

NATURAL CONVERSATIONS IN MALES AND FEMALES: CONVERSATIONAL STYLES, CONTENT RECALL AND QUALITY OF INTERACTION¹

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The caterpillar and Alice looked at each other for some time in silence: At last the Caterpillar took the hookah out of its mouth, and addressed her in a languid, sleepy voice.

"Who are You?" said the Caterpillar.

This was not an encouraging opening for a conversation. Alice replied, rather shyly, "I - I hardly know, Sir, just at present (...)"

Lewis Carroll "Alice's Adventures in Wonderland"

1. Introduction

This study forms part of a research project on dialogic interaction modalities in three different situations: natural conversation, research interview and first clinical interview. In this paper natural pair conversation will be studied, in particular the effects of speaker's sex on quality and quantity of linguistic production, on content memory and personal interaction quality. The other two types of dialogic interaction, which will be further investigated in future research, will be considered to check similarities and differences and also to see whether it is possible to distinguish in the subjects' individual performance in natural conversation, some style indices of good and poor performance in the research interview and in the first clinical interview. The reciprocity of listening, attention and involvement between the two speakers is fundamental for whatever conversational exchange, that is for any cooperative exchange in which the two speakers share an aim (Grice 1975). These characteristics become even more important when the shared aim is the acquisition of information on the subject (research interview) or on the patient (first clinical interview), and it is of course essential in all types of psychotherapy based on speaking. The other two types of dialogue are just mentioned here, with reference to the final aim of the whole research, that is to identify descriptive indices in different conversational styles, that might serve to evaluate also the quality of the communicative interaction which is at the basis of the subject-researcher relationship as well as of the patient-psychotherapist relationship as far as the first

¹ The data were collected by dr. Remo Mazzocco, under our supervision. He has recently used some of them in his thesis dissertation in Psychology (University of Padua, 1995).

interview is concerned.

Attempts to study one of these modalities using discourse analysis techniques usually applied in one of the other modalities have already been carried out (see, for instance, Labov & Fanshel 1977; and, more recently, Beck & Ragan 1992; Bless, Strack, & Schwarz 1993; Lai 1993; Semi 1992).

As concerns natural conversation, interesting is Deakins's (1993) attempt to apply some psychiatric categories, such as normal and neurotic behaviour, based on Horney's (1937, 1945) work, to the conversational styles of speakers of both sexes identified by Tannen (1990a).

In brief, by studying one of these three dialogic interaction modalities, it is inevitable to also focus on some features of the other two. The present research, however, only deals with natural conversation and attempts to analyse it by using not strictly linguistic indices.

2. Male and female conversational styles

The 70s saw a flourishing literature on the language differences between males and females. As concerns conversational styles, in particular, a reference point were Robin Lakoff's (1973a, 1973b) studies on women's language. Grice's conversational maxims (1975) are taken by Lakoff as aspects of the first rule of pragmatic competence ("Be clear"), while the second rule ("Be polite") is spread over three other sayings: 1) Do not impose, 2) Give options, 3) Make your interlocutor feel good - be friendly.

In other words, according to Lakoff, in a normal conversation "do not offend" is more important than "be clear". In almost all conversations, strengthening the relationship between the speakers is more important than communicating information. According to Lakoff, while men tend to apply Grice's maxims more frequently, women tend to apply the rule of politeness, subordinating the communication content of their speech to the social value of interaction.

Much research has been carried out to confirm or falsify Lakoff's claims (see, for instance, in Italy, Attili & Benigni 1977; Baroni 1983; Baroni & D'Urso 1984; Berretta 1982).

More recently, Tannen's research (1989, 1990a, 1990b) has pointed out the question of different styles in men's and women's conversation, dealing with the question of who is dominating and controlling the interaction and who is cooperating. According to Tannen, the asymmetries of conversations in the two sexes are due to the two different worlds in which men and women live. Interruptions, overlappings, amount and length of interventions are expressions of a different way of considering conversation, oriented either to power or to relationship. Males interrupting conversations more frequently is still a controversial point in the literature. From a research study carried out by Campbell, Kleim, and Olson (1992) on university students, males actually seem to interrupt more, while Marche and Peterson (1993), studying subjects of three different ages (children, adolescents and adults), found no differences between males and females. What changes from author to author are the interpretations of the reasons of this phenomenon when these differences do exist. Interruption is not always seen as an aggressive and disruptive behaviour. For example, Chambliss and Feeny (1992) think

that males have a more positive attitude towards interruptions. Tannen herself (1990a) specifies the existence of different types of interruptions: Those prompted by lack of interest in the interlocutor's words, and whose speech is then overlapped, and cooperative ones, in which the interruption is made to ask the other to clarify and further explain or to let him/her know the listener is participating. Therefore there is not only the problem of whether males interrupt more frequently, but also of checking the nature (cooperative, non-cooperative) of the interruptions observed.

Extending the discussion to the other two types of dialogues, the problem of the style of interruption is felt also in both research and clinical interviews, where the interviewer seems occasionally to interrupt the speech in order to get back to topics more useful to research or to get acquainted with the subject-patient. Sullivan (1954) in particular talks about topic changes that may be gradual, when the interviewer gently leads the patient from one topic to another, more accentuated, when the interviewer introduces a new topic via a preliminary muttering, and, lastly, abrupt (generally used to provoke or avoid anxiety) when there is no warning. These interruptions, even the most abrupt, can hardly be considered non-cooperative.

As concerns the ability to establish and maintain a good interaction with the interlocutor, some recent research has confirmed that when females are applying conversational maxims, they use a greater indirectness (see, for instance, Rundquist 1992) as well as being sensitive, in conversation, to the interlocutor's smallest signals (Watts 1992).

3. Conversation and memory

How conversations are remembered has been studied with respect to different aspects of language (e.g., recall of the gist, verbatim memory), methods (e.g., verbal reports based on recall, recognition memory) and material (actual conversations, videorecorded conversations, class lectures, and so on) (Bates, Masling, & Kintsch 1978; Hjelmquist 1984, 1989; Hjelmquist & Gidlund 1985; Keenan, McWhinney, & Mayhew 1977; Kintsch & Bates 1977).

A particularly important index of subjects' involvement in listening to their interlocutors' interventions in conversation is the proportion of recall of their own sentences compared to recall of their interlocutors' sentences: Jarvella and Collas (1974) found that people do actually remember better what they themselves have said.

Baroni, D'Urso, and Pascotto (1991) examined the effects of three different modes of interaction on memory for conversation in pairs, finding a better memory for conversation content in subjects who had actually participated in the conversation, compared to subjects who had only listened or read the material. In addition, they found that, in accordance with Jarvella and Collas's results, subjects tended to better recall their own rather than their interlocutors' interventions. These results could be explained if we hypothesized a deeper personal involvement and a more accurate monitoring of one's contributions to the conversation in the production phase. The interlocutors' sentences seem to be held in memory only the time necessary to extract their meaning, and are then immediately forgotten, allowing the speakers to plan in advance their next interventions.

4. Hypotheses

The hypotheses of this research concern the possible existence of differences depending on the speakers' sex in their conversational style, in their memory for conversation content and in the quality of their interaction. In particular the following exploratory hypotheses have been put forward, on the basis of the above quoted literature.

Hypothesis 1: The speaker's and the interlocutor's sex could affect the length of their interventions and the amount of information given (indices of information amount).

Hypothesis 2: Differences could be found, depending on the speakers' sex, in a series of qualitative indices such as interruptions, overlappings and expansions, topic changes (indices of relation modality).

Hypothesis 3: There could be differences, depending on the speakers' sex, in memory for conversations, both for one's own and for the interlocutor's interventions.

Hypothesis 4: There could be differences, depending on the speakers' sex, in the global interactional style used in the conversation, from the point of view of reciprocity, real listening to each other and involvement.

5. Method

5.1. Subjects

Seventy-two subjects took part in the research (age range 22-46). They all held a high school diploma or a University degree. They did not know one another and they were selected from a larger sample after a pilot research. The subjects were divided in pairs of the same age:

12 pairs of male speakers (MM),

12 pairs of female speakers (FF),

12 pairs of male and female speakers (MF).

5.2. Material and procedure

The research was carried out at the subjects' work place, a large firm in Northern Italy, during the lunch hour, in two phases at one week's interval.

First phase: Conversation task. The subjects were asked to sit down in a sitting room with the experimenter. The experimenter invited them to converse on a topic which they were given at that moment: Their personal experience of high school. This topic had been chosen for the following reasons: a) it could be used also in the second part of the research (on the research interview); b) it gave both speakers new information about each other's experience and therefore kept up the interest in the listener; c) it was not necessary for the speakers to agree on any conclusion. In addition there was no risk that competition or persuasion aims could be involved.

The conversation lasted about five minutes. The speakers were informed of this only implicitly, because their collaboration was required only for a brief break

from their work. At a time in which no intervention or exchange of information was taking place the experimenter said the task was over. With the subjects' agreement, the conversation was recorded. The subjects were given another appointment for a week later for a further unspecified task.

Second phase: Memory task. After a week, in the same sitting room, an unexpected individual memory task took place. The subjects were asked to orally recall all that had been said in the previous week's conversation, both by themselves and by their interlocutors. This task was also recorded.

6. Analysis of the conversations: Linguistic indices

An analysis was carried out on the transcriptions of the conversations and on those of the memory tasks by three independent judges, on the basis of a series of linguistic indices. Doubtful cases were resolved through discussion until agreement was reached.

The first problem was to isolate the information units of the conversation. The procedure was the same used in a previous research (see Baroni, D'Urso, & Pascotto 1991), based in its turn on a reelaboration of criteria used by Hjelmquist and collaborators. Each conversation was divided in a number of information units (called by Hjelmquist "ideas"), that is sentences containing one piece of information and not necessarily coinciding with clauses. The original "idea" definition was enlarged by the authors in order to better adapt it to a memory task, so that the presence or absence of a single piece of information could be easily recorded. This presents two major problems: 1) in most cases the idea recognizable in the subject's report was poorer and more general than in the stimulus material; details were often neglected; 2) repetitions were possible and frequent. For these reasons, the notion of "idea" was slightly modified and extended to include more than a small detail or a single irrelevant piece of information. This new "idea" is a meaningful proposition, or set of propositions, containing an amount of information that could be remembered as a unit. We are aware that this criterion could appear, in fact, rather vague and subjective, and that it is biased by the need to apply it to the items of a memory task. Nevertheless we used it in this research, relying also on the final agreement among the three before-mentioned independent judges. To give an example of what we called "idea", here follows a short passage of an intervention in a conversation (MM pair), and two passages of the correspondent memory reports of the participant who has expressed the idea and of his interlocutor, respectively.

Idea expressed in the conversation. Participant 1: "Io mi sono divertito tantissimo, ho dei ricordi stupendi del liceo e tornerei indietro subito (I enjoyed myself tremendously, I've got marvellous memories of high school, I'd happily go back and do it again)".

Idea recognizable in the memory reports. Participant 1: "Avevo detto che era una scuola in cui mi ero trovato molto bene (I said it was a school where I felt very happy)". Participant 2: "E' una scuola che è piaciuta moltissimo al mio interlocutore (It's a school my interlocutor liked very much)".

As for the frequent repetitions occurring in natural conversations, when no new piece of information was added the repeated sentence was not considered as a new idea, but was pooled with the original sentence and classed as the same idea expressed in more words. In the cases where the other speaker repeated that same idea, it was considered as a new idea (obviously attributed to the second speaker).

Interruptions and overlappings were considered together as in almost all cases they coincided. An overlapping, in fact, signals the insertion of the other speaker in the conversation, and makes the first speaker stop. Cooperative interruptions, that is those that make the interlocutor enlarge on or clarify the information he/she is giving, were considered together with actual expansions, that is sentences that at the end of the speaker's interventions are said by the other speaker to make him or her continue with the topic.

For the conversation we considered

- the mean number of words said by each speaker,
- the number of ideas per speaker,
- the mean number of words per turn per speaker,
- the mean number of words per idea per speaker,
- the mean number of interruptions and overlappings, expansions, and topic changes per speaker.

For the memory task we considered:

- the mean number of words used by each speaker in recall (total recall),
- the mean proportions of ideas per speaker, in ratio to the ideas present in the conversation (total recall),
- the mean proportions of ideas per speaker, limited to own turns, in ratio to the ideas present in the conversation
- the mean proportions of ideas per speaker, limited to the interlocutor's turns, in ratio to the ideas present in the conversation
- the mean number of words per idea per speaker

7. Results

Each subject was given a score for each conversation and for each memory index. The data thus obtained underwent Student's 't' test, in some cases for independent groups, in others for repeated measures, with a bidirectional hypothesis. Four types of comparison were carried out:

- a) between the data of male pairs and female pairs;
- b) between the data of male subjects and female subjects within the mixed pairs;
- c) between the data of the male subjects within the pairs of the same sex and of the male subjects within the mixed pairs;
- d) between the data of the female subjects within the pairs of the same sex and of the female subjects within the mixed pairs.

The data are presented in Tables 1, 2 and 3.

Table 1
LINGUISTIC INDICES IN CONVERSATION

	Speaker's sex	Interlocutor's sex	
Mean number of words used in conversation by each speaker	M	M	431.04
	F	F	337.25
	M	F	392.42
	F	M	423.50
Mean number of ideas per speaker	M	M	7.17
	F	F	8.04
	M	F	7.66
	F	M	7.33
Mean number of words per turn per speaker	M	M	93.79
	F	F	24.18
	M	F	29.71
	F	M	36.26
Mean number of words per idea per speaker	M	M	63.81
	F	F	43.22
	M	F	55.42
	F	M	58.70
Mean number of interruptions and overlappings per speaker	M	M	4.67
	F	F	5.42
	M	F	6.58
	F	M	7.33
Mean number of expansions per speaker	M	M	1.50
	F	F	2.92
	M	F	2.58
	F	M	2.83
Mean number of topic changes per speaker	M	M	6.62
	F	F	5.54
	M	F	6.33
	F	M	7.00

Table 2
MEMORY INDICES

	Speaker's sex	Interlocutor's sex	
Mean number of words used by each speaker in recall	M	M	305.58
	F	F	270.12
	M	F	245.25
	F	M	334.25
Mean proportions of ideas per speaker, in ratio to the ideas present in the conversation (total recall)	M	M	.46
	F	F	.47
	M	F	.44
	F	M	.52
Mean proportions of ideas per speaker, limited to own turns, in ratio to the ideas present in the conversation	M	M	.50
	F	F	.49
	M	F	.47
	F	M	.61
Mean proportions of ideas per speaker, limited to the interlocutor's turns, in ratio to the ideas present in the conversation	M	M	.41
	F	F	.45
	M	F	.42
	F	M	.47
Mean number of words per idea per speaker	M	M	50.81
	F	F	37.46
	M	F	41.95
	F	M	43.00

Table 3
MEMORY FOR OWN AND OTHER'S IDEAS

Speaker's sex	Interlocutor's sex	Mean proportions of ideas per speaker	
		Own ideas	Interlocutor's ideas
M	M	.50	.41
F	F	.49	.45
M	F	.47	.42
F	M	.61	.47

8. Significant differences as concerns conversation indices

Mean number of words used in conversation by each speaker. In the pairs of the same sex, the male subjects tend to use more words than the female subjects ($t = 1.882$, d.f. 46, $p < .10$, trend to significance) (See Fig. 1).

The females of the mixed pairs tend to use more words than the females in the female pairs ($t = -1.743$, d.f. 46, $p < .10$, trend to significance).

Mean number of ideas per speaker. No significant difference.

Mean number of words per turn per speaker (length of the interventions). In the pairs of the same sex (MM and FF), the males' interventions are much longer than the females' ($t = 2.719$, d.f. 46, $p < .01$) (See Fig. 2).

The females' interventions in the MF pairs tend to be longer than the females' interventions of the FF pairs ($t = -1.777$, d.f. 34, $p < .10$, trend to significance). The males' interventions of the MF pairs tend to be shorter than the males' of the MM pairs ($t = 1.755$, d.f. 46, $p < .10$, trend to significance).

Mean number of words per idea per speaker (index of prolixity). In the pairs of the same sex, the males use far more words per unit of information (i.e. per idea) than the females ($t = 3.869$, d.f. 46, $p < .001$) (See Fig. 3).

The females of the MF pairs use more words per idea than the females of the FF pairs ($t = -3.132$, d.f. 34, $p < .01$).

Mean number of interruptions and overlapping per speaker. No significant difference.

Mean number of expansions per speaker. In the pairs of the same sex, the females use a greater number of expansions than the males ($t = -2.081$, d.f. 46, $p < .05$) (See Fig. 4).

Mean number of topic changes per speaker. No significant difference.

Figure 1
MEAN NUMBER OF WORDS USED IN CONVERSATION
BY EACH SPEAKER IN PAIRS OF THE SAME SEX

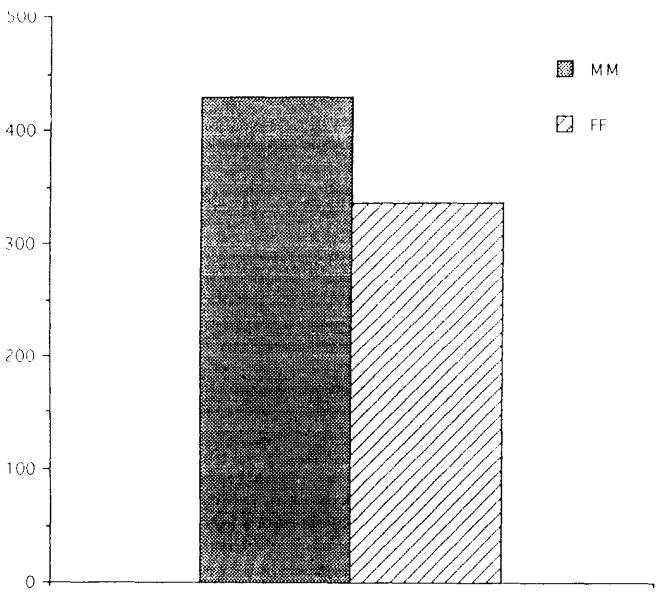


Figure 2
MEAN NUMBER OF WORDS PER TURN PER SPEAKER

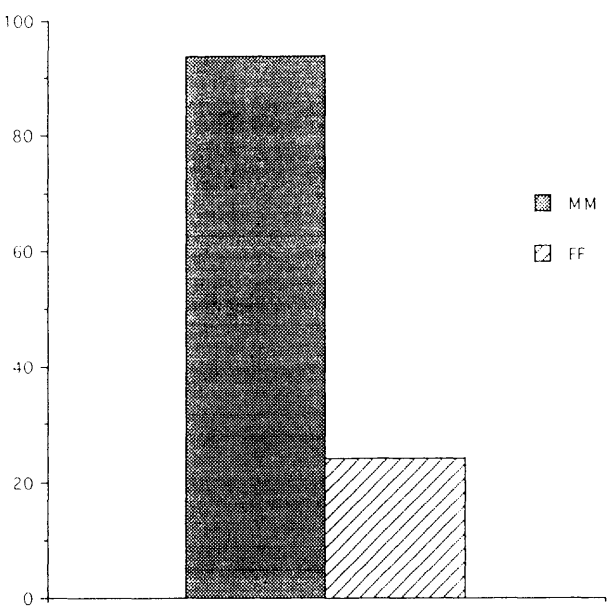


Figure 3
MEAN NUMBER OF WORDS PER IDEA PER SPEAKER

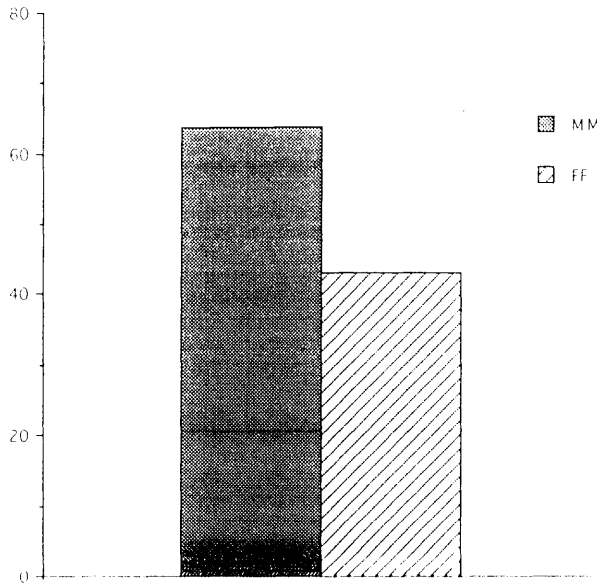
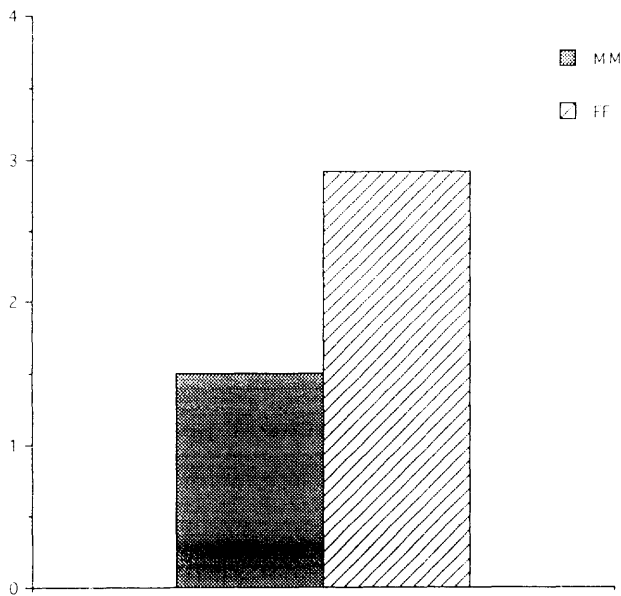


Figure 4
MEAN NUMBER OF EXPANSIONS PER SPEAKER



9. Significant differences as concerns recall indices

Mean number of words used by each speaker in recall. In the MF pairs the females tend to use more words than the males in recall ($t = 1.863$, d.f. 22, $p < .10$, trend to significance).

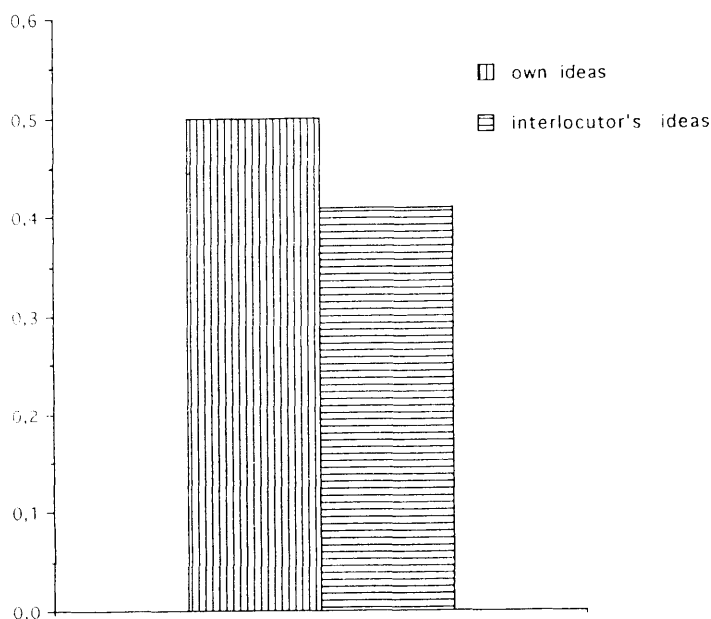
Mean proportions of ideas per speaker, in ratio to the ideas present in the conversation (total recall). No significant difference.

Mean proportions of ideas per speaker, limited to own turns, in ratio to the ideas present in the conversation. The females of the MF pairs tend to remember a greater number of ideas, in connection with their own interventions, than the females of the FF pairs ($t = -1.702$, d.f. 34, $p < .10$, trend to significance).

Mean proportions of ideas per speaker, limited to the interlocutor's turns, in ratio to the ideas present in the conversation. No significant difference.

Memory for own and other's ideas. Only within the MM pairs, the speaker remembers better the ideas expressed by himself than those expressed by the interlocutor ($t = 2.232$, d.f. 23, $p < .05$) (See Fig. 5).

Figure 5
MEMORY TASK: MEAN PROPORTIONS OF OWN AND INTERLOCUTOR'S IDEAS IN THE NM PAIRS



Mean number of words per idea per speaker (index of prolixity). In the pairs of the same sex the males use more words per idea than the females in recall ($t = 2.564$, d.f. 46, $p < .02$). The females of the MF pairs tend to use more words per idea than the females of the the FF pairs ($t = -1.169$, d.f. 34, $p < .10$, trend to significance).

10. Discussion of the linguistic analysis

First hypothesis

In the pairs of the same sex the males tend to use more words than the females. The females tend to use more words when they speak with a male than with a female. The number of words in each turn and the number of words in each idea follow the same trend.

Second hypothesis

As concerns the linguistic indices linked to relational aspects, the only difference is in favour of the females, who, within pairs of the same sex, use more expansions.

In conclusion, as concerns conversational linguistic indices, some differences do emerge. The males use more words and take longer turns. The females expand more greatly on the interlocutor's speeches. When the females converse with the males they seem to adapt to the male conversational style (more words, longer turns, more words per idea). On the whole, Tannen's hypothesis on males making more interruptions and abrupt topic changes is not confirmed. One thing to remember is that in our research both males and females had an equal role in their work, the same level of education and were all relatively young: All conditions that contribute to balance the roles. Other Tannen's hypotheses are partially confirmed. The males, in any case, seem to have a more prolix style (in as many as three indices) and the females seem more oriented to relationship (in only one index).

Third hypothesis

In the mixed pairs, the females recall with more words than the males in the mixed pairs and recall their own interventions better than males recall their own interventions. Further, in the pairs of the same sex even in recall the males use more words per idea than the females. When the females recall a mixed sex conversation, they recall it with more words than when they recall a conversation in pairs of the same sex (they show the same trend as in the conversation).

Lastly, Jarvella and Collas's hypothesis (people better recall their own rather than the interlocutors' interventions) seems confirmed only for the males in the MM pairs. The females always recall in the same way. These data confirm those obtained by a similar research (Baroni, unpublished data) in which, when the topic implied information that was new for both speakers, such as the one used in this research, the trend found by Jarvella and Collas was not confirmed. The most intriguing outcome, at this point, is then the male perseverance, limited to the pairs of the same sex, in recalling their own interventions and those of their interlocutors in an unbalanced way.

In conclusion, as concerns memory indices, no clear orientations emerge. The only reasonably sure data is that the males seem to pay less attention to other people's interventions, and, consequently, do not remember them so well.

As a general conclusion, as concerns linguistic and memory indices, no great differences have emerged. This is probably due to the fact that the subjects were of the same age within the pairs, they had the same working role, the informational content of the conversation was new and so it was interesting, it had a rather high relational value, etc. Notwithstanding these characteristics of the sample and the material, intended to flatten differences, some differences do emerge. They are very

few, but in agreement with the hypotheses: Males are more prolix and therefore more imposing and less attentive to their interlocutor; females are more oriented to relationship with the interlocutor and, in some respects, also more ready to adapt to his or her conversation style.

11. Some observations on the quality of linguistic interaction in the pairs

In the second part of the analysis, the conversations were examined from another viewpoint, i.e. the quality of interaction between the speakers. Except on rare occasions, establishing and keeping a good relationship with the interlocutor is not the explicit aim of a natural conversation, as shown by the models presented above. On the contrary it is much more crucial in a good clinical interview and, generally speaking, in a good research interview. Via this second part of the analysis we tried to spot in natural conversations different modalities of dialogic exchange on dimensions such as interaction between speakers, balancing, involvement.

Two independent judges examined the recorded conversations, on the basis of the three considered indices. The interactive style was examined, first of all, according to the presence or absence of *interaction*. To this aim we have considered the index "Int+" if in the conversation there was reciprocal listening, turn-taking and information exchange; "Int-" if the two speakers presented their experiences as two blocks, without alternation or information exchanges. For instance, evaluated as Int+ was a conversation characterized by such interventions: "Instead, I went to XXX school, I think you will have heard of it...", "The ups and downs of my school life were less troubled than yours...".

Then each conversation was examined in order to see whether it was *balanced* or if there was any dominance on the part of one of the two subjects ("B+" and "B-").

Lastly, for each conversation, the presence or absence of personal *involvement* in what the other was saying was considered. This parameter was considered independently from interaction, because there can be reciprocal listening without involvement: For example "it also happened to me...", "what you say makes me remember...". Involvement is rather characterized by the presence of questions and/or comments; so there can be a conversation "Int-" with one of the two subjects showing involvement in what the other is saying ("Inv +"). For instance, evaluated as Inv+ was a conversation characterized by such interventions: "Do you still see each other?", "How did you get on with your A levels?"

Involvement was also considered as an index applicable to each subject within the conversation rather than to each conversation. In the case of MF pairs, it was also considered in relation to sex.

12. Results and discussion of qualitative analysis

The results of the qualitative analysis are shown in Tables 4, 5, and 6.

Table 4
QUALITATIVE ANALYSIS INDICES: INTERACTION

Speaker's sex	Interlocutor's sex	Interaction +	Interaction -
M	M	9	3
F	F	12	0
M	F	10	2

Table 5
QUALITATIVE ANALYSIS INDICES: BALANCING

Speaker's sex	Interlocutor's sex	Balancing +	Balancing -
M	M	8	4
F	F	12	0
M	F	10	2

Table 6
QUALITATIVE ANALYSIS INDICES: INVOLVEMENT

Speaker's sex	Interlocutor's sex	Involvement + +	+ -	-
M	M	3	5	4
F	F	12	0	0
M	F	6	1(M+F-)	2
F	M	"	3(F+M-)	"

A very apparent result is the unanimity of interaction, balancing and reciprocal involvement in the FF pairs. If we consider the interaction alone, the three groups do not seem to differ greatly; the FF pairs come out top, but the other two groups are very close behind (See Fig 6).

The situation changes if we look at whether there is a dominance on the part of one of the two (balancing index). In all three groups, the majority of pairs seems balanced, but the greatest number of dominants (4) appears in the MM pairs (See Fig. 7).

The clearest outcome concerns the presence or absence of involvement (See Fig. 8).

Figure 6
PRESENCE OF INTERACTION

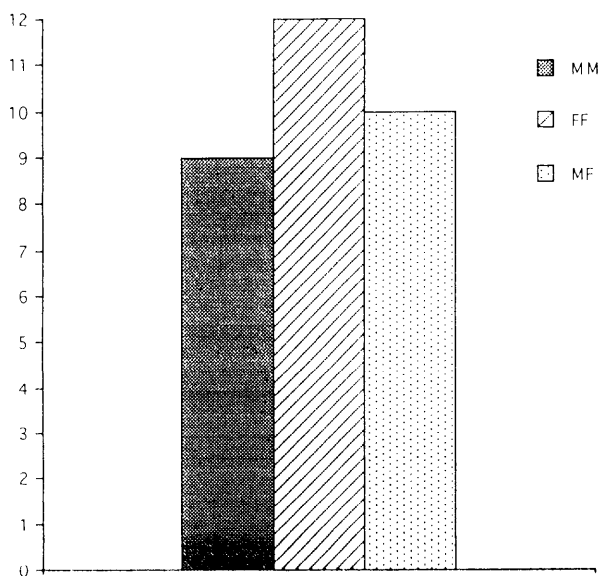


Figure 7
PRESENCE OF BALANCING

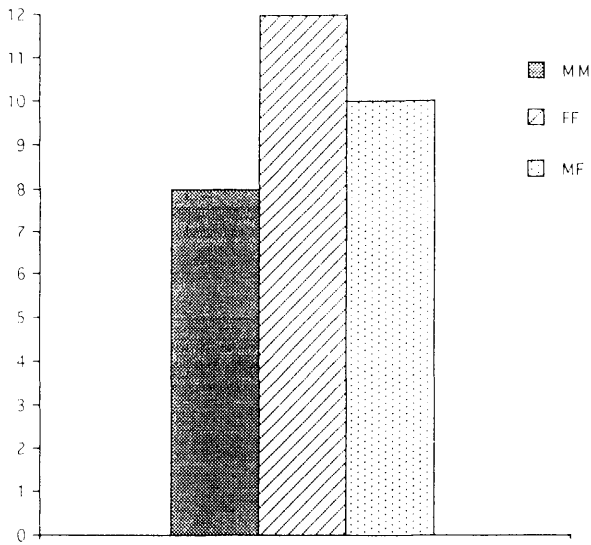
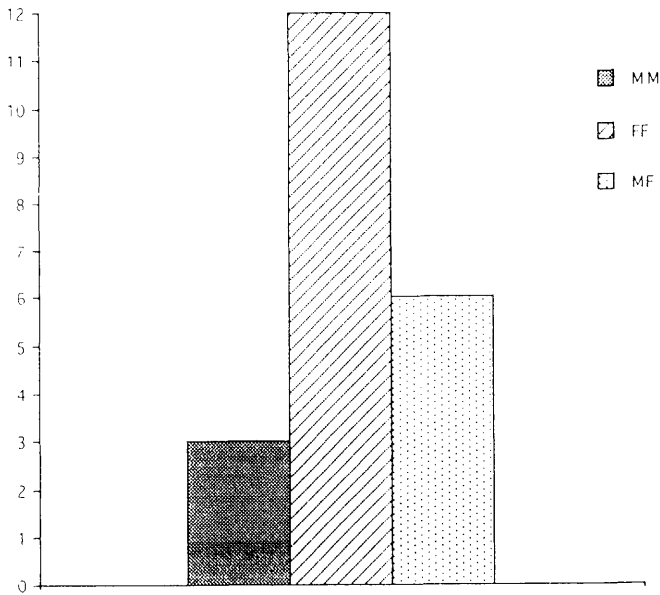


Figure 8
PRESENCE OF RECIPROCAL INVOLVEMENT



Only the FF pairs are characterized by a 100% reciprocal involvement; in the MM pairs reciprocal involvement is present only in three cases, in five cases it is unilateral and in four cases it is completely absent. In the mixed pairs, reciprocal involvement is found in six.

As to the *fourth hypothesis*, the results of this qualitative analysis follow the same trend of the quantitative linguistic indices, showing that the interactive style is better in the female pairs.

Another comment could be made, with reference to our future research (that is the research interview part) and to the fact that also the third modality (clinical interview) was presented at the beginning: If we consider the conversation under these slightly mixed criteria, that is referred to the other two types of dialogue, we can see that the female interactive style is more oriented to reciprocity, is more balanced and more involved. All these seem to be prerequisites for the other two types of interview.

13. A tentative general conclusion

At this point of our research and as far as the data on natural conversation are concerned, some trends have already emerged. We would like to highlight them. First of all a convergence seems to exist between the indices we have called linguistic and memory ones and those we have called interactive indices. The relationship between the two speakers emerging from the analysis of the interaction, the balancing, the involvement can be already assessed, at least partly, through the linguistic-quantitative analysis of the speech. We would like to underline the fact that this happens in a situation where the establishing and keeping of a good relationship was not an explicit aim of the speaker. If from the speaker's linguistic behaviour his/her communicative intentions can be inferred, we can also say that establishing and keeping a good relationship with the interlocutor is indeed the aim of at least a number of the pair subjects engaged in the conversation. On the data of the quality and amount of the speech on the one side, and of the quality of the interaction style on the other, we can say that the sex characterization of the pair speakers is a determining factor in taking on this implicit aim. Rather than a female register, spoken about in the '70s (see for instance Crosby & Nyquist 1977) and not confirmed in our sample, in which there was not a greater amount of male interruptions, overlappings, topic changes, here we could probably talk about females' orientation to listening and reciprocity.

The second point worth underlining is that the combined use of quantitative-linguistic and memory indices (more traditionally used in conversation analysis) and interactive style indices (linked to the other two types of interview) has led to find, albeit at a very early stage, a relatively new typology of conversational styles. The next step could be the application of these slightly mixed criteria to the other two types of dialogues, the research interview and the clinical interview. The natural conversation model can also be considered as the basis of the research and clinical interviews. This is nothing new. On the contrary, in our research we have tried to check the usefulness of applying to conversation evaluation indices more peculiar to the other two types of dialogue.

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