for specific non-verbal behaviours. The weakness of the traditional models became evident when we examined the inconsistencies and variety of results found in non-verbal decoding research. The problems with these explanations of how meaning is assigned to non-verbal behaviour can be further illustrated by examining people's accounts of situations and other people's behaviour. The following study will introduce two aspects avoided in typical decoding tasks; context and "free interpretations" (Frijda, 1969, p. 195).

Context

Researchers have defined context in a variety of ways. Some researchers consider environmental cues and the presence of more than one person as context (Rosenthal, 1979; Archer and Akert, 1977). Context has also been defined as familiarity with the target person being decoded or the goals or history of the relationship or situation (Paterson, 1985; Buck, 1983). Finally, context can be considered the addition of verbal content (Akert and Archer, 1977). Non-verbal research has treated context as a separable variable that can be eliminated as a confounding influence in the beginning stages of research and

re-introduced later. This idea implies that contextual influences can easily be distinguished and removed. It also implies that contextual influences will influence non-verbal meaning in consistent, predictable ways. One goal of the following study is to explore how a simple manipulation of a traditional version of context might affect people's explanations of other people's behaviours.

In this study, contextual influences will be introduced in two ways. First, the photographs used in the study are photographs taken from magazines, books or personal photographs. They show several individuals in natural environments. Furthermore, the photographs were not created nor selected to depict certain non-verbal messages for use in a research study, nor was any attempt made to "reduce" potential contextual cues. Second, each photograph was presented with one of two different verbal labels suggesting different situations. The labels were introduced as a simple way to manipulate one possible contextual influence.

Free Interpretations

Studies of non-verbal behaviour have rarely analysed unrestricted explanations of behaviour and situations. Instead, they typically focus subjects' attention on specific types of non-verbal cues and use pre-selected choices as answers. As argued earlier, the accuracy based research is not exploring individual differences in interpretations of meaning as much as

it is testing the plausibility of the researcher's own interpretations. If non-verbal behaviour really plays an important role in how we perceive and understand our world then similar uses of non-verbal behaviours and meanings used in decoding studies should be found in people's natural descriptions and explanations for situations. One of the most practical ways to explore meanings for non-verbal behaviour is to look closely at verbal accounts for how non-verbal behaviours are mentioned, used or defined. An experimental situation was created to generate relatively unrestrained verbal descriptions and explanations for non-verbal behaviour while still remaining close to the traditional decoding task paradigms.

We can now return to the models of non-verbal behaviour introduced previously and infer what the personality and ecological approaches might expect from conversational data of this kind. We will not examine the structural approach. As suggested earlier, the weaknesses of the structural approach are best addressed by conversational analysis research. The structural approach defines meanings for non-verbal behaviour as any possible influence or communicative value a non-verbal cue might have on the temporal structure of an interaction. Therefore this approach would not be interested in a single decoder's or encoder's production of meaning.

Personality Predictions

Personality researchers expect an individual to explain other people's behaviour by identifying their particular non-verbal behaviours and the associated meanings. They would expect individuals to use these meanings to help build consistent explanations for other people's behaviour or for situations in which they find themselves. Context, in this case defined as other people or the environment, might obscure, complicate or in some cases, clarify a particular meaning for non-verbal behaviour but it should not radically alter the meaning of a non-verbal cue. A smile may be termed sentimental or silly in different situations but it shouldn't be termed a smile in one situation and a frown in another.

Rosenthal and his colleagues distinguish between two processes involved in "decoding" situations accurately. The first is recognition, a primary skill that can be objectively tested by decoding tasks. The second part of the process is interpretation. Any contextual influences would be introduced during the second step of "interpreting" meaning. Thus, Rosenthal's two step recognition-interpretation process would predict that any interpretive work would build upon previously identified non-verbal meanings and situational knowledge.

The personality approach treats the ability to decode non-verbal meaning as a personality trait. The P.O.N.S. research results show the most consistent predictors of scores

are age, gender and cultural background. Therefore the personality approach would predict a high degree of consistency in the meanings given to non-verbal behaviours by the homogenous sample of female first and second year British university students who participated in this study. Moreover, this model would predict even greater consistency for individual accounts generated by stable individual personalities.

It could be argued that the personality approach offers a cognitive model and that discursive data is therefore not appropriate data for testing the model. The personality model may describe a cognitive process but the decoding tasks use "culturally shared" meanings for particular non-verbal behaviours to test for differences in "decoding" skills. In order to evaluate individual differences in the recognition/interpretation process, one must assume a set of non-verbal behaviours that can be correlated with a consistent set of pre-determined meanings. The phrase "culturally shared" allows researchers to explain the developmental and cultural differences in decoding abilities. Some meanings may be innate but many more appear to be learned. Knowledge of inaccurate or accurate meanings can only be learned and evaluated through social interaction, interaction that can not be entirely non-verbal. If these culturally shared meanings do exist, then they should be evident in ordinary discourse.

Most importantly, the value of a social psychological approach should rest at least partly on what people really do. If people do not "recognize" certain non-verbal behaviours and then use these "recognized" meanings to build explanations of

situations and behaviour, individual differences in recognition loses its importance. Furthermore, if people don't agree on the specific meanings of non-verbal behaviours, then it seems questionable to use "culturally shared" meanings as a research resource. The personality model of meaning should be able to explain how we use and define non-verbal behaviours in ordinary social interactions. This study has a number of limitations but it does produce participant's naturalistic data as opposed to the forced choices typical of the answer sheets used in typical decoding tasks.

Ecological Predictions

The ecological approach claims that we are environmentally programmed to pay attention to certain visual stimuli and to ignore others. This model emphasizes the primary role of environment in determining meanings carried by non-verbal behaviour. It is an adaptive advantage for us to perceive the meanings for certain types of non-verbal behaviour, particularly those cues that can indicate another's behavioural goals or intentions. This model would expect us to read meanings for those non-verbal cues that can be useful indications of different behavioural goals. We then use this knowledge to help accomplish our own behavioural goals.

Any inconsistency in meanings given for similar non-verbal cues would be attributed to changes in the "decoder's" environment and behavioural goals. If the visual stimuli remains the same, the meanings contained "within them" should remain the

same. However, if our motivations should change, we might pay attention to different bits of environmental information that are more appropriate for our new goals.

The behavioural situation for all those who saw one set of labels should be practically the same, and the exact same for any single individual participant. Therefore, the ecological model would predict consistent patterns of non-verbal meanings in individual accounts.

This selective responsiveness to certain non-verbal behaviours and their associated meanings is considered to be at least partially innate and mostly unacknowledged. Therefore, the amount of descriptive or interpretive talk displayed to produce appropriate meanings for non-verbal behaviour should be minimal. If there are such universal and culturally shared meanings, one would expect to find individuals drawing upon these meanings in consistent ways in their explanations for other people's behaviour. Even if these meanings are innate or undeliberated, as this perspective suggests, one would still expect references and consistent agreement about these assumed meanings, genetic or socialized.

One might argue that we "receive" non-verbal information unconsciously. Therefore, non-verbal information isn't available to be verbalized in people's accounts. This idea suggests that that people never consciously assign meanings to non-verbal behaviours or if they do, it is not the "actual" meaning that they have perceived unconsciously and are, therefore, unimportant

to social interactions. But if we don't have "access" to these meanings for non-verbal behaviours, how can they be socially learned or culturally determined? Furthermore, if non-verbal information is only received unconsciously, how is it possible for us to make conscious attributions of babyishness, for instance, without having some kind of "access" to this non-verbal information? Finally, researchers working within an ecological framework have ways of articulating the relationship between non-verbal behaviours and meanings. It seems a bit presumptuous to claim that this is a skill only available to scientific researchers without first examining ordinary descriptions and explanations to see whether any relationships between non-verbal behaviour and meaning are articulated in ordinary accounts.

Method

This study adopts a paradigm similar to traditional decoding tasks. Participants answer a series of questions about several different scenes. This study also introduces on the one hand, a simple form of contextual manipulation and, on the other, the opportunity for free interpretations to highlight problems with the personality and ecological approaches to non-verbal behaviour and meaning. In particular, a careful analysis of participant's explanations will attempt to demonstrate that much of this data can not be explained nor predicted by these two theories. The examples presented in the analytic sections are not intended to document empirical regularities but to document phenomena these models predict should not exist. Thus, the argument will be working in the classic Popperian manner. To further demonstrate that any particular example is not a unique instance, similar examples from each of the two conditions for each photograph will be presented. The existence of such falsifying examples seriously undermines these two models of non-verbal meaning.

Subjects

Twenty pairs of British university female students participated in the study. The subjects' ages ranged from 18 to 21 (the mean age was 19). All the subjects were in their first or second year of study. Participants were undergraduates studying a wide range of art and science disciplines.

Procedure

Each separate pair came into a department room set up with two microphones, a tape recorder and a slide projector. The pair was told that the study's aim was to see how well people could communicate to another person who wasn't present at the same time. Their task was to describe and discuss a series of four slides, in the belief that a third person would later listen to a tape-recording of their discussion. This non-existent third person was used as a device to give the subjects a target for their descriptions and to make the researcher's absence from the room more plausible. The use of a third person as a target for the explanations was to encourage the participants to make their interpretations and evaluations explicit and to resolve any disagreements. It also helped prevent pairs from thinking that their accounts of non-verbal behaviour was the study's primary focus. Finally, this task minimized the interaction and any possible non-verbal influences between the researcher and the participants (see Barnes and Rosenthal, 1985).

The researcher told the participants that this third person would have to answer a list of questions about each slide without ever seeing the original slides. Each subject was given a copy of the questions that this supposed third person would have to answer for each slide. The tape was started and the researcher then left the room while the subjects discussed the slides for however long they chose. After the pair had finished the task, they were fully debriefed.

List of Questions

The list of questions asked about the slides reflected the four areas typically covered in decoding studies; (1) relationships between people shown, (2) their role or status, (3) the future outcome of the situation or future behaviour of various individuals and (4) the emotions expressed (see Appendix A).

Labels

Each slide was presented to subjects with one of two possible labels printed on the actual slide. Half the pairs saw one set of labels and the other half saw an alternative set of labels (see Appendix B). These labels represent two of the typical alternative explanations given by subjects in an earlier pilot study. A pilot group of subjects saw different sets of possible labels for these slides to test the plausibility of the actual verbal label used in the final study.

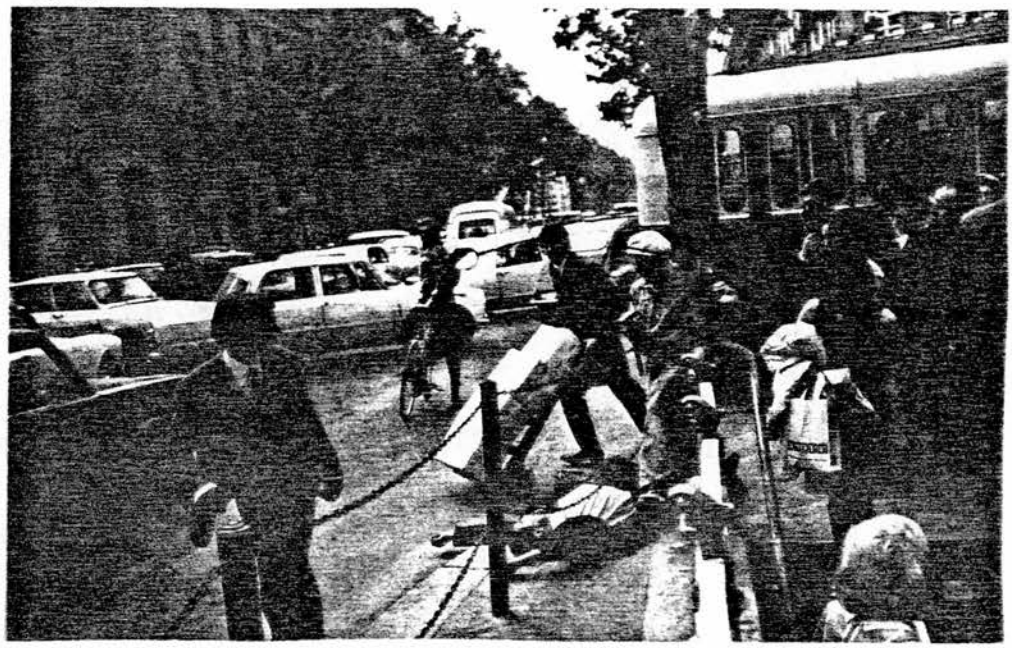
Slides

The four slides presented to each pair were selected from an earlier group of 40 slides shown to a different set of subjects in an earlier pilot study exploring whether and how people might include non-verbal behaviour in their explanations for what was happening in different slides (see Appendix C). Since, all the slides originally presented in the pilot study generated similar

types of variability, only four slides were presented in the final study so that more pairs of subjects could be included. The final set of four photographs represented several different original sources (see Appendix C). They also depicted four different environments and four different numbers of people. These slides were also identified by the pilot subjects as the more interesting photographs to describe. Finally, the accounts generated by these slides, produced two typical alternative explanations that could be used to generate appropriate alternative labels.

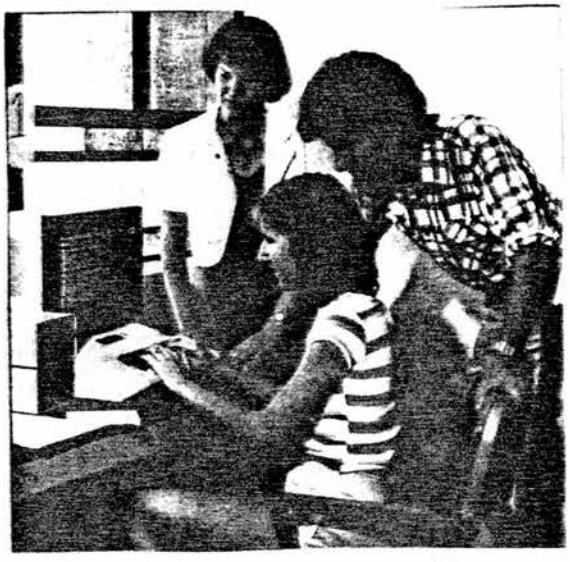
Each photograph and the two alternate titles presented in the study are reproduced below:

Photograph 1.



Condition 1: The Accident.
Condition 2: The Mugging.

Photograph 2.



Condition 1: Professor Harris and her Students.
Condition 2: Middle English Research Group.

Photograph 3.

Condition 1: The Audition.
Condition 2: Burlesque.

Photograph 4.

Condition 1: Sue Perry Confers with Rhonda Thorne.
Condition 2: Sue Perry Confers with Robert Thorne.

Transcription

Each taped discussion was completely transcribed. Although the transcripts do not include details of pause length and pronunciation, simultaneous talk is indicated by brackets and any noticeable lengthy pauses are indicated by an empty pair of parentheses.

The extracts presented as examples are identified by tape number, photograph number and the presented label. Each subject is identified by a separate number.

The conversational turns are numbered in sequence beginning with the first comment given in that account for that particular photograph. Any gaps in a particular example's number sequence will be indicated by a dashed line. Any missing sequence of numbers refer to turns in the account that are not reproduced in the example.

Analysis

The analysis is divided into four sections. Each analytic section will present an appropriate example for each of the alternative labels that accompanied each photograph. No frequency tables will be presented since it is unclear how one can determine a single instance for any particular category of non-verbal behaviour. As this analysis shows, we might refer to theoretically discrete non-verbal behaviours and appropriate definitions but in our explanations, we combine behavioural descriptions, evaluations and predictions with references to gestures, facial expressions, eye gaze or interpersonal distance.

Table 1 (Appendix D) should give readers a sense of the wide variety and conflicting meanings that were given to one specific instance of touch between two figures.

Body Language

The purpose of this first section is to illustrate how some of the data appears to be consistent with the ecological or personality approaches. At first inspection, the accounts generated by this study seem to seem to use non-verbal behaviour and meanings in traditional theoretical ways. A particular non-verbal cue is identified and accepted as having a particular meaning. These meanings can be used to either define the situational context or behavioural intentions. In these examples, the way meaning is assigned to a non-verbal behaviour can be viewed as following from a communicative code. Furthermore, the fact that some data is consistent with the personality or ecological proposals suggest that there is nothing inherently aberant or unusual in these accounts.

Photograph 1.

The first two extracts are taken from accounts given for the first photograph of the street scene.

A1: Tape 40, Photo 1. "Accident"

60. 52: Yeah. So we can tell they're not related,
cause nobody's conversing with anyone else
they're all just focused on the man
who's had the accident.

In line 60, S52 says that you can tell the bystanders aren't related because no one is speaking to anyone else. The individual in the next example uses a similar code to support her

analysis of the bystanders' facial expressions.

A2: Tape 49, Photo 1. "Mugging"

76. 69: I said they all aren't very concerned
and you said that everyone's ignoring it,
but they're not ignoring it,
they're all looking in that direction,
but no one really running to, helping him.

In this example, S69 says that the bystanders are not ignoring the fallen figure because they are looking in his direction. She then uses this definition to subtly distinguish between a lack of concern and ignorance. She further supports her identification of a lack of concern by the absence of anyone running to help.

Photograph 2.

The next two examples are taken from accounts given for the second photograph depicting three figures around a computer.

A3: Tape 46, Photo 2, "Middle English Research"

35. 63: well I think it's kind of,
isn't a it kind of slight intimacy between them.
I mean, you don't
you wouldn't put your hand around
the back of a stranger's chair.
I mean he may not really like her but,
you know, it shows he knows her.

In this extract, S63 draws upon a "common sense" rule that you don't put your hand on the back of a someone's chair unless you know that person. It is interesting to note that the "slight intimacy" is re-termed as knowing the person but not necessarily

liking them.

The next example uses a code for interpersonal distance to interpret the closeness of the relationship.

A4: Tape 35, Photo 2. "Professor Harris"

18. 42: I'm quite sure,
well they're not standing too far apart,
they know each other quite well, all three of them.

In this example S42 uses the distance between the three figures to indicate how well they know each other.

Photograph 3.

The next two extracts are taken from accounts for the scene (the "pub") showing groups of people seated around small tables. In these examples, "she" refers to the cross-legged figure seated on the floor in front (turns of simultaneous talk are indicated by brackets).

A5: Tape 45, Photo 3. "Audition"

12. 61: and she's got her arm leaning on an old man's knee,
so that could be her father.

13. 62: Yeah, her father and mother.
14. 61: yeah, watching.

A6: Tape 47, Photo 3. "Burlesque"

104.65: It, does SHE got her elbow on that man's,
105.66: They might all start clapping?

106.65: um, knee? doesn't he?
107.66: knee.

112.66: [giggles]
Maybe maybe she's their their grand-daughter,
or their daughter and they've come to see her.

In the first example, S62 uses the body contact between the cross-legged girl's elbow and the seated man's knee as indicating the father-daughter relationship. In the second example, the identification of the elbow on the knee leads to a re-interpretation of the situation to include a family relationship.

Photograph 4.

These last two examples are taken from accounts given for the fourth photograph depicting the heads and shoulders of two figures. The "she" in the first example refers to Rhonda Thorne, the figure on the right.

A7: Tape 44, Photo 4. "Rhonda Thorne"

5. 59: yeah, she looks absolutely shattered.

6. 60: yeah. Probably losing,

S60 uses S59's description of the player as "absolutely shattered" in line 5 to indicate that she is "probably losing".

In the last example, "he" is a reference to Robert Thorne, the figure on the right, and "she" refers to Sue Perry, the figure on the left.

A8: Tape 39, Photo 4. "Robert Thorne"

20. 50: he's looking dejected.
And she's looking at him with appealing eyes
but he won't look back.
[laughter] sort of thing, you know?

21. 49: yeah.

22. 50: I think maybe they're boyfriend and girlfriend,

23. 49: yeah,
24. 50: from the way she's looking at him.

S50 describes Sue Perry as looking at Robert with "appealing eyes", line 20. Then in lines 22 and 24, she suggests that the two are boyfriend and girlfriend because of the way she is looking at him, implying that only a girlfriend would look at him with "appealing eyes".

Conclusions

This section shows that this data does contain extracts that seems consistent with traditional theories that describe meanings for non-verbal behaviours as components of a communicative code. These examples show how these meanings for non-verbal behaviours can be used to identify relationships, (boyfriend/girlfriend in extract A8) intentions, (the lack of concern on individual faces is read as predicting a lack of help in extract A2) and situations, (losing the game in extract A7). These examples offer preliminary support for the ecolgical and personality models. The consistency between traditional expectations and these extracts suggest that there is nothing inherent in this type of data that undermines these models. However, these examples are limited to very small pieces of discourse. If we examine larger pieces of discourse from these same accounts, we can find a degree of variability in definitions and uses of non-verbal behaviour that can not be explained by references to an unambiguous communicative code.

Variability

This section will illustrate the variability in the ways non-verbal behaviour is described and defined in these accounts. Several types of variability can be found in the data; (1) variability within accounts given for one label compared to accounts given for the alternate label, (2) variability between pairs' accounts given for the same label, (3) variability between a single pair's account and (4) variability within an individual's account. This section will concentrate on demonstrating the last two types of variability since these present the most fundamental problems to the personality and ecological models.

Although the third and fourth type of variabilities are the most serious, any variability in meanings assigned to non-verbal behaviour causes problems for either the ecological model or the personality model. Ecological researchers treat people as "receivers" of information located in their environment. Therefore they would expect consistent explanations to be given by "receivers" operating in the same environment. If the environment doesn't change, the information available from it shouldn't change. The decoding tests based on the personality model treat people's skill at understanding non-verbal behaviour as a personality trait (or traits). Certain non-verbal behaviours carry particular trans-situational meanings that we either decode appropriately or we don't. If decoding skills are stable personality traits and meanings for non-verbal behaviour are determined by social and environmental processes broader than

a single social interaction, then meanings within a single account should not fluctuate.

These models might explain some variability. The ecological model would explain any variation in the use of non-verbal information as due to either a change in the environment or in the individual's motivations. The personality model might treat any variation in interpretations of non-verbal behaviours as part of the process of interpreting the "correct" meaning for a particular context. These possible explanations derived from these models can be better evaluated after we closely examine the type of variability evident in these extracts.

Photograph 1.

These two examples are taken from the accounts given for the street scene. We can begin analyzing the first extract by tracing references to the bystanders' facial expressions.

B1: Tape 46, Photo 1. "Mugging"

84. 63: How do these people feel?
85. 64: You can't tell.

86. 63: Well, they look quite, quite shocked.
The ones on the side.
Ah, maybe they don't, they just, they just,

87. 64: I don't, they're just looking.
88. 63: maybe they're just looking, yeah.

89. 63: They're just nosy, and inquisitive.
90. 64: yeah. yeah.

The account begins with S63 asking "How do these people feel?" (line 84). S64 says that "you can't tell" (line 85). S63 describes the bystanders as looking "quite shocked" (line 86). In the next turn, S63 and S64 simultaneously suggest that the bystanders are "just looking" (lines 87 and 88). In line 89, S63 describes the bystanders as "just nosy and inquisitive".

In this extract, S63 describes the bystanders as looking "quite shocked", (line 86) perhaps "just looking", (line 87) and finally as "nosy and inquisitive" (line 89). S63's second assessment of the bystanders as nosy and inquisitive in line 89 earns immediate agreement from S64 (line 90) whereas S64 does not respond to S63's first assessment (line 86) until line 87 when she says that the bystanders are "just looking". This suggests that S64 treats "just looking" and being "nosy and inquisitive" as different assessments.

In the next extract, we can again trace all the references to the bystander's expressions.

B2: Tape 36, Photo 1. "Accident"

13. 43: they're all just passers,
people are all just passers-by.

14. 44: Peering at him,
15. 43: yeah,

16. 44: I mean not really being concerned
about what's happening to him.

---

19. 43: ( ) How do people feel? Just nosy, people, [mumble]

---

24. 44: um, Me it ( ) Do you think anybody's going to,
get an ambulance or anything,
I mean they don't look as if they're very sort of,

25. 43: No, I don't think,
26. 44: interested.

27. 43: anybody's very bothered.

In line 14, S44 describes the bystanders as "peering" at the figure. In line 19, S43 describes the bystanders as being "nosy". In lines 25 to 27, the pair describes the bystanders as looking as if they're not interested (S44) or bothered (S43). In line 16, S44 describes the bystanders as "not really being concerned" but in line 19, S43 describes the same crowd as "just, nosy people". Descriptions of the bystanders' expressions vary within the individual accounts as well. In this example, S44 describes the bystanders as "peering" (line 14) at the figure but not being very concerned (line 16) or interested (line 26). S43 describes the bystanders as being "nosy" (line 19) and as not being "very bothered" (line 27) by the event.

Photograph 2.

The next two examples are taken from accounts given for the computer scene. In the first example, the variability becomes evident if we trace the pair's description of the seated figure's facial expression.

B3: Tape 37, Photo 2. "Professor Harris"

2. 46: Well, three people, ah, in a sort of office.
A girl, a young girl, concentrating,
sitting at a computer,
A sort of teacher,
young guy leaning over her
with one hand on the back of her chair,
and one hand on the desk,
and another lady, sort of older lady standing,

---

15. 45: Yeah,

and the girl looks as if
she having a bit of difficulty with that.

16. 46: yeah.
17. 45: She's about, twenty-two? twenty-three?

18. 46: yeah, she's really perched forward on her chair, squinting.

---

38. 45: But I reckon he knows the computer better than she does.

39. 46: Unless she's just really concentrating on um, the print-out.

40. 45: yeah.

In line 2, S46 describes the girl as "concentrating". In line 15, S45 describes the girl as "having a bit of difficulty". Later, she suggests that the man standing behind the girl knows the computer better (line 38). However, in line 39, S46 states that the girl could be "just really concentrating".

One can speculate that S46's description of the girl concentrating in line 39, implies that S45's statement in line 38 isn't necessarily true. If the girl is just really concentrating, then there is no reason to suspect the man behind knows the computer better. But if the girl looks like she's having difficulty, S45's statement seems much more plausible. By disagreeing, S46 implies a distinction between a facial expression of concentration and an expression that shows she's having difficulty.

In the next example, we can trace the different ways the male figure is characterized.

B4: Tape 50, Photo 2. "Middle English Research"

6. 71: There two people watching her,

and one's sort of leaning over her shoulder, a,
it looks as though they're kind of telling her
what to do.

7. 72: what to do, yeah.
He's a man who's telling her what to do.

8. 72: And there's an older woman watching,

9. 71: The older woman could, possibly, be a,

10. 72: Instructor as well.

11. 71: In, instructor, whereas the,
young man could be learning, too,

12. 71: and just seeing, what the girl's doing. Um,
13. 72: yes. what doing.
---
16. 72: And the other [older],
the woman looks a bit worried too.
So maybe the man's is teaching them.

In lines 6 and 7, both subjects describe the man as telling the girl typing "what to do". However, in lines 11 to 13, an alternative role is proposed, the man could be "learning" (S71, line 11) and "just seeing" (S71, line 12) what the girl's doing (simultaneous talk in lines 12 and 13). In line 16, S72 uses her identification of the older woman's face as "being worried" as evidence to support the version of the man as teaching. This example alternates between describing the man's behaviour as telling the girl what to do (lines 6 and 7) or as seeing and learning (lines 11, 12 and 13). In line 16, the older woman's facial expression is used to support the first version of the man's behaviour as teaching.

Photograph 3.

The next two extracts are taken from accounts given for the pub scene. In the first example, we can trace the descriptions of the old man's facial expression.

B5: Tape 46, Photo 3. "Burlesque"

22. 63: [giggling]
And the old man's got a funny look on his face,

23. 64: The old lady look's a bit annoyed by it,

24. 63: a bit put out yeah.

25. 63: ah
26. 64: and the girl on the floor,

27. 64: who ah, look at the expression on her face.
She's resting her arm on the old man's knee,
it must be why he's got the funny look on his face.

28. 63: That's right.
[laughing] Looks as if he's happy anyway.

29. 64: Yes he does. He looks very happy.

30. 63: But the if you look in the background
there's quite a lot of big smiles
on people as well actually,
yeah,

31. 64: Maybe it's not quite so risque,
whatever they're watching.

32. 63: yeah.

In line 22, S63 describes the old man as having "a funny look on his face". In line 27, S64 offers the girl's elbow on his knee as a probable cause of his "funny look". After agreement, S63 describes the old man as "looking happy anyway" (line 28). This description is upgraded to "very happy" by S64 in line 29. In line 30, S63 comments on other smiles in the

audience, perhaps to suggest that it is reasonable to describe the old man as happy. But in line 31, S64 uses the smiles as an indication that the show might not be as risque as they previously implied (lines 27 and 28).

In this account, the pair distinguishes between facial expressions of looking "funny" and looking "happy". The extract also implies separate causes for each of these expressions. The old man has a funny look because the young girl is resting her arm on his knee (line 27). His look of happiness is related to the surrounding smiles and the show they are all watching (lines 30 to 31). However, these two facial expressions are not treated as possible contradictory nor competing descriptions.

In the next extract, we can again trace the descriptions of the old man's facial expression. One should keep in mind that this next example was titled "The Audition" when the slide was presented, while the previous example was titled "Burlesque".

B6: Tape 41, Photo 3. "The Audition"

21. 54: They look more interested than the girl does.

22. 53: The the chap, the old man looks really quite happy,

23. 54: He looks quite happy, yeah.

24. 53: Yeah, he's very sweet.

130.54: No, maybe not.

131.53: And her parents really look so, ah,
the father's really, he looks ever so proud.

132.54: He looks, unhuh,
133.53: He's got a little hat in his knee.

134. 54: He looks real happy.

135.53: He looks very very proud and happy
with the whole thing.

In line 21, S54 describes the old couple as looking more interested than the girl. S53 then describes the old man as "really quite happy" (line 22). In line 131, S53 describes the "father" as looking "ever so proud". S53 names a family relationship between the young girl and the old man and implies that this is the source of his pride. In line 134, S54 repeats her description of the old man as "real happy". S53 upgrades both her and her partner's assessments by describing the old man as looking very very proud and happy (line 135).

If we compare this description of the "father" as "proud and happy" with the previous example's description of the "old man" as "happy" and having "a funny look", we can also see how different the descriptions of the same facial expressions can be in accounts given for the same slide presented with a different title. Again, this account distinguishes between two different facial expressions for the old man. Moreover, labelling a facial expression as proud and as happy is not treated as a problem in this account.

Photograph 4.

The final two examples are taken from accounts given for the sports scene. The first example illustrates all the ways one woman can look at a given instant in time.

B7: Tape 37, Photo 4. "Robert Thorne"

13. 45: She looks close to him because she's,
the way she's looking at him,

14. 45: she's kind of looking reassuringly but questioningly.
You know sort of asking him, well,
"What do you think went wrong?" or something.

15. 46: yeah.
16. 45: She's she's doing the talking, at the moment.

17. 46: And I think she's a bit, ah, unsure, of him,
a bit, she looks a bit worried,
definitely concerned.

---

37. 46: She looks really nice, I think.

38. 45: yeah, she looks calm,
she's not fritty or um, anything,

39. 46: (no.)

40. 45: She looks as if she's wearing a jumper,
41. 46: yeah, she's a,

42. 45: and her hair's done nicely, short dark hair.

43. 46: being reassuring.
Although she does, ( ) she does look tired,
I mean I think it's taking a lot out of her,

---

59. 45: I should think he's going to lose the game.
She doesn't look too optimistic about it really,
neither does he.

We can begin by tracing all the descriptions of Sue Perry's facial expressions (the figure on the right). In lines 13 and 14, S45 says that Sue looks close to Robert because of the way she is looking at him, "questioningly but reassuringly". In line 17, S46 describes Sue as "unsure", "a bit worried" and "definitely concerned" and in line 37 she describes Sue as looking "really nice". In line 38, S45 describes Sue as looking "calm" but "not fritty" and in line 43, she describes Sue as looking tired, and as reassuring for a second time. In line 59, S45 describes Sue as not looking "too optimistic". In this example, the same facial expression is described as reassuring

but questioning, calm, not fritty, not looking too optimistic, (S45) unsure, a bit worried, concerned, nice, and tired (S46).

The next example illustrates a similar variability in descriptions of Sue's expression when she is labelled as conferring with Rhonda Thorne.

B8: Tape 41, Photo 4. "Rhonda Thorne"

20: 54: She looks as though
she's trying to encourage her and trying to,

21. 54: Well, I think it does anyway,
22. 53: They don't,

23. 54: cause the other one's looking down.

---

34. 53: um, ( ) I'd say the girl on the left, is maybe,
I don't know if she's encouraging her,
but she's not happy with the way things are going,
the one on the LEFT, because,
I mean it's not sort of an encouraging look really,
it's almost a sort of, you know,
"O::h, dear me." kind of look.

35. 54: I don't I disagree with that, I think she's trying to,
to get her to cheer up.

36. 53: But look at her mouth, she's got her mouth,
her mouth pursed.

37. 54: Yeah, I still think it's an encouraging look,
but, can you hear me?
Um, but anyway,

38. 53: yeah, the one on on the right, definitely,

39. 54: is not happy.

---

50. 53: It's very difficult to say, but,

51. 54: I think the one on the left
definitely looks the stronger character,
at the moment.

52. 53: yeah, the one on the right probably a bit,
slightly temperamental.

In line 20, S54 describes Sue as trying to encourage Rhonda. She supports her assessment by referring to Rhonda looking down (line 23). However in line 34, S53 suggests that Sue isn't happy with the game, therefore the look is an "Oh dear me" look. S53 supports her assessment and disagrees with S54's earlier assessment by referring to Sue's "pursed" mouth, line 36. S54 disagrees with S53 in lines 35 and 37. She describes Sue's intention to "cheer up" Rhonda; evidence for an encouraging look. The topic then shifts to Rhonda's expression. S54 says that she isn't happy (line 39). S54 returns to describing Sue in line 51 as "the stronger character". In line 52, S53 describes Rhonda as "slightly temperamental". The descriptions of facial expressions are replaced in lines 51 and 52 by personality assessments that can encompass both versions of Sue's facial expression.

Conclusions

The detailed analysis of the examples reproduced in this section illustrate variability within a pair's account of non-verbal behaviour for the same photograph and title and the variability within an individual's account. The examples presented in this section and the next three sections will also demonstrate the variability evident between different pair's accounts.

It is important to realize that any of the variability in meanings illustrated by these accounts is not "intrinsically incompatible" (Gilbert and Mulkay, 1984, p.12). It would probably be possible to resolve even the most diverse set of descriptions. Therefore, one might want to claim that variability between and within accounts is not a legitimate phenomenon. The reply to this criticism has been clearly illustrated by Gilbert and Mulkay (1984) in their work on scientists' discourse. Their analysis shows that variability is evident in accounts that are separated by time and context. This finding suggests that variability in accounts is not simply an extraneous by-product of the process of producing coherent accounts. Furthermore, if variability is acknowledged, it is treated by the participants as an interpretive problem that must be resolved through different interpretive procedures. Variability between and within accounts causes greater problems for the analyst of social action who might be looking, for example, for consistent uses of particular meanings for specific non-verbal behaviours. To resolve variability, one must make a great many interpretive assumptions about what is "really" meant and what is in error. Unfortunately, these interpretive assumptions will not be predictive constraints but post hoc explanations.

The variability in these examples suggest that a model linking single meanings to single non-verbal behaviours does not reflect how non-verbal behaviours are used in discourse. The examples show how easily people can label the same facial

expression as nosy and shocked (extract B1) and yet distinguish between a facial expression of concentration and having difficulty with a computer (extract B3). These extracts illustrate how some accounts make very subtle distinctions between different facial expressions and other accounts incorporate several very different facial expressions into one description. We can now examine the possible explanations the personality or the ecological models might try to offer for this variability.

The ecological model suggests that inconsistency can be caused by a change in the environment or in a change in a "receiver's" motivation. Yet to explain the variability evident within a single pair's account as caused by a change in the environment seems dubious; the slide, the title and the surrounding room stayed the same throughout a pair's account. To explain the variability as caused by a motivational change seems equally problematic. For a motivational change, we must first identify the original motivation, a tricky proposition, and then we must demonstrate how a change in motivation accompanies each change in meaning. For instance, how and where can one identify changes in motivation that accompany the description of Sue Perry as looking "questioningly but reassuringly" (line 14, extract B7)? How and where can one identify changes in motivation to accompany S44's description of the bystanders as both "peering" and not being very concerned (lines 14 and 16, extract B2)?

The personality model might attribute variability as a product of the process used to determine the "correct interpretation" for a non-verbal behaviour in the specific situation. This idea proposes a "building block" metaphor. One might begin by identifying a person's facial expression as a happy smile. Then one would identify the body posture as slightly sad. Finally, one might identify the situation as the person listening to a love song on the radio. Therefore, one would return to the original "happy smile" and re-term it a sentimental smile. This idea suggests that these accounts should show refinements and selections of initial meanings as the explanation is "built". However, if we look at the detail of these accounts, this "building block" metaphor becomes less plausible. It would predict S53 (line 135, extract B6) to describe the old man as looking very happy or very proud, not very proud and very happy. Furthermore, it is difficult to argue that a lack of concern or lack of interest is a refinement of the initial descriptions of the bystanders in extract B2 as peering at the figure and being nosy. Similar problems occur when a building block metaphor is used to resolve the variability that occurs in the other extracts.

The building block metaphor also creates problems for the recognition/interpretation process; we "recognize" meanings either correctly or incorrectly and then use these meanings to build our explanations. If this is true, one would expect some type of sequential process to be evident in these descriptions. The difficulties with this idea can be illustrated by returning

to the first example of this section. In extract B1, the bystanders are identified as looking shocked, just looking, and looking nosy and inquisitive. Are each of these separate descriptions "recognitions"? If so, no building block pattern exists in this account. Can "just looking" be "refined" to "nosy and inquisitive"? If so, what characterizes "just looking" as a recognition and "looking nosy" as an interpretation? This issue will be further developed in the fourth analytic section which examines whether such terms as "recognition" and "interpretation" can be applied to these accounts.

Context

Researchers using a ecological or personality approach treat context as a separable variable. These researchers have defined context as the addition of environmental cues, the entire body, (as opposed to just a face) several people, (as opposed to a single person) or the history of a particular relationship or situation. Contextual influences might complicate or clarify meanings for non-verbal behaviour. Or context might provide an alternative source of information about what is happening. In this study, half the subjects saw one set of titles for the photographs and half the subjects saw another. The only difference between the two conditions was the particular title presented with the photograph. If context can be treated as a separable variable, then we should find that that these different situational labels influenced the accounts in systematic predictable ways. Table 1 (appendix D) presents all the extracts from accounts given for photograph 3 that refer to the young girl's elbow on the old man's knee. As Table 1 illustrates, the photograph's particular title does not necessarily cause a non-verbal behaviour to be read in one specific way. However, if we examine these accounts closely, we can see how particular labels are used as a resource for a pair's explanations and descriptions.

Photograph 1.

The first two examples are taken from accounts given for the street scene. We can look at how the label is used in the account to help produce the explanation.

C1: Tape 34, Photo 1. "Accident"

3. 40: Oh dear. umm, so, it's a there's

4. 39: there's a panic going on the street.

5. 40: It's all in black and white, isn't it?

6. 39: Yes.

7. 40: And at the top it says that there's been an accident.

---

16. 40: It looks as though
that bus might of hit him or something,

17. 39: Do you think?

18. 40: doesn't it?
Is that how else he'd been hit?
Cause it definitely looks like as though,
something's run into him.

This extract demonstrates how the title of the slide might be used in constructing an explanation. S40 introduces the title, "The Accident" in line 7. In lines 16 to 18, S40 suggests that the figure on the ground has been hit by a bus "cause it definitely looks like as though, something's run into him" (line 18). One might speculate that S40 has translated the label "The Accident" into an expectation of an automobile or bus accident.

The next example is taken from an account when the same slide was presented as "The Mugging".

C2: Tape 46, Photo 1. "Mugging"

11. 64: Why's that guy holding a hammer? [giggle]

12. 63: A camara?
13. 64: A hammer.

14. 63: hammer, oh yeah. Well, maybe he's just hit him.

15. 63: Anyway the
16. 64: Well, he's just watching. [giggles]
Everybody's watching.

---

29. 64: Oh, it's called "The Mugging".

30. 63: So it is a fight.
31. 64: Well, maybe but,

32. 63: But nobody's doing anything about it,
except for the guy's who's hitting him.

33. 64: But, but,
it wouldn't be him who did the mugging would it?
He doesn't look like a mugger,
or maybe he is, (I don't know.)

34. 63: Well, he's carrying a hammer.

In this extract, we can trace the references to the hammer held by the figure standing in the centre. The hammer is first mentioned by S64 in line 11. S63 suggests that the hammer indicates that the man has "just hit" the fallen figure, line 14. In lines 15 and 16, the topic shifts to a description of everyone "watching". In line 29, S64 introduces the title of the slide, "The Mugging". S63 uses the title as confirming evidence for a fight between the two central figures (lines 30 and 32). In line 33, S64 suggests that the man holding the hammer is not the mugger because "he doesn't look like a mugger" but then suggests that "he could be." In line 34, S63 uses the hammer to imply a

resolution of the figure's identification as the mugger.

These two examples show how different the accounts for the same photograph presented with different labels can be. The first example describes the scene as a possible bus accident. The second example describes the scene as a fight between the man holding the hammer and the figure on the ground. However the presentation of a different label for the same photograph can't sufficiently explain the differences between these accounts. We need to examine how the different labels are used and incorporated into the accounts to understand how this variability is produced. The label "The Accident" does not necessarily mean a bus accident and the label "The Mugging" does not necessarily mean the hammer was the weapon used. These explanations used both the verbal labels and and the participant's "common sense" or assumptions or expectations for what a scene of a mugging or an accident might entail to produce their explanations. The differences between accounts given for the same photograph presented with alternate titles will be evident in the sets of examples for the other three photographs.

Photograph 2.

The next two examples are taken from accounts given for the computer scene. Both extracts suggest how the situational label can become used in the pair's explanation for what is happening.

C3: Tape 40, Photo 2. "Professor Harris"

2. 52: Right, what's happening in this slide?

3. 51: She's Professor Harris and her students.

4. 52: Yeah.
And we assume that
Professor Harris is the older woman.
And what's actually happening is that,
she's stood by some sort of computer.

---

7. 52: She's by a micro-computer
and there's a boy and a girl with her,
and the girl is actually trying
to operate the computer.

8. 51: And they're both students in their twenties.

---

16. 51: The boy's looking very closely actually.

17. 52: yeah,
the boy is actually looking virtually
over the shoulder of the girl,

18. 51: Um,

19. 52: which indicates that he's trying to learn
something at the same time,
whereas the professor,
is standing a little bit further back,

The slide's title, "Professor Harris and her Students", is introduced by S51 in response to S52's question (line 3). In line 4, S52 identifies Professor Harris as the older woman and in line 7, she identifies a boy and a girl as "trying to operate" the computer. In line 8, S51 identifies the boy and girl as students. In lines 16 and 17, S51 and S52 describe how closely the boy is watching the screen ("actually looking virtually over her shoulder", line 17). In line 19, S52 says that his close attention indicates that he is trying to learn something, (a student's role) while the professor is standing further back (a professor's role).

In this extract, S45 "recognizes" the boy's lean over the girl's shoulder as close attention. However, in the first analytic section, the same lean as identified as an indication of intimacy (extract A3) and in the second analytic section, the same lean is "read" as indicating that the "man's" (the pair's term) status as a teacher (extract B4). Traditional models might explain this variation between these three descriptions as three different "decodings" of the male figure's body posture, and one of the three is correct. Yet which one?

The variability might better be explained as a product of each accounts over-all interpretation of the figure's roles and relationships. In extract C2, the "boy" is a student who is leaning over the girl so he can get a closer look at what "Professor Harris's students" are learning. In extract B3, the "man" is a possible teacher who is leaning over the girl so he can tell her what to do (lines 7 and 16).

The next example uses the slides's title, "Middle English Research" to assign the three figures different roles and motivations.

C4: Tape 46, Photo 2. "Middle English Research"

19. 63: [giggling] yes.
What are the relationships between the people shown?

20. 64: Probably they're students together or something, or,

21. 63: umhum, well Middle English research group,
22. 64: no. Um,

23. 64: yes, research group.
Working together, colleagues.

In this extract, the title, "Middle English Research Group" is introduced by S63 in line 21. S64 repeats the title and then describes the three as colleagues "working together" (line 23). In line 20, S64 suggests the three might be students but the assessment is dropped and the three are described as research colleagues (line 23). In this example, the title precedes S64's identification of the three figures as colleagues working together. In the previous example, the alternate title precedes S52's identification of the "boy" as trying to learn.

In each example, the title is easily incorporated into the account and used to help formulate the explanation. In the first example, the assignment of teacher and student roles seems a plausible extension of the photograph's title. In the second example, the description of the three figures as colleagues working together seems a plausible extension of the same photograph titled "Middle English Research Group". Yet it is important to realize that this "common sense" use of a photograph's title is a product of the interpretation. There are many other plausible ways the titles could be used; the seated figure could be the professor, the research group could include a professor and two secretaries and so on.

Photograph 3.

The next two examples are taken from accounts of the pub scene. The first example illustrates how non-verbal cues can be used to support several different interpretations rather than used to identify a definitive version of the situation.

C5: Tape 35, Photo 3. "The Audition"

14. 41: She looks as if she's already auditioned,
or is it about to audition.

15. 42: Yeah,
she doesn't look too happy about this this situation.

16. 41: She looks, obviously she looks anxious.

---

51. 42: Oh, she doesn't look very happy at all, does she?

52. 41: She looks extremely anxious.

53. 41: Either she,
thinks the person she's watching
is going to get the part,

54. 42: Yeah, she's really nervous,

55. 41: or she's made a mess of hers,
or she's about to go on,

56. 42: yeah,
57. 41: she's very nervous. ( ) um,

In this example, S41 describes two possible alternative situations, before or after the centre figure's audition, line 14. In line 15, S42 describes her as not "looking too happy". In line 16, S41 says she "obviously" looks anxious. S42 upgrades her first remark in line 51 by describing the girl as not looking "very happy at all". S41 upgrades her first remark to "extremely anxious", line 52. In lines 53 to 55, S41 elaborates on the two

alternatives stated in line 14; the current performer might get the part, or the girl's made a mess of her audition, (she's already auditioned) or she's about to go on (she's about to audition). In line 54, S42 describes the girl as looking nervous. Finally, in line 57, S41 repeats the assessment of the dancer as "very nervous".

The facial expressions attributed to the dancer; unhappy, anxious, nervous, are equally plausible for someone about to audition or someone who has finished her audition. In this example, facial expressions are not used to create a definitive version of the situation but can flexibly support either interpretation of when the girl's audition occurred. Attributions of anxiety and nervousness would be an appropriate assessment of a person either before or after her audition.

The next example is also taken from an account describing the pub scene. This example illustrates how the surrounding individuals in a scene can be used to help define one person's facial expression.

C6: Tape 31, Photo 3. "Burlesque"

104.33: and the man at the table, he looks

105.32: because they're ah, looking quite intently,

106.32: they're looking intently,

107.33: He doesn't look as if he's enjoying it.

108.32: But he's concentrating,
he's concentrating. But they're,

109.33: I don't know that man at the table,
maybe just because,
I don't know he's on his own.
I mean he's got kind of a worried expression,

isn't he?

110.32: yeah,
111.33: if you didn't know what the situation was,

112.32: Yeah, if it wasn't for the other people smiling,
you'd think maybe he was,
but I think in the context
of so many other people smiling,

113.33: hm, and the older one,

114.32: and just looking in anticipation,
it it probably is that he just concentrating.

In this example, we can trace the descriptions given to the man at the table. In lines 105 and 106, S32 characterizes the audience as looking intently. In line 107, S33 suggests that man seated alone at the table does not look as if he's enjoying the show. In line 108, S32 responds by describing the man as "concentrating". S33 says that the man is sitting alone and has a "kind of a worried expression", (line 109) however she finishes her turn by saying "if you didn't know what the situation was" (line 111). S32 treats this last statement as a reason for not labelling the man's expression as worried. In line 112, she refers to the other people smiling and the older man looking in anticipation as evidence for her assessment that the man at the table is "just concentrating" (line 114). S32 first characterizes the audience as "looking intently", (line 105) later she refers to "so many other people smiling" (line 112). By shifting her descriptions of the audience, S33 is able to consistently support her assessment that the man's facial expression is concentration.

In this example, a slightly different sense of context is being illustrated than illustrated by the previous examples. Those examples have suggested how a title might be used as an interpretive resource, this example suggests how the surrounding figures can be used as a interpretive resource.

Photograph 4.

The last two examples are taken from accounts given for the sports scene. The first example illustrates how non-verbal cues might be manipulated to fit a current explanation. This example shows what may seem intuitively obvious; the meaning assigned to a non-verbal behaviour will be related to the ongoing explanation in some way. It is in this sense that an explanation can be considered a contextual influence.

C7: Tape 35, Photo 4. "Rhonda Thorne"

59. 42: She's got awful bags under her eyes.

60. 41: She's worrying about the other player. [giggles]

61. 42: yeah, she does looks as though
62. 41: in her thirties.

63. 42: she hasn't had sleep for the last three days.

---

87. 41: Uh,
I don't think there's any chance
that the other one has been playing.
She doesn't look hot,
she doesn't look tired or any anything.
That, that, I'm sure she's got,

88. 42: She looks tired.
89. 41: thick clothes on.

90. 41: She's either got um,

91. 42: You can't really tell what she's wearing,

92. 42: she could be wearing some kind of, you know, sweater,

93. 41: yeah. ( )

94. 42: You're probably right,
she doesn't look like she's been playing.

We can trace the descriptions given for Sue Perry, the figure on the right. S42 begins the extract by describing Sue as having "awful bags under her eyes," (line 59) and looking as though she hasn't slept (line 63). In line 87, S41 says that you can tell that Sue hasn't been playing because she doesn't look "hot" or "tired". In line 88, S42 states that Sue does look tired. In line 91, the topic is shifted to the meaning of the clothes Sue is wearing, and the inconsistency between whether Sue looks tired or not is left unresolved. In line 94, S42 agrees with S41's assessment that Sue hasn't been playing.

In this example, the non-verbal cue and associated meaning (Sue looking or not looking tired) does not produce a definitive version of the situation. In the first part of the extract, the bags under the eyes and Sue looking tired are explained as worry about the other player (line 60) and not sleeping for three days (line 63). In the second part of the extract, Sue not looking tired is used to help support S41's assessment that she hasn't been playing. Any explicit reference to the meaning of the bags under Sue's eyes as evidence for an explanation is dropped after line 59. When S42 agrees with S41's assessment that Sue has not been playing a sport, it is unclear as to why she now agrees. (One might speculate that S42 finds the clothes cue more convincing.)

Throughout the example S41 treats Sue as Rhonda's possible coach. She is worried about Rhonda, but she is not actually playing the game. This consistency is supported by alternately agreeing that Sue looks tired, because she is worried and hasn't slept, or describing Sue as not looking tired, because she hasn't played.

The next extract shows how a label can be used to determine the gender of the individuals shown in the slide.

C8: Tape 49, Photo 4. "Robert Thorne"

13. 70: So who's conferring with who?

14. 69: I think, actually I think that's a woman,
the one on the left,

15. 70: Really?

16. 69: and the one on the right is a man.
But you can't really tell.

17. 69: Cause I mean, he's got his head,
sweatband on, in sort of masculine way.

18. 70: This is true. And also um,

19. 70: Sue Perry confers, I mean she looks as she's speaking,
20. 69: And he's got a necklace, a man's kind of necklace.

21. 70: Um, and he's, so it could be her conferring.
22. 69: yeah,

To help identify the male figure, this account draws upon three types of evidence; (1) "the wearing the headband in a masculine way", (S69, line 17) (2) the title, "Sue Perry confers" as indicating that the one speaking is Sue, (S70, line 19, this also implies that the speaker can be obviously identified) and (3) the "man's type of necklace" (S69, line 20). Although there is confusion over who is who, the existence of one male and one

female is never questioned. The label suggests that there is a male and a female figure and this account finds evidence to support this interpretation.

Conclusions

The previous examples show how important context can be in identifying, defining and using non-verbal cues in these accounts. The photograph's title, the figures surrounding the person being described or how the meaning assigned will relate to an explanation may be used when participants assign meanings to non-verbal behaviours. The close examination of these extracts suggests that context is used as an interpretive resource rather than as "building blocks" of meaning.

One could argue that context should be considered one type of the building blocks of meaning for non-verbal behaviour hypothesized by Rosenthal's model. Such an idea closely resembles ecological ideas of meanings being located in the surrounding environment rather than in people's heads. One might then conclude that recogniziability of expressions and behaviours should be replaced or combined with recogniziability of contexts. However, this argument requires context to be treated as simply and straightforwardly perceivable. This type of recogniziability of context assumes different contexts carry different meanings. The logical next step is to attempt to isolate different contexts and correlate them with the appropriate meaning. If photograph 3 is labelled "Burlesque", then the elbow on the knee will be read

as flirting. If photograph 3 is labelled "The Audition", then the elbow on the knee will be an indication of the father-daughter relationship.

Replacing or combining expressions and behaviours with context does not remove the inadequacies of the traditional models. "Recognition" of contexts fails in the same ways that "recognition" of expression/behaviour fails: it underestimates the interpretive work such "recognition" entails. This formulation treats people as contextually dependent not as contextually sensitive. Therefore, this reasoning cannot accommodate to the participant's interpretive work or variability that is evident in these transcripts. The preceding analysis has illustrated how subtle and complex participant's use of "context" in assigning meanings to non-verbal behaviour can be.

These extracts do illustrate that meanings for non-verbal behaviour are sensitive to context. Student and teacher roles are more likely to be introduced if the photograph is labelled "Professor Harris and her Students" than if the same photograph is labelled "Middle English Research Group". Descriptions of flirting are more likely to be included if the photograph is labelled "Burlesque" than if it is labelled "The Audition". But as Table 1 demonstrates, neither explanation is the exclusive property of the particular label.

First Step, Second Step

The ecological and personality models both stress a sequential processing of meaning for non-verbal behaviours. One first "perceives" or "recognizes" and then one interprets. Such an idea assumes that initial perceptions or recognitions of meaning can be distinguished from the rest of an explanation or description. As this analytic section will illustrate, a sequential model is too simplistic an explanation for how we assign meanings to non-verbal behaviours.

The personality model of meaning suggests that we first "recognize" non-verbal cues and their meanings and then we combine and modiry or "interpret" these "recognized" meanings in the context of other non-verbal cues. Therefore, one would expect certain non-verbal behaviours to be "recognized" (a smile or a touch identified) and then these "recognized" meanings to contribute to the "interpretation" (if they're smiling, then he told a joke). According to the personality model, we would not expect an "interpretation" to precede a "recognition"; If he told a joke, then they're smiling.

The ecological model of meaning suggests that we identify particular patterns or displays of non-verbal behaviour (she's drawing her arm backwards) as indications of other's behavioural goals (she's going to hit me). According to this model, we would not expect indications of behavioural goals to precede identifications of non-verbal displays; She's going to hit me, therefore she's drawing her arm back.

Attempting to classify this type of data "interpretations", "recognitions", "perceptions" or "behavi goals" is a tricky process. However, it seems eq- problematic to classify the P.O.N.S. scenes as "recognit and the S.I.T. scenes as "interpretations". We can Rosenthal's categories and the ethological classifications rough way to show how "interpretations" do not always f "recognitions" and how "non-verbal behaviours" do not a precede identification of "behavioural goals". This section further illustrate the difficulties in applying the persona and the ecological models of non-verbal behaviour to accounts.

Photograph 1.

The first two examples are taken from accounts given for street scene. In the first example, we can trace descriptions given for the man holding the hammer.

D1: Tape 41, Photo 1. "Accident"

20. 53: He looks like he's either stepping over
the person lying on the ground,

21. 53: or, he's going to try and help him.
22. 54: He's going to help.

---

56. 53: I reckon,
I reckon the guy with the hat
and the hammer is going to help him.

57. 54: Do you?
58. 53: I don't

59. 54: I don't think he looks as if he's going to help.
[giggles]

60. 53: Really? You think he's going to walk straight past.

61. 54: No no. ( )

62. 53: Well, somebody's got to help him, they can't leave,
Well, he's in the way.
He's lying on the pavement,
so unless somebody helps him.

63. 54: People are having to step over him.

---

67. 54: I think actually someone will help him.

68. 54: I think the guy with the hammer probably will, help.
69. 53: yeah,

70. 53: Well, it looks like he's going to step over,
so he can get a better view from the other side.

The example begins with S53 outlining two alternative behavioural descriptions for the man with the hammer; he is either stepping over the figure or he is trying to help, lines 20 and 21. (The second alternative is offered simultaneously by S54, line 22.) In line 56, S53 predicts that the man will help the fallen figure. S54 questions this assessment and says he doesn't look "as if he's going to help" (line 59). In line 60, S53 questions S54's implication that the man will "walk straight past". She continues in line 62 by suggesting that "somebody's got to help", the bystanders can't leave someone lying on the pavement. In the following turn, (line 63) S54 says that people are having to step over the fallen figure. She then says that she thinks someone, probably the man with the hammer will help (lines 67 and 68). In line 70, S53 resolves the alternative behavioural descriptions given in line 20 by saying that the man is stepping over the figure to get a better view from the other side (line 70) as opposed to just walking away (line 60).

If we borrow Rosenthal's terms for a moment, we can describe line 70 as "recognizing" the true meaning of the man's raised knee, "it looks like he's going to step over the figure". We can use the same classification scheme to categorize line 62 as an "interpretation". One expects, when an accident occurs, for someone to help. However, in this example it appears that the "interpretation" has preceded the "recognition".

This extract can also be read in ecological terms. Line 70 can be seen as a description of non-verbal behaviour. He is stepping over the body to reach the other side. However one could suggest that the expectation of help expressed in line 62, influenced the "perception" of this particular non-verbal "display".

The next example is taken from an account of the street scene presented as "The Mugging".

D2: Tape 47, Photo 1. "Mugging"

66. 65: I suppose they're quite shocked.
67. 66: They're keeping away aren't they?

68. 65: Yeah, they're all keeping to the side.

69. 65: hmm. Well they'd be scared as well.

70. 66: Unhuh.
Yes,
that the man with the shirt and tie looks quite scared,
as though he's hurrying away.

---

78. 66: [humms] What's the situation? Scared.

79. 65: Scared and shocked, I suppose, I mean I would be.

80. 66: Me too. ( )

We can begin by tracing the descriptions of the bystanders' expressions. In line 66, S65 supposes that the bystanders are quite shocked. In line 69, she suggests that they would be scared as well. In line 78, S66 labels the bystanders as scared and in line 79, S65 labels the bystanders as scared and shocked. In line 70, S66 identifies the man with the shirt and tie as looking "quite scared, as though he's hurrying away".

The ecological model would expect observations of an individual hurrying away to be used to predict that the individual was scared. However, in this example, the behavioural description, "hurrying away", follows the behavioural motivation, "looking scared". Similarly the behavioural description of the bystanders keeping to the side follows rather than precedes the evaluations of the bystanders' feelings (lines 66 and 68, lines 78 and 79). If we are trying to apply a sequential process to interpreting non-verbal behaviours, we would not expect the second step, possible motivations, to precede the first step, behavioural evidence.

It appears that the account's descriptions of the bystanders' expressions may not based on "recognition" of observed facial expressions, but based on empathy, how the pair would feel in such a situation (lines 79 and 80). In this account, it seems impossible to distinguish between "recognized" facial expressions and "common sense" ideas of how you ought to look if you see a mugging.

Photograph 2.

The next two examples are taken from accounts of the computer scene. In the first example, the identification for various roles precedes rather than follows descriptions of non-verbal cues.

D3: Tape 31, Photo 2. "Middle English Research"

25. 32: Yes, so the relationships looks like
the man leaning over the shoulder of the girl
who's typing could be the teacher,

26. 32: and she the pupil and,
27. 33: um,

28. 32: the other girl she's looking on,
may be learning from what the other girl's doing,

29. 33: She yeah.
She probably another pupil and,
just the other one,

30. 32: She looks quite old for a pupil.

31. 33: I don't, but the way she's looking,
her face or something,

32. 32: yeah, it looks like

33. 33: It looks as if she doesn't have
that much of a clue or something.

---

44. 33: What relationships, oh we've done that already. ( )
Well how can you tell?
You can tell because he's leaning over her chair,
can't you?

45. 32: He's looking very intently, at it,
and she's looking, it's almost anticipation on her,
the face of the girl who's typing,
this, sort of "is this right?" sort of thing.

---

70. 32: It looks like they, they're all quite intent on it, um,
the girl who's typing is,
and the the man behind her is very intent
on what she's writing. The other,

71. 33: the other girl looks a bit confused maybe,

doesn't she?

72. 32: She's just on looking,
yeah, she's no, desperately concentrating.

In lines 25 to 29, S32 and S33 define the roles for each of the three figures. The man leaning over the chair could be the teacher, (line 25) and the girl and the older woman could be the students (lines 26 to 29). In line 30, S33 suggests that the woman looks old for a student. S32 responds by describing the older woman as looking as if she doesn't have "much of a clue or something" (lines 31 to 33). in line 45, S32 describes the man as looking intently, an appropriate expression for a teacher, and the girl typing as looking "almost in anticipation", an "is this right?" look, an appropriate expression for a student. In line 71, S53 suggests that the other girl is "a bit confused". In line 72, S32 describes the woman as "desperately concentrating". Both are plausible expressions for students.

It would be a mistake to claim that the initial identification of teacher and student roles "caused" the facial expressions of each figure to be read in the ways that they were. However, it seems equally mistaken to assume that the reading of these facial expressions were completely un-connected to the earlier descriptions. If these descriptions are the "core" meanings of the figure's facial expressions, then they should be evident in the majority of other accounts given for the same scene presented with either label. If these are not "core" meanings of the expressions, and "core" meanings do exist in this scene, then we would expect references to these "core"

expressions to be made in the account. But these descriptions of "desperate concentration" or "confusion" are not used by the majority of the accounts and these are the only references to the older woman's facial expression given by this particular account. A hypothesis of a two step process relying on perception or recognition of "core" meanings for various facial expressions or gestures is a difficult model to support as an explanation of this extract.

The next example illustrates how difficult it is to distinguish "interpretations" from "recognitions" or strict non-verbal meanings from "behavioural goals".

D4: Tape 42, Photo 2. "Professor Harris"

26. 56: They all look quite happy, don't they?

27. 55: yes, they look quite comfortable in their situation. ( ) Because they they know each other reasonably well, not, their first time in meeting.

28. 56: Umhum. The girl looks quite, happy, at her task, doesn't seem to be having any difficulty with it. Cause she's not receiving any help, at the moment, they're just watching her. ( ) And it seems quite friendly.

In line 26, S56 describes the threesome as all looking "quite happy". In line 27, S55 describes the three as looking "quite comfortable" because they know each other "reasonably well". In line 28, S56 describes the girl as looking quite happy; she's not having any difficulty because she's not receiving any help.

We can categorize the girl's expression of happiness as an instance of a Rosenthal recognized meaning. (This, of course, means ignoring any possible influence descriptions of the three figures looking quite happy and comfortable might have had on identifying the girl as happy.) The friendly situation and the lack of difficulty could then be categorized as interpretations. We could also apply ecological categories to the same lines. The girl is not receiving any help therefore she's having no difficulty therefore she's happy. In this classification, her facial expression is interpreted from the context rather than recognized from a non-verbal cue. But if we apply ecological categories to line 27, we are presented with a difficulty. "They know each other reasonably well" can be classified as an example of "direct perception" of non-verbal meaning. But this "direct" perception follows one line describing the three as happy and another describing the three as comfortable. Knowing each other reasonably well could just as easily be classified as an "interpretation" following a "recognition" of comfortableness.

This extract illustrates the problems of identifying the first and second steps in a meaning process. How can we determine when "looking happy" qualifies as a spontaneous recognition of meaning (in Rosenthal's terms) and how can we determine when "looking happy" qualifies as an interpretation (in ecological terms)?

Photograph 3.

The next two examples are taken from extracts of the pub scene. The first example suggests that using a model of a communicative code to explain how non-verbal meaning is used is misleading.

D5: Tape 39, Photo 3. "Burlesque"

14. 50: yeah. They look as if they know each other.

15. 49: yeah, cause the young girl is leaning on the old man.

16. 50: yeah.
17. 49: Maybe it's her dad.

18. 49: She looks as if she's in the show though,
doesn't she?

19. 50: yeah, she does.
20. 49: Some sort of ballet.

21. 49: And maybe this is all the parents.

---

32. 50: How do these people feel?
33. 49: They all look as if they're on friendly terms,

34. 49: don't they?
35. 50: yeah.

36. 49: They're all sort of smiling at each other and,

37. 50: They look happy,

38. 49: See that old woman at the front
I think she must be the wee,
the girl's, mother,
cause she's sort of looking at her,
maybe in admiration?

39. 50: yeah.

40. 49: Sort of looking like a proud mother,

The first part of this extract describes the situation, lines 14 to 21. In lines 15 to 17, the young girl is described as the daughter of the old man. In line 17 to 19, she is described as participating in "some sort of ballet". In line 21, S49 describes the audience as "all the parents". The second part of the extract describes how everyone feels, lines 32 to 40. The audience looks as though "they're on friendly terms", they're all "sort of smiling at each other", (S49, lines 33 and 36) they look "happy" (S50, line 37). In line 38, S49 describes the old woman as the dancer's mother, looking at her "maybe in admiration" the way a "proud mother" would look at her daughter (line 40).

One could argue that this extract shows two possible examples of the pair using a traditional communicative code of meaning. The audience looks happy because they are all smiling, (lines 36 and 37). The old woman is the dancer's mother because she is looking at the girl with "admiration", the way proud mothers look (lines 38 and 40). A communicative code explanation of this account would deny the influence of the interpretive work displayed in lines 14 to 19. Identification of the old woman as the dancer's mother would be based solely on "recognizing" the woman's facial expression. The model would ignore the possible constraints on recognition introduced by earlier descriptions of the old man as the girl's father and the audience as parents.

The second example suggests the importance a prior explanation might have on subsequent definitions of non-verbal cues.

D6: Tape 40, Photo 3. "Audition"

66. 52: It could well be,
that the young girl in the the front of the picture,
is the daughter of that couple
and they've come to watch her having the audition,
the older couple, or the grand-daughter.
Because it looks as if the old lady's looking
at the young girl and
the young girl is leaning on the man's knee,
well she has her elbow on his knee.

67. 51: Hm::m.

68. 52: So I think that shows that
there is some sort of relationship between,

69. 51: the old woman looks sort of disapproving though. humph.
70. 52: that they're not just strangers.

71. 52: I don't think she looks disapproving,
72. 51: concerned?

73. 52: she's looking at the young girl, but I don't know.

74. 51: You think they are related in some way?

75. 52: I think the the old couple and the young girl are, yes.
Cause they're all sat so closely together,
and especially the way she's has elbow leaning
on the old man's knee,
and she's not looking at him or anything,
I mean she just, you know looks,
as if she's not really aware of it being there,
but she's still doing that.

In line 66, S52 describes the dancer as the daughter of the older couple. She uses eye gaze, the old woman looking at the girl, and body contact, the girl's elbow on the man's knee, as evidence for this relationship (line 68 to 70). When S51 suggests that the old woman looks "sort of disapproving", (line 70) S52 disagrees (line 71). In line 72, S51 offers an alternative description of the old woman's expression as being "concerned". However S52 leaves the old woman's facial

expression undefined (line 73). In line 75, S52 elaborates on the familial relationship by commenting on how close the three are sitting together and the girl's apparent unawareness of her elbow on the old man's knee. In this example, S52 rejects both labels of the old woman's facial expression. Perhaps because they don't seem to be consistent with her family group explanation. Rather than define the old woman's expression, S52 chooses instead to elaborate on the meaning of the elbow on the knee.

If we attempt to use the two-step models, we are presented with a difficulty. First, if and when does the meaning of the elbow on the knee become an "interpretation"? Does "recognized" meaning include the girl being described as unaware of the body contact? And how would these models cope with a meaning for a facial expression (disapproval) being introduced, a completely different meaning (concern) being introduced, and both being dropped? Furthermore, how would one explain the introduction of the lack of eye contact between the girl and the old man as carrying meaning so late in the account? According to the personality and ecological models, we would expect to find non-verbal cues and associated meanings to be identified, the situation to be identified and then an explanation produced. In this extract, the explanation of a family relationship precedes the identification of the old woman's facial expression and lack of eye contact between the old man and the young girl.

Photograph 4.

The next two examples are taken from accounts for the sports scene. In the first extract, we can trace the treatment of non-verbal cues in relation to two different roles.

D7: Tape 50, Photo 4. "Robert Thorne"

7. 71: she's either warning, him,
8. 72: explaining something.

9. 71: or explaining something. She could be his coach or, she could be the umpire or lineswoman or something, warning him about something.

---

12. 72: And he's thinking, deep in thought, he's also sweating, profusely. She's trying to make a point, isn't she? She's

13. 71: Um, ( ) she obviously wants to get something through to him, but I don't know whether it's coaching or warning. She's not dressed in sportsclothes.

---

20. 71: Um, but, you can't tell whether she is. Well it kind of looks as if it's warning. but it could be just sort of serious coaching she's giving.

21. 72: Yes, but they look as if they know each other. Yeah, because he's not looking at her eyes, but just,

22. 71: Well he wouldn't look at her eyes if she's just giving him a row.

23. 72: That's true. I don't know,
24. 71: But, I don't know.

25. 71: But it's quite sort of confidential,

26. 72: and he looks, yes.
27. 71: sort of.

28. 72: Um, she's not wanting to make sort of a big thing of it,

29. 71: she's just sort of being, kind of firm but quiet.

In lines 7 and 8, two alternative behaviour descriptions are identified; Sue could be "warning" Robert or "explaining something". In line 9, the two alternative roles are identified; Sue could be a coach, (explaining) or an umpire or lineswoman (warning). In lines 12 and 13, we have descriptions that might fit with either a warning or an explanation; "she's trying to make a point", (S72) "she wants to get something across to him" (S71). In line 20, S71 resolves these two alternative descriptions by suggesting it could look like a warning but it could just be "serious coaching". In line 21, S70 suggest that they might know each other because he's not looking at her eyes. (The "yeah" preceding the second clause could indicate that this lack of eye contact was an afterthought, not a prior piece of evidence supporting her assessment.) In line 22, S71 uses a "common sense" explanation, you don't look at someone giving you a row, to suggest that the lack of eye contact does not necessarily mean they know each other well. In line 24, S72 describes the situation as "quite confidential", and that "she's not wanting to make a big thing of it", (line 27) she's being "firm but quiet" (line 29).

This example illustrates some important characteristics of how we assign meaning to non-verbal behaviours that are not addressed by the two-step perceptual and cognitive models of meaning. Descriptions of Sue as explaining or warning are intuitively plausible behaviours of a coach or an umpire. One might imagine other verbal descriptions (flirting or nagging) that might not be so easily plausible in this situation. To

clarify this point, we can examine how the lack of eye contact is used in this account as compared to the last example, extract D6. In extract D6, the lack of eye contact is constructed as an indication of a family relationship. But in this account it is used as possible evidence of a "row". The meaning for the non-verbal behaviour is oriented to the current explanation and context. An adequate model of the process of assigning meaning to non-verbal behaviours can not ignore how different constructions of meaning for a non-verbal cue can accomplish different goals in different explanations.

The last example illustrates how non-verbal cues can be used to identify the "appropriate" explanation.

D8: Tape 43, Photo 4. "Rhonda Thorne"

8. 57: um, ( )
It could be her mother, instead of a coach, but,

9. 58: Yes, could be, but,
10. 57: don't know.

11. 58: Nah, I think it's probably a coach.

12. 57: Why?

13. 58: ( ) because she looks as though she's,
sort of, criticizing rather then um,
you know, off offering sympathy or,

14. 57: Oh yes, she doesn't look sympathetic, does she?

This example is very similar to the last in that two alternative behavioural descriptions of Sue Perry are proposed. But non-verbal cues are used in this case to help create a definitive version of the situation. In line 8, S57 suggests that Sue could be the other girl's mother rather than her coach.

In line 12, S58 identifies Sue as a coach because she looks as if she's criticizing, appropriate for a coach, but not sympathizing, appropriate for a mother. One could argue that S58 is simply "recognizing" Sue's true expression, but it is interesting that S58 chooses to make this particular distinction. Simple "recognition" or "perception" ignores the subtle importance that the identification of Sue's facial expression as criticism is for S58's argument that Sue is a coach and not a mother.

Conclusions

It is important to realize the difficulty in attempting to apply the sequential categories inferred from the ecological and personality models to these accounts. Since no previous personality or ecological research has examined free interpretations, there has been no need for exact definitions of verbal "recognition", "interpretation", "behavioural perception" or "behavioural goals". Attempting to apply these models to more naturalistic data exposes the methodological haziness of these terms. I certainly can not claim to have provided any definitive version of these terms for any of this section's extracts. Instead, I have only tried to match these terms to the most plausible counterparts available in these accounts. We can easily return to any of these examples and offer alternative formulations of the first and second steps derived from these models for processing meaning.

For example, in extract D1, we could classify the expectation of help (line 62, extract D1) as a "recognition" of meaning and the later description of the figure looking like he is about to step over the fallen figure as an "interpretation" (line 70, extract D1). This classification would provide an example of a "recognition" followed by an "interpretation". It does seem a bit strange, however, to term the sentence "someone's got to help him, they can't leave him" as a "recognition" and the sentence "looks like he's going to step over" as an "interpretation" rather than the other way around.

If we return to the second extract, we can illustrate possible alternative formulations appropriate for the ecological process. One possibility would be to argue that although the description of the man hurrying away follows the description of the man "looking scared", (line 70 Extract D2) the behaviour of "hurrying away" was perceived before evaluating the man as frightened, but this perception was not articulated until afterwards. Although possible, this analysis will prevent the use of any example supporting the sequential model; if people don't or can't display their perceptions before their interpretations, they might also not display their interpretations before their perceptions. It would be difficult to claim that the examples that don't support the ecological model, don't represent reality and the examples that do support the model, do represent reality.

A second alternative is to claim that the entire line can be read as one "perception". Hurrying away and being scared are part of the the same perception. This presents two difficulties. First, this classification means that hurrying away can not be perceived as anger, disgust or apathy and that fear is only linked with hurrying away, not with a lack of movement or screaming. Second, this formulation still requires line 70 to be treated as a perception un-influenced by the preceding 69 turns of talk describing the bystanders and the situation.

This analytic section illustrates two important weaknesses in these models of meaning. The first difficulty is actually distinguishing two separate plausible sequential steps in the process of assigning meaning. The task becomes even more convoluted when one has the choice of two different models. The second difficulty is the sequential processing. If plausible first and second steps for these models are identified, then often the order is found to be the reverse of the model's prediction. If the process of determining non-verbal meaning is a straightforward two step model, the data presented above is rather awkward to explain.

DISCUSSION AND SUGGESTIONS

Summary of Analysis

These extracts reveal uses and definitions of non-verbal behaviour in discourse that were not anticipated by either the personality nor the ecological approach. Consequently, these examples suggest that the underlying assumption of a communicative code used in the accuracy based decoding tests and the levels of attention tasks is misleading.

The first analytic section shows that there are some examples that appear consistent with the expectations of the ecological and personality models. Furthermore, these extracts use and define non-verbal cues in much the same way the accuracy based decoding tasks and the popular research of Morris and Fast define non-verbal cues. Notions of body language and recognition of meaning seem plausible and adequate models for the use and definitions of non-verbal meanings in these examples. However, when larger pieces of discourse are examined, the communication code model becomes less helpful.

The second analytic section illustrates the variability evident between different accounts given for the same photograph presented with different labels. This section also demonstrates the variability within the same pair's descriptions of the slide and the variability within the same individual's account for a particular slide. Individuals may choose to identify several different and perhaps contradictory facial expressions as belonging to the same individual but on other occasions,

individuals may choose to distinguish very subtle differences between facial expressions. In extract B3, S46 distinguishes between a look of concentration and having difficulty. But in an account for a different slide, (extract B7) S46 describes the same person as unsure, a bit worried, concerned, nice and tired.

The personality approach treats decoding ability as a fixed testable skill we possess for understanding pre-existing non-verbal meanings. Therefore it would predict high consistency in definitions of non-verbal cues. The ecological approach also would predict high consistency in definitions of non-verbal cues. If the presented visual stimuli and the decoder's behavioural situation don't change, there should be no variability in a pair's or an individual's account. Both perspectives share the assumption that meanings for non-verbal behaviour pre-exist and individuals perceive or recognize these meanings with varying degrees of skill. The flexibility in definitions for non-verbal cues illustrated by these extracts cause problems for these perspectives. Furthermore, great variability in non-verbal meanings does not mean disagreement between partners. S45 and S46 describe the same face as being unsure, reassuring, worried, calm and tired without any disagreements (extract B7).

The third analytic section shows how influential a simple manipulation of context can be on participants' use of non-verbal behaviour in their explanations. Individuals may give the same expression or gesture very different meanings. These meanings may be expressed in ways analogous to a communicative code but these definitions and uses of non-verbal cues occur within the

context of background expectations influenced by a scene's title or personal experiences. In extract D5, the old woman is described as looking in admiration at her daughter. In extract C6, the same old woman is described as looking annoyed. The examples in this section illustrate how a particular verbal label can be used as a resource for an explanation. But a specific verbal label does not "cause" non-verbal cues to be read a certain way. These extracts display the amount of interpretive work used to produce coherent explanations for a particular slide.

The personality perspective suggests that context might confuse or clarify non-verbal meaning but it does not predict that context might alter these meanings. The ecological approach emphasizes the importance of visual context. But it proposes a model of selective responsiveness to the surrounding environment that includes no role for situational expectations or active interpretations of non-verbal cues. Neither approach would predict that participants might discard some non-verbal cues and introduce others (see S52's explanation of the father-daughter relationship in extract D6). These extracts use both active interpretations and situational expectations to produce explanations.

The fourth analytic section demonstrates the weakness of a sequential model of meaning. These examples illustrate the impossibility of clearly classifying non-verbal meanings into "recognitions" and "interpretations" or distinguishing "perceptions" of meaning from the rest of an explanation or

description. The personality approach predicts that individuals first "recognize" non-verbal cues and then "interpret" the meaning for a particular situation. The ecological approach also predicts that individuals first "perceive" non-verbal displays and then use these displays and their appropriate meanings to understand another individual's "goals or intentions". Even if we could impose these categories on accounts, there are many instances where the second step seems to precede the first step. Moreover, in extract D2, S65 and S66 describe the bystanders as being "scared and shocked" because that would be how they would feel in a similar situation. Neither the personality nor the ecological approach include any type of role for personal empathy in defining and using non-verbal cues.

This study illustrates the weakness of the personality and ecological approaches when these models are used to to try and explain how non-verbal behaviour is used and defined in more naturalistic data than is common in non-verbal behaviour research. It is important to stress that the weaknesses of the ecological and personality models have been revealed by analysing the fine detail of accounts. It is this type of detail that can be lost when pre-selected categories, forced choices and experimentation are used. The ecological and personality models may be adequate models for the simplified data produced by such methods, but not for the complex reality of ordinary talk.

The critical weakness of these perspectives is their assumption of a shared code of trans-situational meanings for non-verbal behaviour. Researchers have assumed the existence of particular meanings linked to non-verbal behaviours without questioning their adoption of this common sense notion. If, as this study indicates, non-verbal meanings can vary to such a degree in a fairly limited experimental task situation, it seems likely that uses of non-verbal behaviour vary even more widely in ordinary discourse. Faced with this kind of variability, researchers can try to modify the communicative code assumption so that it can accommodate the subtlties of context. But how great can a range of meanings become before a code is no longer a code? The more fruitful approach is to re-examine the notion of body language. The communicative code can be viewed, not as a model for non-verbal meaning, but perhaps as a interpretive procedure used in explanations and descriptions.

Limitations

Before the analysis can be pursued any further, it is important to outline the limitations of this particular set of transcripts. This study was created to reflect a traditional decoding task paradigm. Therefore the discourse was generated in response to a very specific task. All the descriptions and explanations were guided by a set of pre-determined questions and produced for a third individual, an absent stranger, to hear. Furthermore, the pair described and explained the behaviour of strangers. As Shotter (1981) argues, it is rare for us to be cast in the role of a third person observer. We are usually a first person performer or a second person recipient (Shotter, 1981, p. 167). In these positions, we are involved in the interaction and required to maintain it. However, as third person observers, we may attend to very different things in very different ways than we would as participants. We may, as third person observers, notice unintended and "revealing" behaviours usually ignored by second persons. Shotter introduces two important points. The first is the relative rarity for "dis-interested" observers to explain a stranger's behaviour. Second, Shotter's argument indicates the potential importance of the conversational interaction. Although the participants might be third person observers of the behaviour depicted in each slide, they are first person "actors" and second person "recipients" for each other. This observation suggests that any analysis of these accounts must address the importance of the conversational interaction between partners in how the slides are

described and explained.

It is possible that the uses and definitions of non-verbal meaning in these transcripts reflect the peculiarities of the experimental situation. For instance, the experimental situation forced the use of non-verbal behaviour as evidence whereas, in ordinary situations, one would not be so limited. There might also be certain ways to use non-verbal behaviour in explanations or descriptions about strangers produced for another stranger that are unique to this type of task. Although the examples reproduced here highlight the problems with traditional approaches to non-verbal meaning, these transcripts might be handicapped in relation to ordinary discourse. However, the analysis of this type of data can still produce possible insights into how we assign meanings to non-verbal behaviours. We can examine these accounts as a preliminary step in understanding how we describe and explain stranger's behaviour in more ordinary interactions. By clearly acknowledging the limitations of this study, we can use these accounts efficiently without exaggerating their worth.

Body Language as an Interpretive Procedure

Throughout this thesis, it is argued that the critical problem with traditional models of non-verbal behaviour is their adoption of the idea of a pre-determined communicative code of meaning. This code suggests that particular non-verbal behaviours can be linked with specific meanings. As we have seen, this idea cannot adequately explain the variability nor the complexity of how non-verbal meanings are used in these transcripts. However, a close examination of these transcripts does suggest that the idea of a "body language" could be construed as a plausible interpretive procedure used in explanations for other's people's behaviour. In this section, I would like to flesh out the notion that "body language" can be used as an interpretive procedure.

If "body language" is described as an interpretive procedure, establishing the existence and validity of a communicative code is no longer relevant. Instead, the goal is to examine how "body language" is a product of the form and content of an account. The following analysis will suggest that accounts and disagreements are often formed in ways that resemble a communicative code of meaning and because they are formed in this sort of way, they are considered acceptable forms of evidence for an explanation.

The earlier analytic sections have demonstrated that single meanings can not be consistently linked to the same non-verbal cue. The amount of variability in the meanings assigned to

non-verbal behaviours indicates that it is unlikely that participants share a pre-determined cultural code of meaning. However, as this section will demonstrate, the meanings given to non-verbal behaviour are often structured as if they are part of a "body language" or code. Partners treat the adoption of a "body language" structure as a plausible method of explanation in these accounts. This adoption of a "body language" structure; one meaning connected to a single behaviour, can be termed an interpretive procedure. By using a "body language" structure, one can present a particular meaning for a non-verbal behaviour as legitimate. While the content of a "body language" might vary within and between accounts, the essential structure appears to remain intact; one "correct" meaning is associated with one particular behaviour.

To understand how "body language" can be used as an interpretive procedure requires us to engage in still further analysis of these transcripts. The following sections will attempt to clarify how "body language" or a notion of a pre-existing code of meaning is structured as a plausible accounting device.

The Structure of a Common Sense "Body Language"

If we return to the extracts given in the first analytic section as examples of traditional theoretical expectations, we can start to outline the structure of a common sense "body language". Three of the examples from the first analytic section

are reproduced below. In each of these examples, a particular action; direction of gaze, the "way" someone is looking, the placement of a hand, is linked to a particular meaning.

E1: Tape 49, Photo 1. "Mugging"

76. 69: I said they all aren't very concerned
and you said that everyone's ignoring it,
but they're not ignoring it,
they're all looking in that direction,
but no one really running to, helping him.

E2: Tape 39, Photo 4. "Robert Thorne"

22. 50: I think maybe they're boyfriend and girlfriend,

23. 49: yeah,
24. 50: from the way she's looking at him.

E3: Tape 46, Photo 2, "Middle English Research"

35. 63: well I think it's kind of,
isn't a it kind of slight intimacy between them.
I mean, you don't
you wouldn't put your hand
around the back of a stranger's chair.
I mean he may not really like her but,
you know, it shows he knows her.

In extract E1, S69 links everyone "looking in that direction" with everyone "not ignoring it". In extract E2, S50 identifies the two figures as boyfriend and girlfriend from "the way she's looking at him". Finally in extract E3, S63 suggests that the two figures in the slide know each other because one has put his hand on the back of the other's chair. In each of these examples, a certain cue is taken to have a particular significance and this is used to help define the nature of the situation.

This analysis seems compatible with the traditional idea that individuals share actual pre-existing codes of meaning for non-verbal behaviour which they use for "understanding" behaviour and situations. However, the comparison will become less useful when we focus on instances where this presumed sharing of the same code of meaning becomes a potential problem.

The next two examples will suggest how a body language definition can be constructed as evidence in response to questions about earlier assessments. These two examples were also introduced earlier. We can re-examine these extracts to see how a "body language" can be drawn upon to support rather than create an explanation. Again, a particular action; the way someone is looking, the way someone is holding on to a tree, is linked to a particular meaning.

E4: Tape 43, Photo 4. "Rhonda Thorne"

8. 57: um, ( ) It could be her mother,
instead of a coach, but,

9. 58: Yes, could be, but,
10. 57: don't know.

11. 58: Nah, I think it's probably a coach.

12. 57: Why?

13. 58: ( ) because she looks as though she's,
sort of, criticizing rather then um,
you know, off offering sympathy or,

14. 57: Oh yes, she doesn't look sympathetic, does she?

E5: Tape 37, Photo 1. "Mugging"

47. 45: Do you think he's just stepping over the body?
Trying to get away from it?

48. 46: Oh yeah, definitely.

50. 45: Oh.

51. 46: Don't you?

52. 45: Yeah, it does look like it.
Cause he's like holding on to the tree
and trying to get around him.

In extract E4, Sue Perry, the figure on the right, is identified as a coach because she is "criticizing" rather than "offering sympathy". This extract uses a similar connection between a certain facial expression, criticism as opposed to sympathy, and a particular role, a coach as opposed to a mother, as the connections outlined in the first set of examples. Furthermore, S57's agreement with S58's assessment of Sue's facial expression indicates that S58's presentation of the facial expression as evidence for the role is perfectly acceptable. In extract E5, S45 supports S46's assessment that the workman is trying to "get away from the body" (an assessment which S46 displays as being obvious with her comments in lines 48 and 51) by describing how he's "holding on to the tree and trying to get around" the body.

What distinguishes these last two examples from the three earlier examples is the way the "body language" explanation is introduced. In extract E4, the description of Sue Perry's facial expression is produced as a response to S57's direct question ("Why?", line 12). In extract E5, the description of how the man is holding the tree is produced after S46's direct question ("Don't you?", line 51). The question and response are produced after Sue Perry is identified as a coach in the first example and after the man is identified as trying to get away from the body

in the second example.

Since the presentation of the "evidence" follows rather than precedes the assessment in these two examples, it indicates that "body language" was not important for the initial description but was introduced afterwards as a plausible account for the earlier assessment. In each example, a meaning and an action (the look of criticism, holding on to the tree so he can get around the body) are used as evidence for the explanation (the figure is a coach not a mother, the man is trying to get away from the body). In the second extract, S45 produces the description of "holding on to the tree" (line 52) as evidence for the man "stepping over the body" even though she phrased the original assessment as a question (line 47). It is possible that S46's agreement that the man is trying to get away from the body has nothing to do with S45's description of him holding on to the tree in an effort to get around the body. Likewise, S58's original identification of Sue Perry as a coach and not as a mother may not necessarily have been caused by her identification of the facial expression as criticism and not sympathy. These examples demonstrate how "body language" might be used as an accounting resource. "Body language" may not lead to a particular explanation but it can be an appropriate way to account for that explanation.

One might argue that these examples don't indicate the use of an accounting resource but instead, indicate the reconstruction of the original reasoning process. Of course, there is no way to permanently refute this criticism since access to the original reasoning process would be impossible to gain.

However, this proposal that these accounts show a "reconstruction" of original reasoning is difficult to sustain. If the first example represents a reconstruction of the original reasoning process, how would one to explain why a lengthy pause (indicated by the two empty parentheses) follows S57's question in line 12 and precedes S58's description of the expression in line 13? If the expression of criticism was part of the initial reasoning process for identifying Sue as a coach, it seems odd that it takes S58 so long to "reconstruct" it. Similar difficulties occur in analysing the second example when one tries to explain line 52 as a reconstruction of either S45's or S46's thinking. If it is the former, it seems odd that S45 first asks about the man's action (line 47) and then responds to S46's affirmative answer in line 50 with "oh" (rather than, for example, "oh, yes" or "I agree"). S46 treats S45's "oh" as a potential disagreement because she asks her directly in line 51 whether S45 agrees with her answer. If line 52 is a reconstruction of S45's reasoning process, why does she first hesitate before agreeing that the man is indeed trying to get away from the body?

One might alternatively argue that line 52 is a reconstruction of S46's reasoning process; it is the reason why she replies "yeah, definitely" (line 47) to S45's question. However, it is a bit awkward to argue that S45 can verbally reconstruct S46's reasoning process when the only content she has heard from S46 has been "oh yeah, definitely" and "don't you" (lines 48 and 51).

Body Language and Disagreements

Further evidence that people treat a "body language" structure as a plausible interpretive procedure can be found by examining instances of disagreement between partners. To identify possible disagreements, I will be drawing upon previous conversation analytic research on preferred and dispreferred assessments (Pomerantz, 1984). The advantages of a comparative approach between observations of ordinary conversations and more extended and possibly more complex pieces of discourse has been effectively demonstrated by studies of the structure of courtroom examinations of witnesses (Drew and Aktinson, 1979) and the structure of agreements and disagreements in scientists' letters (Mulkay, forthcoming). Their research shows how observations of ordinary conversations can be useful in shedding light on the organization of more specific types of discourse.

In her work, Pomerantz defines assessments (the grass is green) as as an important aspect of ordinary conversations; "with an assessment, a speaker claims knowledge of that which he or she is assessing" (Pomerantz, 1984, p. 57). When a dispreferred second assessment (or non-agreement) is produced, any implicit knowledge assumed to be shared by the speaker of the first assessment must be made explicit so that the conversation can continue. This suggests that disagreements are treated as conversational problems that must be repaired. Therefore, certain characteristic structures will be used in conversations to avoid or reduce disagreements. Pomerantz has documented the

recurring features of agreements and disagreements as well as the statistical infrequency of disagreements. For instance, agreements are performed with a minimal gap between the prior assessment and the initiation of the agreement turn while components of a disagreement are frequently delayed by a preface or performed over a series of turns. If disagreeements are stated, they may be formed as partial agreements/partial disagreements while agreements are accomplished with clear agreement components. Pomerantz concludes from her analysis that agreement sequences are structured so as to maximize the occurrence of stated agreements and disagreements are structured so as to minimize the occurrence of stated disagreements.

In this particular set of transcripts, subjects are trying to create a consistent explanation/description of what each slide depicts. One would expect talk in such a situation to encourage joint interpretations and to be adapted to anticipate possible disagreements. Clear disagreements should be relatively few. Pomerantz's observations suggest that when partners disagree, they will be forced to elaborate and explicate their individual explanations. Therefore, examination of instances of disagreement might reveal more explicit uses of a body language interpretive procedure.

The preceding examples suggest that a body language interpretation is structured as a link between one specific meaning and one specific behaviour. We can now examine how such a "body language" might be challenged or modified. This section will show that when partners disagree, they challenge the

explanations or use of "body language" in ways that still leave the fundamental notion of a communicative code intact.

The following examples will illustrate two ways in which a "body language" interpretation might not be considered appropriate evidence for what's happening. The first section will illustrate instances where the description of the particular behaviour is challenged. The second section will illustrate instances where the appropriateness of the particular meaning is challenged. In these ways, the link of one specific meaning to one cue remains a theoretically acceptable explanation but the specific use of either the meaning or the cue in an account may be modified or changed.

Modifications of Descriptions

The first set of examples illustrate some of the ways in which the description of a specific non-verbal behaviour associated with a particular meaning may be modified in light of certain situational expectations. The initial example is taken from an account of the street scene. In this example, the partners disagree over whether the woman at the bottom of the stairs is "walking up" or "turning around".

E6: Tape 35, Photo 1. "Accident"

76. 42: That's right,
they don't seem particularly concerned,
about any of it.

77. 41: Well, what about this woman, it looks like a woman,

78. 41: turning around at the bottom of the subway.

79. 42: this one at the bottom of the stair,

80. 41: She's coming up like she's turning around.
81. 42: She could be walking up.

82. 42: I think she's walking up.

83. 41: Cause she's half, ( )
she's not, really directed forward.

84. 42: Yeah but you don't know how the path goes, do you?

85. 41: I suppose so, yeah.

In this example, S41 tries to suggest that one woman might be in the process of turning around, possibly (?) showing concern. S42 disagrees with S41's assessment by arguing that she's "walking up" the stairs and that her odd posture might be due to a change in the direction of the path. She challenges S41's suggestion that the woman might be turning around by referring to the possible environmental constraints of the footpath.

The focus of the disagreement centres on whether the woman is "walking up" (line 81, 82) or "turning around" (line 80). By recategorizing the woman's benaviour as "walking up" rather than as "turning around", S42 can support her assessment without challenging the possible pairing of concern with the action of turning around, an observation implied by S41 (line 77 and 79). The form of the disagreement leaves the notion of a body language; one action, one meaning, intact.

It is important to distinguish this explanation from the traditional view that was illustrated in the first analytic section. First, the traditional view seeks to establish an underlying code of meaning. The content of the proposed link between "turning around" and "showing concern" would be considered a component of that code. Moreover, a traditional view would attempt to identify a consistent pattern of use for this particular meaning and action. However, if "body language" is formulated as an interpretive procedure rather than as an existing code, one doesn't need to hypothesize about underlying codes of meaning and the accuracy or inaccuracy of a particular formulation. It is the form, not the content of a body language interpretation that shows a systematic pattern. And it is this form that is left unchallenged by focusing the disagreement on the "correct" description of the woman's action.

We can now return to an example presented earlier to illustrate the structure of a "body language" interpretation. In a slightly expanded version, we can see how an interpretation is challenged by the second speaker's use of environmental constraints to recategorize a behavioural description.

E7: Tape 46, Photo 2. "Middle English Research"

36. 63: well I think it's kind of,
isn't a it kind of slight intimacy between them.
I mean, you don't
you wouldn't put your hand around
the back of a stranger's chair.
I mean he may not really like her but,
you know, it shows he knows her.

37. 64: well you would
if you were leaning over a computer terminal,
cause you can't see computer
unless you're sort of beside it.

S63 takes the hand on the back of the chair to show that the two figures know each other. S64, however, suggests that you in fact need to get quite close to a computer terminal to see the writing and that this is the proper explanation of the hand on the chair. The general link of two figures knowing each other if they are close together isn't challenged but the applicability of this "general" idea is modified by referring to the presence of a computer terminal that both figures are trying to see.

S64 chooses to challenge S63's interpretation by referring to the situational constraints presented by the presence of a terminal screen (line 37 can be identified as a potential dispreferred second by the initial "well", Levinson, 1983). In theory, a hand on the chair might mean a "slight intimacy" but in this specific situation, it might be an attempt to get a better view. Similarly, in theory, turning around to look at an accident might mean concern but in the specific situation it could be due to a change in the direction of the footpath.

The next example is a slightly different resolution of a disagreement that allows the particular meaning assigned to a facial expression to remain unchallenged.

E8: Tape 48, Photo 3. "Burlesque"

14. 67: Now that young man behind the young girl could be with the young girl?

15. 68: No, I don't think so.

16. 67: But he does look interested in what she's doing, so,

17. 68: No, they're all watching something, which is, we can't see.
but they're very interested. very animated, obviously enjoying themselves.

In line 16, S67 describes the young man as looking interested in what the girl is doing. In line 17, S68 "corrects" the young man's direction of interest. The whole audience is interested in what they are watching. The identification of the man as looking "interested" isn't questioned, instead, the object of his interest is questioned. S68 produces a disagreement that modifies S67's assessment in such a way that the link between facial expression and meaning is left intact. She did not choose for example, to relabel the facial expression as dis-interest or happiness. But instead, the disagreement centres around the "cause" of the man's interest.

In the final example, (also presented earlier) similar situational expectations are introduced to explain why in this specific situation the particular non-verbal cue doesn't carry the "expected" meaning.

E9: Tape 50, Photo 4. "Robert Thorne"

21. 72: Yes, but they look as if they know each other.
Yeah, because he's not looking at her eyes, but just,

22. 71: Well he wouldn't look at her eyes
if she's just giving him a row.

23. 72: That's true. I don't know,
24. 71: But, I don't know.

25. 71: But it's quite sort of confidential,

In this example, S71 suggests that the lack of eye contact might not mean they know each other because if someone gives you a row you don't look at them (line 22). The specific meaning for the lack of eye contact is questioned by referring to the particular situation, not by questioning the validity of the

general inference. In theory, not looking at someone can mean you know each other. But an argument is a special case which changes the theoretical meaning.

This set of extracts indicates how one part of a "body language" interpretation; the description of the behaviour, might be challenged or modified because of situational expectations. In extract E6, the direction of tne footpath is presented as an alternative cause for the woman's apparent turning around. In extract E7, a view of the computer screen is proposed as the cause for the apparent display of intimacy. In extract E8, the general interest of the audience is proposed as the reason for the man's apparent interest in the young girl. Finally, in extract E9, an argument is proposed as the reason for the appearance of the two figures knowing each other. In each of these examples, the initial "body language" explanation is challenged by proposing an alternative situational cause for the appearance of a cue that might "normally" be linked to a particular meaning.

S42 does not challenge the theoretical validity of linking "turning around" to "concern" but questions the validity of describing the action as "turning around" in this specific situation (extract E6). S68 does not challenge the meaning of the man's expression as interest but instead questions the object of his interest (extract E8). By disagreeing with the applicability of a "body language" in a specific case, the general structure of the interpretive device is left unchallenged. Once the particular action is described

"correctly", the appropriate meaning can then be applied. Therefore, as an interpretive procedure, "body language" can remain a plausible and legitimate method for forming an account.

Modifications of Meaning

This next set of extracts suggests a second way that participants can separate the theoretical existence of a "body language" from its practical use. This set of extracts reproduces disagreements between partners that centre on the meaning given for a non-verbal behaviour. The first example is taken from an account of the street scene. This extract shows how a "body language" interpretation might be construed as illegitimate because the meaning is overgeneralized to mean more that it "should".

E10: Tape 31, Photo 1. "Mugging"

119.33: Although that man who is walking away is just a,
what do you call that with a chain thing?
Either this sort of, what's that, chain,
you know the rail thing that he's coming towards,
he look a bit concerned doesn't he?
He's coming towards the picture.

120.32: what? what?

121.33: That man there, the man with the suit on,
the businessman.

122.32: He's just walking away isn't he?

123.33: I mean on his face at least you can see,

124.32: yeah,

125.33: I don't know,
some of the others just don't look terribly,

126.32: He's just looking back,

as if something has happened, that's all.

In this example, S33 describes the businessman as looking a "bit concerned", line 119. In line 122, S32 suggests that he is "just walking away". S33 first attempts to describe his facial expression and then the bystanders' facial expressions as evidence for her description of concern, but S32 continues to describe the man as "just looking back to see what's happened." S32 never directly questions the identification of the man's facial expression as concerned but she displays her potential disagreement in her descriptions of the man as just walking away and just looking back.

S32's description of the man as just looking can be viewed as a modification of S31's assessment that he is showing concern. By forming her disagreement in this way, S32 can challenge S31's assessment without directly questioning what the facial expression "actually" means. More importantly, this disagreement centres on the single meaning of the facial expression. There is no debate over whether the facial expression does not or could not mean anything or whether the facial expression could mean two things. Instead, the discussion centres on whether the "correct" meaning for the facial expression is concern or not.

The next example illustrates how a general description of the expression of the three figures becomes narrowed down to just one individual.

E11: Tape 35, Photo 2. "Professor Harris"

43. 41: Do you think she's, the lecturer is that interested?

I don't know.

44. 42: You can't really tell,

45. 42: they're definitely all look interested.
46. 41: tell.

47. 41: Yeah, but they could just all be looking at it, couldn't they?

48. 42: you can't really tell from her face.

49. 41: No. The two students definitely look interested,
50. 42: but,

51. 41 I would say.

52. 42: I think he looks more interested than her.
53. 41: her.

The first lines describe all three figures as looking interested. However, in line 47, S41 suggests that they could "just" be looking at the computer screen. Then, in line 49, the two students are described as "definitely interested". (The older woman's face is labelled as being too difficult to read, line 44 and 48.) Finally in line 52, the male student is labelled as looking the most interested. By the end of the example, the initial expression of interest has been narrowed down to one figure looking the most interested.

S42 challenges S41's initial assessment of general interest in two ways. First, it is too difficult to assign any specific meaning to the professor's face. Second, S42 distinguishes levels of interest (line 52). One figure is more interested than the other. The general expression of interest suggested initially becomes refined to more specific descriptions. In this example, a general interest is reduced to the man looking more

interested. In extract E10, concern is reduced to just looking.

The next extract was presented earlier as an example of how the surrounding people's expressions are used to help define one person's expression as concentration rather than worry. We can now re-examine the extract to see how the initial description of the facial expression as worry appears to be scaled down to concentration.

E12: Tape 31, Photo 3. "Burlesque"

109.33: I don't know that man at the table,
maybe just because,
I don't know he's on his own.
I mean he's got kind of a worried expression,
isn't he?

110.32: yeah,
111.33: if you didn't know what the situation was,

112.32: Yeah, if it wasn't for the other people smiling,
you'd think maybe he was,
but I think in the context of
so many other people smiling,

113.33: hm, and the older one,

114.32: and just looking in anticipation,
it it probably is that he just concentrating.

In line 109, S32 describes the man as looking "kind of worried". But in lines 110 to 113, S32 uses the "context" of other people smiling and the old man looking in "anticipation" to re-interpret the expression as "just concentrating" (line 114). This shift to "just" concentrating implies a shift in levels rather than a radical re-reading of the man's facial expression. One could treat the assignment of concentration to the man's facial expression as a completely new alternative to the "kind of worried" expression initially described by S32. However, this

interpretation that the same facial expression can be labelled as worry by one observer and as concentration by the other, threatens the structure of shared knowledge of a "body language" that matches one behaviour to one meaning. This potential conflict is avoided in two ways. First, S32's turn ends with "if you didn't know what the situation was" (line 111). With this, she can allow the possibility of a more appropriate alternative formulation. Second, S31's description is phrased as "just" concentration. One could speculate that this phrasing implies a modification of worry as opposed to a completely new alternative.

The last two examples show similar "corrections" of the meaning for a particular facial expression.

E13: Tape 48, Photo 4. "Robert Thorne"

4. 67: Um, she looks as though either giving him stern advice.
or telling him off or something.
Doesn't look too pleased.
He looks as if he's just been playing something,
cause he got [giggle] a towel,
headband around his head. [giggle]

5. 68: Um, no I don't think she's displeased,
I think she's just talking to him.

6. 67: coaching him, Conferring?
7. 68: conferring. yeah.

E14: Tape 37, Photo 4. "Robert Thorne"

59. 45: I should think he's going to lose the game.
She doesn't look too optimistic about it really,
neither does he.

60. 46: Well I think he's just concentrating.
It's difficult to say because often, I think,
even if they are winning
they sort of sit down and look down,
just to keep themself in the swing of things
and not let any detract their attention.

In the first example, displeasure is re-termed as "just talking" and then "conferring". In the second example, a facial expression indicating lack of optimism and the pending loss of the game is re-termed as concentration, (by referring to the requirements of being a tennis player in a tough game.)

This set of extracts demonstrates how the second part of a "body language" interpretation; the appropriateness of the meaning, can be challenged or modified. In extract E10, a look of concern becomes re-termed just looking. In extract E11, the general look of interest is refined to a single individual and so on. In each of these examples, a single meaning remains attached to a single cue. For instance, in extract E13, a look of displeasure is not re-termed displeasure and conferring, although both could conceivably be part of the same expression.

Conclusions

The structure of body language as an interpretive procedure can be imagined as a match between a single behaviour and a single meaning in a "code". The first set of examples indicated evidence for this type of structure and the examination of potential disagreements between partners reveals further evidence for such a structure. One half of these extracts illustrated how disagreements between partners may focus on questioning the "real" description of the non-verbal behaviour, one part of the equation. The other half of the examples illustrated how disagreements can focus on questioning the "real" meaning, the second part of the equation. If body language is not treated as

a plausible interpretive resource, then there would be no reason to form challenges to your partner's explanations/descriptions in ways that acknowledge the legitimacy of body language as an interpretive procedure.

To summarize, the requirements necessary for a "body language" interpretive procedure can be briefly outlined:

(a) The assignment of a meaning to a non-verbal behaviour can be divided into two parts; (1) an adequate description of the behaviour and (2) an appropriate meaning.

(b) There can not be more than one correct meaning for any adequately described benaviour. (This assumption depends on the previous assumption since it is only possible to define a correct meaning if the description can be divided into a separate action and a separate meaning.)

Of course, this is an analyst's description of what a body language as an interpretive procedure might require. Therefore, this formulation is not meant to imply tnat participants explicitly follow or articulate the interpretive procedure in the exact way described above. However, if a "body language" interpretation follows such a procedure, it then follows that any modification or challenges to an interpretation of the meaning for a non-verbal behaviour will either question the adequacy of the description or tne appropriateness of the meaning. Furthermore, this procedure allows participants to resolve several interpretive issues (see Mulkay and Gilbert (1984) for a similar discussion of the role of consensus in scientists'

discourse). First, there is no restriction on the content of a body language interpretation. The form of the procedure can allow a great degree of variability in the assignment of meaning to any non-verbal behaviour. Second, this procedure legitimates an explanation that pairs one meaning with one non-verbal behaviour. Therefore, it can be used as a plausible accounting device.

Where Do We Go From Here?

At this point, I'd like suggest two directions for future research. First, it will be important to address the limitations of this research study. The primary purpose of this study was to highlight the problems with traditional approaches to non-verbal meaning. However, the use of a quasi-experimental paradigm handicaps the applicability of this analysis to ordinary discourse. An appropriate next step in understanding how meaning is assigned to non-verbal behaviour will be to examine ordinary discourse like phone calls and dinner table conversations. It is also appropriate to ask if "body language" is an interpretive procedure that is unique to decoding type tasks. Analysis of natural occurring discourse might reveal alternative accounting procedures used in explaining or describing other people's behaviour and situations.

The second direction that should be pursued is indicated by the observations presented in the last analytic section. This section is a preliminary analysis of body language as a plausible interpretive procedure based on a set of limited transcripts. It is important to see if these observations can be replicated in the analysis of other types of discourse. There are several potential areas of discourse that could be examined. The first might be gossip or a variation thereof. How do friends describe an absent friend's behaviour to other friends or strangers? How might someone describe a mutual acquaintance to another friend as opposed to describing an individual only acquainted with the speaker? These questions and their variations suggest several

potential sources where the plausibility of a body language can be examined. The second source of discourse would be to examine the pop psychology literature to see whether it might use "body language" in ways that parallel the analysis suggested here. This would be a natural extension of the proposal that body language is an interpretive procedure shared by both ordinary people and non-verbal researchers. Another potential source of discourse might be ethologists' explanations for how they observe and segment behaviour. One might suspect that very subtle or sophisticated forms of "body language" might be evident in their accounts. The analysis of "body language" as an interpretive procedure is as yet preliminary. However, the variety and amount of future research possibilities is yet another indication of how fruitful a discursive approach to non-verbal meaning can be.

The preceding pages have attempted to illustrate both empirically and theoretically the necessity for a new approach to non-verbal behaviour and meaning, and also, to demonstrate the advantages of a language based perspective on how we assign meanings to non-verbal behaviour. In the first section, three current trends in research on non-verbal behaviour were reviewed. It was shown how two of these approaches assume the existence of a commonly shared code of meaning and how this assumption supports the use of particular research methods. It was suggested that this code of meaning needs to be examined rather than assumed. Furthermore, this examination required a new theoretical and methodological approach.

The second section further demonstrated the weaknesses of the ecological and personality perspectives through the analysis of empirical data. Traditional theories could not explain nor predict the amount of variability, the complexity of contextual influences and the impossibility of showing a sequential order in people's assignments of meaning to non-verbal behaviour.

In the third section, it was suggested that the idea of a "body language" could be viewed as a plausible interpretive procedure used by people in constructing explanations and descriptions. Most importantly, this empirical analysis demonstrates the usefulness of a discursive approach in both revealing the weaknesses of prior work and indicating the directions for future work.

Appendix A

Prompt Questions Given to Each Subject Pair To Use While The Pair Views The Slides.

What is happening in the slide?

What clues in the slide indicate what's happening?

What are the relationships between the people shown?

How can you tell?

What type of people are shown?

What is their occupation?

How old are they?

What indicates this?

How do these people feel?

Towards each other?

About the situation?

Is there anything specific that indicates this?

What might happen next?

Appendix B

A second pilot study was created to test out the plausibility of the verbal labels and the experimental situation. This study included six photos (as opposed to the four used in the final study) and four conditions (one photograph was matched to one of four alternative labels). Four pairs of subjects, three female pairs and one mixed sex pair, participated. Afterwards the researcher discussed extensively with the participants the study's purpose, the plausibility of the experimental situation, the situational labels, and suggestions for improvement.

The table below lists the full situational label for each of the two conditions in the final study.

Alternative Labels Presented with Each Slide

Photograph	Condition 1	Condition 2
1.	The Accident	The Mugging
2.	Professor Harris and her Students	Middle English Research Group
3.	The Audition	Burlesque
4.	Sue Perry confers with Rhonda Thorne	Sue Perry confers with Robert Thorne

Appendix C

List of Photographs Used

The four photographs used in the study were selected from an original group of forty photographs presented to both pairs and individual subjects in an earlier pilot study. The study's purpose was to explore with the participants help if and how we use non-verbal behaviour in our explanations and descriptions. A total of twenty subjects, all third and fourth year university students, participated. The researcher interviewed two men individually, four women individually, two female pairs, two male pairs and three mixed-sex pairs. The researcher interviewed either pairs or single individuals about what might be happening in these photographs and why. After discussing each photograph separately, the photographs and non-verbal behaviour were discussed more generally. At this point, subjects would suggest which photographs they found more interesting or easier to discuss. This information was used in selecting the final four photographs.

These discussions were taped and later partially transcribed and analysed to see how non-verbal behaviour was used in these accounts. Previous research results indicated that sex differences might be expected between male and female accounts of non-verbal behaviour. However, a preliminary analysis of the transcripts revealed no quantitative nor qualitative differences between male and female definitions and uses of non-verbal behaviours. The choice to include only female pairs in the final study was to insure a homogeneous sample to compare to traditional research expectations.

The original group of 40 slides were selected from published photographs in sports, beauty, news and photography magazines or books. Some slides were also selected from personal collections. None of the photographs shown to participants were created for any psychological study. The details of the four photographs used in the final study are listed below:

Photograph 1 was taken by Joel Meyerowitz, Paris 1967, World Photography, Bryn Campbell, Hamlyn, London, 1981, pp. 182.

Photograph 2 was published in the 1983-1985 Graduate Division Annoucement of the University of Santa Barbara, (UCPS 646-800, Volume 23, Number 5, August 1983.) Santa Barbara University Press, Santa Barbara, California, pp. 84.

Photograph 3 was taken by Robert Doisneau, World Photography, pp. 24.

Photograph 4 was taken by Stephen Line and published in Squash Player International, May 1984, pp. 29.

Appendix D

If we trace one particular non-verbal cue through all the extracts, we can see the different ways in which context can become part of recognizing non-verbal meanings. These extracts often display the interpretive work necessary to make particular meanings for non-verbal behaviour coherent.

The following table reproduces all the references made to the contact between the seated girl's elbow and the older man's knee (to the right). The first four extracts are taken from the initial pilot study where the same photograph was presented, but without a title. These five extracts represent five of the seven accounts generated from pairs talking in the pilot study.

Table 1

No label. (5/7)

T = 2

15. 2: she's got her knee on this older man's
16. 3: yeah

17. 2: her elbow is on the man's knee
18. 3: her elba
19. E: yeah

20. 3: the man's looks very pleased with himself doesn't he?

---

23. 2: young girl is sort of flirting,
er maybe she's not even realized she's
flirting but () dya dya see what I mean? ()
thethe two old ones are married

24. 2: and she's just noticing this young things
paying attention to her

25. 3: maybe hmmm
26. 2: husband I'm not sure, that's just a possibility.

T = 6

22. 10: it's difficult to tell but
maybe the old woman's does not approve
of the younger dancer woman with her el
elbow on h her husband's knee?

T = 8

28. E: Well what do you think the um the woman's disapproving of?

You mentioned that er

29. 14: Oh! I know oh I see,
maybe that's her husband and she's got her arm on his knee
maybe she doesn't like that ah hehhhehh

T = 5

19. E: what do you think she's disapproving of?

20. 9: of the girl. hehhhah

21. 8: that he's, the girl's got, her, elbow, on his knee

22. E: yeah?

23. 8: you know, her hands are kinda of.

T = 14

13. 20: and that old woman's looking,
looking down at her with her hand on the man's legs
kind of disapprovingly.
See?

---

21. E: heeheh Why did you think they were her parents, J.?

22. 19: well at first I tho, I don't know, well that's,
I could see a daughter,
well, maybe I don't think a daughter
would ever lean like that on the father,

---

24. 19: I don't know, well,
but she seems to be striking a little girlish pose there,

25. 19: I mean she's sitting crossed legged on the ground, and so,

26. 20: With her arm over this old man's knee?

---

43. 20: It's just so incongruous, these two old, old people,
This girl dressed up as a ballerina
who'd been crying with her arm over some man's knee,

Pilot Study - "Disapproval"

T = 21

31. 21: Actually they must, maybe they are related,
cause she's got her hand on his knee or her elbow.

32. 22: umhum. Maybe they aren't related,

33. 22: that's why she's frowning at her hahah
34. 21: heheh

Pilot Study - "Concern"

T = 24

11. 27: Although the girl's got,
the girl's got her elbow on the old man's knee,
which must means something. heheh

12. 28: (I suppose she has.)

13. 27: Which is making the old woman look worried. hehheh

14. 28: yes hahahhah maybe that's why he's grinning. hehhheh

"Burlesque". (8/11)

T = 23

33. 26: but that, the girl with the platinum blonde,
is um, has one arm resting on this,
that guy's knee, and, the,
old lady is not looking too pleased about this situation.

34. 25: yeah, she and her foxes are all kind of scowling horribly.

T = 32

51. 36: and probably, that woman is actually looking disapproving
because the dancer has her,

52. 35: her well the older woman,
53. 36: arm on his, unhuh,

54. 35: cause the dancer got his arm her arm on

55. 36: the dancer is sitting on the floor in front of the old man.

56. 35: with her arm, on his knee.

56. 36: and she's got her arm on his leg.

T = 48

12. 67: He looks quite happy and she looks,
[giggles] what she look?

13. 68: She doesn't look very pleased
because there's a very young girl with her,
well not a very young girl,
a girl with her arm on her husband's knee,
[giggles] (This girl hasn't many clothes on.)

---

47. 68: Um, there's a girl scantily clad,

[laughter] with her arm on the old man's knee,
so his wife doesn't look very pleased about it,
she is probably the only one in the audience
not enjoying herself.

T = 37

21. 46: a young dancer type, and she's got her elbow leaning,
on the older man's ah, knee,
I think the wife looks quite disapproving about that,
cause the young girl sort of wearing a leotard,
ballet shoes. Quite sort of Marlene Dietrich face.
Quite hard, concentrating I think,
a scarf tied around her neck, probably on what's going on.

T = 46

27. 64: She's resting her arm on the old man's knee,
it must be why he's got the funny look on his face.

---

79. 64: How do these people feel towards each other?
Well, the dancer obviously sort of,
well, I don't really know, maybe she's been flirting.
She looks pretty relaxed with the old bloke,
maybe it's her dad?
she's they look quite similar though don't they?

80. 63: [laughing] A::h, yeah.
81. 64: [giggling] she's resting her arm on his knee.

T = 31

46. 32: But she's got her um, elbow on the knee of the, the old man,
so maybe he could be a grandfather or something like that,
maybe to her,
I don't know it's hard to tell,
what the relationship is there,

47. 33: right,
48. 32: but,

49. 32: obviously more than just being a normal spectator, he,

50. 32: this is the older figure, of the central couple.
ahm, and she's sitting down on the floor,
just barely, um, the dancer, I mean, and she got her elbow,
leaning against him.

T = 39

14. 50: yeah. They look as if they know each other.

15. 49: yeah, cause the young girl is leaning on the old man.

16. 50: yeah.

17. 49: Maybe it's her dad.

18. 49: She looks as if she's in tne show though, doesn't she?

19. 50: yeah, she does.
20. 49: Some sort of ballet.

21. 49: And maybe this is all the parents.

T = 47

104.65: It, does SHE got her elbow on that man's, um,
105.66: They might all start clapping?

106.65: knee? doesn't he?
107.66: knee.

108.66: unhuh. She's, they're not in it are they?
No. They won't be in it.

"Audition". (9/11)

T = 40

66. 52: It could well be,
that the young girl in the the front of the picture
is the daughter of that couple
and they've come to watch her having the audition,
the older couple, or the granddaughter.
Because it looks as
if the old lady's looking at the young girl and
the young girl is leaning on the man's knee,
well she has her elbow on his knee.

67. 51: Hm::m.

68. 52: So I think that shows that
there is some sort of relationship between,

---

74. 51: You think they are related in some way?

75. 52: I think the the old couple and the young girl are, yes.
Cause they're all sat so closely together,
and especially the way she's has elbow
leaning on the old man's knee,
and she's not looking at him or anything,
I mean she just, you know looks,
as if she's not really aware of it being there,
but she's still doing that.

76. 51: That could be why he's smiling. [giggles]
And that is why the old woman is looking so disapproving.

T = 34

9. 40: sitting in the centre of the slide,
and then there's a girl who might be the daughter.
With her arm draped over the man's knee,
sitting on the floor, in what looks like a leotard.

---

26. 40: Someone would come and sit down that's doing something,

27. 39: yes, that's just finished.

28. 40: I'd say the lass sitting down with her arm
on the guy's knee will get up and do something.

T = 45

12. 61: and she's got her arm leaning on an old man's knee,
so that could be her father.

13. 62: Yeah, her father and mother.
14. 61: yeah, watching.

T = 42

12. 55: And she's leaning on the knee of a much older man,

13. 55: which could well be her father.

14. 56: Yeah, cause he's with an older woman, so,

T = 41

14. 53: yeah, bored definitely.
And she's got her elbow on the knee
of the man beside her.

15. 54: An older man, an old man,
16. 53: beside her, probably is her father.

17. 54: yeah.

T = 44

29. 59: I wonder if that's her dad, the one she's leaning on.

30. 60: Yeah, it could be.
31. 59: umhum.

T = 43

14. 57: Quite a lot of people. She's got her,

15. 57: The girl on the floor's got her arm
resting on an old man's knee.

16. 58: unh.
17. 57: who's in the audience so he seems quite at ease,

18. 57: although, it looks as if the old woman next to him,
is his husband, and she's looking at the girl.

19. 58: yes, with a distaste, [giggle]
20. 57: and the,

21. 57: wondering why she's resting her arm,
22. 58: yes.

23. 57: on her husband's knee for, but, you don't know.
24. 58: yes.

T = 36

18. 43: Well what's the old man so happy about?

19. 44: Maybe ah, something's amusing just occurred?
[giggles] I don't,

20. 43: maybe he's getting titilated because
her elbow's on his knee. [giggles]

T = 35

11. 42: And she's sitting on the floor.
Behind them there's lots of tables and chairs
and the room is full of people.
And the main people in the front,
there's a elderly man and woman, who could be,
I reckon could be the parents,
don't you think so? of the girl?

12. 41: Yes, and she's resting her elbow on his knee.

Appendix E

The following table presents any references to the way "Sue Perry", defined in all the transcripts as the figure on the left, "looks". The first set of descriptions are part of accounts given for the sports scene presented with the title "Sue Perry confers with Robert Thorne". The second set of descriptions are taken from the accounts given for the alternate title, "Sue Perry confers with Rhonda Thorne", presented with the sports scene. I have made no attempt to distinguish between facial expressions, behavioural descriptions, situational expectations or any other combination. I have also included any references to how "they" look since such references often occurred in accounts that did not distinguish Sue's "expressions" from the other figure.

Table 2

Sue Perry confers with Robert Thorne (9/9)

T = 37

8. 46: and then leaning over over him
from a little in front of him
and sort of to the side of him,
is a lady looking very concerned,

---

13. 45: She looks close to him because she's,
the way she's looking at him,

14. 45: she's kind of looking reassuringly but questioningly.
You know sort of asking him, well,
"What do you think went wrong?" or something.

15. 46: yeah.
16. 45: She's she's doing the talking, at the moment.

17. 46: And I think she's a bit,
ah, unsure, of him, a bit, she looks a bit worried,
definitely concerned.

---

25. 46: Although they're obviously taking it as sportsmen.
you know, taking it seriously.

---

37. 46: She looks really nice, I think.

38. 45: yeah, she looks calm,
she's not fritty or um, anything,

---

42. 46: [she's a] being reassuring. Although she does, ( )
she does look tired,
I mean I think it's taking a lot out of her,

---

59. 45: She doesn't look too optimistic about it really,

neither does he.

T = 48

3. 67: Um, she looks as though either giving him stern advice.
or telling him off or something.
Doesn't look too pleased.

---

5. 68: Um, no I don't think she's displeased,
I think she's just talking to him.

6. 67: coaching him, Conferring?
7. 68: conferring. yeah.

---

40. 67: she looks as if she's giving him
advice on tactics or something, and,

41. 68: She's being quite, stern, (You think? Is that it?)

T = 32

9. 36: The woman who is obviously the coach or something,
is talking to, the the player.

---

15. 35: Um, they obviously know each other, I think.

16. 36: Yeah. It's obviously a close,
some sort of a close relationship,
cause her head, is right up to his,
more or less. Ahm, ( )
the situation doesn't seem to be, too good.

17. 35: Yeah,
18. 36: it's obviously words of encouragement or something.

19. 35: yeah,
it looks definitely as though she's trying to buck him up.

20. 36: umhum.

21. 36: She has a concerned look on her face.

---

31. 35: um, ( ) I wonder how,
if she's she looks kind of concerned
or she could be sort of saying
sort of "Buck up! Buck up!"

32. 36: or it could be,
33. 35: "Pull yourself together."

34. 36: or it could be just advice?
35. 35: Yeah,

36. 36: I mean it could be just,
sort of technical advice about what to do on the,

the pitch not the pitch, the court.

37. 35: (yeah.)
38. 36: It could be something like that, maybe.

T = 50

7. 71: she's either warning, him,
8. 72: explaining something.

9. 71: or explaining something.
She could be his coach or,
she could be the umpire or lineswoman or something,
warning him about something.

---

12. 72: She's trying to make a point, isn't she? She's

13. 71: Um, ( ) she obviously wants to get something through to him,
but I don't know whether it's coaching or warning.
She's not dressed in sportsclothes.

---

20. 71: Um, but, you can't tell whether she is.
Well it kind of looks as if it's warning.
but it could be just sort of serious coaching she's giving.

21. 72: Yes, but they look as if they know each other.

---

26. 71: Um, she's not wanting to make sort of a big thing of it,

27. 71: she's just sort of being, kind of firm but quiet.

T = 31

11. 33: Sue Perry got her head right up against his head
as if she's sort of consol
Isn't it?

12. 32: Well, it's talking to his ear really, um,
ah, almost giving him advice as what to do next.

---

29. 32: maybe she's part of the same team.
and, it also looks like she might be trying to encourage,
trying to get him together again.

---

31. 33: um, she's giving him advice.
Ahm ( ) the relationship between them?
Just as, oh maybe coach or something, and player.

---

35. 33: They're quite I mean they're sort of quite close aren't they?
It looks as though her head is against his head, though not,
a face to face, but, her face is sort of directed in his ear,

36. 32: well, it's not that close probably,
37. 33: right on it.

---

58. 32: yeah, she looks like she's spurring on telling him to
"Come on, you can get it together" ah,

59. 33: um, ( ) Although she looks quite concerned, as well?

60. 32: umhum.

61. 33: well, she's ahm, I mean her face is quite serious,

T = 39

6. 50: And he's looking really dejected
and she's come over to comfort him.

---

20. 50: And she's looking at him with appealing eyes
but he won't look back.
[laughter] sort of thing, you know?

21. 49: yeah.
22. 50: I think maybe they're boyfriend and girlfriend,

23. 49: yeah,
24. 50: from the way she's looking at him.

---

37. 50: Yeah, so she's comforting him saying
"It's not the end of the world, () Robert."

---

40. 49: Well, she's trying to tell him something,

T = 49

31. 70: She's got really sunken eyes.

32. 69: She's got, really sunken eyes, it looks like,

33. 69: I think it's, was she wearing glasses? No.
34. 70: No, no.

35. 69: I think it's just the light.
She's got really black shadows under the eyes.
And a really sort of puckered mouth. Doesn't she?

36. 70: Well, mo, I think she's just talking,
yeah, but she has.

---

47. 69: Cause she looks quite, tired as well, doesn't she?

48. 70: well, she's not sweating like a pig, like he is.
[giggles]

T = 46

6. 64: She's giving encouragement to somebody in the,
in the middle of a MATCH or something.

---

15. 64: And she's giving him advice or,
16. 63: tactics.

17. 64: encouragement, tactics, tactic talks.

18. 64: something like that. Tactical talks.

19. 64: What clues in this slide indicate what's happening?
She's looking at him,
so she is probably doing the talking.

---

28. 64: How can you tell? Their heads are close, ( )
um, sort of looks like quite, you know secretive talking.

29. 63: yeah,
it's very much just to him rather than to anybody else.

---

42. 64: They're young and unhaggard faces. [laughter]

---

53. 64: Towards each other?
well I don't think
they're thinking about each other very much,
don't you think?

54. 63: No.
55. 64: They're really concentrating on,

56. 63: They're concentrating on the situation in this case.

T = 47

11. 65: Ahm, she doesn't look too worse for wear,

12. 66: He doesn't look very cheery, he looks
13. 65:

14. 65: she looks as if she, telling him off or,
15. 66: tired.

16. 66: Sue Perry's the one that's on the left, bending over.

17. 65: umhum.
18. 66: Maybe she's trying to cheer him up.

19. 66: yes, she's obviously not getting,
20. 65: of facial expressions,

21. 65: I would think and like,
and especially the fact he's got a headband on.

---

26. 66: umhum, they look about the same age.

27. 65: umm. I think she looks a bit more experienced at whatever,

28. 66: um, maybe he's younger,

29. 65: this is, umhum.

30. 66: and she's trying to help him.

---

53. 66: Sue Perry on the left,
looks as though she's trying to to understand,
trying to help, maybe a bit worried, maybe.

---

55. 65: and she's just,
don't know what she's talking about, with him.

56. 66: She's got, her face is a funny direction.

57. 65: [mms like "I don't know."] umm.
We've just really said what they feel towards each other.

58. 66: Umhum, helping.

59. 65: yup. About the situation,
well they're maybe annoyed, maybe they lost.

---

74. 66: Anything specific?

75. 65: No, her face just looks a bit, stern,
76: 66: blech. yeah.

77. 65: a little bit.

---

82. 66: maybe she is,
83. 65: and they'll go,

84. 65: and she's giving him some sort of tips on how to play.

85. 66: yes.

86. 65: Or maybe they're working out some strategy
cause they're on the same team.

87. 66: And she's finding out, how,
what he though went, wrong in the first game.

Sue Perry confers with Rhonda Thorne (10/10)

T = 35

7. 42: Well there's one,
there's a picture of two women's heads,
one's just going to talk.

---

29. 42: And the other one looks like she's giving, yeah,
the player doesn't look too happy,
and the other one looks like she's giving her advice.

---

32. 41: they look, they look as if they know each other fairly well.

---

38. 41: yeah, well, I think so, ( ) She's in a, if this is a game,
supposing that this is the middle of a game,
they're having a break,
the coach doesn't look as if the player,
is being very successful.

39. 42: Um, that's right.
She looks, it's a worried look, doesn't she?

40. 41: I think she looks, yeah.
41. 42: CONcerned, the coach looks.

42. 41: Yeah, that's a good description,
she looks concerned. [giggles]

---

59. 42: She's got awful bags under her eyes.

60. 41: She's worrying about the other player. [giggles]

61. 42: yeah, she does looks as though
62. 41: in her thirties.

63. 42: she hasn't had sleep for the last three days.

---

69. 41: How do these people feel?
Well we've done that, because one looks despondent,
and one looks concerned about it. (Don't you think so?)

---

86. 42: And, it looks as though the one wearing the headband,
who is definitely sort of sportswoman,
and has, either let the other one down,
hasn't been playing very well.
And the other one doesn't want to, actually tell her that.

87. 41: Uh, I don't think there's any chance
that the other one has been playing.
She doesn't look hot, she doesn't look tired or any anything.
That, that, I'm sure she's got,

88. 42: She looks tired.
89. 41: thick clothes on.

---

94. 42: You're probably right,
she doesn't look like she's been playing.

95. 41: I think she would be sweating.
96. 42: Cause her hair,

97. 42: the other one wouldn't be,

98. 42: her hair, would be sticky,
it's not gone into rat's tails, yeah.

99. 41: yeah, I don't think she could be that cool,
if the other looks, as sweaty as she does.

T = 45

1. 62: there are two woman! talking, intensely,
[giggle] they're not smiling.

---

14. 62: the one woman who's isn't dressed up to play,
sports is giving advice to the one that
who is actually playing at the moment.

---

18. 61: Could she be an umpire or something then?

19. 62: yeah,
20. 61: asking her to do something,

---

27. 62: but the woman doesn't look very mad,
so she's probably hasn't done something wrong.

28. 61: umhum. She's probably trying to encourage her.

29. 62: yeah.

30. 61: Just keep on playing tne way she is or something.

31. 62: um::m,

---

41. 62: They're obviously quite close relationship,
cause they're quite close,
to one another.

---

47. 62: Yeah, that's how you can tell that
the other woman hasn't been playing.
cause she doesn't look very,

48. 61: messed up [giggle]

T = 44

5. 59: yeah, she looks absolutely shattered.

6. 60: yeah. Probably losing,
and giving some good advice, cheering her.

---

15. 60: The trainer looks pretty fed up as well.

T = 42

12. 55: It's difficult to say.
13. 56: And she's, bent over, talking,

14. 56: very quietly, by the looks of things,
right into her ear, the other woman's ear.

---

24. 56: the woman with the towel around her
doesn't look as tired as the, girl.

---

33. 55: Do they look similar? I think they, is a bit really.

34. 56: Which? The older woman is obviously
offering advice of some kind.

---

52. 56: They obviously know each other, well, know each other,
they look as though known each other for quite some time,

---

58. 55: They they look very similar, I think.

59. 56: yes, they do. Both dark haired. Curly dark hair.

60. 55: Got similar sort of nose, haven't they?
61. 56: yeah. ( )

62. 55: She's probably encour encouraging HER as well,

63. 56: yeah.

64. 55: to go out and play the next game,
by the looks of things.

T = 30

5. 31: And the other one is talking,
and her face is on an angle,
it looks almost as if she's talking in the person's ear.

6. 30: Do you think she's talking? yeah, yeah
7. 31: yes to her.

8. 30: certainly her facial expression,
giving her advice or something.

---

14. 30: The relationship,
I think it's she's obviously talking to her supportively.

---

17. 31: she's probably giving her advice.

---

19. 30: and she seems to be giving her advice
on how to continue or perhaps what she ought to do next. ( )

---

23. 31: The the girl looking towards,
the one that's talking, seems,
I don't know she seems very serious
doesn't she?

24. 30: um,
25. 31: very stern,

26. 31: as though she's trying to impress something on her. Um,
It's it's just the expression the way the eyes are looking,

I don't know what might

T = 36

1. 44: The other one's peering at her,
looks as though she's trying to give her some encouragement?

---

10. 43: She doesn't seem to be doing a very good job
cheering the other person up.

T = 34

4. 39: ah, and her coach is giving her advice.

---

9. 40: And the coach has come over and said,
given her some points, on how to improve her play.

---

14. 40: And the coach looks actually,
I mean she's got bags under her eyes and everything,
doesn't she? She looks, maybe that's the job,

15. 40: but she looks really tired and old.
16. 39: she looks tired.

17. 40: um, no.
18. 39: But there's there's no anger there,

19. 39: she just, she looks like she's trying to um,

19. 39: right.
20. 40: encourage the girl,

21. 40: or um, say that "you did this wrong, improve your serving".
or something like that, you know.

T = 43

3. 57: Ah, looks as though she's giving her some advice,
( ) un k, the, woman who is giving the advice doesn't
look too happy does she?

---

8. 57: um, ( ) It could be her mother, instead of a coach, but,

9. 58: Yes, could be, but,
10. 57: don't know.

11. 58: Nah, I think it's probably a coach.

11. 57: Why?

12. 58: ( ) because she looks as though she's,
sort of, criticizing rather then um,

13. 58: you know, off offering sympathy or,

14. 57: Oh yes, she doesn't look sympathetic, does she?

---

21. 57: [whisper] How about the relationship between them?
I think they seem to have probably quite a good relationship,
but she, the coach is criticizing the athlete, but,

22. 58: Yes, they must know each other quite well.
23. 57: the athlete's a bit

24. 57: subdued. But I think they know, know each other quite well,
and she's giving her constructive criticism.

T = 41

7. 53: Looks like the one,
the girl on the left is trying to encourage
the girl on the right. What do you think?

8. 53: She might even,
9. 54: Cause the one on the right

10. 53: not entirely happy.
11. 54: looks a bit downhearted doesn't she?

---

17. 53: and she is looking, straight into the ear, [giggles]

18. 53: of the other one.
19. 54: of the other one.

20. 54: She looks as though
she's trying to encourage her and trying to,
Well, I think it does anyway,

---

30. 53: And they're, what tennis partners,
but probably friends as well.

31. 54: yeah.
32. 53: They look, I mean, they look like they've got good,

33. 54: relationship going,

34. 53: friendship between the two of them.
um, ( ) I'd say the girl on the left, is maybe,
I don't know if she's encouraging her,
but she's not happy with the way things are going,
the one on the LEFT, because,
I mean it's not sort of an encouraging look really,
it's almost a sort of, you know,
"O::h, dear me." kind of look.

35. 54: I don't I disagree with that,
I think she's trying to, to get her to cheer up.

36. 53: But look at her mouth, she's got her mouth,
her mouth pursed.

37. 54: Yeah, I still think it's an encouraging look,
but, can you hear me? Um, but anyway,

---

42. 54: They don't, they don't look to, pleased about the situation,

43. 53: yeah.

44. 54: so maybe they're not doing so well.

---

50. 53: It's very difficult to say, but,

51. 54: I think the one on the left
definitely looks the stronger character,
at the moment.

52. 53: yeah, the one on the right probably a bit,
slightly temperamental.

T = 33

8. 37: And um, yes, the other one seems rather concerned,
doesn't she?

9. 38: hmm,
10. 37: she's trying to comfort her or something,

---

13. 38: yeah, probably.
Um, yes, the two of them are probably very close,
No I don't think they are. I don't know.

* One pair discussed the last slide after the tape had run out.

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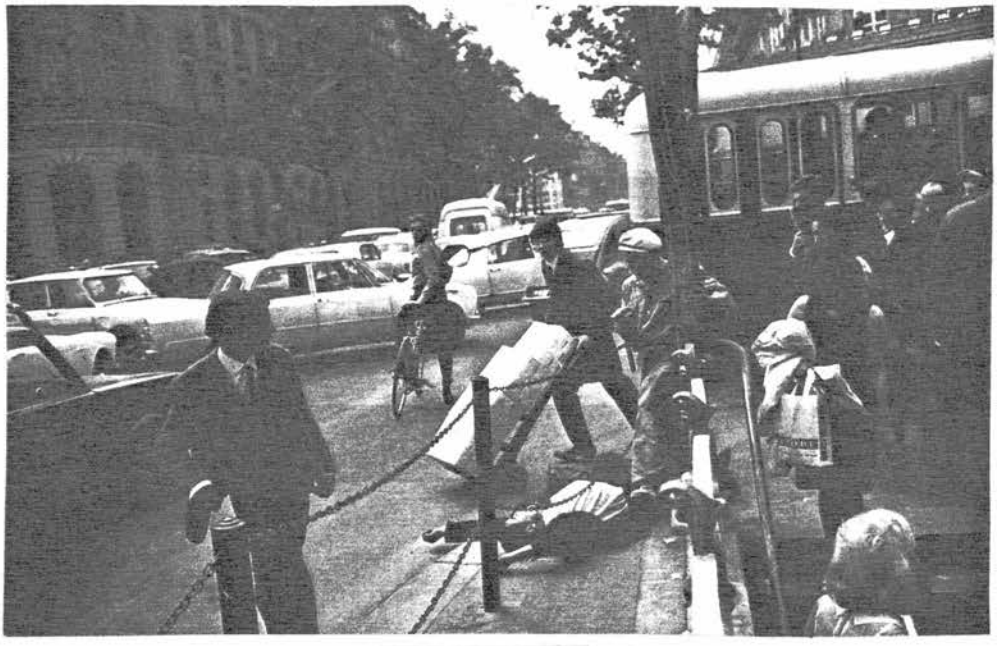
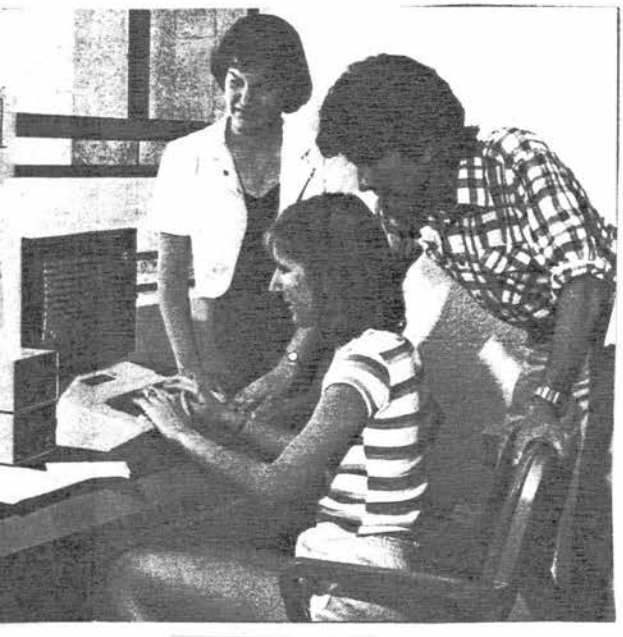


Photograph 1



Photograph 2

Photograph 4

Photograph 3