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Chapter 5

Conversation Analysis and the Analysis of Verbal Behavior

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The Analysis of Verbal Behavior as the Link Between Biology and the Humanities

In the aftermath of Noam Chomsky's (1959) review of Skinner's (1957) book Verbal Behavior, behavior analysis in general and the analysis of verbal behavior in particular have, as I put it in a recent paper, "been consigned to a kind of academic ghetto - cut off by mutual suspicion and incomprehension, not only from other approaches within psychology, but from virtually every other adjacent discipline from philosophy, linguistics and sociology on the one hand and ethology and the neuro-sciences on the other" (Place, 1985a, p. 38). Yet, as I also remarked in the same paper, "the analysis of verbal behavior should provide the essential link between the biological sciences on the one hand and the social sciences and humanities on the other," a role which "cognitive psychology, in my view, is totally disqualified from playing . . . because it rides roughshod over the vital distinction drawn by Skinner (1969) . . . between contingency-shaped and rule-governed behavior" (Place, 1985a, p. 38).

The Concept of the Sentence in Pragmatics, Semantics and Syntactics

As I see the matter, in order to rectify this situation and restore the analysis of verbal behavior to its rightful place in the scientific scheme of things, two things are necessary. In the first place we need to find some way of meeting the valid criticisms made by Chomsky of Skinners's book. In particular, we need to find a way of answering the criticism that Skinner's account of language contains:

(1) no proper concept of the sentence as the effective unit of linguistic communication,

(2) no recognition that the kind of sentence which performs this communicatory function is seldom repeated word for word, but is constructed anew on each occasion of utterance,

(3) no recognition that the ability to construct sentences that the speaker has never before uttered and which the listener has never before encountered enables the speaker to construct sentences which will evoke from the listener behavior which he or she has never before emitted or communicate information about contingencies which the listener has never before encountered.

If the analysis of verbal behavior can be extended so as to accommodate these features, it should be possible to close the theoretical gap which separates it from other approaches to language and take the second of the two steps which are needed in my view, namely the establishment of links between the analysis of verbal behavior from the behavior analytic standpoint and other traditions of empirical research into the phenomenon of linguistic communication.

In order to incorporate the concept of the sentence, its structure and the control it exercises over the behavior of the listener within the behavior analytic approach to language we need to

make use of the distinction, first formulated by the behaviorist philosopher Charles Morris (1938, 1946) between the three divisions of semiotic or the general theory of signs of which verbal or linguistic signs are a special case, pragmatics which deals with the function of the sign within the behavior of both speaker and listener, semantics which deals with the relation or pseudo-relation[2] between the sign and what it "signifies", "means" or "refers to" and syntactics which deals with the relations between one sign or word and another which give form or structure to the sentence and thereby determine the functions it performs within the context of utterance. In terms of this distinction the behavior analytic concept of the sentence differs from that of the grammarian, linguist or philosopher in that it is defined, not in terms of a particular syntactic structure, but in pragmatic or functional terms. In other words the sentence is defined in the first instance in terms of the control which it is capable of exercising over the behavior of any listener who is a competent member of the verbal community within which that string of phonemes is recognised as an intelligible sentence. Given that initial definition, we can account for the phenomenon whereby the speaker can construct novel sentences which act for the listener as discriminative stimuli with respect both to behavior which he or she has never previously emitted and to contingencies which he or she has never previously encountered in terms of the principle which I have referred to elsewhere (Place, 1983) as "behavioral contingency semantics."

Behavioral Contingency Semantics and its Interdisciplinary Affiliations

Behavioral contingency semantics is the principle according to which a sentence acts as a discriminative stimulus which, to use Kantor's term, "orientates" the behavior of the listener towards a particular contingency or type of contingency by virtue of a correspondence between the form and content of the sentence on the one hand and the form and content of the contingency or contingency term or "leg", as I prefer to say, which it thereby "specifies" on the other.

As I see it, this principle fills a number of important gaps in the behavior analytic approach to language as developed by Skinner in *Verbal Behavior.* Besides offering an account of how novel sentences can generate novel behavior and supply new information, it offers an explanation of the meaning of the verb to "specify" which plays a key role both in *Verbal Behavior* and in Chapter 6 of *Contingencies of Reinforcement,* but is nowhere defined in Skinner's writings. But it also has the virtue of opening up much needed links between the analysis of verbal behavior and a number of other traditions within general linguistics, philosophical logic and the philosophy of language. Thus, in developing an account of the sentence in these terms in a previous paper (Place, 1983), use was made both of Chomsky's (1958) generative and transformational grammar and of Frege's (1879, 1891) "function and argument" analysis of the sentence.

In suggesting that we can think of the sentence as a kind of map or plan of a part or sometimes the whole of the contingency for which it thereby acts as a discriminative stimulus, I have consciously modelled my account on the so-called "picture theory" of the meaning of sentences as developed originally by Russell (1918-1919) in his theory of Logical Atomism and refined and extended by Wittgenstein (1922) in his *Tractatus Logico-Philosophicus.* Again, in analysing the elements and structure of the contingency that correspond to the elements and structure of the sentence, I have relied heavily on ideas derived from Aristotle's *Metaphysics,* and in so doing I have given an account of the internal structure of the events and states of affairs which constitute the terms or legs of a contingency which, I have since discovered, is virtually identical with that given by Barwise and Perry (1983) of "a situation" in developing what has become known as "situation semantics" in their book *Situations and Attitudes.*

For Barwise and Perry, sentences map onto situations. Situations are either events which involve change at or over time or states of affairs which remain the same over a period of time. On my account, simple or "atomic" sentences, like "The baby is crying," "Give the baby a bottle" or "The baby will go back to sleep," map onto a single contingency term or leg. In the case of "The baby is crying," the sentence specifies behavior on the part of the baby, but an antecedent condition which calls for behavior on the part of the baby sitter. Similarly, "Give the baby a bottle" specifies a consequence of the behavior emitted by the baby and the behavior to be performed on the part of the baby sitter, while "The baby will go back to sleep" specifies further behavior on the part of the baby and the anticipated consequence of the behavior to be emitted by the baby sitter. Moreover, each of these sentences specifies a discrete event which stands in a causal relation either as effect with respect to the event which precedes it and/or as cause with respect to the one which follows, and as such it qualifies as "a situation" in the Barwise and Perry sense.

The Failure of Verbal Behavior to Generate a Program of Empirical Research and the Reasons for It

While it is of particular satisfaction to me as a philosopher to be able to establish links of this kind between a behavior analytic approach to language and some of the more traditional, as well as some more recent thinking in linguistics and philosophy, my training as a psychologist makes me equally sensitive to the need to establish links of a more practical and empirical kind between the analysis of verbal behavior on the one hand and empirical studies of language and communication within other research traditions and other disciplines on the other.

In this connnection I have long been impressed by the fact that what concerns the experimental behavior analyst who values Skinner's contribution in other areas of research for its robust no-nonsense empiricism is not so much Chomsky's criticisms as the fact that in *Verbal Behavior* Skinner relies exclusively on the traditional literary device of artificially constructed examples, interspersed with the occasional anecdote, without any systematically collected empirical data to support the conclusions reached. The book contains no suggestions for a program of empirical research which might develop out of it. Nor has any significant program of such research been generated over the quarter of a century since the book was first published. The citations of *Verbal Behavior* recently surveyed by McPherson, Bonem, Green and Osborne (1984) represent little more than a drop in the ocean when compared with the enormous proliferation of both theoretical and empirical studies of language formulated in terms of other conceptual frameworks over the same period.

There are three factors, in my judgment, which can be invoked to explain this failure of *Verbal Behavior* to generate an effective program of empirical research. In the first place there are the conceptual deficiencies of Skinner's analysis with respect to the concept of the sentence and the stimulus control exercised by novel sentences over the behavior of the listener. Related to these conceptual deficiencies is the lack of a satisfactory and coherent taxonomy for the classification of verbal operants. I have discussed the inadequacy of and confusions within Skinner's existing taxonomy based on the concepts of mand, tact, autoclitic, intraverbal, echoic and textual response in a number of recent articles (Place, 1985a, 1985b, 1985c) and I shall not repeat those arguments here. I propose, instead, to concentrate on the third of the three factors which in my view explain the failure of *Verbal Behavior* to generate an effective on-going program of empirical research. This third factor is the exclusive commitment of behavior analysis to an experimental methodology which, in my view, has only a very limited application to the study of verbal behavior.

The basis for this judgment is the observation that at the level of tactical execution the verbal behavior of a linguistically competent human adult is a skilled performance which, like other forms of skilled performance such as playing tennis or driving a car, is shaped to the contingencies governing such behavior by repeated practical experience of the immediate consequences of behaving in one way rather than another. In terms of the distinction drawn by Skinner in Chapter 6 of *Contingencies of Reinforcement,* verbal behavior at the level of tactical execution is "contingency-shaped" rather than "rule- governed". What this means is that, instead of planning what she or he is about to say in terms of a verbal specification of the behavior to be emitted and the predicted consequences of emitting behavior of that kind in the prevailing context of utterance, verbal behavior is shaped by repeated exposure to the consequences of emitting behavior belonging to the same response classes[3] on relevantly similar occasions in the past. Moreover, the effect of these past consequences on the subsequent emission of verbal behavior by the speaker is not mediated, as it is in the case of most rule-governed behavior, by the formulation of a verbal specification of the behavior-consequence relation.

One of the striking features of verbal behavior is its dependence for reinforcement on the response of the listener. In a person-to-person verbal interaction, the maintenance of ongoing verbal behavior by the speaker requires the constant emission by the listener of a stream of verbal reinforcers, known to conversation analysts as "continuers" (Jefferson, 1980c). These include expressions of agreement like "Right," "Mmhmm," nodding the head, etc. which are used to reinforce opinion-stating behavior, expressions of comprehension like "Yes," "No," "I see," etc. which are used to reinforce instruction-giving behavior, expressions of surprise like "Really?," "Well I never did!," "You don't say!," etc. which are used to reinforce news-telling (Jefferson, 1981), expressions of concern and sympathy like "Oh dear!," "I'm so sorry!," "You poor thing," etc. which are used to reinforce what Jefferson (1980a, 1980b,) has called "troubles talk", and the laughter which reinforces joke-telling behavior (Jefferson, 1979).

Evidence that verbal behavior is directly shaped by these verbal reinforcers/continuers, rather than being subject to control by a verbal formula or "rule" specifying the behavior-consequence relation, comes from the fact that, in terms of the verbal reports they are able to give, both speakers and listeners are almost totally oblivious, in the case of speakers, both of the occurrence of the continuers and of the effect they are having and, in the case of listeners, of their behavior in supplying them.

The phenomenon whereby spontaneous verbal behavior on the part of the speaker is maintained, with minimal awareness by either party, through verbal reinforcers/continuers supplied by the listener is one which does not easily lend itself to reproduction in the experimental laboratory. The reason for this is that if you attempt to reinforce verbal behavior which is under the control of artificial instructions such as the instruction to "say all the words you can think of" (Greenspoon, 1955) or the instruction to complete an incomplete sentence presented on a stimulus card (Taffel, 1955), particularly if, as in many studies of this type, a conspicuous expression of approval like "Good!" is used as the reinforcer, the effect is to create just the kind of problem situation which Skinner describes in Chapter 6 of *Contingencies of Reinforcement* in which the subject attempts to solve the problem of how to satisfy the demands of the experimenter by generating "a rule", i.e., a verbal formula which serves to "specify" the relevant contingency. As a result, the behavior exhibited in the experimental situation acquires a conscious premeditated "rule- governed" character quite different from the "contingency-shaped" character of verbal behavior in its natural setting.

It is true that in his survey of experimental studies of the operant reinforcement of verbal behavior Krasner (1958) concluded (a) that most subjects in these studies were "unaware" of the contingency involved, and (b) that the effect of reinforcement in strengthening and of

disinforcement in weakening the propensity to emit responses of the relevant class did not depend on the subject's ability to provide a correct verbal specification of the contingency in question. However, Spielberger and Levin (1962) reviewed the same literature in the light of further studies carried out in the intervening period and concluded that the results obtained in the studies reviewed by Krasner were an artifact of the procedure whereby subjects were only questioned about the contingency involved in the experiment after their earlier hypotheses had been undermined by the extinction phase required by the ABA experimental design. Spielberger and Levin claim that, if subjects are questioned about the contingency at the end of the acquisition phase of the experiment, (a) most subjects are able to supply a correct verbal specification of the contingency, and (b) those that cannot specify the contingency show no learning effect. If this is correct, it shows that the behavior observed in these studies is in fact rule-governed rather than contingency-shaped and is to that extent unrepresentative of verbal behavior as it occurs in its natural setting.

The only experimental study I know of that escapes criticism on these grounds is that of Verplanck (1955) who showed that when an experimenter engages a subject in normal conversation in a natural setting, the number of opinions expressed by the subject during a 10-minute experimental session can be significantly increased, if every expression of opinion is reinforced by an expression of agreement, such as Yes, you're right, That's so etc., or by nodding the head or "smiling affirmation." It was also shown that opinion-stating behavior returned to its pre-experimental baseline level during a subsequent 10-minute extinction session during which opinion-stating behavior was no longer reinforced. The contingency-shaped character of this effect is demonstrated by the fact that none of the subjects in this experiment were aware that their behavior was being modified in this way, except that "during extinction some Ss got angry at E and commented on his disagreeableness, or noted his 'lack of interest.'" (Verplanck, 1955, p. 671)

Systematic Field Observation of Naturally Occurring Verbal Interactions

While there is no doubt a limited scope for further experimental investigations along the lines pioneered by Verplanck, it is evident in my view that the methodology of choice in studying the verbal behavior of older children and adults has to be the systematic field observation of naturally occurring verbal interactions. This is not an altogether novel suggestion as far as the analysis of verbal behavior from a behavior analytic standpoint is concerned. There have been isolated studies of this kind which have attempted to make use the taxonomy of verbal operants proposed by Skinner in *Verbal Behavior.* Horner and Gussow (1972), for example, used the concepts of the "mand" and the "tact" in their study of the verbal interactions of urban blacks in the family setting. McLeish and Martin (1975) were more ambitious. They tried to use the complete taxonomy of *Verbal Behavior* in their study of verbal interactions in a psychotherapeutic setting. But in neither of these cases are the results obtained particularly encouraging. Nor have their authors been sufficiently reinforced by the consequences to attempt further studies along these lines.

But whereas the attempt to analyse naturally occurring verbal interactions between linguistically competent human adults and children in terms of the taxonomy of verbal operants proposed by Skinner in *Verbal Behavior* seems to have petered out, the last decade has seen a remarkable escalation of observational studies of naturally occurring verbal interactions (cf., van Dijk, 1985) inspired by what at first sight appear to be quite different and, in some cases (e.g., Grice, 1975; Brown & Levinson, 1978) quite alien conceptual schemes. Those who have participated in this development come from a variety of disciplines and subdivisions within those disciplines. There are linguists with a variety of interests from phonetics through syntax to what

is variously known as "pragmatics" or "sociolinguistics." There are psychologists, mainly of a "cognitive" persuasion, drawn from the developmental, clinical and social areas, and there are sociologists interested in what is known as "conversation analysis" (Heritage, 1985). It is this latter research tradition which, in my view, bears the closest affinities with behavior analysis and it is with the links between these two research traditions that I shall be dealing in what follows.

Conversation Analysis and its Affinities with Behavior Analysis

Conversation analysis emerged as a branch of sociological enquiry in the United States towards the end of the 1960's under the leadership of the late Harvey Sacks and his two principal collaborators, Emmanuel Schegloff and Gail Jefferson. It was and to some extent remains an outgrowth of the ethnomethodological movement within sociology, founded in the 1960's by Harold Garfinkel (1967). Nevertheless, in its single minded pursuit of scientific accuracy in the transcription and analysis of naturally occurring verbal interactions unconstrained by any theoretical preconceptions of whatever kind and from whatever source, conversation analysis offers the nearest thing to a body of uncontaminated empirical data on the way language is actually used in everyday life. As such it presents a challenge to the interpretative skills of anyone interested in the phenomenon of human language, be he or she a linguist, a phonetician, a philosopher, a psychologist, whether of the behaviorist or of the cognitive persuasion, a social psychologist or, like the conversation analysts themselves, a sociologist.

Although there have never been any formal links or active interaction between the two research traditions, there are a number of respects in which there is a remarkable affinity between conversation analysis and behavior analysis:

(1) Conversation analysis and behavior analysis share a common commitment to the kind of *radical empiricism* which refuses to accept phenomena whose existence cannot be demonstrated in the available empirical data. Curiously enough, as I pointed out recently (Place 1985/6), it is this commitment to radical empiricism which leads the conversation analyst to question the reality of what I have called the "extra-episodic" or from-trial-to-trial effects of utterances like "Thank you!" in reinforcing the previous speaker's propensity to emit behavior similar to that which he or she has just emitted on relevantly similar occasions in the future. Conversation analysts are familiar with the "intra-episodic" or within-trial effects of verbal reinforcers or "continuers", as they call them, in maintaining ongoing verbal behavior on the part of the current speaker. But because their data contain no record of the behavior of the individuals concerned on subsequent occasions, the extra-episodic reinforcement effects of an utterance like "Thank you!" belongs as far as they are concerned to the realms of speculative fantasy. All they can see is the intra-episodic effect of "Thank you!" in bringing the interchange to an appropriate close.

(2) Like the behavior analyst, the conversation analyst insists that behavior can only be properly understood in relation to its context, what precedes it, its antecedents, and what follows, its consequences.

(3) Like the behavior analyst, the conversation analyst is suspicious of statistics, particularly statistical tables which report frequencies of occurrence for certain types of behavior within a given body of data. They regard such information as useless, since it fails to distinguish between two kinds of behavior which may have the same net frequency of occurrence, where one has a high natural probability of emission which is partially suppressed by the disinforcing effects of social disapproval, while the other has a relatively low natural probability of emission which has been increased by social reinforcement.

(4) Like the behavior analyst, the conversation analyst tends to regard with suspicion introspective protocols of the kind that are assiduously collected from the participants in a verbal interaction by social psychologists in the cognitive tradition after the interaction has been recorded. Conversation analysts regard such protocols as massively irrelevant. The controlling variables, as the behavior analyst would put it, are all there, to the discerning eye, in the objectively observed data of behavior and its context.

(5) Finally the attitude of conversation analysts to questions of theory is remarkably reminiscent of that expressed by Skinner (1950) in his paper "Are theories of learning necessary?" Just as Skinner professes not to have a theory of learning in the sense that, say, Hull and Tolman proposed such theories, so the conversation analysts are inclined to deny that their work depends on any kind of preconceived theory. Of course, like Skinner, conversation analysts do have their own system of theoretical concepts. Without those concepts, no analysis of the data would be possible. But like Skinner, they insist that this conceptual scheme is entirely data-driven. It does not and should not reflect any extraneous theoretical preconceptions.

Apart from superficial differences of terminology whereby the conversation analyst uses, for example, the word "action" where the behavior analyst speaks of an "operant", the only major difference between these two research traditions is a difference of methodology. Whereas behavior analysis belongs to the tradition of experimental psychology in which the method of controlled laboratory experiment tends to be treated as if it were the only legitimate way of generating empirical data, conversation analysis is equally firmly committed to the methodology of the systematic field observation of behavioral phenomena in their natural setting without any form of experimental manipulation and with a minimum of interference from whatever audio or video equipment is used to record the data.

This difference in preferred methodology between the two research traditions contributes, as we have seen, to a difference of view with respect to the extra-episodic reinforcement effect of an utterance like "Thank you." But it is not sufficient in my view to constitute a major obstacle to mutual understanding. It is in this belief that I have been attempting over the past two years to increase my understanding of conversation analysis with a view both to persuading behavior analysts that conversation analysis provides us with the missing body of empirical research that should have been generated by *Verbal Behavior,* but never was, and to persuading conversation analysts that the concepts of behavior analysis, particularly that of the three term or three legged contingency, provide a more satisfactory basis for a more adequate taxonomy of "verbal operants", alias "speech acts", alias "actions" than anything else that is currently available to them. To this end during the winter of 1985-86 I attended a course on the principles of conversation analysis given by Drs. Paul Drew and Tony Wootton in the Department of Sociology at the University of York. As my final course assessment I prepared the exercise to which the remainder of this paper is devoted.

The exercise begins with a transcript of a verbal interaction recorded in the main Departmental Office of the Leeds University Department of Philosophy in October 1985 between Mrs Penny Ewens, a mature student in her second undergraduate year and one of the Senior Departmental Secretaries Mrs Rose Purdy. I am indebted to Mrs Ewens and Mrs Purdy for their permission to publish this data. The transcript has been substantially emended, vetted and finally approved as an accurate record by Dr. Paul Drew of the Department of Sociology, University of York, to whom I am likewise deeply indebted. The phonetic conventions used in the transcript are to be found in Appendix I.

Transcript of the Verbal Transaction - First Year Party 10/85

Penny: ((Enters and approaches))

Rose: |ˆhello Penny. ['sawrigh(t)
[
Penny: (so[rry)

Penny: =can I interrupt y[er a moment. I'm sorry excuse me,=
[
Rose: [yes do:

Penny: it's just this bus'ness uv (.) th'pahtee [fer the=
[
Rose: [ye:h(s)
((Knock))

Penny: =first y:e:ahrs. I won't (.) be j:n temorro mo:rning.
Rose: yes no=

Penny: =I've left a notice on the bawd.
Rose: yeah.=

Penny: =an ther's a note fer th'm %uv the money.=

Rose: =who wants te pick it up?
Penny: we:ll (.) the:'re on that=

Penny: =li; [st.
[
Rose: [oh the're %aw- on that list. (.) and any-any uv these=
Rose: =people [can have i˜t, (.) can they.
[
Penny: [yes:: (.) ah do:: know John's girl=

Penny: =friend knows about it. bu(t) she:'s not free at the same time=

Penny: =as them tomorro. so:th- lots uv people know about it,=

Rose: =anan the:'re goin te get the shoppin(g) ou [t uv it. (.)
[
Penny: [yes (.)

Rose: I see [( )
[
Penny: [yes ah've put a list uv what I=

Penny: =suggest [they get
Rose: [yeah (.) okay [(then)
Penny: [an I've got all the rest uv the=

Penny: =shopping.
Rose: oh you've got all the rest. an they know that.=

Rose: =but anybody c'n: t-take this money that's in heah.=

Penny: =wul- (.) th(u) people o [n that list (.) yeh] are the people=
Rose: [on that list yes]

Penny: =who said they wud help with it=

Rose: = [o: k a y P e n n y] thanks then=
Penny: = [thank you very much]

Rose: =very much ye:s u:m (.) so down to "persuaded me."

Pragmatic Analysis I - List of Adjacency Pairs

Having transcribed this "sequence", as such things are called in conversation analysis, the next step is to generate the first Pragmatic Analysis consisting of a list of "adjacency pairs." As it is used in conversation analysis an *adjacency pair* (Schegloff, 1968, Schegloff & Sacks, 1973), may be defined in terms of the concepts of behavior analysis as a pair of consecutive actions/operants emitted by two different speakers of which the first is a verbal operant or effective sentence utterance which acts as an antecedent "establishing condition" (Michael, 1982) which "calls for" and is thus reinforced by the emission of the second member of the pair by the listener/second speaker. The second member of the pair may be either verbal, as in answering a question, or non-verbal, as in complying with a request to shut the door. Examples of Adjacency Pairs given by Levinson (1983) include Question-Answer, Greeting-Greeting, Offer-Acceptance and Apology-Minimalisation.

However, in adapting the concept of Adjacency Pair (AP) for use as a basic analytical tool in the pragmatic analysis of naturally occurring verbal interactions, it seemed desirable to broaden the concept so as to include any pair of consecutive actions/operants emitted by two separate speakers/agents in which the first member of the pair is a verbal operant and the second is a verbal or non-verbal response under the control of the first in its capacity as stimulus. The effect of broadening the concept in this way is that it allows us to use the concept to describe the actual consequences of emitting a particular verbal operant, instead of restricting it to the reinforcing consequences which are "called for" by verbal operants of that type. In other words a question followed by an apology for speaker's inabilty to answer counts as an adjacency pair on this usage, just as much as a question followed by an answer that is both correct and genuinely informative.

In analysing the transcript as a sequence of "adjacency pairs" defined in this way, we begin by breaking it down into a sequence of "turns" and "turn segments." In conversation analysis, a verbal interaction involving two or more participants is conceived as a *sequence* of alternating *turns* in each of which one of the participants speaks or otherwise "holds the floor" without being interrupted and without pausing for longer than, say, 0.5 seconds.

Turns in this sense are classified for the purposes of the present analysis as either "bivalent" or "univalent." A *bivalent turn* (C/A) consists of a gesture, token, sentence or sequence of sentences emitted by one speaker which acts both as a consequence (C) with respect to an immediately preceding turn emitted by another speaker and as an antecedent (A) with respect to another speaker's immediately succeeding turn. In other words, a bivalent turn is a turn which forms part of two consecutive adjacency pairs, contributing the second member to the first of the two pairs and the first member to the second pair.

Bivalent turns, according to this classification, are of two kinds - "single" and "double." A *single bivalent turn* (SB) is one which consists of a single gesture token or sentence which "looks" in both directions, both back towards the preceding turn and forward towards the next turn to be emitted by another speaker. A *double bivalent turn* (DB) consists of two distinct parts, either two sentences or a sentence followed by a sequence of sentences, the first of which acts as a consequence with respect to an immediately preceding turn emitted by another speaker, while the second acts as an antecedent with respect to another speaker's immediately succeeding turn.

A *univalent turn* is one which "looks" in only one direction, either forward as an antecedent with respect to an immediately succeeding turn to be emitted by another speaker without acting as consequence with respect to a preceding turn of that speaker, as in the case of the *opening turn* (OT) of a sequence, or backward as a consequence with respect to the immediately preceding turn of the other participant without acting as an antecedent with respect to a succeeding turn. The *closing turn* (CT) of a sequence is one case of such a backward-looking univalent turn. Another is the case of the verbal reinforcers or *continuers,* already mentioned, which overlap with and sustain without interrupting the other speaker's turn. A turn consisting of two or more sentences, punctuated and sustained by continuers supplied by the listener, constitutes what is known, for the purposes of the present analysis, as an *extended turn* (ET).

In breaking down the transcript into a sequence of Adjacency Pairs for the first Pragmatic Analysis, these extended turns emitted by a single speaker are analysed as a succession of *turn segments* the divisions between which are marked by the onset of an overlapping continuer emitted by the listener. In this way an extended turn is analysed as a succession of adjacency pairs each of which, except in the case of the final segment, consists of a turn segment followed by a continuer emitted by the listener.

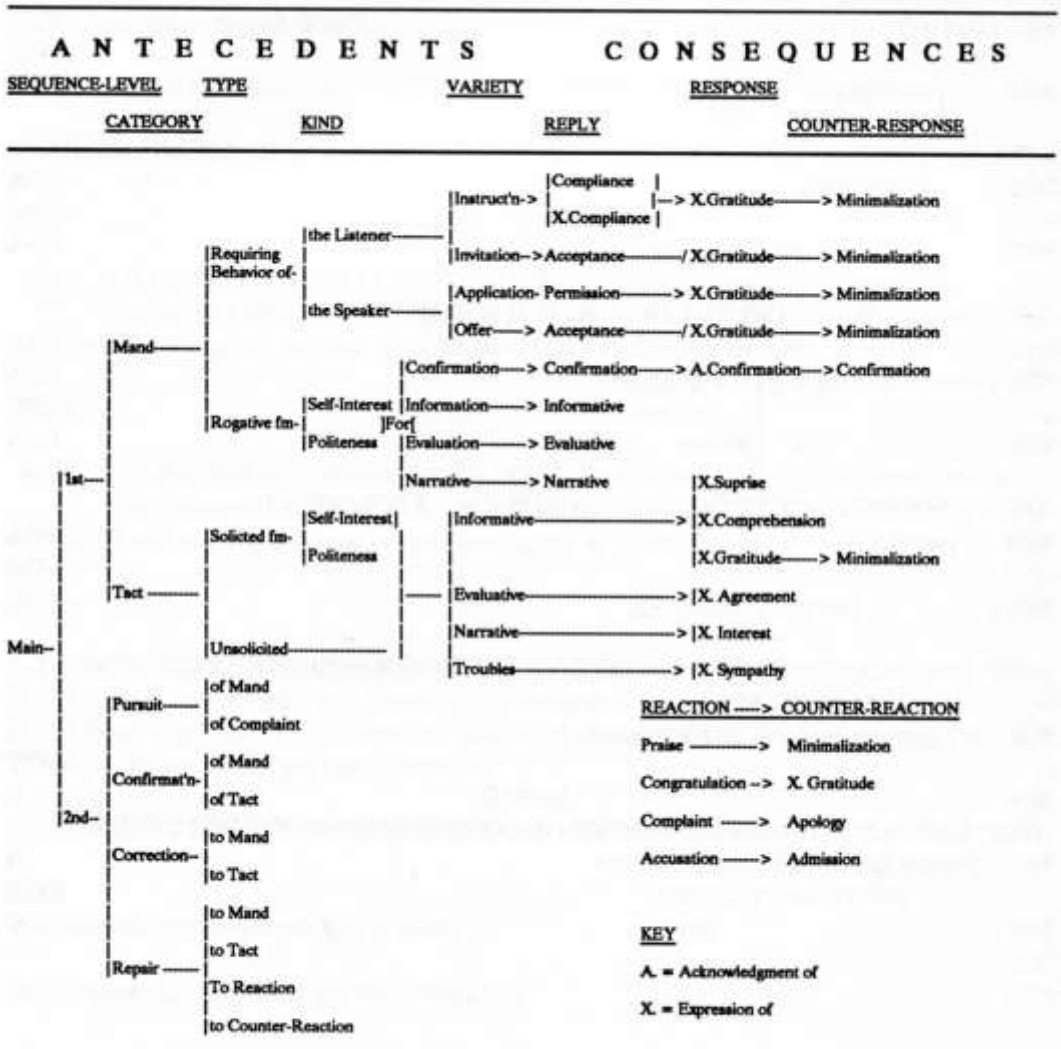
In this way each successive utterance in the transcript is represented alternately as the first or as the second member of an adjacency pair, the only exception being the case of a single bivalent term which appears twice, once as the second member of the preceding adjacency pair and once as the first member of the following pair. Having analysed the sequence as a succession of adjacency pairs in this way, each pair is given a number and a description is assigned to the two members of the pair which reflects the relation between them.

By assigning these descriptions in accordance with the principle whereby a particular kind of verbal operant calls for a particular kind of reply or response which provides the reinforcing consequence for its emission, it is hoped to derive an empirically based taxonomy of speech acts/ verbal operants which can be applied to the analysis of all kinds of verbal interaction. A provisional attempt to draft such a taxonomy is presented in Table 1.

Table 1 is divided vertically between the Antecedents or first members of the Adjacency Pairs on the left and the corresponding Consequences or second members on the right.

Horizontally, there is a division on the Antecedent side between First or primary antecedents and Second(ary) antecedents which consist in Pursuits, Confirmations, Corrections of and Repairs to First or primary antecedents. First or primary antecedents are sub-divided into Mands and Tacts, while there is a corresponding division on the Consequence side between Replies which pair with Mands and Responses, a category which includes most continuers, pairing with Tacts. Mands are finally subdivided into Instructions, Invitations, Applications, Offers and several varieties of (inter)Rogative. Tacts are similarly subdivided into those which are Informative, Evaluative, Narrative and Troubles-telling. There is corresponding complexity on the Consequence side in the subdivisions of Replies and Responses. As it stands, the table includes only the **reinforcing** consequences called for by the types of antecedent listed. It also includes only those adjacency pairs found in the so-called "Main Sequence" and excludes those peculiar to the so-called "Pre-sequence" and "Post-sequence."

Table 1. - Draft Taxonomy of Speech Acts/Verbal Operants



First Year Party 10/85 - Pragmatic Analysis I : List of Adjacency Pairs

Language Game: Leaving Instructions with a Peer

AP01 : ATTENTION-BID - GREETING/A.RECOGNITION
P01 : ((Enters and approaches)) — A
AP01
R01 : |ˆhello Penny. — C/A

AP02 : GREETING/A.RECOGNITION - APOLOGY
R01 : |ˆhello Penny. — C/A
AP02
P02 : (so[rry) — C/A

AP03 : APOLOGY - ACCEPTANCE/?APOLOGY TO THIRD PARTY
P02 : (so[rry) — C/A
AP03
R02 : ['sawrigh(t) — C/A

AP04: INVITATION TO OPEN M.S.-APOLOGY/INTERRUPTION-APPLICATION
R02 : ['sawrigh(t) — C/A
AP04
P03 : can I interrupt — C/A

AP05 : APOLOGY/INTERRUPTION-APPLICATION -
ACCEPTANCE/PERMISSION
P03 : can I interrupt y[er a moment. — C/A
[
AP05
R03 : [yes do: — C/A

AP06 : APOLOGY ACCEPTANCE/PERMISSION - APOLOGY
R03 : [yes do: — C/A
AP06
P04.1: I'm sorry excuse me, — C

AP07 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER
(OPENING M.S.)
P04.2: it's just this bus'ness uv (.) th'pahtee[— A
AP07
R04 : [ye:h(s) — C
AP08 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER
P05 : [fer the first y:e:ahrs. — A
AP08
R05 : yes — C

AP09 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER
(INSTRUCTION) (X.COMPLIANCE)
P06 : J won't (.) be j:n temorro mo:rning. A
AP09
R06 : no C

AP10 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER
P07 : I've left a notice on the bawd. A
AP10
R07 : yeah. C

AP11 : UNSOLICITED INFORMATIVE - INFORMATION-ROGATIVE
(INSTRUCTION) (X.COMPLIANCE)
P08 : an ther's a note fer th'm %uv the money. A
AP11
R08 : who wants te pick it up? C/A

AP12 : INFORMATION-ROGATIVE - SOLICITED INFORMATIVE
(SIGNALLING REDUNDANCY)
R08 : who wants te pick it up? C/A
AP12
P09 : we:ll (.) the:'re on that li:[st. C/A

AP13 : SOLICITED INFORMATIVE - X.SURPRISE/X.COMPREHENSION
(SIGNALLING REDUNDANCY) (ECHOIC)
P09 : we:ll (.) the:'re on that li:[st. C/A
[AP13
R09.1: [oh the're %aw- on that list. C

AP14 : X.COMPREHENSION/CONFIRMATION-ROGATIVE - CONFIRMATION
(EXTRAPOLATION)
R09.2: (.) and any-any uv these people [can have i˜t, (.) can they. C/A
[AP14
P10.1: [yes:: (.) C

S-D : SELF-DIRECTED INFERENCE
P10.2: ah do:: know John's girl friend knows about it. S-D
P10.3: bu(t) she:'s not free at the same time as them temorro S-D
P10.4: so:th- lots uv people kno:w about it, A

AP15 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/
CONFIRMATION-ROGATIVE
(EXTRAPOLATION)
P10.4: so:th- lots uv people kno:w about it, A
AP15
R10 : anan the:'re goin te get the shoppin(g) C/A

AP16 : CONFIRMATION-ROGATIVE - CONFIRMATION
(EXTRAPOLATION)

R10 : anan the:'re goin te get the shoppin(g) out [C/A
[AP16
P11 : [yes C

AP17 : A.CONFIRMATION - CONFIRMATION

R11 : ou[t uv it. (.) I see [( ) C/A
[AP17
P12.1: [yes C

AP18 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER

P12.2: ah've put a list uv what I suggest C/A
AP18
R12 : [yeah C

AP19 : UNSOLICITED INFORMATIVE - X.COMPLIANCE/CLOSURE
(INSTRUCTION) (WEAK-OVERRIDDEN)

P13 : [they get A
AP19
R13 : okay. [(then) C

AP20 : UNSOLICITED INFORMATIVE - X.SURPRISE/X.COMPREHENSION
(ECHOIC)

P14 : [an I've got all the rest uv the shopping. A
AP20
R14.1: oh you've got all the rest, an they know that C

AP21 : X.COMPREHENSION/ CONFIRMATION/CORRECTION
CONFIRMATION-ROGATIVE
(EXTRAPOLATION)

R14.3: =but anybody c'n: t-take this money that's in heah.= C/A
AP21
P15 : =wul (.) th(u) people o[n that list (.) yeh] C/A

AP22 : UNSOLICITED INFORMATIVE - X.COMPREHENSION/CONTINUER
(SHADOWING)

P15 : wul (.) th(u) people o[n that list (.) yeh] C/A
[ ] AP22
R15 : [on that list yes] C/A

AP23 : X.COMPREHENSION - UNSOLICITED INFORMATIVE
(SHADOWING) (INSTRUCTION)

R15 : [on that list yes]= C/A
AP23
P16 : are the people who said they wud help with it= C/A

AP24 : UNSOLICITED INFORMATIVE - X.COMPLIANCE/CLOSURE
(INSTRUCTION)

P16 : are the people who said they wud help with it =	C/A
	AP24
R16 : = [o: k a y P e n n y]	C/A

AP25 : X.COMPLIANCE - X.GRATITUDE
(OVERLAPPING)

R16 : [o: k a y P e n n y]	C/A
[ ]	AP25
P17 : [thank you very much]	C/A

AP26 : X.GRATITUDE - X.GRATITUDE

P17 : [thank you very much]	C/A
	AP26
R17.1: thanks then very much	C

See Appendix II for a key to symbols and conventions used in this analysis that are not explained in the text or in Appendix I.

Pragmatic Analysis II - List of Single Bivalent, Double Bivalent and Extended Turns

The second pragmatic analysis below is derived from the first by removing the numbers of the adjacency pairs, the duplications of the single bivalent turns and the continuers which divide up the extended turns into their constituent turn segments. The effect of this is to reveal a sequence of single bivalent, double bivalent and double bivalent/extended turns alternating between the different participants in such a way that each turn so defined acts as a consequence with respect to the immediately preceding turn emitted by another speaker and as antecedent with respect to another speaker's immediately succeeding turn. This pattern is emphasised by classifying and numbering each turn in a list of single bivalent (SB), double bivalent (DB) and extended turns (ET).

Finally the sequence is subdivided into its three phases. The first of these is the Pre-sequence in which self-identification is solicited and/or offered, recognition is acknowledged, enquiries about each other's health and welfare and observations about the weather, etc. are exchanged, and the opening of the subsequent Main Sequence is negotiated. The Main Sequence which follows contains the business transaction, information transfer, evaluation exchange, etc. for which the sequence was initiated in the first place. This is followed by the Post-sequence which contains expressions of gratitude, wishes for the successful outcome to the other's pre-occupying uncompleted contingencies, arrangements for subsequent interaction and final leave taking.

First Year Party 10/85 - Pragmatic Analysis II: List of Single Bivalent, Double Bivalent, and Extended Turns

Language Game - Leaving Instructions with a Peer

PRE-SEQUENCE BEGINS

OT-P	: ATTENTION-BID	
P01	: ((Enters and approaches))	A
SB1-R	: GREETING/A.RECOGNITION-ACKNOWLEDGEMENT	
R01	: |^hello Penny.	C/A
SB1-P	: APOLOGY	
P02	: (so[rry)	C/A
SB2-R	: ACCEPTANCE/INVITATION TO OPEN M.S.	
R02	: ['sawrigh(t)	C/A
SB2-P	: APOLOGY/INTERRUPTION-APPLICATION	
P03	: can I interrupt y[er a moment.	C/A
SB3-R	: ACCEPTANCE/PERMISSION	
R03	: [yes do:	C/A
DB1/ET1-P		
	: APOLOGY	
P04.1	: I'm sorry excuse me,	C

MAIN SEQUENCE BEGINS

	: UNSOLICITED INFORMATIVE	
P04.2	: it's just this bus'ness uv (.) th'pahtee [	A
	: UNSOLICITED INFORMATIVE	
P05	: [fer the first y:e:ahrs.	A
	: UNSOLICITED INFORMATIVE (INSTRUCTION)	
P06	: I won't (.) be j:n temorro mo:rning.	A
	: UNSOLICITED INFORMATIVE	
P07	: I've left a notice on the bawd.	A
	: UNSOLICITED INFORMATIVE (INSTRUCTION)	
P08	: an ther's a note fer th'm %uv the money.	A
SB4-R	: INFORMATION-ROGATIVE	
R08	: who wants te pick it up?	C/A

SB3-P : SOLICITED INFORMATIVE (SIGNALLING REDUNDANCY)
P09 : we:ll (.) the:'re on that li:[st. C/A

DB1-R:
: X.SURPRISE/X.COMPREHENSION (ECHOIC)
R09.1 : [oh the're %aw- on that list. C

: X.COMPREHENSION (EXTRAPOLATION)/
CONFIRMATION-ROGATIVE
R09.2 : (.) and any-any uv these people [can have i˜t, (.) can they. C/A
DB2/ET2-P
: CONFIRMATION
P10.1 : [yes:: (.) C

: SELF-DIRECTED PREMISE
P10.2 : ah do:: know John's girl friend knows about it. S-D

: SELF-DIRECTED PREMISE
P10.3 : bu(t) she:'s not free at the same time as them temorro S-D

: SELF-DIRECTED CONCLUSION/UNSOLICITED INFORMATIVE
P10.4 : so:th- lots uv people kno:w about it, A

DB2-R
: X.COMPREHENSION (EXTRAPOLATION)/
CONFIRMATION-ROGATIVE
R10 : anan the:'re goin te get the shoppin(g) ou[t uv it. (.) C/A

: CONFIRMATION
R11 : I see [( ) C/A

DB3-P
: CONFIRMATION/UNSOLICITED INFORMATIVE
P12 : [yes ah've put a list uv what I suggest [they get C/A

: UNSOLICITED INFORMATIVE
P14 : [an I've got all the rest uv the shopping. A

DB3/ET1-R
: X.SURPRISE/X.COMPREHENSION (ECHOIC)
R14.1 : oh you've got all the rest. C

: CONFIRMATION ROGATIVE
R14.2 : an they know that. C

: X.COMPREHENSION (EXTRAPOLATION)/CONFIRMATION-ROGATIVE
R14.3 : but anybody c'n: t-take this money that's in heah. C/A

DB4-P
: CONFIRMATION/CORRECTION
P15 : wul (.) th(u) people o[n that list (.) yeh] C/A
: UNSOLICITED INFORMATIVE (INSTRUCTION)
P16 : are the people who said they wud help with it C/A

POST-SEQUENCE BEGINS

SB5-R : X.COMPLIANCE/CLOSURE
R16 : [o; k a y P e n n y] C/A

SB4-P : X.GRATITUDE
P17 : [thank you very much] C/A

CT/DB4-R
: X.GRATITUDE
R17.1 : thanks then very much ye:s u:m (.) C

SEQUENCE ENDS - INTERRUPTED MAIN SEQUENCE RESUMES

R17.3 : so down to "persuaded me." A

Semantic Analysis - Contingencies of the Three Agents Arranged in Chronological Order

The semantic analysis is derived from the List of Single Bivalent, Double Bivalent and Extended Turns in three stages. In the first stage the pragmatic descriptions and notation of the individual turns and turn segments are removed. At the same time Pre-and Post- sequences are dropped on the grounds that the stereotyped sentences of which they consist have a purely pragmatic function and are of no semantic significance. The remaining sentences are then given a semantic classification based on the principle of Behavioral Contingency Semantics. On this principle, each sentence in the sequence is classified, regardless of who is the current speaker, in terms of the particular contingency term or leg (A for "antecedent", B for "behavior" and C for "consequence") which it specifies relative to the behavior of the speaker (S), the listener (L) and some other person or persons mentioned in the sequence (O).

The second stage in the semantic analysis is to split up the sequence into three separate lists of semantically significant sentences for each of the three agents whose contingencies are specified in it, the two participants and the other person or persons mentioned in the dialogue. In the case of the two participants, sentences uttered by that participant as speaker (S:) are included along with those uttered by the other participant to which that agent responds as listener (L:). A serial number is then assigned to the contingency specified by the sentence in question according to its position on a list of contingencies defined in relation to the behavior of the particular agent in the chronological order of the occurrence of that behavior. Finally, the relationship of the event or state of affairs represented in each sentence to the "now" of utterance is indicated by means of the symbol "<" for past "< >" for present and ">" for future. This prepares the way for the third and final stage in which the sentences which specify the legs of the contingencies of the three agents are re-arranged in the chronological order of occurrence of the behavior relative to which the contingency in question is defined in the time scale represented in the dialogue. This permits all the sentences which specify parts of a particular

contingency to be grouped together under a heading which describes the contingency by reference to its defining behavior.

First Year Party 10/85 - Semantic Analysis

I. Penny's Contingencies in Chronological Order

CONTINGENCY 1. - DOING THE SHOPPING
P14 : [an I've got all the rest uv the shopping. S:B1C1<

CONTINGENCY 2. - TELLING THE HELPERS ABOUT THE ARRANGEMENTS
P07 : I've left a notice on the bawd. S:B2C2<
P10.2: ah do:: know John's girl friend knows about it. S:C2.1<
P10.4: so:th- lots uv people kno:w about it, S:C2.1<
P10.3: bu(t) she:'s not free at the same time as them temorro S:C2.3>

CONTINGENCY 3. - MAKING A LIST OF WHO IS TO HAVE THE MONEY
P08 : an ther's a note fer th'm %uv the money. S:B3C3<
P09 : we:ll (.) the:'re on that li:[st. S:C3<
R09.2: (.) and any-any uv these people [can have i¯t, (.) can they. L:C3.1>?
R14.3: but anybody c'n: t-take this money that's in heah. L:C3.1>?
P15 :wul- (.) th(u) people o[n that list (.) yeh]
P16 : are the people who said they wud help with it S:C3.2>

CONTINGENCY 4. - MAKING THE SHOPPING LIST
P12.2: ah've put a list uv what I suggest [they get S:A4<>B4C4<
R10 : anan the:'re goin te get the shoppin(g) ou[t uv it. L:C4.1>?

CONTINGENCY 5. - HANDING OVER THE MONEY AND LISTS TO ROSE
P03 : can I interrupt y[er a moment. S:B5<>
P08 : an ther's a note fer th'm %uv the money. S:B5.1<>
P04.2: it's just this bus'ness uv (.) th'pahtee
P05 : [fer the first y:e:ahrs. S:C5>
CONTINGENCY 6. - NOT COMING IN TOMORROW
P06 : I won't (.) be j:n temorro mo:rning. S:B6

II. Rose's Contingencies in Chronological Order

CONTINGENCY 1. - LISTENING TO PENNY
P03 : can I interrupt y[er a moment. L:A1<>
CONTINGENCY 2. - TAKING CHARGE OF THE MONEY AND THE LISTS
P08 : an ther's a note fer th'm %uv the money. L:A2<>/

CONTINGENCY 3. - NO NEED TO TELL THE HELPERS ABOUT THE ARRANGEMENTS
P07 : I've left a notice on the bawd. L:A3<
P10.2: ah do:: know John's girl friend knows about it. L:A3.1<
P10.4: so:th- lots uv people kno:w about it, L:A3.2<
P06 : I won't (.) be j:n temorro mo:rning. L:A3.3>

P10.3: bu(t) she:'s not free at the same time as them temorro L:A3.4>

CONTINGENCY 4. - CHECKING WHETHER AN APPLICANT CAN HAVE THE MONEY AND GIVING IT TO THEM

P15 : wul- (.) th(u) people o[n that list (.) yeh]
P16 : are the people who said they wud help with it L:A4<
P08 : an ther's a note fer th'm %uv the money. L:A4.1<>
R08 : who wants te pick it up? S:A4>?
P09 : we:ll (.) the:'re on that li:[st. L:A4.1<>
R09.2: (.) and any-any uv these people [can have i^t, (.) can they. S:B4>?
R14.3: but anybody c'n: t-take this money that's in heah. S:B4>?

CONTINGENCY 5. - NO NEED TO TELL THEM WHAT TO GET

P14 : [an I've got all the rest uv the shopping. L:A5<
P12.2: ah've put a list uv what I suggest [they get L:A5.1>
R10 : anan the:'re goin te get the shoppin(g) ou[t uv it. S:C5>?
P04.2: it's just this bus'ness uv (.) th'pahtee
P05 : [fer the first y:e:ahrs. L:C5>

III. Contingencies of the Others in Chronological Order

CONTINGENCY 1. - RESPONDING TO PENNY'S COMMUNICATION

P15 : wul- (.) th(u) people o[n that list (.) yeh]
P16 : are the people who said they wud help with it O:B1<
P10.2: ah do:: know John's girl friend knows about it. O:C1<
P10.4: so:th- lots uv people kno:w about it, O:C1<

CONTINGENCY 2. - APPLYING TO ROSE FOR THE MONEY

P15 :wul- (.) th(u) people o[n that list (.) yeh]
P16 : are the people who said they would help with it O:A2<
R08 : who wants te pick it up? O:B2>?
P09 : we:ll (.) the:'re on that li:[st. O:B2>
R14.3: but anybody c'n: t-take this money that's in heah. O:B2>?
R09.2: (.) and any-any uv these people [can have i^t, (.) can they. O:C2>?

CONTINGENCY 3. DOING THE REST OF THE SHOPPING

P14 : [an I've got all the rest uv the shopping. O;A3<
P08 : an ther's a note fer th'm %uv the money. O:A3.1<>
P12.2: ah've put a list uv what I suggest [they get O:A3.2<>
R10 : anan the:'re goin te get the shoppin(g) ou[t uv it. O:B3>?
P04.2: it's just this bus'ness uv (.) th'pahtee
P05 : [fer the first y:e:ahrs. O:C3>

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Footnotes

1. Now at the University College of North Wales, Bangor.
2. As Brentano (1911) points out, the objects, events and states of affairs to which words and sentences intentionally refer do not exist and you cannot have a relation one of whose terms is non-existent.
3. The construction of novel sentences requires that any such sentence be a member of a number of response classes.

APPENDIX I - Phonetic Conventions

(adapted from those used in conversation analysis more particularly in transcripts made by Dr. Gail Jefferson)

1. **superimposed square brackets** either: [a.....z]
[ ]
[a.....z] as in:

P15 :wul- (.) th(u) people o[n that list (.) yeh]
[ ]
R15 : [on that list yes]

or [a.....z
[
[a.....z as in:

R03 : [yes do:
[
P04.1: y[er a moment. I'm sorry excuse me,

indicate overlapping.

2. **Equals symbol** =a.....z= as in:

Penny: =who said they would help with it=

indicates no discernible gap between the preceding or following utterances, whether of the same or of different speakers.

3. **A full stop within curved brackets,** (.) as in:

P06 : I won't (.) be j:n temorro mo:rning.

indicates a micropause between utterances.

4. A comma ....z, at the end of a phrase or sentence as in:

P10.4: so:th- lots uv people kno:w about it,

indicates an upward intonation at the end of the word it follows.

5. A **question mark** ....z? at the end of a sentence as in:

RO8: who wants te pick it up?

indicates an upward intonation on the whole word that precedes it.

6. A **full stop** ....z. at the end of a sentence as in:

P07 : I've left a notice on the bawd.

indicates a downward intonation, either over the course of the word that precedes it or at the end of the word.

7. **Colons** a::...z: as in:
P10.2: ah do:: know John's girl friend knows about it.

indicate prolonging or stretching of the sound of the preceding letter or syllable, the more colons the more the stretching.

8. **Underlining** a,...z as in:

P03 : can I interrupt

indicates stress either by pitch or by volume.

9. A **percent symbol** %a....z as in:

P08 : an ther's a note fer th'm %uv the money.

indicates a very soft tone or low volume.

10. An **upward line and carrot** |^a....z as in:

R01 : |^hello Penny.

indicates a sharp upward intonation in the syllable following the line and carrot.
11. A **dash** ....z- as in:

P09 : we:ll (.) the:'re on that li:[st.
R09.1: [oh the're %aw- on that list.

indicates a cut-off of the preceding sound or word.

12. A **tilde** ....~z as in:

R09.2: (.) and any-any uv these people [can have i~t, (.) can they.
P10.1: [yes:: (.)

indicates an accentuation of a final consonant.

13. **Empty brackets** ( ) as in:

P11 : [yes
[
R11 : ou[t of it. (.) I see [( )
[
P12.1: [yes

indicate that the speaker made some sound or utterance which could not be heard sufficiently to be transcribed.

14. **Words or letters in curved brackets** (a....z) as in:

P02: (so [rry)
[
R02 : ['sawrigh(t)

indicate that the transcriber is in some doubt about the word or sound actually emitted or whether any sound was actually made in this position.

15. **Words in double curved brackets** ((A....z)) as in:

Penny: it's just this bus'ness uv (.) th' pahtee [fer the=
[
Rose: [ye:h(s)
((Knock))

indicate sounds on the tape other than the speakers' verbalizations.

APPENDIX II - Conventions Used in the List of Adjacency Pairs and Not Explained Elsewhere in the Text

S-D = A self-directed turn in which a speaker is "thinking aloud" in such a way that no response is called for from the listener.

A...Z - A.. = The boundary between the descriptions of the two members of an adjacency pair.

A....Z/A.... = The boundary between the descriptions of the consequence and antecedent functions of a single bivalent (C/A) turn.

A. = "Acknowledgment of"

M.S. = The main sequence

(A....Z) = An additional function performed by the utterance in question or a description of the way in which the function of the utterance in question is performed.

X. = "Expression of"

(ECHOIC) = An utterance in which the speaker repeats part of the previous speaker's utterance word for word.

(SHADOWING) = An utterance in which the concluding word or words of the speaker's sentence are uttered simultaneously by the listener.