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EXEMPLAR ACTIVATION AND INTERPERSONAL BEHAVIOR

Luigi Castelli
Università di Padova

Cristina Zogmaister
Università di Padova

Luciano Arcuri
Università di Padova

ABSTRACT

This study investigates the effects of exemplar activation on the verbal responses of participants. Two-hundred people were sent a clearly miss-addressed e-mail message. The name of the sender was manipulated so that he could have the same name as a famous positive exemplar or as a famous negative exemplar. Replies (15%) showed no effect on the number of responses. However, effects emerged on the content of the responses. Overall, participants were much more friendly when the sender had the same name as a positive exemplar. Thus, it is demonstrated that assimilation effects might occur when a social target shares some irrelevant feature (i.e., the name) with a famous exemplar. Results are consistent with recent models that underlie the importance of exemplar activation on social perception and behavior.

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INTRODUCTION

A growing body of literature suggests that the way people perceive their physical and social world is not only driven by abstract knowledge, but also by instance-based information (Elio & Anderson 1981; Nosofsky, Palmeri & McKinley 1994; Smith & Záratem1990, 1992). The specific instances that are brought to mind may affect the construal of objects, events, and other people. In social perception, the activation of representations concerning concrete exemplars (i.e., famous actors, football players, relatives, and so on) is particularly relevant. Indeed, when activating a person-based representation all relevant information about the exemplar is activated as well, and it may affect subsequent processing (Castelli & Zogmaister 2000; Macrae et al.

1998). For instance, we may find it extremely difficult to say that someone called Fiona Schwartzenegger is actually a female because the representation of the famous male actor interferes with our judgment (see Macrae et al. 1998). Similarly, inducing individuals to think about Saddham Hussein influences their judgments about the hostility of an unknown target (see Herr 1986). Further research by Andersen and her colleagues have nicely shown how personality characteristics may be attributed to a target only on the basis of her/his resemblance with a significant other (Andersen & Cole 1990; see also Andersen, Glassman, Chen, & Cole 1995). Self-perception processes may also be affected by the activation of relevant exemplars (Baldwin, Carrell, & Lopez 1990), suggesting that the construal of self and others' representations may fluctuate in accordance with the characteristics of the activated exemplars (see also, Bodenhausen, Schwarz, Bless, & Wänke 1995; Graham, Weiner, Giuliano, & Williams 1993).

Once the pervasive nature of the effects of person-based representations on information processing are demonstrated, the following logical step has been to investigate the effects of exemplar activation on actual behavior (Dijksterhuis et al. 1998; Herr 1986; Lewicki 1985, 1986; Macrae et al. 1998, Study 4). For instance, Macrae and his colleagues demonstrated that the subtle activation of a person-based representation influences the performance in an ostensibly unrelated task. Participants were faster in reading words when the words were presented as part of the "Schumacher Word Reading Test" rather than of the "Shimuhuru Word Reading Test". This result is interpreted as the effect of the activation of the famous Formula One motor-racing driver.

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Clear demonstrations of possible effects of exemplar activation on social interaction, however, are still lacking (for a notable exception see Herr 1986). In particular, a fundamental issue concerning the direction of the effects is still under debate. Indeed, it has been suggested that the activation of social exemplar may lead to contrast effects, instead of assimilation effects, because the activated exemplars are used as comparison standards (see Dijksterhuis et al. 1998; Herr 1986; Herr, Sherman, & Fazio 1983; Stapel, Koomen, & van der Plight 1997)[1]. For instance, participants primed with Adolph Hitler were later more co-operative when playing with another individual (Herr 1986), while participants primed with Albert Einstein decreased their performance in a general knowledge test (Dijksterhuis et al. 1998). Social targets, or even oneself, are judged in comparison to the activated exemplars, and almost anyone is usually less cruel than Hitler. These experiments convincingly demonstrate that behavioral contrast effects occur when a person-based representation is activated and neither the perceiver nor a potential target share any feature with the activated exemplar. In contrast, there is reason to believe that behavioral assimilation might occur as soon as the activated exemplar and the target share some relevant characteristics (see Lewicki 1985). In support of this view, the previously mentioned results obtained by Andersen and her colleagues suggest that the sharing of some characteristics between the activated exemplar (i.e., the significant other) and the target leads to assimilation effects, rather than contrast effects, also on other independent dimensions. For instance, a social target that resembles a particularly clever friend will also be perceived as intelligent. In short, it may be predicted that behavioral contrast will occur when there is no link between the activated exemplar and the target (or the perceiver), whereas the existence of such a link would favor behavioral assimilation. This is particularly worth noting if we assume that almost everyone we

meet in the everyday life may potentially evoke a well-known exemplar: The name, the dress, the posture, and any other detail may lead to the activation of a person-based representation stored in memory. Thus, a person may be particularly kind with someone named as her or his mother or particularly nasty with someone named as the last unfaithful partner. Even though the name is an irrelevant feature, given that there is no correlation between a given name and certain attitudes, proclivities, or behaviors, social interactions may be highly influenced. For instance, there is no *a priori* reason for being friendlier with someone called John Kennedy than with someone called Lee Harvey Oswald, or for giving higher grades to a psychology student called William James rather than Jack Serril. Nonetheless, the person-based representation the name activates may lead to systematic biases.

We will test this hypothesis, using a modified version of the lost letter technique (Milgram 1977). In the original technique, researchers just leave a marked letter on a street and verify whether it will ever be posted. This technique has been developed to assess, in an unobtrusive way, people's attitudes, as racial attitudes, examining the effects of experimental manipulations on actual behaviors. For instance, the sender's name may be manipulated so that it could presumably belong to a White or a Black person, and this change proves to influence the pro-social behavior of posting the letter. Along the same line, it is possible to send a letter to a wrong address and wait for an eventual reply. This allows not only to check for the number of people engaging in a given behavior, but also to analyze the characteristics of their verbal responses. In the present research, we sent e-mail messages, manipulating the name of the sender, which was the same as a famous positive or negative exemplar, and examined the way people reacted.

METHOD

Participants

A list containing a large number of E-mail addresses of people living throughout Italy was prepared.

Procedure

Negative Exemplar Condition

We then sent to a random sample of 100 people[2] the following message:

Dear Ferdinando,

My name is Pietro. I have received your address from Marcello who lives in Padova. I hope it is right. I need some information about how recycling works in your town.

Thank you,

Pietro

The full name of the sender was Pietro Pacciani, which is the name of a person that some years ago was accused of murdering many couples near Florence. The full name was visible instead of the sender's address.

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Positive Exemplar Condition
A similar message was sent to another random sample of 100 people, but this time the sender was called Sandro Pertini, which is the name of a previous president of the Italian Republic loved by most Italians despite their political affiliation (which is quite unusual). Both (the real) Pietro Pacciani and Sandro Pertini had died at the time of the study.

Since none of the recipients was called Ferdinando, it was clear that the message had been sent to the wrong address. All replies were collected, expecting differences in their number and quality as a function of the sender (i.e., a higher number of responses and friendlier replies when the positive exemplar had been activated).

RESULTS

Overall, 30 people, corresponding to 15 percent, replied saying that there had been a mistake. Contrary to our predictions, there was no significant effect of the sender's name on the number of responses (16% and 14%, for Pacciani and Pertini, respectively). Of course, we do not know how many persons actually read the message. It is often the case that users own e-mail accounts on public domains, but do not regularly use them. Because of this reason, it may also be that the lack of difference in the response rate is due to ceiling effects, and that almost everyone who actually read the message also replied.

Interesting results however, emerged when considering the content of the replies. Many different aspects were examined. First, the length of the replies was considered. It was expected that participants would provide more information when the positive exemplar was activated than when a negative exemplar was activated. In line with this prediction, the median number of words used when replying to Pertini was significantly higher [$F(1,28)=5.11$; $p<.05$]; responses to Pertini were indeed more than twice as long as responses to Pacciani (27 words vs. 11 words). This could also be interpreted as an index of the time devoted to the interaction.

Content analyses were also carried out to investigate how many respondents did the very simple acts of greeting and introducing themselves. A significant effect of the sender emerged on the number of greetings [$\chi^2(1) = 9.85$; $p<.005$]: While almost everyone greeted Pertini, only one third greeted Pacciani. The effect on the number of people introducing themselves, saying in any part of the message their own name, was in the expected direction but it did not reach the conventional significance level. Whereas 79 percent of the respondents introduced themselves to Pertini, only 50 percent did so to Pacciani. It is likely that this lack of results is due to ceiling effects, given that many people have their e-mail program set to automatically include the signature.

Finally, two blind independent coders judged the friendliness of the responses. Coders were provided with the original message - with no mention about the name of the sender, or the purposes of the study - and asked to rank the replies from the most to the least friendly. Inter-rater agreement was very high (Spearman correlation coefficient = .93), so that judgments have been averaged. Ranking proved to be significantly related to the sender's name [$Z=3.1$, $p<.005$]: As expected, when a positive exemplar was activated, replies were friendlier in comparison to responses after a negative exemplar was activated (mean rank: 10 and 20, respectively). No other dimension was analyzed.

DISCUSSION

The valence of the person-based representation activated during social interaction seems to have pervasive effects on the nature of the interaction. In the present study, such an effect has been demonstrated after having activated extremely positive or negative exemplars. Since the sender had the same name of one of those exemplars, participants sent back to him very different kinds of message: They were friendlier with the "positive exemplar" rather than with the "negative exemplar". Participants did not receive any individuating information about the sender other than his name; but since it was shared with a well-known exemplar, that was sufficient to influence the responses. Overall, the present results demonstrate that assimilation effects occur when the target itself activates the exemplar-based representation. The existing literature on the effects of exemplar activation showed that contrast effects emerge when the exemplar activation occurs in a different context, that is when the exemplar and the target do not share any feature. The obtained data extend those conclusions by showing that assimilation effects emerge when the target to be judged, or to interact with, is able to activate an exemplar representation. In this sense, individuals are not more friendly with someone called as a famous murderer, as it could be expected on the basis of the contrast hypothesis, but they are very reluctant to interact with him.

People often rely on irrelevant cues to infer personality traits (Andersen & Cole 1990), skills (Gilovich 1981), or physical characteristics. In the present study, the influence of another piece of irrelevant information has been demonstrated, that is the name of a person. Simply because a given name is able to activate the representation of a famous exemplar, social behavior is highly influenced by the characteristics of the activated exemplar. People often look for trivial associations with famous exemplars to manage their own self-image (Cialdini et al. 1976; see also Finch & Cialdini 1989). Along the same line, it is likely that others' trivial associations with known exemplars are heuristically used to construe others' representations and to attribute personality characteristics (Andersen & Glassman 1996). In particular, in the present study, it has been shown that social interaction, and not just perception, can be shaped by irrelevant information, as the name of the interlocutor.

It must be underlined that we investigated only computer-mediated interactions. However, we believe that similar effects should be found also in face to face interactions. It is true that e-mails

allow relative anonymity, and the interlocutor is somehow depersonalized, so that discrimination could potentially be more likely when a negative exemplar has been activated. However, written responses can be more easily controlled for the influence of irrelevant primes. In face to face interaction such a control is less likely, and discrimination (or favoritism) may thus appear in many different forms, either in verbal or non-verbal channels (see Maass, Castelli, & Arcuri 2000).

A critical aspect of the studies investigating the effects of exemplar activation on actual behaviors resides in the precise specification of the involved processes. As a matter of fact, the exemplar's influence on behavior may take at least two different routes. On one side, the activated representation shapes the construal of the other, so that the target will be perceived as more or less friendly, and thus leading to behave accordingly. On the other hand, person-based representations may have a direct effect on behavior, so that a friendly exemplar could lead to be friendly and an unfriendly exemplar could lead to be nasty (Bargh, Chen, & Burrows 1996; Dijksterhuis & van Knippenberg 1998). In other words, according to this view, the exemplar-based representation primes a given behavior without affecting the perception of what is out there. The main difference between these two processes is in their specificity: While according to the first, possible effects are limited to the instance that is able to activate a person-based representation. According to the second, effects are much more pervasive and not necessarily confined to the specific exemplar. In the latter case, the activation of a negative exemplar may influence the behavior toward any unlucky person passing nearby. These processes are crucial for understanding not only the influences of person-based representations, but also the way stereotypes and any other kind of abstract knowledge primes social behavior. Future research will definitely have to shed light on this issue.

From the methodological point of view, the present study has also provided some evidence about the usefulness of the *lost e-mail technique* for studying psychological phenomena. Such a technique is extremely flexible and allows one to manipulate, singularly or in combination, many features of the sender and of the recipients, such as their name, gender, and geographical position. Thus, the effects of important factors such as similarity, or regional identity, can be investigated with this technique. Also, the content of the sender's message could be easily manipulated in order to investigate the effects of message structure and framing. However, we should always keep in mind that Internet users are not representative of the overall population. In many countries, access to Internet is still limited to a restricted number of individuals. For instance, at the time of the study, in Italy only 6% of the population used Internet and in more than 66% of the cases the users were males with a high-level of education. Hence, when there is reason to believe that the specific characteristics of the sample may affect the process under investigation, it is necessary to be extremely cautious. In the case of the present study, however, we believe that exemplar activation is a basic process, and that similar effects would also emerge with different samples. In addition to its wide applicability, the *lost e-mail technique* has the advantage of being extremely easy to use. Of course, ethical considerations must be addressed. Indeed, with the *lost e-mail technique*, either by e-mail or in its original form, researchers cannot obtain informed consents. Therefore, it is important that anonymity is respected and that the message contents are not harassing. In the present study, as soon as we received a reply, we

copied the content in a different file and deleted the message so that it was no further possible to know who the respondent was. Moreover, the message that we sent was quite friendly and short, and it is unlikely that someone experienced it as harassing. In our view, this technique can be considered as ethical as any other field study (for a discussion about the very low ethical costs of this technique see also Stern & Faber 1997).

In summary, the present research proposes a new technique for investigating social processes, and, in more details, shows how social interaction may be affected – in an assimilative way – by the person-based representations retrieved from memory. Hence, as it may be safe not to think about Michael Schumacher while driving home, it is also desirable that no one with your own name ever commits a horrible murder.

FOOTNOTES

1. Different results emerge as a function of exemplar extremity (see Herr 1986). However, as long as the exemplars used in the present study are extremely positive, or negative, we will focus only on the case of extreme exemplars.

2. If an address was not valid it was replaced by another randomly selected one.

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AUTHORS' BIOGRAPHIES

Luigi Castelli is an Assistant Professor at the University of Padova, Italy. Email: castelli@psico.unipd.it.

Cristina Zogmaister is a PhD student in cognitive sciences at the University of Padova, Italy. Email: zogmaist@psy.unipd.it.

Luciano Arcuri is Full Professor at the University of Padova, Italy. Email: arcuri@psico.unipd.it.

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