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COOPERATIVE PARTICIPANTS DISCRIMINATE (NOT ALWAYS): A LOGIC OF CONVERSATION APPROACH TO THE MINIMAL GROUP PARADIGM

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ABSTRACT

The basic finding in minimal group studies is that merely categorizing people into groups leads them to discriminate against the outgroup and favor their own group on a subsequent resource allocation task. Based on Grice's (1975) logic of conversation, it is argued that participants use this group membership information for discrimination because they obey the cooperative principle and assume that the presented group membership information must be relevant for the allocation task. In a variation of the standard design, the group membership information was made explicitly relevant for a second task (without denying its relevance for the allocation task). Consistent with the logic of conversation approach, discrimination was strongly reduced in this condition, compared to the standard design.

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INTRODUCTION

The Minimal Group Paradigm

In the early seventies, Henri Tajfel and his coworkers introduced a new paradigm for the study of intergroup discrimination, the purpose of which was to explore the minimal conditions for intergroup discrimination to take place. In a typical experiment (e.g., Tajfel, Billig, Bundy and Flament, 1971), the participants are first divided into two groups on the basis of a trivial criterion. Such a criterion may be the alleged over- or under-estimation of quantities in a perception task. Thereafter, the participants are given the opportunity to divide monetary rewards between members of these two groups. (The participants are told that this second task has nothing to do with the first one and that the categorization from the first task is used only "for convenience.") However, the identity of these members remains anonymous; they are only referred to with code numbers. Another important feature of the minimal group situation is that

participants can never allocate rewards to themselves, that is, they have no immediate personal interest in their decisions.

The allocation of resources is done by choosing one of several payoff combinations prearranged in a matrix which consists of two rows and several (usually thirteen) columns. Each row gives the possible payoffs for one person from one of the groups. For example, the upper row gives the payoffs for "person no. x from the overestimator group", and the lower row gives the payoffs for "person no. y from the underestimator group" (see also the example matrices given in the method section). The participants' task is to choose one of the columns. Due to the construction of the matrices, these choices correspond to certain critical allocation strategies. Two classes of strategies are of major interest: fair strategies and discriminatory strategies. The first class subsumes two strategies: Fairness (F), which means that both persons are awarded the same number of points or money, and Maximum Joint Payoff (MJP), which means that the sum of the two payoffs is maximized, regardless of whether they are equal or not. The second class subsumes two other strategies: Maximum Ingroup Payoff (MIP), meaning that the person which belongs to one's own group is awarded as many points as possible, regardless of whether the payoff for the person from the outgroup is higher or lower, and Maximum Difference (MD), which means that the difference in payoffs in favor of the ingroup member is maximized. The well-known basic finding is that participants allocate rewards clearly in favor of their own group (i.e., participants employ discriminatory strategies; see Diehl, 1990, for an overview).

Methodological Criticism: Demand Characteristics And Logic Of Conversation

Along with the finding of discrimination in the minimal group paradigm have come suspicions that this finding is produced by demand characteristics of the experimental situation (e.g., Gerard and Hoyt, 1974). The main argument is that the presence of the group membership information in the matrices gives a strong clue to a plausible interpretation of an otherwise rather strange task, namely, dividing money between two anonymous people. Thus, the participants might use this group membership information as a guideline for their behavior in the experiment, that is, make a difference where a difference is provided. Of course, there have been efforts to meet these criticisms (St. Claire and Turner, 1982; Tajfel and Turner, 1979), but it does not seem that the issue has been settled; on the contrary, the debate has been taken up again recently (Berkowitz, 1994).

The present approach is in the spirit of the demand characteristics idea but takes a new direction which is inspired by Grice's (1975) work on the logic of conversation. Grice holds that in normal verbal exchanges people follow a rational, cooperative principle (and assume that their interlocutor also does). This means specifically that they make their contributions so as to optimize the agreed-upon purpose of the conversation, the exchange of information. The cooperative principle covers several conversational maxims and submaxims, one of which is central to the present work, the maxim of relevance (see below).

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In the last few years, it has been recognized that the logic of conversation approach can be fruitfully applied to the analysis of the social interaction and communication in psychological experiments (see Hilton, 1995, for an overview). Information conveyed in an experimental situation can be treated in much the same way as contributions to a conversation. Returning to the minimal group paradigm: when presented with the group membership information, the participants will assume the maxim of relevance operates. That is, they will assume that this piece of information is relevant for the current topic of the experiment-interaction (in this case, working on the matrices). If it was not relevant, the experimenter would not have provided it. Thus, based on the cooperative principle, it is a reasonable conclusion for them that they should incorporate this information into the next step of the interaction, in this case, the allocation of resources.

So far, the argument largely parallels the demand characteristics hypothesis. However, an attractive feature of the logic of conversation approach is that it offers new roads to experimentation. According to my above argument, discriminative behavior in the minimal group paradigm results from the perceived relevance of the group membership information. However, this perception is a consequence of the fact that no other reasonable attribution of relevance is possible in the minimal group situation; there is no other task for which the group membership information might reasonably be used. Thus, we might expect that participants will refrain from using the group membership information for discrimination when they have a better opportunity for relevance attribution. Following this logic, the present study presented the participants with a second task which was intended to be as unrelated as possible to the principal task but explicitly required use of the group membership information. At the same time, relevance for the principal task was not questioned (more specifically, the procedure was otherwise identical to the standard paradigm). If discrimination in the standard paradigm is a consequence of the perceived relevance of the group membership information, then discrimination should be reduced to the degree that perceived relevance is directed away from the principal task.

METHOD

Overview

The experiment was performed in fulfillment of a psychology undergraduate course requirement supervised by me. Eight students served as experimenters. Relevance of group membership information was varied between subjects. The procedure was the same in both participant groups except that the standard resource allocation task was coupled with a second task in one of the groups (which we might call the relevance group), whereas the standard group was run as a usual minimal group experiment.

Participants

Altogether, 53 individuals took part in the experiment (18 males, 35 females). Thirty of them were psychology undergraduates and were tested at the psychology department of the University of Leipzig. Because we were running short of psychology undergraduates in need of course credit, the rest of the sample had to be recruited among acquaintances of the experimenters.

These individuals were tested in private settings and participated voluntarily (location of testing, university or private, was not confounded with experimental condition). The non-psychology subsample consisted mainly of students from various disciplines. Both subsamples had about the same age distribution; the whole sample ranged between 17 and about 30 years.

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Procedure

Subjects were randomly assigned to experimental conditions and tested in small groups. Within one group session, only one of the experimental conditions could be run because they differed somewhat in their time schedules. The experiment consisted of two main parts. In the first part, which was the same for all participants, a concentration test was administered which served as a rationale for dividing the participants into two groups - the "concentrated" and the "unconcentrated" group. In order to have a simple task which can be administered without much difficulty, we took a concentration test which is part of an admission test for medical students in Germany. It presents rows of b's which are over- or underlined with one or two lines and requires the participants to check all b's with exactly two lines. The participants had three minutes to complete this test. Then the test sheets were collected and one of the experimenters pretended to calculate the participants' test scores (during that time, the other experimenter administered an unrelated filler task). In fact, however, half of the participants within both experimental groups were randomly assigned to the "concentrated" and the "unconcentrated" group.

The second part of the experiment consisted of the resource allocation task, which was announced as a decision making task. The participants in the standard group first read the instruction which stated that for this task a division of the sample into two groups was required, and that for purposes of convenience we had made this division on the basis of their test scores in the first experiment. Then each individual read the sentence "You belong to the ... (concentrated/unconcentrated) group, that is, group ... (C/U)". The blanks were filled in in handwriting, in order to enhance the credibility of the categorization procedure. Afterwards, the participants were instructed how to fill in the matrices (see below). One example matrix was depicted. The participants were informed that the points in the matrix which they had to allocate to other persons were later to be exchanged for sweets (placed on a desk in front of the room). The participants were also reminded that it was not possible to assign any points to oneself. After they had read and understood the instructions, the participants were given a booklet with 30 matrices on separate sheets (see below) and began with their allocation task. When finished, they were asked to answer four open questions regarding their allocation strategies and use of the group membership information, and were debriefed.

The procedure in the "relevance" group was the same except that the participants performed an additional task. This task was a memory task and required them to recall, after three matrices each, their allocations on these matrices. Specifically, they had to recall how many points they had awarded to the first person in a matrix and to which group this person belonged; the same holds for the second person. For this task, additional sheets were inserted into the matrix booklets, and the task was also explained in the instructions, using an example. Due to the additional task, the instructions had to be slightly changed. The participants were now told that

we were interested in the relationship between decision behavior and memory performance and therefore we would combine a decision task and a memory task. They were then told that we needed a division of the sample into two groups ... (and so on, see above). Finally, the post-experimental questionnaire contained one additional question regarding mnemonic strategies potentially used in the memory task and which might interfere with the allocation decisions.

Matrices

Three types of matrices were used, one of which was a home-made exploratory version. Unfortunately, we had made a mistake in the construction of this type, so that it could not be analyzed and will not be discussed further. The other two were fairly "classic" matrix types which I describe shortly in detail. However, we made two changes, mainly in order to simplify the construction of different numerical versions of these matrices (see below). First, we used seven instead of thirteen columns and second, we used positive as well as negative payoffs.

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The first of the two classic matrix types (see Diehl, 1990, p. 266, for a description of frequently used matrices) was Maximum Ingroup Payoff (MIP) vs. Maximum Difference (MD); this is a matrix which assesses the impact of two discriminatory strategies. Consider the following example matrix:

Matrix No. 11 for participant No. 34 from group U:

Participant No. 23 from group U: -1 1 3 5 7 9 11

Participant No. 07 from group C: -11 -6 -1 4 9 14 19

In this matrix, a participant from the "unconcentrated" group (group U) can make an optimal decision for the goal of maximizing the difference in payoffs in favor of the ingroup (MD) if he or she checks the leftmost column. The optimal decision for the goal of maximizing the payoffs for the ingroup (MIP), on the other hand, is on the opposite end of the matrix. At the same time, this choice maximizes the joint payoffs for both groups (MJP); however, because this strategy turned out to have low impact in previous studies (cf. Diehl, 1990), it will be neglected for the remainder of this article. The optimal decision for a fairness strategy is in the middle of the matrix.

Note that the two discriminatory strategies in question - MD and MIP - are in opposition to each other only if the points in the top row of the matrix are assigned to a member of one's own group. Imagine, however, that the decision was made by a member of group C - or, alternatively, that the U member was placed in the bottom row and the C member on top. Then, both strategies are in accordance with each other, that is, the rightmost column would be the optimal decision for both MD and MIP. It is precisely this difference between a "concordant" and a "discordant"

implementation of a matrix which is central to analyzing the impact of allocation strategies (see below). The second "classic" matrix type (see example matrix below) was Fairness (F) vs. Maximum Ingroup Payoff (MIP) and Maximum Difference (MD). Fairness is on the left side of the matrix, and MD and MIP are on the right side in the discordant implementation (as shown) but also on the left in the concordant implementation.

Matrix No. 25 for participant No. 6 from group C:

Participant No. 38 from group C: 6 8 10 12 14 16 18

Participant No. 10 from group U: 7 4 1 -2 -5 -8 -11

There were four implementations of each matrix: points could be divided between U-members (top row) and C-members (bottom row), C-members (top row) and U-members (bottom row), two C-members, and two U-members (the latter two versions are of minor theoretical and empirical interest; they were retained simply because I wanted to replicate the standard design as closely as possible). Each of these implementations was assigned a different numerical version of a given matrix type (i.e., a different set of payoff values which, however, preserved the construction principle of the matrix). The reason for this was to prevent participants in the relevance group from choosing always the same numbers in order to make the memory task easier for them; this, of course, would heavily interfere with their performance on the allocation task (in general, easily memorizable combinations of payoff values were avoided as far as possible). For counterbalancing purposes, the assignment of numerical versions to implementations was rotated across subjects according to a Latin square. Further, we constructed a mirror image (left vs. right order of numbers interchanged) of each numerical version to control for left-right response biases. Thus, there were eight versions of each matrix type altogether. This holds for each of the three matrix types, yielding 24 matrices per individual. These matrices were preceded by six training matrices (drawn from the above types but with different numerical values), so that each booklet contained 30 matrices in all.

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Analysis

Only the C/U and U/C versions of each matrix were analyzed (the C/C and U/U versions are of minor interest, as noted above). As a first step, all individual decisions were assigned values corresponding to the "optimality" of a given decision with respect to a certain allocation strategy. For instance, the optimal decision in the first example matrix above is 11 points for MIP. Since the decision is made by a member of group U, it represents the maximum reward for a member of the own group; this decision is therefore assigned the maximum score of 6. The same decision is scored 0 with respect to MD, because it is the worst possible decision for maximizing the difference to the outgroup. Second, all of these scores were averaged across the two mirror image versions.

From these data, in turn, I calculated traditional "pull scores". Pull scores indicate the impact of a given allocation strategy (or combination of strategies) relative to another strategy and result from a comparison of the concordant and discordant implementations of a given matrix. For example, let us assume that, in the MIP vs. MD matrix shown above, an individual has made an optimal decision for MIP (score 6) in the concordant implementation but a suboptimal decision in the discordant implementation (say, score 4). Then, the resulting difference in "optimality scores" ($6 - 4 = 2$) is called the "pull of MD on MIP". It denotes the degree to which the goal of maximizing the difference in favor of the ingroup has distracted the participants from optimally realizing the goal of maximizing ingroup payoff. The same principle holds also for other combinations of strategies: in general, the "pull of X on Y" is the mean shift in optimality values as a result of having strategy X supporting or conflicting with strategy Y (see Tajfel et al., 1971, for a detailed description of these calculations).

Note that there are two possible pull scores for each matrix type, as a consequence of the fact that either strategy (more precisely: the "optimality" of the participants' decisions with respect to this strategy) can be treated as the dependent variable. The "pull of X on Y" means that Y is the dependent variable and the concordant vs. discordant implementation of X is the independent variable; the opposite is true for the "pull of Y on X". In the latter case, the "optimality" scores in the discordant implementation are simply reversed, because here an optimal decision for strategy X is by definition the least optimal decision for Y. Thus, in the above example, the suboptimal decision for MIP (score 4) would turn into an even more suboptimal decision for MD (score 2), and the resulting "pull of MIP on MD" would be $6 - 2 = 4$.

RESULTS AND INTERPRETATIONS

Of the 53 participants, 3 were excluded from analysis because of experimenters' mistakes in the presentation of materials. Another participant in both the standard and the relevance group was randomly excluded in order to have equal numbers of participants in each of the counterbalancing cells (with the restriction that precisely half of the remaining participants were members of the C and U group, respectively), so that the results are based on the data from 24 individuals in each group.

A preliminary analysis was conducted to ensure that method of recruitment (university students vs. private acquaintances) did not contaminate the results. ANOVAs with recruitment as a between-subjects factor did not reveal any significant main effects or interactions with any of the dependent measures listed in the tables below. Therefore, all following results are collapsed across this variable. Table 1 gives the mean pull scores for the matrix type MIP vs. MD in the standard group and the relevance group (the "optimality scores" are given in parentheses; a score of 3 corresponds to the point of fairness), together with the results of one-tailed t-tests.

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Table 1: Mean Pull Scores for Matrix Type MIP vs. MD in the Standard Group and Relevance Group

Direction of Pull	Pull	t(23)	p
<i>Standard Group</i>			
MIP on MD	1.1 (3.9-2.8)	2.72	.01
MD on MIP	0.7 (3.9-3.2)	1.30	.10
<i>Relevance Group</i>			
MIP on MD	0.2 (3.2-3.0)	0.49	.31
MD on MIP	0.2 (3.2-3.0)	0.46	.32

In the standard group, there is a highly significant impact of one of the discriminatory strategies, MIP, while the other, MD, only approaches significance. (By the way, this result differs from the usual finding that MD has a greater impact than MIP; see Diehl, 1990.) It is also possible to assess the joint impact of both strategies if we test for the deviation from the point of fairness (score 3) in the concordant implementation of MIP and MD. This test reveals significant ingroup favoritism in the standard group, $t(23) = 2.72$, $p = .006$, one-tailed. Both strategies, however, have no significant effect in the relevance group, $t(23) = .68$, $p = .25$, one-tailed. These results are in accordance with the assumption that offering a reasonable alternative for relevance attribution actually reduces ingroup favoritism.

Table 2: Mean Pull Scores for Matrix Type F vs. MIP and MD in the Standard Group and Relevance Group

Direction of Pull	Pull	t(23)	p
<i>Standard Group</i>			
F on MIP and MD	3.1 (4.4-1.3)	6.35	.00
MIP and MD on F	-0.3 (4.4-4.7)	-0.49	.68
<i>Relevance Group</i>			
F on MIP and MD	1.3 (3.6-2.3)	2.71	.01
MIP and MD on F	-0.1 (3.6-3.7)	-0.14	.56

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The results of the second matrix type, F vs. MIP and MD (see table 2), do not fit so easily into this interpretation. While there is a highly significant impact of fairness in both groups (a typical finding), this impact is smaller in the relevance group: compare the "pull" of 4.4 (mean "optimality score" of MIP and MD, supported by F) - 1.3 (mean "optimality score" of MIP and MD, opposed by F) = 3.1 in the standard group with the corresponding pull of 3.6 - 2.3 = 1.3 in the relevance group. On the other hand, this does not imply more ingroup favoritism in the relevance group (as one might expect at first sight); table 2 shows that the impact of MIP and MD is far from significant in both groups. Less fairness means simply that the participants in the

relevance group did not so often divide points equally between two persons but alternated between a moderate amount of ingroup favoritism and the same amount of outgroup favoritism. Note that this reveals a trend toward the middle of the matrix in the relevance group (maximum fairness is at one extreme end in this matrix type).

The latter observation points to another way of describing the results of this experiment: in the relevance group, the participants' decisions were generally more in the middle region of the matrices (i.e., around a mean score of 3), leaving less room for any strategies to show an impact, compared to the standard group. This latter implication is statistically supported by an ANOVA with direction of pull as within-subjects factor and experimental group as between-subjects factor: there is a significant interaction of both factors for F on MID and MD, $F(1,46) = 6.15$, $p = .017$, and the interaction for MIP on MD at least approaches significance, $F(1, 46) = 2.78$, $p = .102$. Furthermore, the trend is in the same direction for the other pull scores, even though the respective interactions are far from being significant.

An examination of the participants' answers to the post-experimental open questions (which I cannot present in detail here) suggests an absolutely plausible interpretation for this phenomenon. In the relevance group, most participants reported that their allocation decisions were primarily or exclusively guided by mnemonic considerations: they chose pairs of values which they thought were easy to memorize for them. Now, this should lead to an even distribution of choices across the whole matrix range (as a consequence of individual variability in mnemonics and of differing suitability of number combinations for mnemonic strategies in different numerical versions of the matrices), and, further, to a mean response in the middle of the matrix, which means an average score of 3 for any strategy and comes very close to the actual results in the relevance group.

An interesting further observation is that roughly a quarter of the participants in the standard group which were assigned to the "unconcentrated" subgroup also reported that they had favored the other subgroup instead of their own. They held that the "concentrated" ones deserved more rewards because of their better achievement. However, as the results show, the effect of this allocation strategy is overridden by the other, discriminatory strategies. At least, this finding suggests that discrimination per se may be more important than the direction of this discrimination - against or, alternatively, in favor of the outgroup.

DISCUSSION

The main goal of this study was to evaluate a possible cause for ingroup favoritism in the minimal group paradigm. According to the logic of conversation approach advocated here, ingroup favoritism arises from the pragmatics of the laboratory situation, particularly from the participants' reliance on conversational maxims. Group membership information is used because participants implicitly assume its relevance for the resource allocation task they are engaged in. If this is true, then precluding this relevance attribution by offering an explicit alternative should preclude or at least reduce ingroup favoritism. This was tested using an additional memory task which required use of the group membership information.

Let us compare this approach to the almost "official", at least widespread explanation offered by Social Identity Theory (SIT; Tajfel and Turner, 1979). According to these authors, ingroup favoritism results from participants' motivation to enhance their self-esteem. The latter is a function of (favorable) comparisons to relevant outgroups concerning people's social identity. In the minimal group paradigm, being a member of one of the groups is assumed to be part of the participants' social identity since this categorization is especially salient during the experiment; because of the same reason, the other group is a relevant outgroup. The resource allocation task offers a comparison dimension and at the same time the opportunity to create a favorable outcome of the comparison (namely, by awarding one's own group more points or money than the other group).

I see no compelling reason to assume that the addition of a second task which requires use of the group membership information interferes with the operation of these processes as postulated by SIT. The participants still have the opportunity to favor their own group and thereby enhance their self-esteem. If anything, it could be argued that the salience of the categorization is enhanced by this second task and, therefore, ingroup favoritism should actually be stronger (This was pointed out to me by Ulrich Wagner.)

What do the results of the present study tell us with respect to these two theoretical approaches? In principle, the data seem to favor the logic of conversation approach over the explanation provided by SIT. The participants did not discriminate against the outgroup when an additional task was provided, whereas significant ingroup favoritism was found in the standard paradigm (at least in one matrix type, MIP vs. MD; the results of the other matrix type, MF vs. MIP and MD, are undiagnostic because no discrimination was found with this matrix type in both groups). But are these results conclusive? There are some ambiguities which make a decision between the two approaches at least premature.

First, as one reviewer of this article has noted, there may be a possibility to reconcile the present findings with SIT. The argument focuses on the properties of the additional memory task in the relevance group. Contrary to the allocation task itself, the memory task is a clearly defined task with correct and easily checkable solutions. Therefore, it probably induces evaluation apprehension in the participants and also an option to directly favor themselves (i.e., by performing well on the task and appearing competent to the experimenters). This means, in turn, that they may not need to enhance their self-esteem using indirect methods like favoring the ingroup. (It is for this reason that participants have no opportunity to reward themselves in the standard minimal group paradigm.) Though post hoc, this explanation of the present findings is tenable. However, one may wonder whether such a direct self-enhancement mechanism generalizes so easily to tasks other than the allocation task itself. Is it really the same for the participants' allocation behavior if they can reward themselves on this very task vs. a different task such as the memory task used in this study (and one could take it even further: consider a concurrent finger-tapping task, for instance)? In any case, a rejection of this alternative account, whether plausible or not, would require the use of a different concurrent task, one which leaves no possibility for the participants to show competence or good performance.

A second ambiguity also is associated with the concurrent memory task but relates to a more direct form of interference. In this view, the pattern of results in the present experiment emerged simply because the participants in the relevance group were occupied with the memory task, which led to a shift in their choices of payoff combinations: Their main concern was to find numbers that were easy to memorize. In fact, it seems that most individuals hardly even perceived the numbers as payoffs, as can be concluded from their post-experimental self-reports. The overwhelming majority of the participants in the relevance group spontaneously described their distribution strategies in terms of a mnemonic strategy (and used the term "numbers" instead of "payoffs"). Thus, according to this argument, the participants abstained from discrimination not because of an altered relevance attribution but because they simply "forgot about" the allocation task or because their information processing capacity was largely absorbed by the concurrent memory task (in fact, most subjects perceived this task as difficult). The latter version could be reconciled with a SIT explanation: From this perspective, the participants' motivation to enhance their self-esteem by favoring the ingroup would have been "suppressed" by the additional memory task and the differing distribution strategies it "forced upon" the participants.

I do not think this view is correct. First, there was no pressure (time limits or whatever) on the participants to concentrate on the memory task; they could have extensively memorized number combinations and at the same time engaged themselves in discriminatory behavior. It would even have been possible to use ingroup favoritism as a mnemonic device, for instance, always award more points to the ingroup than to the outgroup (in fact, one single individual reported such a strategy). In addition, the participants were explicitly instructed not to focus on one of the tasks at the expense of the other.

Second, even if disruption of the allocation task through the additional memory task was inevitable, this would not invalidate the logic of conversation approach. It by no means excludes the possibility that the changed relevance attribution per se is sufficient to eliminate or reduce discrimination, without the help of a disrupting task. At best, one could say that the two influences are confounded in this experiment (and this is certainly a point which should be considered and ameliorated in future studies; suggestions are welcome).

Finally, there seems to be some positive evidence for a change in the perceived relevance of the group membership information (more precisely, a decline in perceived relevance for the allocation task as a consequence of explicit relevance for the memory task) in the participants' post-experimental self-reports, particularly in the reported use of the group membership information for the allocation of rewards. In the standard group, most individuals reported such a use, whereas only a minority did so in the relevance group. In fact, most of the latter participants seemed to be surprised by the question and gave answers like "I didn't pay attention to this at all". Also, one might expect that perceived relevance for the allocation task should result in some knowledge or correct guesses about the true purpose of the experiment. In fact, this was the case for roughly half of the participants in the standard group. In contrast, such an interpretation was almost never provided in the relevance group; rather, most individuals came up with some kind of memory hypothesis.

In sum, it does not seem that the participants were kept from discriminatory behavior by the dynamics of a dominant memory task. Rather, one has the impression that it was the participants' deliberate choice to concentrate on the memory task, presumably because it made more sense to them than awarding payoffs to people they do not know and without explicit guidelines for their decisions. (This points to other reasons for such a shift than the opportunity for direct self-enhancement; see above.) From this perspective, the usual finding of ingroup favoritism in the minimal group paradigm seems to be an untypical result, restricted to a rather artificial situation.

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However, a word of caution is necessary. Even if the logic of conversation approach illuminates some of the processes in the minimal group situation, it can only be a partial explanation of ingroup favoritism. It explains why people make a difference between two groups but tells nothing about the direction of this difference, that means, it would also allow for outgroup favoritism. Hence, we need a second step to fully explain ingroup favoritism in the minimal group paradigm. Of course, SIT readily provides such an explanation. But one could also assume that the participants, in search of guidelines for their behavior in an unfamiliar situation, recur to social norms like fairness or loyalty to the ingroup (interestingly, the latter is the original explanation offered by Tajfel et al., 1971, before they shifted to SIT). This would also explain the differing allocation behavior of those individuals in the "unconcentrated" group who rewarded more points to the "concentrated" ones. (Think of justice as a social norm.)

CONCLUSIONS

The main finding of this study is that ingroup favoritism in the minimal group paradigm is strongly reduced as a consequence of adding a second task which also requires the use of group membership information. This finding is compatible with the logic of conversation approach advocated here. In this view, the mere categorization of people into groups is not sufficient to produce ingroup favoritism in the minimal group paradigm; it must be supported by the pragmatics of the communication in the experiment. An open question is whether the present results can also be reconciled with Social Identity Theory. A clarification of this issue would require, above all, the use of another type of concurrent task which (a) leaves no possibility for direct self-enhancement and (b) does not in itself suggest or require specific allocation strategies (like the mnemonic strategies in the present experiment). With the use of such a task, it may be possible to create an experimental situation for which the logic of conversation approach and SIT will make opposite predictions. At present, one can only say that the situation is encouraging for the logic of conversation approach but poses no real problems for SIT.

ENDNOTE

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[48]

[49]

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[49]