SEX ROLES, INTERRUPTIONS AND SILENCES IN CONVERSATION*

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INTRODUCTION

Power and dominance constitute significant aspects of many recurring interactions such as those between whites and blacks, adults and children, and—of specific interest here—men and women. It should not be surprising, then, that the distribution of power in the occupational structure, the family division of labor, and other institutional contexts where life chances are determined, has its parallel in the dynamics of everyday interaction. The preliminary findings of the research reported here indicate that there are definite and patterned ways in which the power and dominance enjoyed by men in other contexts are exercised in their conversational interaction with women.

Interruptions, lapses in the flow of conversation, and inattentiveness are commonplace occurrences, seemingly far removed from sociological concerns with such things as institutionalized power. Employing recent developments in the study of conversational interaction (Sacks et al., 1974; Sacks, n.d.; Schegloff, 1972a,b; Sacks and Schegloff, 1973) as a resource, this paper shows how these events may be related to the enduring problems of power and dominance in social life.

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Specifically, we report striking asymmetries between men and women with respect to patterns of interruption, silence, and support for partner in the development of topics. We discuss these observations in this paper and draw implications from them concerning the larger issue of sexism in American society. Prior to presenting our results, we must briefly consider the relationship of our research to the study of language and social interaction.

SEX ROLES, LANGUAGE, AND SOCIAL INTERACTION

The recognition that sex role differences are reflected in language patterns has stimulated a good deal of recent research in this area (cf. Henley and Thorne, 1975). To consider just one example, Robin Lakoff (1973) suggests that a separate "woman's speech" exists, characterized by a greater preponderance of such forms as tag questions, compound requests, and questioning intonational patterns offered in the context of otherwise declarative answers. She also examines the semantics of sexism by focusing on the discrepancies in supposed referential equivalents (e.g., "master" and "mistress"), and typically female euphemisms (e.g., "lady") for which there is no colloquial male equivalent.

Even a cursory review of studies of sex roles and language patterns suggests that various features of language and speech furnish the resources for male dominance (and, for that matter, female submissiveness) in pervasive and often subtle ways (cf. also Bernard, 1968; Brend, 1971; Key, 1972; and Kramer, 1973). There can be little doubt that speech patterns and particular syntactic, semantic, phonological, and intonational structures function to communicate the cultural and social meanings that cluster around sex roles. We, however, wish to stress the role of language and its constituent structures in the *organization* of social interaction in general and from that perspective view the characteristics of interaction between men and women. Conversation is clearly one very basic form of social interaction and it is the analysis of conversational structure in relation to sex roles that concerns us here.

While studies dealing with the exchange of talk between men and women can be found (e.g., Strodtbeck and Mann, 1956; Strodtbeck, James and Hawkins, 1957; and Soskin and John, 1963), they typically lack any explicit model of conversational interaction per se in terms of which their findings could be interpreted. An appropriate model can be found, however, in recent work by Sacks, Schegloff and Jefferson (1974), and Sacks (n.d.), which provides a systematic approach to turn-taking or speaker alternation in naturally occurring (i.e., uncontrived) conversation. This model, taken in conjunction with other work on the structure of conversation by Sacks and Schegloff (Sacks, 1972a, 1972b; Sacks and Schegloff, 1974; Schegloff, 1972a; Schegloff, 1972b) furnishes a general approach to the study of conversational interaction strongly

rooted in meticulous empirical examination of audiotaped natural conversations. 1

In this paper, we attempt to adapt relevant portions of this turn-taking model and other work in conversational analysis to the concerns already announced. We wish to make it clear that we do not view our efforts as a contribution to conversational analysis per se but rather as an attempt to apply it to a particular problem. In order to carry through this application, it is necessary to spell out the relevant aspects of the model in a brief and simplified form. The first part of this paper is, therefore, an exposition of Sacks, Schegloff, and Jefferson (1974).

THE MODEL

Sacks et al. (1974) suggest that speech exchange systems in general are organized to ensure that (1) one party speaks at a time and (2) speaker change recurs. These features are said to hold for casual conversation as well as for formal debate and even high ceremony. Thus it appears that the range of speech exchange systems found in our society (and possibly all societies) is constrained by some form of turn-taking mechanism.

What distinguishes conversation from debate and ceremony is the variability of the distribution of turns, turn size, and turn content. In debate, there is pre-allocation of turns, and standardization of turn size; in ceremony, the content of speech is predetermined as well.

The model Sacks et al. (1974) offer describes the properties of the turn-taking mechanism for conversation. A turn consists of not merely the temporal duration of an utterance but of the right (and obligation) to speak which is allocated to a particular speaker. The turn is spoken of as something valued and sought (or sometimes avoided) and allusion is made to the distribution of turns as a kind of economy. This analogy will prove useful to the purposes of this paper in subsequent discussion.

A turn is constructed by the speaker out of what Sacks et al. (1974) call "unit-types" which can consist of single words, phrases, clauses or sentences. Each speaker, upon being allocated a turn, has an initial right to produce one such unit. In general, the terminal boundary of a unit-type, e.g., the end of a sentence, is a possible transition place, and the transfer of a turn from one speaker to another properly occurs at that place.

Unit-types are generally projective; that is, the beginning portion of the unit frequently furnishes a basis for anticipating when it will be concluded and hence signals the upcoming transition place for purposes of speaker change. This property of unit-types assumes that the listener performs a syntactic (and/or intonational) analysis of the unit in the course of its production—the internal structure of the sentence, for example, indicating its possible completion point. Elsewhere, Sacks (n.d.) suggests that the phenomenon of sentence completion

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furnishes evidence for this "on line" analysis. For example, in the following segment, 2 a young man attempting to arrange a date with a young woman he has just met appears to anticipate her objection by completing her sentence for her (lines 4 and 5):

1	A:	How would ja like to go to a movie later on tonight?
(3.2) 2	B:	Huh?=
3	A:	A movie y'know like a like (x) a flick?
(3.4) 4	B:	Yeah I uh know what a movie is (.8) It's just that=

5 A: You don't know me well enough?

With appropriate transformation of the pronouns, the sentence reads: "It's just that I don't know you well enough," a syntactically and semantically coherent utterance jointly produced by two speakers. It should also be pointed out that the completion is done with precise timing, i.e., no gap or overlap between the two speakers.

With regard to the timing of transitions between utterances, Sacks et al. (1974) observe that much of the time the alternation of speakers is achieved with little or no gap, suggesting a considerable degree of next-speaker readiness to commence a turn upon the occurrence of a possible transition place. These considerations establish the ground for what is undoubtedly presupposed by parties to conversations, namely, that a conversation involves both active speakership and active listenership, with these roles alternating between persons.

Minimal Responses: A Brief Digression

Active hearership is a fundamental prerequisite for the production of instances of a particular class of utterances which may not be considered as unit-types, and hence may not count as filling turns. Such items as "um hmm," "uh huh," and "yeah," when interspersed through a current speaker's ongoing utterance, are not seen as interrupting the current speaker (cf. Schegloff, 1972b), but instead serve to display continuing interest and co-participation in topic development. Fishman (1973) continues along these lines to point out the agility with which speakers are able to insert such comments—rarely do they overlap a current speaker's utterance, being interjected virtually between breaths. Characteristically, the current speaker will continue her turn after insertion of a "yeah" or "um hmm" with little if any discernible pause. Fishman (1973) suggests that these phenomena serve to do "support work," functioning as indicators that the listener is carefully attending to the stream of talk.

These "minimal responses" which monitor a speaker's utterance may of course be coupled with energetic nonverbal cues such as nodding of the head, and such gestures often replace the verbal comments when conversationalists are face-to-face. Although the purposes at hand prohibit examination of this matter in detail, it is interesting to note that parties to talk are likely to time these nonverbal signals to coincide with pauses in a current speaker's utterance. Thus,

items like "um hmm," "uh huh," and "yeah" may be viewed as a kind of positive reinforcement for continued talk where the provider of such cues must do active listening work to determine proper placement.

The Operation of the Rule-Set

The specific mechanism for speaker alternation is furnished by an ordered set of rules which are applied recursively to generate the distribution of turns and turn sizes for any actual conversation. In order to simplify this presentation the operation of the rule-set is represented in Figure 1 as a flow diagram of the sequence of "decisions" involved.³ The rule-set is represented by a vertical array of decision points, with the highest priority decision point at the top.

Inspecting Figure 1 we see that for a given transition place within a turn, the highest priority decision is whether or not current speaker has selected next speaker. Current speaker selects next speaker by such techniques as addressing her by name (or title) or by directing a question to her, or both, where the term of address or question is constructed as part of the unit-type the terminal boundary of which marks the next transition place. If next speaker has been selected by current speaker at this point, the rule-set recycles to the beginning (I) in preparation for the occurrence of the next transition place, the speaker just selected having the exclusive right (and obligation) to speak next.

In the event that next speaker has not been selected by current speaker, the next decision point (II) presents the *option* to potential speakers other than current speaker to self-select. (Self-selection is an option available to each potential next speaker; thus, more than one speaker could start to speak, the right to the turn belonging to the first starter.) The rule-set recycles to (I) if self-selection occurs; if it does not, the third decision point (III) is reached.

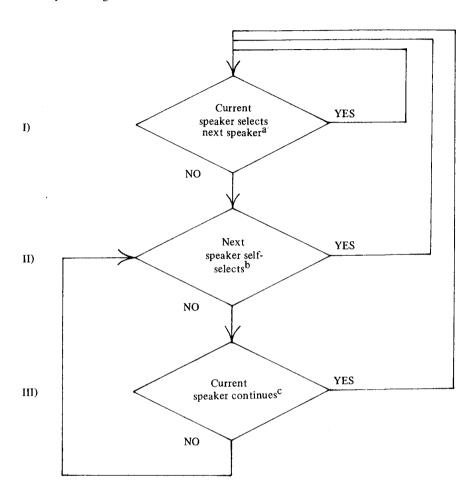
In the absence of self-selection by other parties, the current speaker may (but is not obligated to) continue speaking. The exercise of this option recycles the rule set to (I), the process repeating itself until speaker change occurs. If current speaker does not speak, the rule-set recycles to (II), the first decision point (current speaker selects next speaker) being obviously inapplicable.

This model of turn-taking, Sacks et al. propose, accounts for a number of regularly occurring features of observed conversations—including the alternation of speakers in a variable order with brief (if any) gaps or overlaps between turns, as well as variable length of turns. That is, the model provides for the systematic initiation, continuation and alternation of turns in everyday conversation.

Sacks et al. (1974) characterize their model as a "locally managed" system by which they mean that over a series of turns the rule-set operates to effect transitions between successive pairs of adjacent turns, one turn at a time, the focus of the system being the next turn and the next transition. Turn size is also locally managed since the concatenation of unit-types to construct longer turns is also provided for by the system's organization.

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Figure 1 Tow diagram of the "decision" process in Sacks' et al. (1974) model of turn-taking in naturally occurring conversation



otes:

The person selected by current speaker has the exclusive right (and obligation) to speak

Next speaker other than current speaker.

Current speaker is not obligated to continue speaking.

Moreover, the system is said to be "party administered," i.e., turn order and turn size are under the control of parties to the conversation who exercise the options provided. The system is also characterized as "interactionally managed," turn order and turn size being determined turn by turn by conversationalists, each of whom exercises options which are contingent upon, and undertaken with the awareness of, options available to the other. The point of immediate concern here is that the turn-taking system described by Sacks et al. (1974) can be viewed as a representation of speakers' methods for achieving a preferred organization of their conversational interaction, i.e., the intended conversational order from the point of view of speakers. (Violations of this intended order can and do occur, of course, and should be observable as such by virtue of the rules for turn-taking.)

Sacks et al. (1974) suggest that this model approaches the status of a context-free mechanism which is, moreover, finely context-sensitive in its application. Here, "context-free" means analytically independent of a wide range of features exhibited by actual conversations, e.g., topics, settings, number of parties, and social identities (which could be subject to analysis in their own right). This independence establishes the basis for the context-sensitivity of the system since, by virtue of its indifference to the particulars of any given conversation, it can accommodate the changing circumstances of talk posed by variation in topic, setting, number of parties, and identity of participants. The model generates an infinite set of possible turn-taking sequences varying in terms of turn order, turn size, and number of speakers, by recourse to a limited set of organizational principles usable on any occasion of conversation.⁴

Our task in this paper is to bring relevant aspects of this model to bear on conversational interaction between men and women. The next section deals with the collection, transcription, and analysis of our data and is followed by the presentation of our findings.

METHODS

Recording Conversations

Three-quarters of the 31 conversational segments analyzed in this paper were two-party interactions recorded in coffee shops, drug stores, and other public places in a university community. Such places were viewed as routine settings in which everyday "chit chat" takes place—the kind of talking we all do, even when others are likely to overhear us.

The tape recorder was carried by one or the other author, and what they could hear by virtue of their routine and unquestioned access to public areas was deemed eligible for taping. Whenever possible, conversationalists were subsequently informed of our recording and their consent obtained. In some of these cases however, the abrupt departure of parties to the talk precluded such

debriefing. In the process of transcription, identifying references were disguised and the tape erased after the transcript was completed and checked, thus protecting the anonymity of the persons involved. Some recording was done in private residences to which the authors normally had casual access. In these cases (which comprise the remaining fourth of the data), consent was uniformly obtained after recording, and no refusals to permit the use of the tape or complaints about the covert procedure were encountered. Data collection, moreover, was designed to collect equal numbers of male-male, female-female, and male-female conversations for comparative purposes.⁵

Of the conversations among same-sex pairs (equally divided between 10 male-male and 10 female-female pairs), all parties were white, apparently middle-class persons from approximately twenty to thirty-five years of age with relationships varying from close friendship to that between nurse and patient. The eleven cross-sex pairs were also apparently middle class, under thirty, and white. All but one were university students. Relationships varied from intimacy to first-time acquaintanceship, with one instance of a formal status relationship (see footnote 5). The topics of these exchanges varied widely, touching on everyday concerns. Close friends and lovers quarreled and confessed insecurities to one another, and people meeting for the first time exchanged social amenities.

Classifying Overlaps and Interruptions

Each author inspected the transcripts for instances of simultaneous speech and employed the definitions of overlap and interruption specified below to produce an initial classification of these events. The results of this independent classification were then compared. Of 86 instances of simultaneous speech classified, there was agreement between the authors on 80 (93%). The disagreements were resolved by discussion of the particular utterance.

Two-Party Conversations

The selection of two-party conversations was not accidental. The model outlined above applies, in principle, to any number of participants in a given conversation, although Sacks et al. (1974) suggest that for larger groups (e.g., four or more) there is a tendency for talk to divide into two or more distinct conversations. Our reason for choosing two-party talk was that it is a simpler case to analyze.

In conversations with three or more participants, who speaks next is problematic; this is not the case in two-party talk where the alternation of speakers follows an ABAB... pattern. Moreover, certain phenomena will be observed only infrequently in two-party talk, e.g., simultaneous starts by two speakers. Simultaneous starts in two-party conversation can be observed after what appear to be lapses, i.e., where current speaker stops for an interval and then elects to continue, and next speaker self-selects.

These considerations notwithstanding, when a next speaker commences her utterance remains an interesting problem. A next speaker needn't concern herself that some other next speaker will commence speaking if she doesn't start first, thus eliminating the systemic pressure toward early starts characteristic of multi-party conversations. Thus, two-party conversations are perhaps the best case to inspect for the purposes at hand.

Transcription

Transcription was done by the authors according to a set of conventions modeled after those suggested by Gail Jefferson (see Appendix). Silences between utterances were timed by stop watch twice and averaged. Those portions of our tapes actually transcribed were selected by the criteria that a segment exhibit a pattern (more than two instances) of (a) noticeable silence between speaker turns and/or (b) instances of simultaneous speech, without regard to other features present, e.g., who overlapped whom. Portions of our tapes which were not transcribed included many stretches of talk containing neither noticeable silences nor instances of simultaneous speech (for both same-sex and cross-sex pairs). However, no segment of two-party conversation excluded from transcription by our selection criteria contained any instance of simultaneous speech initiated by a female in a cross-sex pair. Insofar as was possible, the topical coherence of each segment was preserved.

Generality

This collection of conversations does not, of course, constitute a probability sample of conversationalists or conversations. Hence, simple projections from findings based on this collection to conversationalists or conversations at large cannot be justified by the usual logic of statistical inference. The stability of any empirical finding cannot, in any event, be established by a single study. The present research serves to illustrate the utility of Sacks' et al. (1974) model as a means of locating significant problems in the area of language and interaction and as a point of departure for further study. Further, more systematic research should settle the question of the stability and generality of our findings concerning sex role differences in conversation. With this note of caution entered, we proceed to the examination of our data.

USING THE MODEL: SIMULTANEOUS SPEECH

The turn-taking mechanism described by Sacks et al. (1974) is so constructed that under ideal conditions conversations generated via its use would exhibit, among other features, a minimum of perceptible gaps between speaker turns and no instances of simultaneous talk (e.g., "overlaps"). Parties to such conversations would be observed to alternate their turns at speaking precisely on cue.

As noted earlier, clean and prompt transitions between speaker turns are conditional in part on the competent listenership of the potential next speaker, i.e., the current speaker's utterance must be analyzed in the course of its development in order for the listener to be prepared to commence a turn at a transition place, either by virtue of being selected to speak next or on the basis of self-selection. Indeed, the provision that the self-selector who speaks first gains the turn encourages the intended next speaker in a multi-party conversation to begin at the earliest point of a transition place. This leads to the systematic possibility of briefly overlapping the current speaker. The likelihood of an overlap is also increased if the current speaker varies the articulation of the last syllable or syllables of a unit-type:

A1: I know what you thought I know you://

A2: [Ya] still see her anymore (?)

or adds a tag question:

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A2: Oh I did too::: it just doesn't sit well with them not being specialized enough//right (?)

A1: [Or] empirically grounded enough ha (!).

A speaker who has been allocated a turn has the initial right to one unit-type, e.g., a sentence. A sentence, in the course of its development, may project a possible completion point (i.e., the end of a sentence):

B: Well::: my appointment was for two o'clock.

However, this sentence (and hence, the unit-type) can be extended by the speaker:

B: Well::: my appointment was for two o'clock 'n (x) I have a class at three.

A listener, presumably performing an on-going analysis of this sentence, may exercise a legitimate option to self-select as next speaker:

B1: ... 'n I have a class at three//so

B2: [I'm] sure you'll be in by then dear. . . .

In our view, overlaps are instances of simultaneous speech where a speaker other than the current speaker begins to speak at or very close to a possible transition place in a current speaker's utterance (i.e., within the boundaries of the last word). It is this proximity to a legitimate point of speaker alternation that leads us to distinguish overlaps from interruptions.⁶

An interruption in this context, then, is seen as penetrating the boundaries of a unit-type *prior* to the last lexical constituent that could define a possible terminal boundary of a unit-type:

B2: Know what 'cha mean (#) we went camping in Mojave last//

B1: [Oh] didja go with Mark in August (?)⁷

or,

B: That sounds fantastic (#) not everybody can jus' spend a day in some//place

A: [Well] we've already established the fact that um he's not y'know just anyone (.)

The category of overlaps, as we have defined them, explicitly allows some margin of error in the transition between speaker turns. However, interruptions can be viewed as *violations* of the turn-taking system rules (which provide that the proper place for transition between speakers is at the terminal boundary of a unit-type or possible unit-type). How are these "errors" and "violations" distributed in our transcripts?⁸

Patterns of Overlap and Interruption

Because of the small number of observations involved, we have collapsed the results of our tabulations for same-sex conversations (male-male and female-female) into one table (see Table 1). There were 7 instances of simultaneous speech classified as interruptions and 22 classified as overlaps. What is striking about Table 1 is that both overlaps and interruptions appear to be symmetrically distributed between speakers. That is, speaker transition errors (overlaps) and violations (interrupts) seem to be fairly equally divided between the first and second speakers in these conversations; or, put another way, the distribution approaches maximum variance.

Table 1
INTERRUPTIONS AND OVERLAPS IN 20 SAME-SEX
TWO-PARTY CONVERSATIONAL SEGMENTS

	FIRST SPEAKER*	SECOND SPEAKER	TOTAL
INTERRUPTIONS	43% (3)	57% (4)	100% (7)
OVERLAPS	55% (12)	45% (10)	100% (22)

^{*}For a given segment, the person speaking first is designated first speaker; the person speaking second is thus a second speaker. There is no necessary implication that "first speaker" is the one who initiated the conversation, e.g., the first to utter a greeting, etc.

Turning to Table 2, in cross-sex conversations there were 48 instances of simultaneous speech classified as interruptions and 9 classified as overlaps. The pattern displayed by Table 2 is dramatic: virtually all the interruptions and overlaps are by the male speakers (98% and 100%, respectively). The cross-sex

Table 2
INTERRUPTIONS AND OVERLAPS IN 11 CROSS-SEX
TWO-PARTY CONVERSATIONAL SEGMENTS

	MALES	FEMALES	TOTAL
INTERRUPTIONS	96% (46)	4% (2)	100% (48)
OVERLAPS	100% (9)		100% (9)

conversational segments we examined are thus clearly asymmetrical with regard to the occurrence of violations and speaker errors.

Since our observations of simultaneous speech are based on a collection of conversational segments, it is possible that one or two conversational pairs could have contributed a disproportionate number of these instances to the overall pattern. If this were the case, it is conceivable that some unusual circumstances or some quirk of personality could have produced these remarkable distributions.

Reviewing the transcripts, we found that 5 out of the 11 male-female segments contained a total of 9 overlaps; 18 percent of the segments contained 66 percent of the overlaps. All were, of course, done by males. For the 20 same-sex pairs, half yielded a total of 22 overlaps, with 64 percent of the overlaps located in 15 percent of the segments. Thus if the distribution of overlaps across the segments is construed as evidence of clustering, we would have to conclude that the pattern is essentially identical for both cross-sex and same-sex pairs.

Ten of the 11 male-female segments exhibited interruptions, ranging from a low of 2 to a high of 13 and averaging 4.2 per transcript. The segment containing 13 interruptions (27 percent of the total) occurred between the female teaching assistant (see footnote 6) and a male undergraduate who repeatedly interrupted her attempts to explain a concept. The 7 interruptions that occurred in the same-sex conversations, in contrast, were concentrated in only 3 of the 20 or 15 percent of the segments. Thus it might be argued that the occurrence of interruptions is clustered in a few conversations for the same-sex pairs, while almost uniformly distributed across cross-sex pairs. This contrast in the distribution of interruptions vis a vis overlaps cannot be fully analyzed here, although it suggests, if anything, that interruptions are idiosyncratic in same-sex conversations and systematic in cross-sex conversations. For example, one possibility is that males conversing with females orient themselves to the role of listener differently than they do with one another. For, if interruptions are viewed as violations of a speaker's rights, continual or frequent interruption might be viewed as disregard for a speaker, or for what a speaker has to say.

Here, we are dealing with a class of speakers, females, whose rights to speak appear to be casually infringed upon by males.

Hence, on the basis of these observations, we note that at least for the transcripts we have inspected, there is a marked asymmetry between males and females with respect to interruption, and, perhaps to a lesser extent, with respect to overlap. The incidence of interruptions, which are violations of a speaker's right to complete a turn, and of overlaps, which we have viewed as errors indigenous to the speaker transition process, are much higher and more uniformly distributed across the male-female segments than proves to be the case for the same-sex transcripts.

USING THE MODEL: SILENCES

Silences in the conversational interchange are also possible outcomes provided by the model. The operation of the rule-set does not command participants to speak; even a next speaker selected by the current speaker (and thus obliged to take the turn thereby transferred) may pause before speaking. Moreover, since, at some points, potential next speakers may elect not to speak in the absence of selection by current speaker and current speaker may not elect to continue, a discontinuity in conversational flow—which Sacks et al. (1974) term a "lapse"—may occur. Many conversations proceed with few if any lapses; yet others are characterized by frequent and sometimes lengthy gaps between speaker turns. (Recall that our segments were selected partly on the basis of silence.)

There is nothing inherent in the turn-taking model which would suggest that, over a range of turns and of different conversations, one party to a conversation would fall silent more frequently than another. Indeed, all the model furnishes by way of a characterization of speakers are the categories "current speaker" and "next speaker." Accordingly, we would expect that on the average silences between speaker turns would tend to be symmetrically distributed (we cannot consider the silence within speaker turns here).

For two-party conversations, this assumption can be expressed as a ratio of silences (measured in seconds and tenths of seconds) with 1.0 indicating equality (either exactly equal silences or the absence of any gaps whatsoever). This is admittedly a crude measurement which does not distinguish between types of silences (e.g., those that represent a thoughtful pause before answering a question, or those following upon a brusque interruption), but it should inform us as to the existence of gross asymmetries.

The ratio of silence was computed as follows. The total silence in seconds (and tenths of seconds) for the least silent speaker was divided by the total for

the most silent speaker for each of the same-sex pairs, thus avoiding any ratio greater than 1.0 (and hence, an arbitrary maximization of any differences that might exist).

A speaker's total silence was determined by counting the elapsed time prior to speaking after the previous speaker had concluded a turn. If a previous speaker spoke again after a period of time—without a next speaker beginning an utterance—the intervening silence was treated as *internal* to that speaker's turn and thus not counted.

Patterns of Silence

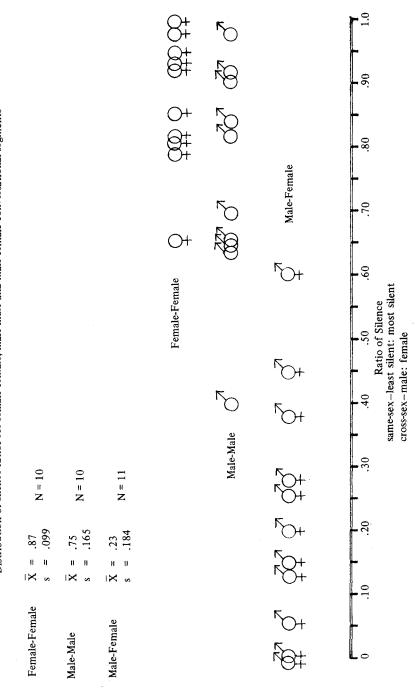
Figure 2 charts the silence ratios for the three sets of conversational segments. It is immediately evident that each female in the cross-sex segments exhibits the most silence, where for same-sex conversations, the distribution of silence is more nearly equal. It is also worth noting that the female-female and male-female distributions do not overlap, and that the other same-sex distribution does so only slightly. For our transcripts, there is an obvious asymmetry in the allocation of silences between men and women conversationalists relative to their same-sex counterparts.

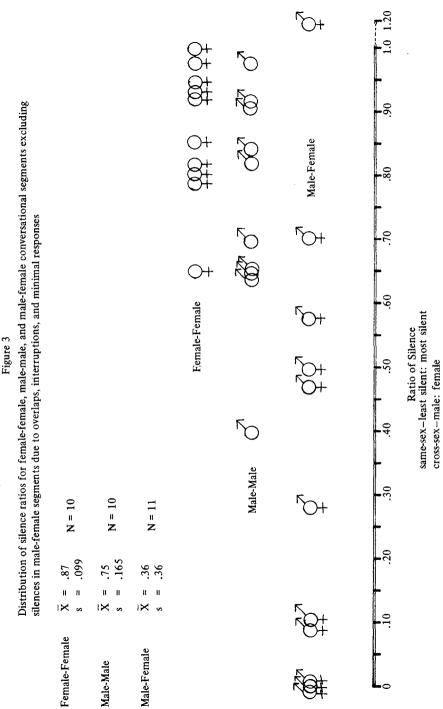
What accounts for these differences? We can begin to address this question by observing that 62 percent of the females' aggregate silence in the cross-sex segments followed upon three types of events in the preceding turns: (1) a delayed "minimal response" by the male; (2) an overlap by the male; and (3) an interruption by the male. In the two instances where a female interrupted a male, there was no ensuing silence prior to the male speaking again. A few silences do follow delayed minimal responses, overlaps and interrupts in the same-sex conversations. However, there are fewer (45 percent vs 67 percent) of such ensuing silences spread across the three types of events and the average aggregate silence is 1.35 seconds (with a range from 1.0 to 2.2) as compared with 3.21 seconds (with a range from 1.0 to 12.0) for females in the cross-sex segments.

If we subtract all the silences following the delayed minimal responses, overlaps, and interruptions for the cross-sex segments, we may gain some information about the effect of these male-initiated events on their female co-conversationalists. (Since the delayed minimal response is, by our definition, preceded by at least one second of silence, these silences must also be excluded if the silence following them is to be disregarded.)

This operation yields a mean ratio of silence of .36 with the median falling at .28 and a range from 1 to 1.2. This adjusted mean is somewhat closer to those for the same-sex distributions (see Figure 3), but there is more variance ($s^2 = .129$ versus .033 for the original distribution). Although some slight

Distribution of silence ratios for female-female, male-male and male-female conversational segments Figure 2





equalization in the silence ratio does occur by discounting silences following delayed minimal responses, overlaps and interruptions, it appears to us that the overall asymmetry between males and females still remains. One reason for this may be that the occurrence of one or more of these three silence-inducing events in the course of conversation may affect the subsequent conversational participation of the female, a possibility that we cannot elaborate here. It is quite evident, however, that there is a relationship between the occurrence of delayed minimal responses, overlaps, and interruptions, on the one hand, and noticeable silence prior to a next speaker's turn on the other. This relationship is most pronounced for females in cross-sex conversations. We now turn to a more detailed consideration of this relationship.

Delayed Minimal Responses

Consider the following excerpt from a male-female transcript:

```
(A is the male, and B the female)
              This thing with uh Sandy 'n Karen
   1
         B:
              'n Paul is really bugging me
  2
  (5.0)
  3
               Um
         A:
  (3.0)
               Well it's really complicating things
  4
         B:
               y'know between Sandy 'n Karen 'n I
   5
               because I know what's ( ) going on
   6
               'n I can see uh there's no contradiction
   7
               to me at all//
   8
               [Um] hmm
  9
         A:
  (#)
               In between Sandy finding (#) I mean in
 10
         B:
               between Paul finding Sandy attractive (#)
 11
               'n Paul finding um uh Karen
 12
               attractive
 13
   (4.0)
  14
               Mm hmm
         A:
  (6.0)
```

15	B:	Y'know an' sleeping with either
16		of 'em of whatever (2.0) the
17		problem (x) problem is that when
18		he started finding Karen attractive
19		um (#) it was at the same
20		time uh as he was finding Sandy
21		unattractive
(10.0	0)	

It seems evident that B (the female) introduces a topic in lines 1 and 2 (her feelings about the relationship between the three persons mentioned) and attempts to elaborate it in her subsequent remarks. It is also obvious that A (the male), in response to B's attempts, employs several minimal responses ("Um," "Um hmm") which were discussed earlier as types of supportive responses one party gives to another in conversation (Fishman, 1973; Schegloff, 1972b). The difference here is that these minimal responses are (with the exception of the "um hmm" of line 9) preceded by pauses up to 10 seconds in length. Instead of finely timed placement within the structure of the current speaker's utterance, as suggested by Fishman (1973), these are retarded beyond the end of the utterance.

In our male-female segments, the mean silence for all females following a delayed minimal response was 3.85 seconds (versus 1.4 seconds for the three instances found in the same-sex conversations). Eleven of the 13 delayed minimal responses observed in our data were followed by perceptible silences, and ten of these were timed as longer than one second.

The difference between a monologue and a dialogue is not the number of persons present but the articulation of the roles of speaker and listener. We are inclined to the view that the "promptly" issued minimal response serves to display active listenership (in effect, "I understand what you are saying") with, moreover, the least intervention in the development of a topic by the other speaker (in effect, "Go on, say more."). That speakers currently holding the floor are oriented to the display of active listenership is sometimes indicated by the use of question-like forms ("you know") to elicit response from the putative listener.

Such displays of active listenership can, of course, be simulated. We have in mind here the "yes dear" response that husbands are said to utter while their wives talk and they read the newspaper, a kind of minimum hearership sustained by an artfully located standardized response. Poor timing (among other things) can quickly betray feigned involvement or at least call attention to some difficulty in the course of talk.

The delayed minimal response and the ensuing silence may thus *locate* a point in conversation found to be problematic by its participants. If we assume that the demonstration of active attention and the invitation to continue a turn support the speaker's developing a topic, then retarding the response may function to signal a lack of understanding or even disinterest in and inattention to the current talk. The silence that follows a delayed minimal response reflects, we believe, the other speaker's uncertainty as to her partner's orientation to the current state of the conversation, an uncertainty generated by these several possibilities. The implications of the foregoing in the context of the pattern of male-initiated retarded responses will be discussed in connection with the examination below of the silences following interruptions.

Interruptions and Ensuing Silences

We have already noted the tendency for speakers in our transcripts to fall silent for noticeable (if brief) periods of time subsequent to being interrupted. This observation relies almost entirely on the response of women in the cross-sex segments who, in the aggregate, paused for an average of 3.14 seconds after 32 or 70 percent of the interruptions recorded. Two women in the same-sex conversations each paused for 1 second in response to 2 of the seven or 29 percent of the interruptions recorded there. Silence also followed overlaps, but less frequently and for shorter average durations than it did interruptions.

Our position, which follows that of Sacks et al. (1974), is that interruptions are a violation of a current speaker's right to complete a turn, or more precisely, to reach a possible transition place in a unit-type's progression. In an earlier, unpublished manuscript, Sacks (n.d.) discusses the social control devices available to conversationalists in dealing with violations such as interruptions. One type of negative sanction is the complaint, i.e., a formulation of a speaker's previous utterance as a certain kind of act. Such a complaint could be: "You just interrupted me" or, in the case of a series of such acts, "You keep interrupting me."

We have observed a variant of this type of sanction which includes a counter-interruption reclaiming the turn just lost:

(A1 and A2 are both males)

- 1 A1: Well (,) I moved again ya know (x) 2 you know Del Playa (?) Well I//
- 3 A2: [Shee]:::et (!) You don't mean//
- 4 A1: [Let] me finish::: no I didn't move
- 5 back in with Cathy (.)

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The above example is the only instance in our data where an explicit negative sanction follows on an interruption and it occurs in a male-male segment. Indeed, even after repeated interruptions, women in our transcripts enter no such complaint, and, as the preceding remarks suggest, when the interrupting male completes his utterance, the female typically pauses before speaking again. A possible explanation for the relative absence of sanctioning in our data lies in the locally managed character of conversation. Elsewhere (Sacks: 1972 n.d.) it is suggested that complaints must be entered in the turns immediately subsequent to violations if they are to be effective. However, voicing a complaint also constitutes changing the topic of the talk at that point. A speaker interrupted in the course of topic development may choose to disregard the violation in order to continue her trend of thought. In this respect, the females' pauses before speaking again might indicate points at which the foci of topic development

must be recollected after interruptions.

While we cannot demonstrate it here, we believe that both retarded minimal responses and interruptions function as topic control mechanisms. For example, if retarded minimal responses are indeed signals of non-support for the continued development of a topic by one speaker over a series of turns (or by continuation of the same turn) a series of retarded responses should serve, at a minimum, to bring the topic to a close. We have observed this pattern in 3 of the 10 male-female transcripts.

Similarly, repeated interruptions of the same speaker by her partner also seem to be followed by topic change. If the interrupter is the one who is developing a topic, the interruptions appear to restrict the rights of the person being interrupted to contribute to the developing topic. We view the production of both retarded minimal responses and interruptions by male speakers interacting with females as an assertion of the right to control the topic of conversation reminiscent of adult-child conversations where in most instances the child has restricted rights to speak and to be listened to (cf. Sacks, 1972b). Indeed, our preliminary work on a set of adult-child transcripts indicates that the patterns of interruption found there (adults interrupt children overwhelmingly) most closely resemble the male-female patterns and contrast with those of the same-sex adult conversants we have discussed in this paper.

CONCLUDING REMARKS

It will be useful at this point to recall that Sacks et al. (1974) view the turn-taking system as an economy in which the turn is distributed in much the same fashion as a commodity. Differences between males and females in the distribution of turns may, for example, be parallel to the differences between them in the society's economic system, i.e., a matter of advantage. It can be noted that, in effecting the distribution of turns, the operation of the

turn-taking system determines the distribution of resources for accomplishin interactional events *through* conversation, e.g., introducing and developin topics. Just above, we suggested that males assert an asymmetrical right t control topics and do so without evident repercussions. We are led to th conclusion that, at least in our transcripts, men deny equal status to women a conversational partners with respect to rights to the full utilization of their turn and support for the development of topics. Thus we speculate that just as mal dominance is exhibited through male control of macro-institutions in society, it is also exhibited through control of at least a part of one micro-institution.

Before closing, we wish to reiterate one point. We are not claiming that male-female conversations invariably exhibit the asymmetric patterns reported in this paper. A challenging task for further research is the specification of conditions under which they occur, i.e., the conditions under which sex role become relevant to the conduct of conversationalists and sex-linked difference in conversational interaction emerge.

NOTES

¹This paper does not concern itself specifically with the nonverbal component of conversational interaction. Gestures, posture, patterns of eye contact, and intonation are clearly involved in the total communicative exchange between speakers. Moreover, research by Duncan (1972) suggests that nonverbal cues (e.g., hand gesticulation) are relevant to turn-taking in the interview situation. However, since our data consist of transcripts of audiotapes, we obviously cannot address such matters. Thus, we ignore them in our discussion even though they are potentially important variables to consider.

²The transcribing conventions used for our data are presented in the Appendix to this paper. Here, the = sign following a speaker's last word indicates a transition to the first word of the next speaker's utterance which is free of any perceivable gap.

³The use of the term "decision" here does not necessarily imply any *conscious* choice or deliberation of the sort that could be retrieved by introspection or elicited by interview, but instead is used descriptively as a shorthand reference to the process of selection from sets of alternative acts that constitute different states of talk.

⁴The analogy to the notion of a generative grammar is obvious.

⁵The research plan called for ten segments each for the male-male, female-female and male-female conversations. In the course of recording these conversations, we were given a tape of a discussion section conducted by a female teaching assistant. One segment of this tape contained a two-party interaction with the teaching assistant and a male undergraduate. Inclusion of this segment increased the number of male-female segments to 11, but since it contained the only instances of a female interrupting a male we could not exclude it. It is worth noting that in this case of female-initiated interruption, the female is the status superior (teaching assistant vis-à-vis undergraduate). Nevertheless, the male undergraduate

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interrupted this woman eleven times to her two. Our future research will, in part, deal with the relationship between sex role status differentials and other types of status inequalities, e.g., employer-employee.

⁶In coding instances of simultaneous speech in terms of our distribution between overlap and interruption, we relied on our intuitive knowledge of the English language to decide where possible completion points occurred. In cases where an utterance was ambiguous (e.g., could receive more than one syntactic analysis) we relied on the topical context for disambguation. We hope to employ more formal linguistic analysis in subsequent research.

⁷The careful reader will note that the excerpt to the left of the double slashes could be interpreted as a possibly complete sentence. However, the context of B2's utterance led the authors to decide that "last" was used as an adjective rather than an adverb; thus B1's intrusion constituted an interruption of B2's unit-type completion.

⁸In the analysis, we do not take certain steps that some would assume to be routine. We do not employ a chi-square test to our percentage tables because more than one of the units of analysis (interruptions and overlaps) can be contributed by each individual, thus violating the assumption of independent observations. Since our collection of segments is not a probability sample, we do not present tests of significance which depend for their interpretation on just such a sample. We feel that the regularities in our data are sufficiently strong to warrant reporting them here if caution is exercised in their interpretation.

⁹The segments from which these instances were drawn were not standardized, and the figures presented are thus not rates of interruption or overlap per some unit measure. Among the many possible units are number of words uttered, temporal duration of speech, number of turns, number of unit-types in a turn, number of unit-types, etc. There are a number of problems connected with each of these choices, not the least of which is determining the theoretical rationale for selecting among them. For present purposes, we have elected not to introduce any arbitrary standardization since whatever unit we selected would not alter the basic fact that in our transcripts an overwhelming proportion of interruptions are done by men to women. These considerations also pertain to the discussion of silences,

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APPENDIX

TRANSCRIBING CONVENTIONS

The transcript techniques and symbols were devised by Gail Jefferson in the course of research undertaken with Harvey Sacks. Techniques are revised, symbols added or dropped as they seem useful to the work. There is no guarantee or suggestion that the symbols or transcripts alone would permit the doing of any unspecified research tasks; they are properly used as an adjunct to the tape recorded materials.

(x) I've (x) I've met him once	Parentheses encasing an "x" indicate a hitch or stutter on the part of the speaker.
J: Well really//I C: I don't care	Double obliques indicate the point at which one speaker is overlapped or interrupted by another. When nothing appears to the right of this symbol, the speaker has been overlapped in the middle of the last syllable preceding the slashes.
[] J: If I//could D: [But] you can't	Brackets around the first part of a speaker's utterance mean that the portion bracketed overlapped or interrupted a previous speaker's utterance.
::: A: Well::: now	Colons indicate that the immediately prior syllable is prolonged.
A: 'Swat I said= B: But you didn't	An equal sign is used to indicate that no time elapses between the objects "latched" by the marks. Often used as a transcribing convenience, it can also mean that a next speaker starts at precisely the end of a current speaker's utterance.
	Underscoring is utilized to represent heavier emphasis (in speaker's pitch) on words so marked.
(?), (!), (,), (.) Are you sure (?)	Punctuation marks are used for intonation, not grammar.
(word) If you (will) please	Single parentheses with words in them indicate that something was heard, but the transcriber is

() Why do you () it

((softly))
Ha ((chuckles))

(#)

But (#) you said

(1.2)

not sure what it was. These can serve as a warning that the transcript may be unreliable

Single parentheses without words in them indicate that something was said but not caught by the transcriber.

Double parentheses enclose "descriptions," not transcribed utterances.

Score sign indicates a pause of one second of less that wasn't possible to discriminate precisely.

Numbers encased in parentheses indicate the seconds and tenths of seconds ensuing between speaker's turns. They may also be used to indicate the duration of pauses internal to a speaker's turn.