Turn-taking and interruption in political interviews: Margaret Thatcher and Jim Callaghan compared and contrasted

GEOFFREY W. BEATTIE

Introduction

This study presents some analyses of the speech and conversational styles of two of Britain's leading political figures — Margaret Thatcher, now Prime Minister, and Jim Callaghan, now leader of the Opposition.[1] The corpus on which the analysis is based consists of two televised interviews shown on British television in April 1979, just before the last general election. They were shown on ITV's 'TV Eye' program. At the time of the initial recording the political role of the two politicians was reversed. Mr. Callaghan was then Prime Minister, Mrs. Thatcher was leader of the Opposition.

The analysis presented in this paper focuses on conversational turn-taking in these interviews and the study only considers other aspects of speech where they are thought to be relevant to turn-taking. In this paper I am especially interested in deviations from the turn-taking rule that specifies that only one party should talk at a time — we normally refer to such deviations as 'interruptions'.

Turn-taking is a central and apparently universal feature of conversation (Miller 1963) that is made necessary by the cognitive limitations of human beings. People find it very difficult to talk and listen simultaneously, especially when the speech is relatively complex, and therefore, for reasonable efficiency in conversation, there must be some means of allocating turns so that for some limited period one person alone holds the floor and acts primarily as speaker and the other person acts primarily as listener, contributing only briefly to provide support, encouragement, and feedback. Turn-taking skills develop early. In the very earliest interactions between mothers and children simultaneous vocalization predominates (Anderson 1977; Anderson and Vietze 1977), but within two years children learn to terminate simultaneous vocalization by shifting to a listener role (Stern 1974; Stern *et al.* 1975). Some of the signals used in the regulation of turns have been observed in nursery school children (De Long 1974, 1975).

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Despite the apparently universal status of turn-taking, and the fact that it can be traced to conversations involving young children, it may nevertheless appropriately be thought of as a highly skilled act (see Beattie 1980), since groups can be identified who are poor in its execution. For example, one of the major differences between shy people and others is the ability of the latter to initiate and structure conversations (see Pilkonis 1977). The shy individuals have longer pauses between turns and speak less frequently and for a shorter percentage of the time. Clinical groups show even more marked effects. Conversations involving schizophrenics show marked disruption in turn-taking skills (see Chapple and Lindemann 1942; Matarazzo and Saslow 1961; but see also Rutter 1977a, b). Trower *et al.* (1978) also found poor turn-taking skills in neurotic patients diagnosed as socially unskilled. Trower *et al.* describe how 'their speech lacked continuity and was punctuated with too many silences; they failed to hand over or take up the conversation and generally, did little or nothing to control the interaction, leaving the other person to make all the moves' (1978: 50). Depressed persons also show disruption in turn-taking — as Libet and Lewinsohn (1973: 311) note, the available evidence indicates that 'the depressed person's timing of social responses is off'.

In social psychology, the majority of research has attempted to link aspects of turn-taking and interruption to fairly gross social or personality variables such as sex, intelligence, degree of extroversion, etc. This study differs in that it considers the turn-taking style of individual speakers. Such an enterprise may prove interesting on at least two accounts. First, we may learn something about the variability of a central aspect of conversational behavior as displayed by two very different individuals placed in a similar situation. Second, we may at least speculate how any observed behavioral differences may influence other people's perceptions of these politicians. There is no doubt, of course, that noncontent aspects of speech in conversation do have a strong influence on interpersonal perception. A number of studies have demonstrated that the nonverbal channel in communication has a greater effect on the communication of interpersonal attitudes than the verbal channel (Argyle *et al.* 1970; Argyle *et al.* 1971). Facial expression seems to outweigh the vocal channel in certain kinds of communication of interpersonal attitude (Mehrabian and Ferris 1967) and the tone of communication generally seems to outweigh content (Mehrabian and Wiener 1967). There is also evidence that people will ascribe certain traits to individuals on the basis of particular aspects of their nonverbal and conversational behavior. Lay and Burron (1968) found that people ascribe desirable traits to fluent speakers and undesirable traits to hesitant speakers who used frequent pauses and repetitions. Cook and Smith (1975) found that individuals who averted eye gaze in

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interaction were perceived as 'nervous' and 'lacking in confidence'. Kleck and Nuessle (1968) found that people who displayed little eye gaze in interaction were perceived as 'defensive' and 'evasive'. More recently, research has shown that in real-life situations aspects of conversational style critically affect interpersonal judgment, such that success or failure in selection interviews depends upon behaviors such as amount of eye contact, smiling, and head movement (Forbes and Jackson 1980). Given the centrality of the turn-taking mechanism, individual differences in the style of its operation will undoubtedly influence interpersonal perception. Therefore, turn-taking in political interviews will be especially important since, for politicians, interpersonal perception is of crucial significance.

The emergence of the televised political interview as the chief vehicle for getting a political message across makes skills of dialogue (including turn-taking skills) all the more important. Intimate conversations between a politician and an interviewer are broadcast to millions of viewers who witness at close quarters the speech and nonverbal style of the politician. Many people seem to have become aware of this and before the last general election there was a good deal of consternation among British politicians that viewers were more likely to forget the content of the political message than the way it was delivered. Clearly, the modern politician must be as adept at the skills of dialogue as politicians from earlier generations were at the skills of oratory. Moreover, viewers are unlikely to excuse temporary lapses in performance, or to attribute deviations from perfect performance to the stresses and strains of the interview. There is considerable evidence to suggest that observers (as opposed to the actors themselves) are prone to explain behavior in terms of the traits or personality of the individual concerned rather than in terms of the demands of the situation (see Ross 1977; Ross *et al.* 1977; Beattie, 1979a). Any behaviors that appear discrepant in interviews will be used to infer personality traits that are likely to endure. Thus, any differences in turn-taking style may critically influence the viewers' perceptions of the politicians and may indeed lead to strong beliefs about the characters and personalities of the politicians concerned. Consequently, exploration of individual differences in turn-taking style becomes interesting and significant for reasons other than those of simply learning more about the phenomena in question.

Before turning to the analysis, however, we must consider the evidence that turn-taking, and especially interruption, is influenced by a number of social and personality variables and that in addition these conversational behaviors have complex meanings.

A number of studies have demonstrated that turn-taking and interruption in conversation are affected by a number of social and

personality variables. Rim (1977) found that in three-person discussion groups, the less intelligent subjects interrupted more frequently than the more intelligent subjects. He also found that subjects high in neuroticism interrupted more often than less neurotic subjects, and extroverts interrupted, and spoke simultaneously, more often than introverts. (One striking omission from this study, however, is that 'interruption' is not defined. All that we do know is that interruptions are not defined solely on the basis of the occurrence of simultaneous speech, as in many other studies, because the levels of interruption and simultaneous speech are not the same.) Feldstein *et al.* (1974) (cited by Feldstein and Welkowitz 1978) analyzed the relationship between frequency of initiation of simultaneous speech and the personality characteristics of subjects (all female) as indexed by the personality test — the Catell 16PF. They found that 'women who are relaxed, complacent, secure and not overly dependent on the approval of others tend to initiate more simultaneous speech than women who are generally apprehensive, self-reproaching, tense and frustrated' (Feldstein and Welkowitz 1978: 357). But Feldstein *et al.* also found that the personality characteristics of their subjects' conversational partners affected the rate of simultaneous speech as well; such that 'women tend to initiate more simultaneous speech when they converse with others who are cooperative, attentive, emotionally mature and talkative than with others who are aloof, critical, emotionally labile, introspective, silent and self-sufficient'. Similarly, Natale *et al.* (1979) found that the personality characteristics of subjects and of their conversational partners were related to rate of interruption. They found that frequency of interruption is inversely related to social anxiety (e.g., fear of negative evaluation) and to speech anxiety, but positively related to confidence as a speaker. They also found that 'the more confident the partner felt about speaking, the higher the proportion of successful interruptions by the other subject (approximately 18% of the predicted variance was accounted for by the partner's speech confidence' (Natale *et al.* 1979: 875).

Zimmerman and West (1975) have, however, probably reported the most striking effects of social variables on interruption in conversation. They found that in male–female conversation men interrupt much more frequently than women. In fact, in ten male–female conversations of a routine type, they found that virtually all the interruptions were initiated by men — the only instance recorded by Zimmerman and West of a female-initiated interruption occurred when a female teaching assistant interrupted a male undergraduate. Zimmerman and West note, however, that this same undergraduate had interrupted the female assistant eleven times to her two. Sex differences in frequency of interruption have also

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been reported by Esposito (1979), who found that boys (between 3.5 and 4.8 years old) interrupted girls more frequently than vice-versa; and by Natale *et al.* in the study already mentioned. Zimmerman and West unequivocally interpret their results in terms of male dominance and the power relationships between men and women: '... just as male 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' (Zimmerman and West 1975: 125). Beattie (1981a), however, found no difference in either frequency of interruption or type of interruption between men and women in university tutorials.

Interruption has traditionally been interpreted as a sign of dominance in the psychological literature (Farina 1960; Mishler and Waxler 1968; Hetherington *et al.* 1971; Jacob 1974, 1975). But more recently some authors have cautiously suggested that it may not always reflect or signal dominance. For example, Gallois and Markel (1975) have provided evidence to suggest that interruptions may have different psychological relevance during different phases of a conversation. They suggest that in the middle section of a conversation, they may actually signal heightened involvement rather than dominance or discomfort (Long 1972). Meltzer *et al.* (1971): 392) have emphasized that 'it would be a mistake ... to infer that each interruption event is a miniature battle for ascendency'. Natale *et al.* found that a person who has a high need for social approval tends to interrupt more often, and that at least some interruptions may serve to express 'joint enthusiasm' (1979: 875). Ferguson (1977) actually investigated the relationship between interruption and the dominance of interactants. She did not find any significant relationship between overall measures of interruption and dominance, contrary to the traditional view. She did, however, find that those subjects who used a lot of overlaps (which involve simultaneous speech, but in which the original speaker's utterance is complete) rated themselves as highly dominant. Zimmerman and West, in their study, had also investigated overlaps and found that men used these much more frequently than women.

Recent evidence thus suggests that the relationship between interruptions and dominance is much more complex than had previously been assumed. Interruptions are a social phenomenon affected by many variables, including the personality characteristics of subjects as well as the personality characteristics of their fellow interactants. It has also now been suggested that interruption may be indicative of social relationships other than those purely of dominance. In this study the turn-taking styles of Margaret Thatcher and Jim Callaghan are analyzed and contrasted. Special attention is devoted to the frequency, nature, and significance of the interruptions that punctuate these interviews.

Method

The analyses presented below were based on data drawn from videotapes of two televised interviews broadcast in April 1979. James Callaghan, then Prime Minister, was interviewed by Llew Gardner for the 'TV Eye' program. Margaret Thatcher, then leader of the Opposition, was interviewed for the same program by Denis Tuohy. At the time of recording, a general election in Britain was imminent. Both interviews lasted 25 minutes. The two interviews were recorded in different locations — Mr. Callaghan was interviewed in 10 Downing Street, the official residence of the British Prime Minister. Mrs. Thatcher was interviewed in a television studio. These televised interviews were video-recorded by the author using a Sony VTR and a timer was mixed onto the recording, allowing identification of individual frames on the video-tape.

The video-tapes were played back and analyzed on a Sanyo Video Edit Machine. The time of each speaker-switch was noted and the accompanying speech was transcribed in considerable detail. Notes were also made on the transcripts of relevant nonverbal behavior. A pause/phonation analysis using specially constructed equipment (details of which are provided below) was also performed on selected speaker turns of the two politicians from the beginning, middle, and end of the interviews, in order to calculate speech rate and articulation rate. Speech rate is defined as the number of words per minute of the whole utterance. Articulation rate is defined as the number of words per minute of the time spent in vocal activity (see Goldman-Eisler 1968: 24). The same equipment was also used to analyze switching pauses (the period of joint silence bounded by the turns of different speakers), which are marked, where appropriate, on the examples provided.

Equipment

Pauseometer The recorded audio signal is first amplified and full-wave rectified. To remove the audio frequencies from the waveform, the rectified output passes through an (active single-pole) low-pass filter with a time constant of 33 ms. The output from the filter represents the speech intensity 'envelope'. This signal is then compared with a fixed reference voltage (by a Schmitt trigger circuit), giving a digital speech/pause output signal. In use, the gain of the amplifier stage is adjusted to be as high as possible without producing spurious 'speech' outputs from the background noise level.

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frequency range 150 Hz to 20 KHz is 10 ms for a pause-to-speech transition and 40–60 ms for a speech-to-pause transition. These measurements were made with a sinusoidal tone-burst input and so probably represent worst-case figures.

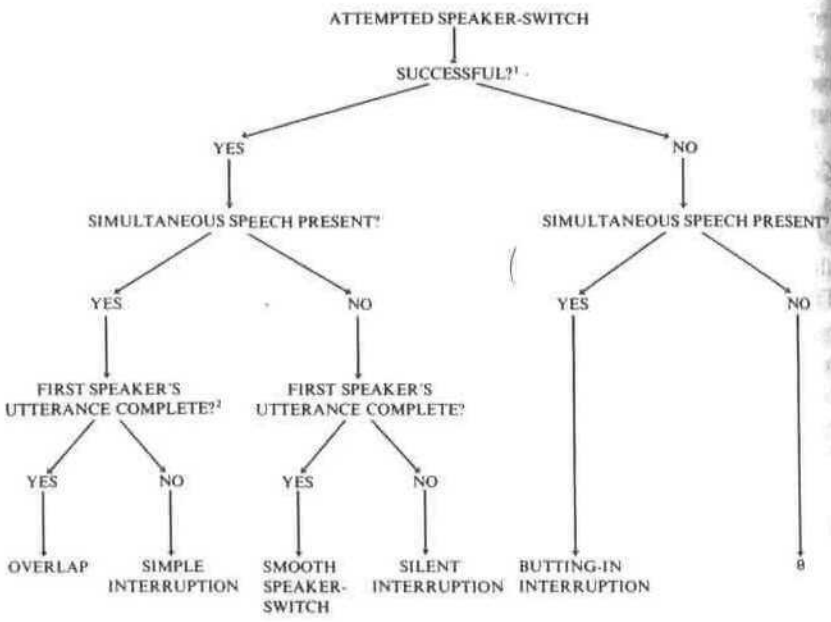
Computer Analysis The digital speech/pause output of the pauseometer is fed into a NASCOM 2 microcomputer and analyzed by a single timing program written in BASIC. A separate switch connected to the computer allows the user to manually select the required speech passage for analysis. The computer automatically measures the durations of the switching-pause and individual phonation and pause intervals during the selected turn, and displays a separate total for each. Additionally, pauses are classified as long or short, according to a time threshold entered into the program by the user (in this case 200 ms). Any period of silence less than 200 ms was not classified as an unfilled pause (following Boomer 1965).

The durations of the long and short pauses are totaled separately. All timing measurements are derived from a crystal-controlled clock, with a time resolution of 10 ms.

Procedure

Analysis of corpus

The first decision that must be made in such an analysis is what constitutes a turn at talk. There has been widespread disagreement about this in the literature — Jaffe and Feldstein (1970) have used an automated criteria — any vocalization above a certain amplitude. Kendon (1967), on the other hand, excluded utterances of less than 5 sec, classifying those under 5 sec as listener responses instead. Others (for example, Yngve 1970) would exclude quite long utterances from the class of turns when they indicate a certain kind of attention and interest in a previous speaker. Yngve (1970), for example, identifies a case in which a person fills in a good deal of needed personal background information so that the person having the floor could continue as 'back-channel' activity rather than as a turn at talk. In the present study, however, only the vocal identifiers 'mm-hmm', 'uh-huh' (Pittenger and Smith 1957), and brief lexical terms such as 'yeah' and 'I see' with attentional functions (see Rosenfeld 1978: 296) are excluded from the class of turns. This provides us with a large category of turns. Interestingly, listener-response (or back-channel) examples with asserting functions provided by Kendon (1967), such as 'that's true' or 'mm yes', did not tend to occur in isolation in these political interviews. If they did occur, they were elaborated.



Notes

1. By successful it is meant that the initiator of the attempted speaker-switch gains the floor. In a butting-in interruption — an unsuccessful attempted speaker-switch — the initiator of the interruption does not gain the floor, i.e., there is no exchange of turns.
2. Completeness was judged intuitively, taking into account the intonation, syntax, and meaning of the utterance. Nonverbal behavior was also considered, since nonverbal behavior often substitutes for the linguistic channel, as in the following example (from a corpus of university tutorials):

   Tutor: '... so you might imagine it would be ...'

   At the end of the utterance the tutor gestured in a downward direction. Without the benefit of video-recording, this utterance would have been categorized as incomplete, since it was incomplete in terms of syntax and intonation, and the speaker-switch would have been regarded as an interruption. Using video-analysis, the utterance was classified as complete and the speaker-switch categorized as a smooth speaker-switch.

Figure 1. *Classification of interruptions and smooth speaker-switches*

Smooth speaker-switches and interruptions were classified according to a categorization scheme devised by Ferguson (1977) and used by Beattie (1981a). Test–retest reliability in applying this categorization scheme was 93%. A better measure of reliability that takes into account 'chance

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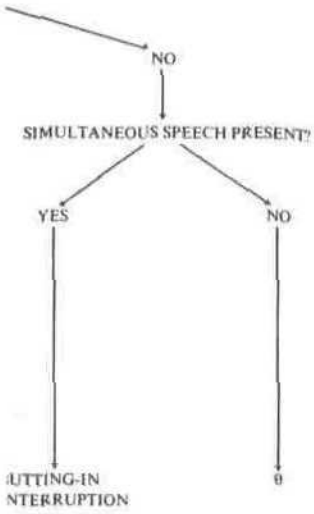

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Figure 1 shows the decision path necessary in order to classify any attempted speaker-switch.

Examples[2]

(1) Smooth speaker-switch: exchange of turns, no simultaneous speech present, first speaker's utterance appears complete.

Example A

MT: ... I hope it will succeed/We can put the ball at/people's feet/Some of them will kick it.

(0)

DT: What about the people below the top rate tax payers. The people who you feel might come back to the country.

Example B

JC: ... the Conservative Attorney General/had to find this man called the official solicitor/in order to invent some piece of law to get them out again/Now for heaven's sake we've tried it and failed/Now we've got to go the other way.

(200)

LG: Mr. Callaghan/if the polls are to be believed your own appeal.

(2) Simple interruption: exchange of turns, simultaneous speech present, first speaker's turn appears incomplete.

Example A

JC: ... and I don't claim to be infallible. You may remember in one of my *earliest broad-*
LG: *a degree* of fallibility Prime Minister.

Example B

MT: ... People forget/that he was one of the best ministers of social/services this country's ever had
DT: *and he* / *but that's* one kind of public spending.

(3) Overlap: exchange of turns, simultaneous speech present, first speaker's turn *reaches* completion. In example C the interruption extends for more than a sentence (7 words in all), but the first speaker nevertheless manages to complete his utterance; thus the speaker-switch is classified as an overlap.

Example A

MT: ... it cannot tell you exactly what economies it's going to make in each department {*it just can't* / *can it tell you*
DT: that it will be able to make any?

Example B

LG: ... I wonder whether people feel that this is because the Labour Party has run out of some steam. It hasn't so many {*new ideas* / *I think i-/*
JC: I think it's because they are/ah answers to what are/gross overclaims by the Conservative Party/...

Example C

LG: Not every other other country ev-every other malpractice our driving/our driving the way we behave in the street/ {*everything else why are trade unions different* / *look trade unions are a voluntary body*
JC: trade unions are covered by the law too/they are covered by the law in a great many ways.

(4) Butting-in interruption: no exchange of turns, simultaneous speech present.

Example A

JC: ... but if anybody suggests that in a democracy you can do more than that/then they're saying this shouldn't be a {*democracy* / *everybody else's malpractices* / *now heavens*
LG: / JC: for heaven's sake/in Eastern Europe/you can/you can/perhaps enforce guidelines.

Example B

MT: ... if you've got the money in your pocket/you can choose/whether you spend it on things which attract Value Added Tax/or not/

DT: {*You s-*
MT: {*and* the main neces
DT: You say a little on

(5) Silent interruption: exchange speaker's utterance appears i

Example A

DT: ... and you gave a l sector workers who months/you said yo ments with

MT: unremitting hostility
DT:
MT: you have seen destru television

This example may seem amb floor-holders often hand over listener to complete their utte the above example is not a intentionally omitted. The gr interruption depend crucially subsequent behavior of DT, regain the floor. It should be floor is unsuccessful (resultin

Symbols used in transcription (a 1973):

/ indicates unfilled pause ≥ 2
(x) indicates switching pause

{*word 1* / *word 2* indicates simultaneo

Results

In the Callaghan interview, Callagh who put the first question and con times. There were thus 76 exchan

DT: [*You s-*
MT: [*and* the main necessities don't
DT: You say a little on Value Added Tax

(5) Silent interruption: exchange of turns, no simultaneous speech, first speaker's utterance appears incomplete.

Example A

DT: ... and you gave a list which included/most of the public sector workers who have been on strike in the last few months/you said you would/pursue those disruptive elements with

(0)

MT: unremitting hostility [*quite right*
DT: [*yes and is that a word*
MT: you have seen destructive elements today/yesterday on the television

This example may seem ambiguous in terms of classification, since floor-holders often hand over the floor in conversation by allowing a listener to complete their utterance. It can be argued, however, that the above example is not a smooth speaker-switch with the end intentionally omitted. The grounds for its classification as a silent interruption depend crucially on the intonation of the turn and the subsequent behavior of DT, in that DT immediately attempts to regain the floor. It should be noted that DT's attempt to regain the floor is unsuccessful (resulting in a butting-in interruption).

Symbols used in transcription (adapted from Schegloff and Sacks 1973):

/ indicates unfilled pause $\geqslant$ 200 m sec
(x) indicates switching pause of x m sec

[*word 1*
[*word 2* indicates simultaneous speech

Results

In the Callaghan interview, Callaghan held the floor 38 times and Gardner, who put the first question and contributed the last turn, held the floor 39 times. There were thus 76 exchanges of turn. In addition, there were 8

butting-in interruptions, i.e., interruptions in which there was no exchange of turn. In all there were 84 smooth speaker-switches and interruptions in this interview.

In the Thatcher interview, Thatcher held the floor 26 times and Tuohy 26 times. There were thus 51 exchanges of turn. This means that the average length of turn was longer in this interview than in the Callaghan interview, because both interviews lasted exactly 25 minutes. There were 11 butting-in interruptions in this interview and therefore there were 62 smooth speaker-switches and interruptions in all in the interview.

Table 1 shows the relative frequency of smooth speaker-switches and interruptions in the two interviews. Interruptions account for 37.0% of all exchanges of turn and 45.2% of all attempted exchanges of turn. This compares with 10.6% for dyadic university tutorials and 6.3% for telephone conversations (Beattie and Barnard 1979). Clearly, interruptions are very common in political interviews. An interesting contrast between the two politicians is also immediately apparent — in the Thatcher interview the interviewer interrupts Margaret Thatcher almost twice as often as she interrupts him, whereas in the Callaghan interview, Jim Callaghan interrupts his interviewer more than the interviewer interrupts him. Margaret Thatcher is in fact interrupted significantly more frequently in her interview than Callaghan is in his ($\chi^2 = 3.05$, df = 1, $p \simeq 0.05$).

The two politicians did not, however, differ significantly in the frequency with which they interrupted their interviewers ($\chi^2 = 1.69$, df = 1, n.s.). The percentage figures allow some interesting comparisons. Tuohy interrupted Thatcher 52.8% of the time and Callaghan interrupted Gardner 54.8% of the time. Thatcher interrupted Tuohy 38.5% of the time and Gardner interrupted Callaghan 33.3% of the time. Thus, in this respect, Tuohy was behaving more like Jim Callaghan than Callaghan's interviewer Gardner,

Table 1. *Relative frequency of smooth speaker-switches and interruptions in televised political interviews*

$Speaker_1$ — $Speaker_2$	Smooth speaker-switch	Interruption
Margaret Thatcher — Denis Tuohy	17	19
Denis Tuohy — Margaret Thatcher	16	10
Jim Callaghan — Llew Gardner	28	14
Llew Gardner — Jim Callaghan	19	23
	80	66

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Table 2. *Relative frequency*
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$Speaker_1$ — $Speaker_2$	Simple interr.
Thatcher — Tuohy	4
Tuohy — Thatcher	1
Callaghan — Gardner	4
Gardner — Callaghan	8
	17

and Margaret Thatcher was behaving more like Gardner than her political opponent!

Table 2 shows how the different categories of interruption varied across interview and speaker. Overlaps were the most frequent form of interruption and silent interruptions the least frequent. (Only Margaret Thatcher used silent interruptions, and then only once.) Interestingly, in a study of interruption in university tutorials, I also found there that overlaps were the most common form of interruption and silent interruptions the least common (Beattie 1981a). In these political interviews, overlaps were the most common form of interruption for all individual speakers except Denis Tuohy, who displayed a disproportionately large number of butting-in interruptions. In the Thatcher interview there were 11 cases of butting-in interruptions when Thatcher held the floor but none when Tuohy held the floor. In the other interview Callaghan and Gardner produced exactly equal numbers of butting-in interruptions (4). The high frequency of butting-in interruptions by Tuohy when Thatcher held the floor is perhaps the most striking aspect of this data.

If one compares the frequency with which the two interviewers produced butting-in interruptions as opposed to other kinds of interruption using standard statistical procedures, the difference tends towards but narrowly fails to reach significance, largely because of the small numbers involved ($\chi^2 = 2.89$, df = 1, $p < 0.1$).

One interesting point is that although the overall number of interruptions produced by the politicians does not exceed the number produced by their interviewers (33 in each case), the number of overlaps produced by the politicians is almost double the number produced by the interviewers (19 as opposed to 10). Ferguson (1977), of course, found that overlaps were the form of interruption that was the most reliable index of dominance. In

Table 2. *Relative frequency of different categories of interruption in televised political interviews*

Speaker$_1$ — Speaker$_2$	Simple interr.	Overlap	Butting-in interr.	Silent interr.	All interr.
Thatcher — Tuohy	4	4	11	0	19
Tuohy — Thatcher	1	8	0	1	10
Callaghan — Gardner	4	6	4	0	14
Gardner — Callaghan	8	11	4	0	23
	17	29	19	1	66

university tutorials overlaps were more significantly used by tutors than students, again suggesting that this form of behavior reflects dominance (Beattie 1981a).

In the Discussion, I will consider possible interpretations of the observation of the high frequency of butting-in interruptions by Denis Tuohy when Margaret Thatcher held the floor. But first I want to discuss some other aspects of the two politicians' speech that will probably have some bearing on this issue. Using the pauseometer and Nascom microcomputer I analyzed samples of speech of the two politicians from the beginning, middle, and end of the interviews. The computer program gave me a reading of the total duration of unfilled pauses ($\geqslant 200$ m sec, Boomer 1965; Beattie 1979b) in the speech sample, the total duration of phonation, and the total length of the sample (as well as the switching pause, but this is not relevant here). The speech was then transcribed and the number of words counted. From these measures the speech rate and articulation rate were calculated (see Goldman-Eisler 1968: Ch. 1). Table 3 shows the speech rate and articulation rate of the two politicians estimated at different points in the interview. Again, some interesting differences emerge — Callaghan's speech rate and articulation rate decline steadily throughout the course of the interview. On the other hand, Margaret Thatcher's speech rate and articulation rate reach their maximum in the middle of the interview. Callaghan starts fast and gets slower. Thatcher needs some time to warm up. However, even after Margaret Thatcher has warmed up, her articulation rate and speech rate never exceed Callaghan's lowest limits!

There are also striking differences in the incidence of filled pauses in the speech of the two politicians. Filled pauses (ah, er, um, etc.) have been hypothesized to possess a floor-holding function, in addition to making time for cognitive planning in speech (Maclay and Osgood 1959; Ball 1975; Beattie 1977; Beattie and Barnard 1979). Margaret Thatcher, in her

Table 3. *Speech rate and articulation rate of Margaret Thatcher and Jim Callaghan (in words/min)*

Stage of interview	Margaret Thatcher		Jim Callaghan	
	Speech rate	Articulation rate	Speech rate	Articulation rate
Beginning	167.4	181.9	220.9	241.4
Middle	184.0	202.1	207.8	223.2
End	174.5	189.8	196.1	212.7
Mean	175.5	191.4	207.3	224.5

interview, only used four in the whole time, whereas Callaghan used 22 (Gardner used 20, and Tuohy 10). Undoubtedly Callaghan's high speech rate is an important determinant of his higher filled pause rate, but it should be emphasized that Callaghan's filled pause rate is much closer to the norm than Margaret Thatcher's. Four filled pauses in a 25-minute interview is remarkably few.

Discussion

This study focussing on turn-taking and interruptions in televised political interviews has produced some evidence of significant differences in interview behavior between Margaret Thatcher and Jim Callaghan. Margaret Thatcher is interrupted by her interviewer almost twice as often as she interrupts him. Jim Callaghan, on the other hand, interrupts his interviewer more than he himself is interrupted. Both politicians use overlaps most frequently, and they use this form of interruption almost twice as often as their interviewers. Overlaps, which are interruptions involving simultaneous speech but in which the interrupted person manages to apparently complete his or her turn, were the only form of interruption found by Ferguson (1977) to correlate with self-ratings of dominance. Beattie (1981a) found that overlaps were used significantly more frequently by tutors than by students in university tutorials. The present study again suggests that this form of interruption acts as a subtle reflection of dominance relationships in conversation.

Perhaps the most surprising and counterintuitive finding of this study is that Margaret Thatcher is interrupted significantly more frequently in her interview than Callaghan is in his. In the Introduction I reviewed the evidence that turn-taking style is likely to be influential in interpersonal perception and that with the televised political interview, in which the intimate conversational behavior of politicians is witnessed by millions of observers, there are likely to be strong beliefs developing about the character and personality of politicians on the basis of conversational behavior. However, we seem to have a paradox. There is undoubtedly a widespread view among the general public that Margaret Thatcher is domineering in interviews, whereas Callaghan is generally viewed as relaxed and affable. However, the analyses of the interviews revealed that Jim Callaghan interrupts his interviewer more than Margaret Thatcher interrupts hers, and moreover, that Margaret Thatcher's interviewer interrupts her more frequently than she interrupts him. Where, then, does the perception of Thatcher as domineering arise from? One possible suggestion is that it is her determination not to yield the floor when

interrupted that leads to this perception. I have already discussed how her speech is punctuated by butting-in interruptions from her interviewer. What is striking about some of these interruptions and other interruptions where she holds the floor is their length.

When interrupted, Margaret Thatcher often tries to finish her point regardless of the duration of simultaneous talking required. Sacks et al. (1974) make the point that 'occurrences of more than one party speaking simultaneously are common, but brief'. Beattie and Barnard (1979) reported that the mean duration of simultaneous speech in face-to-face conversation is 454 m sec. In the Thatcher interview, however, some periods of simultaneous speech last for as long as 5 sec.

In the example below, the italicized words were spoken simultaneously by Margaret Thatcher and Denis Tuohy. Tuohy started speaking in the juncture after the second 'society'.

MT: ... there are comparatively few people/they could be measured in thousands/who wish to destroy the kind of society which you and I value/destroy the free society/*Please, please this is the most please this is the most please this is*/ the most important point you have raised/There are people in this country who are the great destroyers.

DT: *You were talking about striking ambulance workers you were talking about ancilliary workers in hospitals*

Margaret Thatcher often wins the battle for the floor when she is interrupted, as can be seen from the high proportion of butting-in interruptions in her speech (i.e., interruptions in which the interrupter *Denis Tuohy does not gain the floor*), and it is perhaps for this reason that television viewers perceive her as domineering. What viewers often fail to notice is that it is not she but her interviewer who interrupts in the first place.

An important question, of course, is why she is interrupted so frequently in the first place. One hypothesis, which, following Zimmerman and West (1975), might be termed the 'male dominance' hypothesis, is that there is some evidence that women are interrupted more frequently than men; and Margaret Thatcher, despite being leader of the Opposition at the time of the interview, with all the power that goes with it, is still fundamentally a woman, to be dominated by men. This hypothesis would maintain that Margaret Thatcher and Denis Tuohy are simply displaying behaviors typical of women and men, respectively. This, of course, could easily be tested, by investigating whether Tuohy interrupts other women to a similar degree. My guess is that there is probably something else going on here. The cause of the high frequency of interruption in Margaret Thatcher's speech may lie in the paralinguistic and nonverbal behaviors that regulate

conversation. Starkey Duncan (1972, 1973, 1974, 1975) and Duncan and Fiske (1977) have identified some of the cues involved in the regulation of conversation. Duncan identified six turn-yielding cues (rising/falling intonation, drawl on final syllable or stressed syllable of a terminal clause, sociocentric sequence, drop in pitch or loudness on a sociocentric sequence, syntactic clause completion, and gesture termination). He demonstrated that the higher the conjoint frequency of these cues, the greater is the probability of a listener turn-taking attempt (although one should perhaps have some reservations about the magnitude of the correlation claimed [see Beattie 1981b]). He also posited the existence of attempt suppression signals that could override the effects of any number of turn-yielding cues. The only attempt suppression signal he actually identified was speaker gesticulation, and he demonstrated that when the speaker was actually engaged in gesture, the incidence of listener turn-taking attempts fell virtually to zero. Another possible attempt suppression signal that has been identified is the filled pause (ah, er, um, etc.). Ball (1975), for example, found that filled pauses effectively delayed subject's assumption of the floor in conversational dyads. Beattie (1977) also showed that filled pauses reduced the probability of a speaker-switch, at least for a short period after their occurrence.

Mrs. Thatcher may be interrupted frequently because she unintentionally sends out a set of paralinguistic and nonverbal turn-yielding cues that result in an attempted speaker-switch. Many of the interruptions of Margaret Thatcher that occurred in this interview were found at the ends of clauses in her speech in which there was drawl on the stressed syllable in the clause and there was a falling intonation pattern associated with the end of the clause. Duncan has identified all three of these as turn-yielding cues. Margaret Thatcher does not seem to display attempt suppression signals that could override the effects of these cues. In the whole Thatcher interview I found that Margaret Thatcher only used 4 filled pauses in all, while Tuohy used 10. (Callaghan used 22 in his, and Gardner 20.) She often uses a hand gesture only after the interruption has begun. Consider the following exchange between Margaret Thatcher and Denis Tuohy:

MT: The police do a fantastic job
DT: Coming
MT: and we must support them in every way possible
DT: Coming towards the end of our time, Mrs. Thatcher

Denis Tuohy starts to speak after Mrs. Thatcher says 'job'. This might seem to be an appropriate point to begin, because it is the end of a

syntactic clause, there is drawl on the stressed middle syllable of 'fantastic', and there is a final-sounding intonation associated with the end of the clause. Denis Tuohy seems to think that Mrs. Thatcher has finished and begins to speak. A filled pause after 'job' might have been appropriate in signaling that there was more speech to come and that the combination of paralinguistic cues did not constitute an appropriate point for a speaker-switch. One may only speculate that the speech training Margaret Thatcher received before the last General Election may have in part contributed to this problem.

This study has attempted to contrast the interview style of two of Britain's leading politicians by concentrating on deviations from the turn-taking rule. It has tried to suggest how differences in behavior may affect interpersonal perception and it has also tried to account for the differences in terms of the mechanisms that control conversation. It is a preliminary study — clearly further work needs to be done before we more fully understand the origin of habitual differences in conversational interaction and appreciate their full social significance.

Note

1. Since this article was written, Mr. Callaghan has resigned from the leadership of the Labor Party.
2. Only words in italics are spoken simultaneously.

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Geoffrey W. Beattie (b. 1952) is a lecturer in psychology at the University of Sheffield. His principal research interests are language production, nonverbal communication, and conversational interaction. His publications include 'Gesture and silence as indicators of planning in speech' (1978, with B. Butterworth), 'The modifiability of the temporal structure of spontaneous speech' (1979), 'The skilled art of conversational interaction: Verbal and nonverbal signals in its regulation and management' (1980), and 'The role of language production processes in the organisation of behaviour in face-to-face interaction' (1980).