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Analytic Work: Aspects of the Organisation of Conversational Data[1]

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This paper discusses some features of what we have come to think of as sociology's commonsense, brought out by treating sociology as a species of practical reasoning.[2] To illustrate, we draw upon one particular instance of one particular type of sociological work, a paper by Emmanuel Schegloff[3] that is a contribution to the accumulating corpus known as Conversation Analysis (CA). Conversation Analysis is not a model for all sociology, nor are its methods typical. But as a species of sociology it does display in its own way the nature of sociology's practical reasoning.

Adopting this view of sociological work entails the following. In the first place and most importantly, such an adoption is a methodological one.[4] For the purposes of sociological investigation, it is always possible to treat any activity or institution in terms of the practices which constitute it. We can ask of each and every socially observable phenomenon, "how was it produced"?. For the purposes of analytic sociological treatment, all activities display the methods which produced them. Such a viewpoint encourages the adoption of a means-end investigative strategy. Activities can be seen as organized in order to produce the products they do. Such a strategy makes it permissible to speak of social actors as producing the routine, ordinary orderliness that their lives have by recognizably doing for example, t.v. watching, drinking with friends, shopping with the family, writing academic papers . . . .

We take this means-end organizational framework and apply it to sociology itself. We ask what it is about sociological work, sociology's routine and methodical practices, which constitutes it as recognizably sociology, and, hence, as not astrophysics, necromancy or weather forecasting.

We begin by asking how sociology produces its findings. Sociology is a body of practices whereby findings, conclusion, theories and their implications are made public. These practices provide sociologists with ways of talking about and displaying their data, findings and theories. Or, if you prefer, it offers them a variety of ways in which they can tell their sociological stories.

We have deliberately chosen this way of putting things because the idea that sociology might be "mere" story-telling has been felt to be deplorable by some commentators.[5] But such an observation is not so much a comment upon sociology's worthiness as it is a leading idea by means of which we can begin to consider sociological practice. As a beginning, such a viewpoint enables us to take advantage of two fruitful ideas of Harvey Sacks, namely "recipient design" and "co-selection".[6] In his work on story-telling in conversation, Sacks proposes that stories can be seen as designed for the specific listeners to whom they are told, and hence the assemblage of items which comprises the story is selected so that it all fits together. Co-selection and recipient design are, then, glosses for a considerable body of story-telling practices. We have used these ideas to illuminate what we will treat as sociology's story-telling practices, its production features. In the rest of this paper we will discuss these practices under the headings of "the provision of a context for an account" and "the enhancement of the orderliness displayed by the features of the account".

In setting out sociology's practical reasoning as that is evidenced in Schegloff's work, we emphasize its character as a "rationalizing procedure", an idea taken from some recent discussions by philosophers that attempted to lay out a natural logic for semantics.[7] What is being sought in such discussion is the *logical* descriptions of the rationalizing work which can, or might be, attributed to interpretive actors. "Logical" here is an important adjective, for it is plain that no claims concerning actual rationalising procedures could be based on this exercise. What is being described is the "logical form" of such processes, what they would have to be like for their logic to be discernible. And there is no methodological rule requiring the supervenience of logical descriptions. Such a semantics attributes to actors a strategy of assuming attitudinal and behavioural rationality defined in means/ends terms.[8] Grice (1975) has developed a similar kind of rationalizing procedure, although he does not refer to it as such, in his suggestion that the logic of conversation appears to be a conformity with a maxim of co-operation. Co-operation is the normative characteristic of conversation. Because they are interested in semantics, both philosophies offer what can be termed the logical structure of utterance design, how it is that well formed meaningful sentences can convey their meaning. Grice unpacks his "master maxim" of co-operation into the following:

(i) conversationalists should be as informative as possible;
(ii) conversationalists should say only what they know to be true;
(iii) conversationalists should be relevant;
(iv) conversationalists should be as brief, orderly and as perspicuous as possible.

Grice's rationalizing procedure consists in supposing that conversationalists

normally respect these maxims, and their hearers assume that they do. The logic of what Grice calls "implicature" lies in the application and breach of these maxims as the normative characteristics of conversation.

Rather than following Grice's logicist path, we want to adapt his maxims and use them to provide the analytic rationalization which Schegloff uses as the basis of his sociological practical reasoning. It is possible to formulate a set of hearer's maxims parallel to those of Grice. These might be:

(i) trust what people tell you;
(ii) assume what had been said makes sense on its own, even though more could always be asked for;
(iii) treat what is said within the context of what precedes it and what follows it;
(iv) prefer to hear utterances as simple and clear rather than as complex and cumbersome.

This set of maxims could be reduced to the two principles which all CA seems to recognize, namely the ubiquity of receipient design and the use of minimal forms. The practical reasoning of CA consists in rationalizing data by seeing it normatively organized to satisfy these two principles. The procedures which we will outline are the ways that analysts set about explicating this rationalization in much the same way that the devices made available by the predicate calculi and modal logic etc. are the ways that the logical semanticists and Grice set about their rationalizing work. Task performance, in Schegloff's case telephone identification, is assumed to be as economic as possible and carried out with the co-operation of others. Such economy and co-operation are identified in terms of paradigm forms. Once these have been "discovered" and analyzed, other examples of the activity can be rationalized into conformity with them by means of examination of their context. Deviant cases are *deviant for a reason*, and the provision of that reason shows them to be efficiently designed and co-operatively produced in a particular setting. Grice's maxims capture the essential features of the practical logic which Schegloff uses when rationalizing the features of identification in conversational openings. By assuming that data are precisely designed and co-operatively produced on and for the occasion of their use, Schegloff is able to lay out the general structural features of the phenomenon he wishes to discuss.

The choice of Schegloff's paper is not, of itself, significant, but the choice may prove felicitous in two respects. First, to those who know his work, it should be fairly obvious that Schegloff, as a practitioner of CA, takes exactly the same attitude towards his data as we do towards his paper (our data). This ought to be sufficient to preempt the misapprehension that treating sociology as the work of practical reasoning is, somehow, decrying it, underestimating it or, even worse, mounting a critique of it. No one takes

CA to be a critique of conversation (do they?). Second, not only is Schegloff among the foremost workers in his field, but also his writing is quite rightly held to be a model of clarity and perspicuity.

We turn now to the nature of sociological practices themselves.

II

The Provision of a Context for an Account

Several procedures are used to shape the context in which a piece of analysis is to be located. Their net effect is to make a piece of analysis fit within a familiar and recognizable framework.

1. Authority and Authorization

Authorizing of sociological analysis can take many forms. We list three.

(a) *normalizing the work in question*: readers of sociological descriptions assume the standardized character of some piece of work without necessarily investigating it. Such standardization is assumed *until further notice*, where such further notice would entail the questioning of the standardized character of the work. The work of localizing the descriptions being offered provides resources whereby such a presupposition can be sustained. In dealing with recognizability in terms of its organizational consequences, two interesting sets of things become available for study. First of all, it becomes possible to give a serious, organizationally oriented treatment of a familiar feature of writing, namely the work of finding a title for a piece, listing the acknowledgements, the selection of publication outlets and even of style. All of these can be used as possible resources for localization work. Second is that perennial aspect of sociological debates, the argument over the interpretation of sources. Placing a piece in the context of widely known previous research makes possible a subsequent "tagging" strategy claiming that the "tagged-onto" piece has misinterpreted one or more of its sources. However, the achieved recognizability of the standarized format of some piece does not rest only on normalization by citation at the beginning, but authorization is a permanent feature of an account, present all through the description.

(b) *taking the background as read*: closely related to the work of normalization is the separation of the author from generalized responsibility for the style of work he is presenting. By locating a piece within a particular tradition, a researcher displays his commitment to his work and prevents himself from having to substantiate that work's general bona fides. In taking the

background as read, researchers can treat their work as justifiable "for all practical purposes", and hence can get on with presenting their findings within a recognizable framework. The provision of recognizability indicates both what standards will be acceptable in assessing a piece of work and exactly what has been taken as read in the background debates. Accomplishing the recognizability of some findings also demonstrates what will count as proper criticism of them.

(c) *accomodating the standarized format*: central to everything said so far is the idea of a standarized format into which findings are cast. By presenting descriptions in these conventionalized ways, sociologists can ensure, in as economical a way as possible, that their work will be found to be related to a whole collection of ideas, forms of argument, types of data, lists of citable authorities which in turn provide for its readability, understandability and criticizability. What this does is to shift the problem away from specifying how, in predetermined ways, any piece is, say, sociology and not cognitive psychology, or conversation analysis and not symbolic interactionism, and instead raises the issue of how it achieves its recognizability as sociology and/or conversation analysis.

In order to demonstrate just how this authorizing work may be accomplished in an actual case, let us turn to Schegloff's paper. Each of the three features described can be discerned there. Perhaps the most important resource that Schegloff provides is the portmanteau reference secured in the footnotes rather than listed in the main text. These footnotes provide inference-rich references from which a standard format can be derived. This, in fact, makes the footnotes and their references crucial to the text rather marginal opportunities for the display of intellectual virtuosity or electicism. The first four footnotes are all references to Schegloff's own and his close colleagues' work. They define the locale in which the paper is operating. As Schegloff himself notes, introductions and beginnings are important places for identification and recognition work to be done. These footnotes (cf. 71, fn. 1–4)[9] provide direct and detailed indications of the analytic tradition within which Schegloff locates his paper:

> "This, then, is another of a series on parts of conversational openings. Its data base is made up of about 450 openings, the parties to which vary on the standardly relevant parameters—age, sex, region, social class . . . ." (p. 27)

Exactly what this interest in openings is had already been laid down in the previous paragraph:

> "Attention to these sequences may contribute to our knowledge of one type of conversational opening; and by exploiting the special visibility of interactional work on the telephone, it may contribute to our understanding of it in other settings of conversation and interaction as well". (p. 27)

Generalizations of the type quoted and the use of inference-rich references leave it to the reader to infer the context of the argument being developed. The reader need not have more than a working knowledge of the field cited by Schegloff. Indeed, this knowledge can be gained simply by noticing the references and by browsing through the rest of the book, reading its title and the title of the paper. From such slim resources it is possible to build up quite a complex picture of the kind of work which Schegloff will present; a picture which will represent an instance of the standard format or normal form for research reports. The format establishes the sociological relevances of the paper and is the basis for the generalizing strategy adopted with regard to the findings presented.

2. Finding a Puzzle to Fit the Solution

The topic of Schegloff's paper is the organization of identification in the openings of conversation. This organization constitutes a puzzle to which the corpus of data—the 450 calls mentioned in the quotation cited—stand as a solution. In that he had collected the data, Schegloff already possessed the solution. The analytic task is to discover what problem the corpus is a solution to. By casting the contents of the paper into this puzzle-solution dichotomy, it becomes possible to show how its structure reveals a collection of systematic solutions to the problem of how to describe identification as member's solutions to the practical problems of achieving recognition in the openings of conversation. There are two constraints on this analytic puzzle solving.

(i) Although it is feasible to conceive the myriads of alternative possible analytic solutions to the descriptive problem, in fact only a small number of such solutions is ever used. This is a constraint generated by the analytic tradition associated with a specific format. Such a format contains standard procedures or "formalities" that identify the legitimate moves that can be made. Within CA, such formalities might be the requirement that all analysis of data should take cognizance of the implications of the turn-taking machinery; that, where possible, alternatives should be arranged in a principled preference hierarchy; and that explanations which incorporate topicality, "reason for the call" features or categorical materials should be subsumed under broader sequential headings.[10] It is the display of accounts such as these that are used to relate particular pieces to the standard forms and hence to judge the *bona fides* and analytic effectiveness.

(ii) Within the overall ambience of (i) there may be divergent attitudes that are descriptive of particular styles. For example, there are strong differences of opinion about the efficacy of bulk data, different sets of

transcription procedures (although, as Schegloff implies by his use of them, Jefferson's protocols seem to be taking on paragon status), the fruitfulness of close attention to preferential organization as opposed to using it as a leading idea, the importance of categorization and descriptive problems and on many other fronts, all of which can be taken as emblematic of different authorizations. These divergences—even disarray—have no important analytic implications except that they raise the recognizability of different kinds of descriptive solutions within CA as a possible topic for analysis.

Faced with a corpus of data, the analytic task is to arrange that data so that the puzzle to which the data is a solution can be revealed. That puzzle can then be authorized by linking it to specific sets of researches and analyses, and the solutions legitimated by showing it conforms to clusters of constraints. In making the constraints visible, the arrangement of the puzzle and its solution is normalized or recognized. Although such arrangement is crucial, it is not necessarily perceived as such by the analyst. Sometimes it will; sometimes not. From our point of view, though, sociological work must be seen as the fitting of members' solutions to members' problems within some analytic framework.

In Schegloff's paper, two such devices are used. In brief these are:

(i) The putative adequacy of existing solutions.
This is to be seen in the lists of referenced authorities. It also has a retrospective-prospective character since the work that is presented both takes its lead from, and in some measure supplants, the work which has already been done. By tagging this work to previous work, the cumulative nature of the whole enterprise is provided for. Schegloff begins, then, with some theoretically interesting, but, as yet, poorly understood or only partially described problems concerning data such as these.

(ii) The anecdotal incorporation of commonsense.
The theoretical justification of the work is run alongside, and indeed is illuminated by, the incorporation of a commonsensical interpretation of the hypothesized problem. The fusion is achieved by the use of stories from Genesis, daily life, hypothetical experiences, and anthropomorphizing ethological data in Section 1 of his paper.[11]

By talking of a *formally* derived connection and contrasting it with an *anecdotal* one, it should not be thought that we mean to disparage either. Both are very effective ways of solving the organizational problems of analysis. Nor are they completely unrelated. As Schegloff demonstrates, anecdotal connections can be used instead of an argument for the warrantability of a search for formal ones. Nor is this merely a stylistic point—although it is

that too. It is not just that some people write in an easy and fluent style and with down-to-earth examples, while others seem unable to. Styles can be treated as encapsulations of operational formulae and what is the object of discussion here is the ways that these different formulae might achieve the same organizational goals. So, in the opening section of his paper, Schegloff provides arguments concerning the importance of identification in human activities, as a species of social activity in its own right, as central for CA, and as important in everyday experience, All of these themes allow him to conclude that interactional identification is not only a proper topic for sociological study but an important one too. He had established his topic and identified his format.

3. Disregarding the Incompleteness of the Data

Although Schegloff bases his analysis upon the 450 items which are contained in his corpus, he does not cite all of them in his paper. Furthermore, the 450 items comprise just a miniscule proportion of the possible corpus of materials that the analysis is intended to apply to. For anyone interested in formalizing the level of claims that Schegloff could make quantitatively on this data, the problems that would be raised by this discrepancy between base and its application would, by and large, be sampling ones. How do we (or Schegloff for that matter) know that his cases, and hence his analyses, are not aberrant ones? We do not think these sampling issues are important, nor do we think that the representativeness of the data needs to be called into question at all, let alone in this technical way. Rather, we would take the sampling problem as, in fact, pointing to a much more interesting methodological issue, a fully fledged problem and an inductive solution, namely the ways that Schegloff manages to *bring off* the analytic representativeness of his data. We raise the data's representativeness, then, not in order to fault its base but to investigate how its base is secured as a practical, analytic (i.e., methodological) matter. How does Schegloff manage to go from the small (relatively speaking) selection of instances that he cites to the phenomenon at large? In very broad terms what happens is that the selected portions of data that are cited are presented as "standing in for" all those other instances that could have been given and would have been equally recognizable had they been so. Some data stands in for, or takes the place of, all the possible data and hence becomes generalized. This representativeness is achieved by the treatment of the data as documentary evidence of its own generalizability. This seems to be done in two ways:

(a) Particular fragments are cast as "inferentially rich" by having aspects of organizational—i.e., sequential—character worked up and explicated. Obviously the details of any particular "working up" will vary from case to case, but, given that each case that is so treated is, on the

surface at least, perfectly ordinary and prosaic, then any item would yield the same kinds of results if it too was the object of such extended and meticulous attention. But to do that would make presentation of results impossible or confine them to individual fragments. So, by means of a perfectly ordinary *etc. assumption*,[12] Schegloff can assume that what he says about specific items is sayable about the collection as a whole, and further, he can assume that we recognize it to be so. He can assume, that is, that we are operating on the same assumption. Later on we shall suggest that it is only by disregarding the contextualities of data fragments that they can be assembled into corpora. All we want to notice here is that this compilation of data is only feasible because of the institutionalized practice of typifying specific cases as instances of generalized forms. By teasing out the structural, contextual and organizational features of some (even just one) cases that are by that exercise classed as typical, the motivations for the production of "this one" can be assumed to apply to "all the rest". And hence any citation of data has a retrospective/prospective readability. It is "read in line" with what has gone before and locates what succeeds it.

(b) The second way in which this disregarding is brought off is probably best thought of in relation to the structuring of relevancies. Many things that are known to inform the interactional experience of data (e.g. intonation, gesture, facial movement, serial location in biographical histories) but cannot be coped with satisfactorily within the given bounds of this sociology, these transcription protocols, these descriptive frameworks, are simply ignored. They are not considered and then dismissed as irrelevant. They are "read out" of the exercise as not bearing on this case. Again notice that this is not a critical comment. We do not suggest that "everything" ought to be included or that Schegloff has no grounds for doing what he does. What we are saying is that he has to solve the problem of getting a description of these data out and he goes about it in a standard way. Probably the most interesting implication of this "solution" surfaces in what can be thought of as the "no bad data phenomenon". None of the instances cited are deemed to be weaker, in need of reservations as to its quality, etc. There is an apparent uniformity of transcription quality, appositeness, clarity, etc. This is because whatever weakness individual fragments might have, those weaknesses do not matter.[13] Analysts assume consonance between that which is cited and that which is being talked about. They use a principle of opportunism: of doing what they can with what they have available. The structuring of relevances and no bad data are the methodological necessities of such a principle. They enable solutions to the problem of "what can be

made out of this data?", or "of what is this data?". Hence it follows that specific examples will be held to be consonant with or correspond to generic types.

Schegloff engages in the specific contextualization of data at several points. At the beginning of Section II, we are given very precise instructions on how to read the data fragments that are to be presented. They are to be seen as "displays" of recognition/identification work. They occur in the caller's first turn and fall into nine types, distinguished commonsensically by the nature of their "contents". The nine types are: greeting terms; answerer's address term used interrogatively; answerer's address term used exclamatorily; a question or observation of called's state; switchboard requests; questions concerning identity; jokes, and first topics. Schegloff (and therefore we) has no other interest in the data he cites except as instances of the types. Similar instructions introduce data fragments 48 and 49 on Page 37 and fragment 50 (Page 40) as well. However, perhaps the most interesting example of this structuring of paper organized relevancies occurs in footnote 14 on Page 72. Whereas each of the previous "instructions" referred to the reading of individual fragments, this note is an instruction on how to see the paper as a whole. It displays the paper's preliminary status, the line that it has selected and the possibilities of alternative analyses it might be associated with. To do justice to the range of relevancies it covers and to its succinctness, we will have to quote the footnote at length.

"Openings are organizationally and interactionally very 'dense'. In them, and in the very short turns of which they are composed, are compacted the treatment of many of the issues central to the organization of interaction, and to the shape of any particular interaction getting underway. Accordingly, each turn is partially implicated in a number of different organizational issues, and the treatment accorded some turn or sequence of turns when addressing a particular organizational issue will almost necessarily be only a partial treatment of those turns. Further, since the various organizational issues and their solution in particular openings are concomitant and interact, even our understanding of a single issue being addressed will likely be partial until the full range of issues is at least somewhat surveyed, and the way that particular sequences integrate and reconcile the requirements of different organizational structures is appreciated . . . . For example, in the data to which this paper is addressed, running parallel to the issues of identification on which I focus is the issue of the length and shape of the opening as it bears on the allocation of first topic and the displayed priority it should have. In sum, the paper is preliminary not only for a larger study of openings, but for its narrower topic". (p. 72, fn. 14)

From our remarks, it must be obvious that we are far from accusing Schegloff of doing something underhand, or even of implying that he is pulling that analytic wool over our eyes. Even less can it be said that he is some kind of "analytic dope" unaware of the organizational problems which he has to

solve. Schegloff is very aware that, in presenting data in particular ways, he facilitates particular analytic treatments as working solutions to analytic problems. The accounts that he gives are designed for his readers and to enable them to follow him through all the steps from the presented data to the working solution.

It is the operation of these twin analytic devices of a generalizing *etcetera* assumption and no bad data which enables the inductive move from "these items of data" to "all cases" and hence underwrites the explanatory power of the analysis Schegloff presents.

4. Providing the Hidden Unity of the Data

The previous section considered the generalization of some specific characteristics of some pieces of data to all data of that type. This is done by the production of equivalence classes of data (the collection of types) based on the treatment of some features as criterial for the class definition and hence inclusion, and some as irrelevant. Assembling such classes, no matter by what criterion, gives then a unity, one which, in the examples which we are considering, is not to be discerned by a first, and non-analytic scanning of the data. Instructions are issued on what to look for. That was the point of 3 above. The criterion with which Schegloff chooses to build his equivalence types is a structural one. The items in the class show the same structural solutions to some interactional task, i.e., recognition/identification in second turn. It is this which unites such disparate items as data fragments

(4) B. Hello
R. Howdy (ID 277)

and (23) F. (. . .)o
C. Yeah I'm jus leaving (JG 55)

with (41) M. Hello?
G. Hi = This is your daughter chewing on beets (MDE 930)

Having conceived of analysis in terms of the production of the set of equivalence classes, the work that goes into its accomplishment is the display and illustration of the relationships between the classes and the collation of data fragments into them. We have already looked at some of the ways that the latter is achieved. The former is brought off by the hierarchical organization of types, sub-types, preferential ordering and so on.

It is important to keep in mind the "double fitting"[14] that is involved in this procedure. Having ascribed some unifying theme to some corpus of data (i.e., having made it a corpus) it is always possible to explicate that unification by finding some structural, contextual, organizational exigencies that show that they are "really" just the same—the same for all practical

analytic purposes. It is always possible the unity could be shown, although this does not mean that just anyone can do it. It is a mark of Schegloff's analytic skill that he can do so with elegance and a minimum of effort. The skill resides in recovering from the corpus what it was that allowed it to be collected together in the first place. Analytic work comprises no more and no less than the working out of the string of nested equivalence classes. The whole of Schegloff's paper demonstrates this. Its organization is provided by the step by step working through of the set of equivalence classes for identification.

5. "Working Up" a Thematic Relevance

Co-classification is a product of finding how and where similarities can be discerned. Since the forms of co-classification made available by analysis are "discovered" ones, this requires work to "shape up" or fit the data to the theme by showing its conformity to the classificational criteria. What this discovery procedure amounts to is the application of rubrics other than commonsense ones. Thematising data consists, therefore, in making a contrast between analytic and commonsense relevances with regard to data items, and then organizing the data according to analytic requirements. In Schegloff's case this rubric is a structural one. The data are organized into types, sub-types and generic classes and these are related by treating some as base or normal forms and others as elaborated, first preferences, second preferences, compressed or mutant versions and so on. The net result is the accumulation of data within a highly organized framework of identification in second, third and fourth turns where, when naively considered without the benefit of the analytic work that went into shaping up the data, many items which are co-classed would look thoroughly dissimilar if juxtaposed. Juxtaposing such dissimilar items and then demonstrating their "hidden unity" by "working up their relevance to the theme", reveals the analytic power that the framework possesses. It provides both another step in the analysis and a further instance of it.

What the work that the procedures itemized in 1–5 above achieves is the refining out of contingent, non-analytic relevances in the consideration of data. Hence, by such procedures, data comes to be treatable under certain kinds of sociological attitudes and amenable to certain kinds of sociological analysis. Once individual features of data are set aside in favour of corporate ones, the generalizability of data findings is ensured. Although findings may be presented as just and only descriptive of the items cited, attending to the routine character of the organization of the data as co-classified solutions to generally noticeable problems makes it possible to see how the induction from these specific findings to all such characterizable data is accomplished. But that is a general point. What is necessary is a close look at exactly how it is achieved.

III

Some Procedures for Displaying the Achieved Orderliness of Data

In discussions of the methodological nature of research procedures, one of the hardest things to do is keep the essentially accidental nature of the researchable world at the forefront of one's mind. It is all too easy to allow particular conceptions to take on an absolutist status and hence to forget the purely contingent quality of social phenomena as they are made available to researchers. Yet is it important to keep this character in mind, for the work of analysis is rooted in the contrast between the analytic orderliness that the world is discovered to display and the commonsense orderliness that it is encountered as possessing. Under the investigative attitude of science, no matter what orderliness the world may be discovered as displaying, it specifically lacks the taken-for-granted, non-theoretically constituted, commonsense orderliness that ordinary members find it to have. It is from the bits and pieces that are collected, from the fragments that are collated, passed on, recounted from the tapes, notes and so on that the researchable world, is built up. The world under research is a corpus of researchable materials, a collection of data. From that data its organization has to be derived. "Data" here not only includes notes, tapes, transcriptions and observation; but analysts bring to the "collected data" their own competences as members and these provide data too. Indeed, the ways that analytic work utilizes commonsense logic demonstrate this. The commonsense nature of the organizing activity has already been attested to. We want now to turn to the nature of the organization itself.

The organization that is derived in some analysis is first and foremost *an organization.* It puts together separate and distinguishable items of data by allocating them positions within a pattern. It does so by treating the pattern, the organization, as systematically producing the observed features of the researchable world. We turn here to some of the ways that this systemacity is produced in CA. We will discriminate and describe a set of practices collected under the title of "order enhancing procedures". But before we move into the details, this notion of "order enhancement" should be elaborated.

One way of considering "order enhancement" is to see it as analogous to the processes of geomorphological reconstruction. By and large, geomorphologists are faced only with the results of mountain building and erosion. Most of the time they are not fortunate enough to have massive geological processes run through their whole course under investigable conditions. Hence when dealing with the aftermath, the debris, of what they term orogenic processes, geomorphologists have to work from the results back to the processes that might have produced them. By hypothesizing the processes, geomorphologists reconstruct the phases that a landscape has passed through. Such an *orogenic* treatment of data seems to be essential to CA's

style of analysis. All such reasoning requires the reconstruction of the data in order to display and license the analysis that is given. Such an analytic reconstruction, or re-assembly, of data for the purpose of displaying its organized character differs markedly from the ways that the data were put together or happened upon during their collection. There is, therefore, a very clear and very important distinction between the practical logic of discovery and the practical logic of displaying such discoveries in analysis. We will discuss some of the ways that the latter is derived from the former via the orogenic treatment of data.

The analytic work of reconstruction can be thought of as a generous rendition of research work, which provides an analytical story that enables the logic of the discoveries to be displayed. This story provides a formally constituted account of the researchable world. At the risk of boredom but in the hope of clarity, let us repeat that it is how such analytic constitution is achieved that is our focus. We are not suggesting that departure from the natural history of research experience and what it involves methodologically ("first I did this, and then I did that and then I waited for something else to happen") is something to deplore. That would be silly. What we are saying is that such a natural history account has no place in the institutionalized and formalized accounting procedures that this kind of sociology adopts. It does, of course, have a place in other kinds. The transformation of the naturalistic accounting of discovery procedures by an analytic schema is both critical for and necessary to this form of sociology. One can hardly deplore the necessary. Precisely because research reports are recast in this generously rendered form they are *recognizable* as this kind of sociology. But, the difficulty is to keep the essentially practical nature of this reconstruction in mind.

What follows examines a range of possible orogenic devices which can be used to provide or enhance the orderliness that features of the researchable world might be said to display. Each of the examples is illustrated by reference to Schegloff's paper.

(1) Kaleidoscopic Colligation of Data

In the historical sciences, colligation is a particular technique for arranging information. A collection of materials which might be thought to bear upon some matter under investigation; reports, announcements, proclamations, legal statutes, tradition and diaries, dispatches, common knowledge are brought together, and from that assemblage the investigator seeks to infer an overarching pattern. Such assembling requires that attention be focused on some matters rather than others. Some relevances have to be taken as critical for the colligation to be effective. By working in this way historians can reorganize a whole gamut of contingent events and activities to display some

putative and underlying theme. As it is encountered in historical and certainly in sociological research, the world has a haphazard nature. Colligation is one way of allowing the pattern to be discerned and the structural organization of activities to be displayed.

The most important feature of colligation is the way that it provides a means of "stacking up" and "running through" vast arrays of archival or other materials. To see how this works out with particular "data arrays", look at the following two examples.

Example 1

At the beginning of Section II (pp. 28–32), Schegloff lists some 41 items of data (data 1–41) all of which are defined as alternative types of identification in caller's first turn. Although we are given this very long list of examples, Schegloff prefaces it by observing that identifications in caller's first turn "are, *overwhelmingly*, constructed from a very small set of turn components" (p. 28) (emphasis added). In all, only nine types are cited. In most cases the fragments given are just two utterances long.[15] Two examples (data 36 and 37) are used to show how the turn structure can be recycled in four turns. So, despite the fact that these calls were made on many separate occasions by lots of different people for a myriad of personal reasons and with whatever particular outcomes they might, in fact, have had, in this treatment and at this point they are all and only instances of caller's first turn recognition. Any other matters pertaining to the data are disattended to in favour of this organizational relevance. It is by making the sequential location of identification the feature for attention that the colligation is facilitated. Whatever else the calls could be about for the participants, or even other analysts, is processed out.

Example 2

On pp. 51–2 Schegloff gives four examples of "third turn recognition 'tries'" (data 67–70). All four have the use of a name as the *third slot* recognition token.

For example (67) A. Hello
B. Connie?
C. Yeah Joanie (J. G. #65a).

Again only those turns that are defined as relevant by this feature are cited. There is no discussion of what ensues, whether the use of the name is successful and if not why not, whether recognition work ensues, how long it lasts etc. etc. These "omissions" are, in fact, colligational irrelevancies since the interest is not in what the items show as individual items but only in what

they can be used to illustrate as a group or cluster. This order of interest is summarized by Schegloff himself in the following manner:

> "From the voice sample it supplies, and sometimes from other 'clues' that are put into the turn (for example such wholly or partially self-identifying address terms as 'Mommy'), the answerer achieves a recognition, and displays it in the next turn in a way that obviates the possibility of deception. The basic form of evidence is inclusion in the recognition-exhibiting turn of caller's name, usually as an address term, occasionally as a 'try' ". (p. 51)

The technique of pooling together and colligating arrays of data involves at least three distinct steps. The first is the establishement of a familiarity with the corpus of materials that has been collected. Once the investigator knows his way around his materials, so to speak, he can review them in order to pick out puzzling items, general themes, oddities worthy of investigation, usual features and so on. The investigator has to know what is to be found in the data although knowing what it will amount to can only come as a consequence of the analyses carried out. The second step is a much more disciplined one. Using the thematic relevances of particular puzzles and problems, the data can be sorted into broad groups of "heaps". As these heaps emerge, noticeable features, interesting similarities and oddly different cases will emerge. Once data has been "stacked up" in this way different "stacks" or corpora can be combined and recombined according to different analytic principles by means of successive "data runs". The combinations and recombinations generate "clusters" which can then be mapped onto one another. It is the provision of the methods for accomplishing the mapping the clusters that constitutes the paper's practical analytic logic. As evidenced in colligation, the processes of selection and combination operate at one remove from the displayed analysis. The analysis rendered as a practical treatment throws them into relief and hence highlights and illustrates them.

In essence, what colligation does provide is a method for finding and displaying standardized formats. Such formats are found by setting aside whatever particular interest data may have so that concentrated attention can be given to generalized characteristics. Analysis consists in finding ways of making logical and/or descriptive connections between the formats by means of arrangements of the clustered data. Such connections are mapping techniques. Descriptive connections might in CA refer to a similarity of locations, relative complexity of structure, task performance or token type and clearly contrast with the logical connections of necessity, priority, modality, implication, etc. Both sets of connections bring out the unity that is hidden in the data. Colligation then, enables the modes of classification of data that have already been discussed and provides clusters of data to correspond to the categorical types. Providing an arrangement of the data which matches the classification system grounds the structural logic of the organization. Without colligation analysis of this type would be impossible.

(2) Incongruity Procedures

Colligation is the first stage in analysis, and provides the basis for the mapping out of the clusters of data. In CA this mapping seems to be based on a particular kind of incongruity procedure which works as follows. After the data runs have been produced, particular individual ones are chosen to stand as archetypal or paradigmatic forms of the basis of a least effort principle.[16] These archetypes then furnish a normal environment or base format for the ways that the activity is "usually", "normally", "standardly", "regularly" brought about. Once this least effort principle has been allowed *to order* the data, analysis shows how the rest of the data arrays can be seen as standardly organized non-paradigmatic variations. The least effort principle operates as a rationalizing strategy which takes one case as the base case and proceeds from there. Not only do all 41 examples that Schegloff cites as second turn identifications illustrate the basic or archetypal form, they are also, or so we can infer from their description, the modal form. As the normal or modal form, they constitute the base environment for identification in conversation and around them, all and any non-paradigmatic or deviant cases can be arranged. By relaxing the least effort principle in a step by step manner the individually deviant cases can come to be accommodated within a gradually broadening classificatory schema of 3rd turn, 4th turn, called identification, called self-identification, identification "tries" etc. They then come to be treated as sub-types and their variability is explained away. This procedure of incorporation is accomplished by a strategy of "reading in", whereby the differences between the instances and the archetypes are set aside as merely elaborations, or warpings or residual. Apparent non-conformity is really hidden conformity.

Such analytic explication and reading in is precisely what the whole of the analysis of Sections III and IV of Schegloff's paper are given over to. A sketch of the route adopted ought to be enough to indicate the terrain covered. From the simplest form of identification by caller in second turn, the contextual in-filling of specific fragments allows the classification to be built up. A little orogenic treatment enables each item's vestigial or differentiated nature to be displayed. Hence atypicality is rendered as typicality, as really conformity with the lineaments of the base case. In Section II, Schegloff considers first voice recognition types (data 42–44) e.g.,

(43) M: Hello
J: Hello
M: Hi (MDE #91)

and non-recognition types occupying two turns (data 45–47) e.g.,

(47) L: Hello
B: Hi Linda
(0.1) (ID #212a)

Next Turn Repair Initiators are then introduced to allow the positing of a preference for self identification (data 48–49) e.g.,

(49) L: Hello
B: Hi Linda
(0.1)
B: 's Bonnie (ID #212a)

and in its absence the demand for self identification in third turn (data 49–49a) e.g.,

(49a) C: Hello?
G: Hello
(1.5)
C: Who is this? (CF #130)

All these various types or forms are extensions of the basic format and are built onto it by means of the minimalist strategy of relaxing the economy principle one step at a time. This strategy is a very neat way of introducing how members cope with "interactional troubles with identification". The introduction of the possibility of such troubles also allows the extension into explicitly addressed identification issues via an elaborated base form. Third and fourth turns can be tacked onto the base format as the products of "repairs". Once that step is facilitated the rest of the section can be devoted to spelling out how the elaborations are *only* variations.

A similar step by step expansion in the construction of a classificatory schema is used in Section IV. Schegloff begins by proposing that two sets of sequences can be identified as "possibles" following caller's first turn. These are (a) self identification of caller or (b) identification of called. In the rest of the section he proceeds to work up the variety of types that these two possible next turn activities can generate by utilizing both analytic devices such as "repair initiators", and types of activity such as "switchboard requests", "recognition tries" and "pre-self identifications". As each of these types is introduced, the nested set of possibilities which it in turn generates is introduced, outlined and elaborated. The net result is the extended and complex display of the data types.

What incongruity procedures involve, then, is the establishment of the normative character for a specific form and the working out of a classification system by means of the comparison of deviant cases with this normative form. Such an organizing and rationalizing procedure enables the constant enlargement of a classification system by showing how the simplicity of its construction and the complexity of its function allow it to accommodate more and more apparently deviant cases.

(3) Transformation of Form

Both of the procedures discussed so far in involve the extraction of data fragments from their local setting to facilitate comparison of their structural features. Such extraction is a method for structuring investigative relevancies. Aspects of any call such as timing, shared biographies, outcomes of the call, reasons for the call, nature of personal relationships, are taken out of the analytic frame of reference. By such refining, the data become amenable to, or perhaps more exactly are defined as data in terms of, the investigation of structurally conceived sequential features. This process of distillation or purification is, in effect, a transformation of form. Once it has been so transformed the data are fit for assembly into patterns, types, and classification can proceed along the lines already outlined. Although, in vivo, different cases may have no apparent similarities at all, in vitro, that is, after the transformational work has been done, they can be related within the overall classification system as elaborated or degenerate, or vestigial versions of one another. What is taken as descriptive of the data once the irrelevancies have been removed are just those characteristics which allow the normal form to be traced out in some adjusted state—as, say, a compacted, projected but not realized, over extended example—with each of the cases. Analysis is revealed as the step by step working through of types showing what transformations have to be effected for the underlying conformity with the base case or normal form to be realized. Such an accounting procedure is designed to remove what Lynch (1979) terms the *artefacts* present in data so that the features to be described analytically can be focussed on. Schegloff does this neatly and very efficiently by means of the two disregarding concepts or analytic devices already mentioned, the "Next Turn Repair Initiator" and the "identification try". By using these two, a whole range of superficially non-conforming data is set out, arrayed and classified within the basic schema in Sections III and IV. These devices arrange the data instances as more or less locally efficient means for achieving the same task as the basic, minimal normal form.

(4) Format Borrowing

The last of the devices refers not to processes of relating items of data *per se* but with constructing the overall organization of the analysis. Where analysis follows through the sequential unfolding of the phenomenon under study, where it utilizes the phenomenon's natural history so to speak, we can say that the analysis has borrowed the format of its phenomenon. In the case of CA, format borrowing has an added advantage beyond that of being an intuitively easy organization to recognize. It allows *sequential* complexity to go proxy for *analytic* complexity to such an extent that sequential complexity

is assumed more often than not to be analytic complexity. Schegloff, for example, moves from a two turn basic form to a consideration of five or even six turn "recognition sequences" such as

(95) K: Hello
B: Kim//it's Bonnie
K: Yeah
(0.4)
K: Who?
B: Bonnie =
K: = Hi, where we//re you
B: Remember me?
K: Where were you = I thought you said Connie (ID #223a)

In that it preserves the overall recognizability of the phenomenon while at the same time facilitating its complexities to be laid out analytically, such format borrowing is a crucial element in the success of ethnographic descriptions of this kind. The goal of preservation of the natural "shape" of the phenomenon makes this kind of formal analysis very different from those which use mathematical techniques such as scaling, association of variables, ordination analysis. The latter seek to impose a shape upon their data by means of statistical techniques for relating them, e.g., by multivariate and cluster analysis. Such abstracted mapping techniques do indeed seek to represent the data and are no less successful than other methods, but they do not try to represent in their descriptions what might be termed the naturally recognizable logic that the activities under study have. As a consequence, the structure of analysis which incorporates these kinds of techniques, for example Path Analysis, does not need to borrow the format of the phenomenon under study. No one suggests that the paths delineated in any particular reconstruction *match directly* the temporal steps that were followed. They provide ways of reconstructing events to see items in a step-wise, organized, "causal" sense. The production of the contextual shapeliness together with the handling of huge arrays of data within a simple and yet systematically arranged classification system is no easy task. The way that Schegloff chooses to accomplish it is by following through the *sequential ordering*—the format—of his phenomenon, conversation, and allowing its organization to provide him with his analytic structure. He moves from two turn sequences, to three turn, four turn and on to even more elaborated ones. At each phase in the analysis, as he moves further and further into the conversation, the turn by turn elaborative possibilities are taken up and identified with complexities of structure. In moving from two turn sequences to three and four turn ones, it is presumed that the analysis is moving from less to more complex types. These multi-turn instances are then integrated into the overall classification by means of incongruity procedures, colligation and transformation of form.

On an even larger scale, of course, format borrowing is used to provide the investigative problems in the first place by defining certain areas and certain tasks. In CA for example openings and identification, closings, first topics, topic shifts have all been designated as "obviously" important ones to study.

IV

At several points in our discussion, we have been at pains to make clear that our purpose has not been a critique of Conversation Analysis. Rather, our purpose has been to demonstrate how CA can be used to illustrate the nature of sociology's practical reasoning. Although we do have views on the likely fruitfulness of CA in sociology, expanding and defending them would require us to abandon the disinterested, analytic attitude we have endeavoured to adopt here.[17] The evaluation of the sociological adequacy of the style of practical reasoning which has been used by Schegloff and his colleagues in CA would be an entirely different task from the one which we have set ourselves, and would sit quite oddly with it. It would occupy at least as much space and time as the present analysis and would have to incorporate a serious and sympathetic consideration of CA's analytic goals and modes of argument. As far as we are aware, no such consideration has ever been accorded in print to CA. For that reason, if for no other, we may well take up this cluster of problems at some future date.

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NOTES

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[2] It is, then, a contribution to the body of work initiated by Harold Garfinkel and summarized in his (1967). Reference to more recent studies can be found in Garfinkel, Lynch and Livingston (1981) and Schegloff (1980).

[3] Schegloff (1979).

[4] A great deal of confusion could have been avoided if commentators had noticed that Garfinkel's proposals were methodological not epistemological in nature.

[5] Hindess (1977), p. 49. Hindess makes the elementary mistake of conflating stories with fictions.

[6] Cf. the exposition in Sacks (1978).

[7] Davidson (1980), Davidson and Harman (1975) and the general reviews in Platts (1979) and Pettit and MacDonald (1981).

[8] This pairing is elaborated at length in Pettit and MacDonald (1981), where its use is a little different from our own.

[9] Unless otherwise notified, all quotations and references are to Schegloff (1979).

[10] Cf. the various papers in Psathas (1979) and Schenkein (1978).

[11] Especially pp. 26–27.

[12] Garfinkel (1967) Chapter 1.

[13] Lynch (1979) discusses the same phenomenon in the selection of micro-spectroscopic slides.

[14] This phenomenon, albeit under a different name, has been extensively discussed in Baldamus (1971).

[15] Cf. the data items cited above on page 113.

[16] Schegloff (1979), p. 64.

[17] We have been quite happy to abandon it elsewhere, although not to discuss Schegloff but some recent approaches to the study of teaching and classroom interaction, Cf. Sharrock and Anderson (1982).