THE IMPACT OF LINGUISTICALLY BIASED MESSAGES
ON INVOLVED RECEIVERS
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The impact of linguistically biased messages on involved receivers

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The impact of linguistically biased messages on involved receivers

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CHAPTER 1
Introduction

Language plays an important role in human life. It is one of the most central aspects in human interaction and it is also our most important social instrument (Clark, 1985). Language is an essentially interpersonal and socially regulated aspect of behavior. This link between language and our social environment is bi-directional: Our social environment does not only influence the language we use, but the language we use also influences our social environment (e.g., Semin, 2001). One research line in which this bi-directional relationship between our social environment and language becomes quite clear is the research on the Linguistic Intergroup Bias (LIB, e.g., Maass, Salvi, Arcuri, & Semin, 1989). This bias shows that people describe positive behaviors of others close to them (e.g., in-group member, friend) in abstract terms (for example: ‘X is helpful’), but in concrete terms (for example: ‘X helps’) for people who they are not close to (e.g., out-group member, enemy). In contrast, negative behaviors of people whom they are close to are described in concrete terms (for example: ‘X hurts’), but in abstract terms (for example: ‘X is aggressive’) for people who are distant to them. More recent research showed that receiving these linguistically biased messages does have an impact upon an uninvolved third party, namely a receiver who is not the same person as the actor of the behavior being described in the message. However, the question of how a message varying systematically in abstraction level impacts a receiver who is also the actor of the behavior being described, has never been examined. Besides being a theoretically interesting question, it is also an important question, since in daily life we not only receive descriptions of others, but we often get direct feedback on our own behavior or performance. The research reported in this dissertation answers this question, by investigating what the impact is of
messages about a receiver’s own behavior that are given directly to this receiver. In this first chapter, an overview is provided of the relevant literature and of this dissertation.

The Linguistic Intergroup Bias

According the Linguistic Intergroup Bias (Maass et al., 1989), people systematically vary the type of verbs they use as a function of whether they are describing positive or negative behaviors of in- or out-group members. Positive in-group and negative out-group behaviors are described at a higher level of abstraction compared to the same positive behavior displayed by an out-group member and negative behavior displayed by an in-group member. In a similar way, it has been demonstrated that, in general, stereotype consistent behaviors are described at a higher level of abstraction than stereotype inconsistent behaviors (e.g., Maass, Milesi, Zabbini, & Stahlberg, 1995). Furthermore, this phenomenon not only operates in intergroup settings, but also at an interpersonal level, for example, when describing the behavior of an enemy or a friend (e.g., Maass et al., 1995; Semin, Gil de Montes, & Valencia, 2003; Taris, 1999). In Figure 1.1, the LIB is depicted.

![Figure 1.1](image)

The abstraction level of the message (M) in which the behavior is described depends on the relationship between the sender and the actor.

The occurrence of the LIB is robust. Strong support for the LIB has been found in experimental as well as nonexperimental studies, in different intergroup settings, such as competing schools, sport teams, nations (Arcuri, Maass, & Portelli, 1993), the sexes (Fiedler, Semin, & Finkenauer, 1993) and political and interest
groups (Rubini & Semin, 1994). Furthermore, evidence is found using different response formats (free verbalization or multiple word choice), and in different languages (e.g., English, German, Italian, and Japanese, e.g., Fiedler et al., 1993; Karpinski & Von Hippel, 1996; Maass et al., 1989, Tanabe & Oka, 2001), for an overview, see Maass (1999) and Wigboldus and Douglas (2007).

**Linguistic Category Model**

The continuum from abstract to concrete language terms is based on the Linguistic Category Model (LCM; Semin & Fiedler, 1988, 1991, 1992). In the LCM, five categories of predicate types (i.e., verbs and adjectives) are distinguished that people use in everyday life to describe persons and interpersonal behavior (see Table 1.1). The distinctions between these categories are based on meta-semantic and linguistic criteria.

The linguistic devices that are specified by the LCM trigger a variety of cognitive inferences (see Maass et al., 1989, Exp 3; Semin & Fiedler, 1988; 1991; 1992; Semin & DePoot; 1997a; Semin & Marsman, 1994). Two independent dimensions have been shown to underlie these cognitive inferences (Semin & Fiedler, 1988, 1991, 1992): a concrete-abstract dimension and an inductive inference dimension.

On the one end of the first dimension, the concrete-abstract dimension, are the descriptive action verbs. These verbs provide a concrete description of a specific behavioral event. On the other end of this first dimension are adjectives. They refer to specific person dispositions. The relevant cognitive inferences change correspondingly from the most concrete to the most abstract end of this dimension. That is, the more abstract, the more information is given about the person whose behavior is described, the less information is given about the specific situation, the information appears to be more endurable, less verifiable, and more likely to be the object of disagreement or dispute (Semin & Fiedler, 1988, 1992), the temporal duration increases, more alternative behaviors can be visualized for
Table 1.1

The characteristics and classification criteria of interpersonal predicates defined by the Linguistic Category Model (LCM).

<table>
<thead>
<tr>
<th>Category</th>
<th>Examples</th>
<th>Characteristic features</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Descriptive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Verbs</td>
<td>call, yell</td>
<td>Reference to single behavioral event; Reference to specific object and situation;</td>
</tr>
<tr>
<td>(DAVs)</td>
<td>see, hear</td>
<td>Context essential for sentence comprehension; Objective description of observable events.</td>
</tr>
<tr>
<td></td>
<td>hit, kick</td>
<td></td>
</tr>
<tr>
<td></td>
<td>walk, talk</td>
<td></td>
</tr>
<tr>
<td><strong>Classification criteria</strong>:</td>
<td>Refer to one particular activity and to a physically invariant feature of the action; Action has clear beginning and end; In general do not have positive and negative semantic valence.</td>
<td></td>
</tr>
<tr>
<td><strong>Interpretive</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Action Verbs</td>
<td>cheat, tease</td>
<td>Reference to single behavioral event; Reference to specific object and situation;</td>
</tr>
<tr>
<td>(IAVs)</td>
<td>help, consult</td>
<td>Autonomous sentence comprehension; Interpretation beyond description</td>
</tr>
<tr>
<td></td>
<td>avoid, attack</td>
<td></td>
</tr>
<tr>
<td></td>
<td>argue, imitate</td>
<td></td>
</tr>
<tr>
<td><strong>Classification criteria</strong>:</td>
<td>Refer to general class of behaviors; Have defined action with beginning and end; Have positive and negative semantic valence.</td>
<td></td>
</tr>
<tr>
<td><strong>State Action</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Verbs (SAVs)</td>
<td>surprise, amaze</td>
<td>As IAV, no reference to concrete action frames but to states evoked in object of sentence by unspecified action.</td>
</tr>
<tr>
<td></td>
<td>excite, anger</td>
<td></td>
</tr>
<tr>
<td></td>
<td>embarrass</td>
<td></td>
</tr>
<tr>
<td><strong>Classification criteria</strong>:</td>
<td>As with IAV, except that the verb expresses emotional consequence of action rather than referring to action as such.</td>
<td></td>
</tr>
<tr>
<td><strong>State Verbs</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(SVs)</td>
<td>admire, like</td>
<td>Enduring states, abstracted from single events; Reference to social object, but not to situation; No context reference preserved; Interpretation beyond mere description.</td>
</tr>
<tr>
<td></td>
<td>hate, love</td>
<td></td>
</tr>
<tr>
<td></td>
<td>abhor</td>
<td></td>
</tr>
<tr>
<td></td>
<td>appreciate</td>
<td></td>
</tr>
<tr>
<td><strong>Classification criteria</strong>:</td>
<td>Refer to mental and emotional states; No clear definition of beginning and end; Do not readily take progressive forms; Not freely used in imperatives</td>
<td></td>
</tr>
<tr>
<td><strong>Adjectives</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(ADJ’s)</td>
<td>honest, impulsive</td>
<td>Highly abstract person disposition; No object or situation reference; No context reference; Highly interpretive, detached from specific behaviors.</td>
</tr>
<tr>
<td></td>
<td>reliable, helpful</td>
<td></td>
</tr>
<tr>
<td></td>
<td>nice, emotional</td>
<td></td>
</tr>
<tr>
<td></td>
<td>aggressive</td>
<td></td>
</tr>
</tbody>
</table>

Note. Taken from Semin and Fiedler (1991).
the statement (Semin & Fiedler, 1992), and the estimated repetition likelihood of the event increases (Maass et al., 1989, Exp. 3). The second dimension that underlies the cognitive inferences is the inductive inference dimension. This dimension is orthogonal to the concrete-abstract dimension (see Semin & Fiedler, 1991, 1992). This inductive inference dimension reflects the systematic finding that simple “subject-verb-object” sentences constructed with an action-verb (DAV, IAV, or SAV) lead to the causal inference that the interpersonal event is caused by the sentence-subject, while sentences constructed with a state verb (SV) lead to causal inferences about the sentence-object (e.g., Brown & Fish, 1983; Garvey & Caramazza, 1974). The general finding in the context of the LCM is that the three action verbs categories lead to stronger subject inferences, while state verbs lead to stronger object inferences (e.g., Semin & Marsman, 1994).

**Mechanisms underlying the Linguistic Intergroup Bias**

The LIB is assumed to be driven by two distinctive processes (Maass, Ceccarelli, Rudin, 1996; Maass et al., 1995; Rubini & Semin, 1994): a motivational one and a cognitive one. The motivational process is based on the social identity theory (Tajfel & Turner, 1979, 1986). The idea is that when an in-group’s identity is threatened, then a positive group image is maintained, even when there is disconfirming evidence. This is achieved by describing positive in-group behaviors and negative out-group behaviors in abstract terms, by which these behaviors are portrayed as highly diagnostic for the person being described, whereas by describing negative in-group and positive out-group behaviors in concrete terms, these behaviors are reflected as being exceptions to the general rule.

The other mechanism that drives this biased language use is a cognitive one (Maass et al., 1995). This mechanism is based on differential expectancies. Expected behaviors are described more abstractly than unexpected behaviors, since expectancy consistent behaviors are more stable, typical and resistant to disconfirmation, which is reflected by abstract language. For the description of
unexpected behaviors, concrete language is more appropriate, since these unexpected behaviors are unstable, atypical and open to disconfirmation, which is best reflected by concrete language.

**The relation between the cognitive and motivational account of the LIB**

The main difference between the cognitive account and the motivational account is that the cognitive explanation predicts abstract language use for expected behavior and concrete language use for unexpected behavior, regardless of the valence of the behavior, whereas the in-group protective explanation predicts abstract language use for positive in-group and negative out-group behaviors, regardless of stereotypic expectancy. The motivational account has to do with the desirability of behaviors performed by in-group and out-group members. The expectation-based account is about a more general phenomenon and is due to the subjective likelihood of the behavior.

In many situations, both mechanisms lead to the same predictions for which abstraction level is used to describe behaviors, since people in general have negative expectations about the in-group and positive expectations about the out-group (Howard & Rothbart, 1980). But it is not always the case that people expect positive behaviors from their in-group and negative behaviors from the out-group. For example, although for North Italians South Italians are an out-group, they also expect positive behavior from them, namely that they act in a friendly manner. In this case the motivational and the cognitive explanation of the Linguistic Intergroup Bias makes opposite predictions for the abstraction level that is used to describe this behavior. In a series of studies, Maass et al. (1995, 1996) investigated which explanation did win in such a situation. They showed that, although in-group protective needs may come into play in highly competitive or conflictual intergroup relations, it seems that differential expectancies are sufficient to produce biased language use. Thus, if people are motivated to protect their in-group, the original LIB is manifested. Otherwise, expectancies are sufficient to elicit biased language.
use. This last phenomenon is referred to as the Linguistic Expectancy Bias (LEB, Wigboldus, Semin, & Spears, 2000). These two biases have been shown to operate independently from each other (Maass et al., 1996, Exp 2) and are not mutually exclusive.

**LIB is implicit**

This systematic variation of linguistic abstraction occurs in a subtle and implicit way. The LIB correlates with implicit but not with explicit measures of prejudice (Von Hippel, Sekaquaptewa, & Vargas, 1997). While people may be monitoring the explicit positivity or negativity of their utterances about a given group or person, they are not aware of the fact that they systematically vary the abstraction level (Franco & Maass, 1996, 1999). This variation appears to escape conscious access. This supports the idea that the LIB and the more general LEB are implicit phenomena by which people transmit biased expectancies without intending to do so.

**Paradox?**

People are thus unaware of their biased language use, but there is also evidence that people can use this biased language strategically. Although it seems to be a paradox that people are unable to control their language abstraction use, but nevertheless can use it as a tool to achieve communication goals, it is not a paradox (Douglas & Sutton, 2003). Language abstraction is not only a medium by which beliefs are transmitted unintentionally, but language abstraction is also influenced by goals and motives. Being unable to inhibit a behavior does not logically entail being unable to perform the same behavior when it facilitates a goal (see also Higgins, 1997). Communication is a purposeful social activity used to achieve goals (Higgins’s, 1981). There are also other social psychological theories that argue that communication is a flexible, purposeful activity (e.g., Edwards & Potter, 1993; Giles & Coupland, 1991; Jost & Kruglanski, 2002; Semin et al., 2003). In this sense
communication creates information and not simply transmits it. Congruent with this line of reasoning, recent research shows that language abstraction is affected not just by communicators’ expectancies, but also by the communicators’ motives and goals.

**LIB and communication goals**

Maass et al., (1996) showed that language abstraction is influenced by motives. They demonstrated that the LIB is augmented under conditions of high threat to in-group members from out-group members, which elicits a motive to protect the in-group. Webster, Kruglanski, and Pattison (1997) showed that people who have a high cognitive need for closure, who have a general preference for certainty, preferred more abstract descriptions, compared to people who are in a low need for cognitive closure. This research shows that language abstraction is affected by motives on an intrapersonal level.

Other research suggests that communication goals do affect language abstraction also at an interpersonal level. For example, Schmid, Fiedler, Englich, Ehrenberger, and Semin (1996; see also Schmid & Fiedler, 1996, 1998) demonstrated that prosecution lawyers typically use abstract language to describe defendants’ actions, implying dispositionality and personal responsibility, whereas defense lawyers use more concrete language, implying that situational factors were the cause of the behavior.

Semin et al. (2003) demonstrated that only when there is a communication purpose, people use biased language. Participants in their research were informed that they were engaging in a cooperation (or competition) task. They had to write down a message about a cartoon representing a positive (or negative) behavior of their partner (or opponent). Half of the participants were told that their partner (or opponent) would read this message prior to the cooperation (or competition) task, the other half was informed that they could keep what they wrote. So, for the first
half there was a communication purpose, for the second half there was no communication purpose. Only for the first half, biased language use occurred.

Douglas and McGarty (2001, 2002) demonstrated that communicators used language abstraction differently depending on their identifiability to different types of audiences (in-group and out-group). Also, Rubini and Sigall (2002) found that participants, whose goal was to be liked by recipients, presented their own political views more abstractly when communicating with an agreeing audience than with a mixed audience.

Douglas and Sutton (2003) revealed that explicit communication goals have strong effects on language abstraction independent of describers’ beliefs or expectancies. In their studies, they disentangled the effects of goals on messages from the effects of expectancies and other intrapersonal factors such as liking. They showed that when communication goals (describing somebody favorably or unfavorably) compete with expectancies, these goals override even these expectancies, for example when persons had to describe negative behavior of enemy favorably, they described this negative behaviors in relatively concrete terms. However, expectancies are not always overridden by communication goals (Wenneker, Wigboldus, & Spears, 2005). For instance, under time pressure, the original expectancy-based encoding affected level of abstraction, independently of the communication goal effect.

Wigboldus, Spears, and Semin (2005) also demonstrated that the occurrence of biased language use is context dependent. They found that in an intragroup context there was no biased language use, whereas it emerged in an intergroup context. They explain this by arguing that stereotype activation is crucial for biased language use to occur and that in an intragroup context no stereotype is activated, whereas this is the case in an intergroup context. This is consistent with the finding of Maass et al. (1989) that there was almost no difference in describing the positive and negative behavior of in-group members, but that there was a difference in abstraction level in describing the positive and negative behaviors of out-group
members. So, the occurrence of linguistically biased language use may be moderated by the communicative context in general (i.e., what communication goals do communicators have?) and by recipient characteristics in particular (i.e., is the recipient an in- or an outgroup member).

**From sender to receiver**

The research discussed so far focused on the LCM, the LIB, the explanations for this biased language use, and on the conditions under which this biased language use occurs. It is clear that the occurrence of this biased language use is not only driven by expectancies and stereotypes, but that it is also actively used as a tool for the creation of beliefs. This raises an important question, namely if a linguistically biased message influences a receiver. Ample research has been done that shows that linguistically biased language use has an impact upon a receiver.

**Question-Answer paradigm**

Research on the so-called question-answer paradigm (e.g., Semin & DePoot, 1997a; Semin, Rubini, & Fiedler, 1995) shows that questions formulated with action verbs elicit answers about the sentence subject (e.g., Why do you read the Times? Because I …), whereas questions formulated with a state verb elicit answers about the sentence object (e.g., Why do you prefer the Times? Because the Times is …). In addition, it was shown that questions containing an action verb generate answers that are concrete, whereas questions containing state verbs elicit more abstract answers. Thus linguistically biased language use in questions does have an influence on the responses of the receiver.
Consequences at an individual level

At an intraindividual level it has been shown that the LIB may be functional to self-esteem maintenance (Maas et al., 1996, Experiment 1), whereas the LEB may be functional to expectancy maintenance (Karpinski & Von Hippel, 1996).

Although this linguistically biased language use always has been assumed to have important interpersonal consequences (see Maass et al., 1989), the actual interindividual consequences have received little attention. However, more recently, these interindividual consequences have been investigated. Werkman, Wigboldus, and Semin (1999), Wigboldus et al. (2000), and Wigboldus, Semin, and Spears (2006) showed that variations in linguistic abstraction systematically influence the types of inferences recipients of such messages make. An abstract description conveys the impression that the behavior is due to enduring dispositions and not to some transitory state, while a concrete description suggests that the behavior is due to contextual or incidental features of the situation. And this linguistic abstraction level mediates the receiver's attribution in a stereotype confirming way (Wigboldus et al., 2000). In this way, biased language use contributes to the transmission and maintenance of existing stereotypes.

Furthermore, people are able to make judgments about the sender’s personal relationship with the actor on the basis of the abstraction level used by the sender to describe the actor’s behavior (Douglas & Sutton, 2006). One of their findings was that people rated the describer more likely to be an unbiased observer by decreasing linguistic abstraction, both for positive and negative behaviors. People rated the describer less likely to be an enemy for increasing linguistic abstraction for positive behaviors and decreasing linguistic abstraction for negative behaviors. The describer was rated more likely to be a friend with increasing linguistic abstraction in the positive conditions. In the negative conditions there was no effect of linguistic abstraction on the ratings for the likeability to be a friend. In sum (see Figure 1.2), there is clear evidence that linguistically biased messages do have an influence upon receivers of these messages.
Figure 1.2
A linguistically biased message does impact a receiver of the message

However, in all these receiver-based studies (i.e., Douglas & Sutton, 2006; Semin & DePoot, 1997a; Werkman et al., 1999; Wigboldus et al., 2000), the target whose behavior is being described and judged is not the same person as the actual receiver of the message. While this situation occurs often in daily life (e.g., during gossip, reports in public media), it is also the case that people receive direct feedback on their behavior (e.g., during performance evaluation). Oftentimes, a party to a social event provides direct feedback on the behavior to an actor in that same situation. Surprisingly, the question how a message varying systematically in abstraction level influences a receiver who is also the actor of the behavior being described, has not been addressed.

This question is an important one because it provides a first step in answering how stereotypes are communicated and maintained by investigating the effects of LIB upon receivers whose own behavior is being described. Stereotype maintenance and transmission was the question that drove the research on the LIB, but the LIB and related research has been primarily concerned with how a message is strategically composed, the psychological processes responsible in the production of such strategic word choices, and stereotype transmission and maintenance in terms of the impact of such messages upon uninvolved third parties. However, an experimental examination of transmission and maintenance through
communication necessitates the inclusion of a receiver toward whom a message is directed and understanding the impact of this message upon this person. The research reported in this dissertation was designed to close the communication cycle, by investigating the impact of messages about a receiver’s behavior that are given directly to the receiver (see Figure 1.3). To close this cycle it has to be shown that subtle but systematic differences in predicate choice in message composition have a systematic influence on receivers receiving a message about their own behavior. This would extend the LIB and related research into a full communication context. Important to note is that in none of our studies we manipulated group membership of the sender and the receiver. We looked at the different consequences for a receiver who receives a linguistically biased message about his/her own behavior. A next step would be examining what the consequences of receiving linguistically biased messages are when stereotypes are involved.

![Figure 1.3](sender_receiver.png)

*Figure 1.3*

*The consequences of receiving linguistically bias for a receiver who is also the actor of the behavior being described*

**Overview of the present dissertation**

The aim of this dissertation is to examine the impact of receiving linguistically biased messages upon receivers who are also the actor of the behavior being described. To this end we conducted a number of studies that will be reported in this dissertation.

In Chapter 2 a study is presented in which we examined the impact of linguistically biased messages on receivers whose behavior was the subject of the message by examining how such biased messages influence the recipient’s
perceived interpersonal distance to the sender of the message. Participants were asked to describe an event in which they acted in a socially responsible or irresponsible way. Another unknown participant had to form a first impression on the basis of this description. This other participant (the sender) wrote down the first impression and this impression varied in valence and abstraction. After the participant, who had written the description had received and read the message, we measured the perceived interpersonal distance to the sender of the message. We hypothesized that participants receiving a positive abstract message upon a positive behavior would perceive being closer to the sender than those receiving a positive concrete message. Conversely, we hypothesized that participants that performed negative behavior and received a negative abstract message should perceive more interpersonal distance to the sender than participants receiving a negative concrete message.

In Chapter 3 we extended the studies in Chapter 2 by examining this interpersonal distance effect in two different experimentally induced performance tasks to ascertain the generality and robustness of the phenomenon under examination and we addressed some of the shortcomings of the study described in Chapter 2. In two studies, a positive abstract compared to a positive concrete message was hypothesized to lead to increased proximity to the sender, while a negative abstract compared to a negative concrete message was hypothesized to lead to perceived distance. Moreover, in the second study we additionally investigated whether this effect is manifested only in interpersonal contexts by controlling the message source. In half of the conditions a person delivered the message about performance to the performing target and in the other half of the conditions the same message was delivered via a computer. We hypothesized that the effect of the message on the perceived interpersonal distance is limited to an interpersonal communication setting and is not a general phenomenon of the message itself.
In Chapter 4 we further examined the conditions under which receiving a linguistically biased message about one’s own behavior influences the perceived interpersonal distance to the sender of the message. In all three studies in Chapters 2 and 3, we used an unknown sender, which is an optimal condition for the message to have an effect on the distance to the sender. In this situation the only information available to infer interpersonal proximity or distance to the sender is the message. There is no other source of information available, so the chances are high that the subtle differences in language abstraction in the message will influence the perceived interpersonal distance to the sender. What happens if the sender and receiver have a well-established relationship with each other? Is one relationship more sensitive for the subtle differences in linguistic abstraction than the other? When is the message informative for the interpersonal distance between the sender and the receiver and when is it not? Study 1 in Chapter 4 examined the role of prior acquaintance which was operationalized as the sender and the receiver being friends, enemies, or that they did not know each other. We hypothesized that receiving a linguistically biased message will influence the perceived interpersonal distance to an unknown person or to an enemy, but not to a friend. The line of reasoning is that being unknowns or enemies makes a receiver sensitive to subtle differences in language use, compared to a situation in which the sender and the receiver are friends. Study 2 in Chapter 4 examined the role of power in moderating the interpersonal distance effect of linguistically biased messages. In half of the conditions the receiver had power over the sender and in the other half of the conditions the sender had power over the receiver. We hypothesized that only when the sender has power over the receiver, the linguistically biased message influences the perceived interpersonal distance to the sender and not when the receiver has power over the sender. In this last situation we expected the message to be corrected for the possibility of brownnosing, namely that a positive abstract message compared to a positive concrete message is judged as sliming just as a negative concrete message compared to a negative abstract message.
In Chapter 5, a final study is presented in which we examined the effects of receiving linguistically biased feedback on a task, for the performance on a subsequent task. Participants were asked to do a performance task and received linguistically biased feedback on this task. Then, they performed a second task. The performance on this second task was our dependent variable. Based on the LIB literature and the research done by Dweck and colleagues (e.g., Dweck & Leggett, 1988), we hypothesized that in the conditions in which there was a personal sender of the feedback that the performance after negative abstract feedback is lower than after negative concrete feedback. In half of the conditions there was no personal sender, but the feedback was delivered by computer. In these conditions we expected that negative abstract feedback compared to negative concrete feedback enhanced performance on a second task. In the positive conditions we expected a reversed pattern, namely a better performance in the abstract than in the concrete condition in an interpersonal communication context and a lower performance in the abstract than in the concrete condition in an impersonal communication context, although we expected this difference in the positive conditions to be much weaker than in the negative conditions. Besides the performance on the second task, we also measured motivation to test whether the effect of receiving linguistically biased feedback on the performance on a second task is mediated by motivation.

In Chapter 6, we summarize and discuss the current findings as well as the implications and new research directions they evoke. Finally, the different chapters of this dissertation were written as separate papers. Therefore, there is some overlap between these chapters, which makes it possible to read each chapter separately from other parts of the dissertation.
CHAPTER 2
The effect of linguistic abstraction on interpersonal distance*

It is well known that people describe positive behaviors of others close to them (e.g., in-group member, friend) in abstract terms, but in concrete terms in the case of people who they are not close to (e.g., out-group member, enemy). In contrast, negative behaviors of people who they are close to are described in concrete terms, but in abstract terms for people who are distant. However, the communicative impact of such subtle differences in language use on a receiver who is also the actor of the behavior being described has never been addressed. We hypothesized and found that a positive abstract message compared to a positive concrete message leads to perceived proximity to the sender, while a negative abstract message compared to a negative concrete message leads to perceived distance. The implications of this study, which is the first to show the communicative impact of biased language use, are discussed.

Introduction

We talk to many people on many different occasions. Often these fleeting encounters are functional, on occasions they are incidental. Not much is said in such encounters about how we feel towards each other, or what we think about the other, and yet we develop an intuitive sense of the nature of the relationship. It feels good or awkward, we feel close or distant, liked or disliked. It is oftentimes difficult, if not impossible, to explain why we arrive at the sensibilities that typify a relationship. One factor that may contribute to these intuitive inferences of proximity and distance may be how language is used to describe positive or negative events that we are engaged in. The study reported in this chapter addresses the question of whether and how language use, and in particular the systematic difference in predicate use, contributes to feelings of proximity and distance.

* This chapter is based on Reitsma–van Rooijen, Semin, & Van Leeuwen (2007a).
Sometimes it is very obvious why we feel close or distant to another. For example, we feel distant when we are explicitly discriminated on the basis of our gender, race or belief and feel close when somebody genuinely compliments us. However, there are also situations in which we experience feelings of proximity or distance, but are not necessarily able to articulate why. This can occur, for example, in the case of being subjected to subtle forms of prejudice. Although the direct expression of discrimination has become politically incorrect due to the prevalence of egalitarian social norms (Dovidio & Gaertner, 1986), and is often negatively sanctioned, prejudice is still the order of the day. It has taken more sophisticated forms of expression, and occurs in subtler and less detectable ways (Schnake & Ruscher, 1998). This type of prejudice may play a role in situations in which we experience feelings of proximity or distance, but cannot say why.

Subtle prejudice can be expressed in a number of different ways (Swim, Aikin, Hall, & Hunter, 1995; Swim, Ferguson, & Hyers, 1999). One form of it is found in biased language use where people systematically vary the type of predicates they use as a function of whether they are describing positive and negative behaviors of in- or out-group members (Linguistic Intergroup Bias, LIB, e.g., Maass et al., 1989). Positive in-group and negative out-group behaviors are described with abstract predicates (for example: ‘X is helpful’, ‘X is aggressive’). In contrast, the same positive behavior displayed by an out-group member and negative behavior displayed by an in-group member is predominantly described with concrete predicates (for example: ‘X helps’, ‘X hurts’). This phenomenon not only operates in intergroup settings, but also at an interpersonal level (e.g., Maass et al., 1995; Semin et al., 2003; Taris, 1999).

This systematic variation of linguistic abstraction occurs in a subtle and implicit way. The LIB correlates with implicit but not with explicit measures of prejudice (Von Hippel et al., 1997). While people may be monitoring the explicit positivity or negativity of their utterances about a given group or person, a greater
or lesser degree of abstraction appears to escape conscious access (Franco & Maass, 1996, 1999).

Moreover, it has been shown that these implicit biases in language use systematically influence the types of inferences made by recipients of such messages (Werkman et al., 1999; Wigboldus et al., 2000). An abstract description has been shown to convey the impression that the behavior is due to enduring dispositions and not to some transitory state, while a concrete description suggests that the behavior is due to contextual or incidental features of the situation. In this way, biased language use contributes to the transmission and maintenance of existing stereotypes. Furthermore, people are able to make judgments about the sender’s personal relationship with the actor on the basis of the abstraction level used by the sender to describe the actor’s behavior (Douglas & Sutton, 2006).

These findings constitute an important step in examining how linguistically biased messages impact recipients of such messages. Notably, in all these recipient-based studies (i.e. Douglas & Sutton, 2006; Werkman et al., 1999; Wigboldus et al., 2000), the target whose behavior is being described and judged is different from the recipient. However, we not only receive descriptions of others, but we also receive feedback on our own behavior. Oftentimes, a party to a social event provides direct feedback on the behavior to an actor in that same situation. Surprisingly, the question of how a message varying systematically in abstraction level contributes to the regulation of the relationship between sender and receiver has never been examined. Although Douglas and Sutton (2006) demonstrated that observers are able to deduce the sender’s personal relationship with the actor from the abstraction level, this research does not answer the question how does linguistic abstraction regulate the relationship between the sender and the receiver when this receiver is the person being described. We cannot simply extrapolate the findings of Douglas and Sutton (2006) and state that receivers respond in the same way as observers, since there might be differences between targets’ and observers’ reactions to the same messages.
To this end, we designed a study in which participants received a message containing feedback on a positive or negative behavior they had performed. This message varied in abstraction whereby the valence of the message was congruent with the behavior in question. Subsequently, the participant’s judgment of their interpersonal distance to the sender of the message was measured. We measured both feeling close and behaving close to examine whether the subtle differences in the message only led to feelings of closeness or whether these subtle differences even influenced behavioral intentions towards the sender. We hypothesized that participants receiving a positive abstract message upon a positive behavior would perceive being closer to the sender than those receiving a positive concrete message. Conversely, we hypothesized that participants that performed negative behavior and received a negative abstract message should perceive more interpersonal distance to the sender than participants receiving a negative concrete message. Additionally, we measured the perceived evaluation of the message to be able to separate the unique contributions of message abstraction and of evaluation to their interpersonal distance judgments.

**Study 2.1**

*Method*

**Participants and Design.** One hundred one students from the Free University Amsterdam (63% female, $M_{age} = 20$ years) participated in this study on a voluntary basis. They received 5 Euro for their participation and were randomly assigned to one of the cells of a 2 (Abstraction: concrete vs. abstract) x 2 (Valence: positive vs. negative) between participants experimental design.

**Procedure.** Participants were seated in separate cubicles with a computer, a sheet of paper, and a pencil. Half of the participants were asked to describe an event in which they acted in a socially responsible way by standing up for somebody else’s interests at the expense of their own (positive conditions). The other half was asked to describe an event in which they acted in a socially
irresponsible way by advancing their own interests at the expense of the interests of another (negative conditions). The experimenter collected the description of the event after they had completed this.

Participants were subsequently informed that their description was given to another participant (sender) to form a first impression of them. They had not met the sender before and were not informed as to whether or not the sender was aware of the nature of the experimentally induced assignment they had received, namely to describe themselves in either a socially responsible or irresponsible way. After a few minutes, the event description was returned to them with a handwritten message on it that varied depending on experimental condition.

Message valence was always congruent with the valence of the described event. Message abstraction was manipulated by modifying one phrase in the message. In the positive abstract condition this read: ‘In my view, you are someone who stands up for the interests of others. I think that you are socially very responsible’. In the negative abstract condition ‘stands up for’ was replaced by ‘harms’ and ‘responsible’ by ‘irresponsible’. The positive concrete condition was formulated as follows: ‘In my view, you acted in the interests of the other and stood up for the interests of the other.’ In the negative concrete condition ‘acted in’ was replaced by ‘harmed’ and ‘stood up’ by ‘did not stand up’.¹

To measure the perceived interpersonal distance, we used in the first place a slightly modified version of the Inclusion of Other in Self scale (IOS scale, Aron, Aron, & Smollan, 1992). This scale measures people’s sense of interpersonal connectedness. It taps into both the feeling close and behaving close aspects. The scale we used consisted of seven pairs of circles of the same size that varied in the extent to which they were overlapping. Participants were asked to indicate which pair best represented their degree of similarity with the sender. Subsequently, participants were asked to indicate to what extent they agreed with a series of six statements that also measured participants’ perceived relationship with the sender in terms of behavioral intentions and tendencies (“I would enjoy it to have a chat
with the sender”, “I am interested in the sender”, “I think that the sender is somebody with whom I could easily get along”, “I wouldn’t like to meet the sender”, “I would avoid the sender if I knew who the sender was”, and “The sender’s remark has done no good to what I think of the sender”, 1 = fully disagree, 7 = fully agree, the last three items were reverse coded). The IOS scale and the relationship items formed a reliable scale, Cronbach’s $\alpha = .73$.

In addition, we measured the evaluation of the message by 5 items. We asked participants to indicate on a scale running from 1 (fully disagree) to 7 (fully agree) whether they perceived the message as blunt, nice, humiliating, sympathetic, and complimentary. Negative items were reverse coded, Cronbach’s $\alpha = .93$. Finally, the participants were debriefed, thanked and paid.

**Results**

We conducted an analysis of variance with Valence and Abstraction on the interpersonal distance scale. The predicted interaction between Valence and Abstraction was significant, $F(1, 97) = 20.29, p < .001, \eta^2 = .17$. Simple main effects of Abstraction revealed that there was a significant difference in the positive, $F(1, 97) = 5.21, p < .03$, as in the negative conditions, $F(1, 97) = 16.63, p < .001$. As shown in Table 2.1, participants reported more proximity to the sender in the positive abstract than in the positive concrete condition. Similarly, participants reported less distance to the sender in the negative concrete than in the negative abstract condition.

We also found a trivial main effect of Valence, $F(1, 97) = 18.77, p < .001, \eta^2 = .25$. Participants reported more proximity in the positive ($M = 5.08$) than in the negative conditions ($M = 4.21$). A similar Valence main effect was obtained on the evaluation scale, $F(1, 97) = 260.86, p < .001, \eta^2 = .73$. The message was evaluated more positively in the positive ($M = 5.95$) than in the negative conditions ($M = 3.13$). Neither the interpersonal distance nor the evaluation scale yielded a significant effect for Abstraction.
The effect of linguistic abstraction on interpersonal distance

Table 2.1

Mean scores (standard deviations) on the interpersonal distance scale and on the evaluation scale as a function of Valence and Abstraction

<table>
<thead>
<tr>
<th>Abstraction</th>
<th>Valence</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
<td>negative</td>
<td></td>
</tr>
<tr>
<td>Interpersonal Distance</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>abstract</td>
<td>5.31(^a)</td>
<td>3.77(^a)</td>
<td>(.76) (.82)</td>
</tr>
<tr>
<td>concrete</td>
<td>4.83(^b)</td>
<td>4.65(^b)</td>
<td>(.66) (.78)</td>
</tr>
<tr>
<td>Evaluation</td>
<td>6.25(^a)</td>
<td>2.67(^a)</td>
<td>(.70) (1.00)</td>
</tr>
<tr>
<td>abstract</td>
<td>5.64(^b)</td>
<td>3.58(^b)</td>
<td>(.86) (.91)</td>
</tr>
</tbody>
</table>

Note: Means in columns with a different superscript, differ significantly from each other at the .05 level in tests for simple main effects.

However, there was a significant Valence and Abstraction interaction for the evaluation scale, \(F(1, 97) = 19.11, p < .02, \eta^2 = .17\). The message was evaluated more positively in the positive abstract (\(M = 6.25\)) than in the positive concrete condition (\(M = 5.64\)) and more negatively in the negative abstract (\(M = 2.67\)) than in the negative concrete condition (\(M = 3.58\)). To test whether the evaluation mediated the interaction effect between Valence and Abstraction on the interpersonal distance to the sender, we used the procedure proposed by Baron and Kenny (1986). The message was predictive of the evaluation scale, \(\beta = .23, t(97) = 4.37, p < .001\). The interaction effect between Valence and Abstraction on the interpersonal distance scale, \(\beta = .37, t(97) = 4.50, p < .001\), decreased significantly according the Sobel’s test, \(z = 2.97, p < .01\) (Sobel, 1982) when evaluation was added as predictor, but remained nevertheless significant, \(\beta = .23, t(96) = 2.79, p < .01\). Thus, although the effect of the message on the interpersonal distance
decreased when evaluation was added as a mediator, there was still a non-negligible significant direct effect of the message on the interpersonal distance. This suggests that while part of the effect can be explained in terms of evaluation, there remains a significant part that is due to message abstraction.

Discussion

The findings of the present study show that receiving linguistically biased messages in an interpersonal communication setting influences the perceived interpersonal distance to the sender of the message: A receiver of a positive abstract message perceives more proximity to the sender than a receiver of a positive concrete message and a receiver of a negative abstract message perceives more distance to the sender than a receiver of a negative concrete message. Furthermore, our analyses suggest that the effect cannot be explained merely by how the message is evaluated. Although there was a decrease in the effect of the message on the perceived interpersonal distance when we used message evaluation as a mediator, there was still an important and significant part of the perceived interpersonal distance that was due to abstraction level of the message.

These findings indicate that it are not the particular evaluative properties of the message that leads to feelings of closeness or distance, but that there are other aspects of abstraction that lead to these feelings. Abstract messages imply different inferences than concrete messages. We assume that the hidden message of such communication is implicitly processed. While message valence is overtly assessable it is nevertheless congruent with the behavior that is being commented upon. The type of predicate (verb vs. adjective) is very unlikely to be attended to or explicitly processed. This is a contention that is further reinforced by the fact that this study involved a between subjects design and participants were obviously unable to make comparisons of message types and the different predicates. Consequently, we presume that the type of inference that is made is implicitly and leads to a ‘feeling’ of proximity or distance, very much like the example of politically correct
discrimination that leads to the strange feeling that one is being discriminated without knowing precisely why as we noted in the introduction to this chapter.

Our stimulus material (i.e., the abstract and concrete messages) also differed in terms of grammatical tense. While the abstract messages were formulated in the present tense, the concrete messages were formulated in the past tense. The use of the present tense with trait terms (e.g., John is extroverted) implies possession of the property or quality. The use of the past tense however suggests that the person does not have the property any more (e.g., John was extroverted). In contrast, verbal descriptions of events are oftentimes after an event has been witnessed and therefore most frequently in the past tense. Obviously, there are exceptions to this (e.g., radio commentator on an ongoing soccer match). However, one might argue that presenting an event in the present tense implies continued possession, representing the same event in the past tense is a confound, since tense covaries with abstract and concrete terms respectively. This is an issue that the current research cannot resolve and one that remains an open empirical question.

The main contribution of the current research is that it extends the voluminous work on the Linguistic Intergroup Bias into how systematic differences in language use contribute to the regulation of social relationships, by highlighting the contribution of a few simple words to the creation of feelings of proximity or distance. Previous research has shown that people systematically vary the abstraction level of their messages to describe a person’s behavior as a function of whether the person is close (e.g., in-group member, friend) or distant to them (e.g., out-group member, enemy). Moreover, it has been demonstrated that participants who read messages about other’s behaviors make systematic inferences as a function of the level of abstraction of the message. More recently, it has been shown that people are able to deduce the relation between a sender and the described person from the abstraction level of the description (Douglas & Sutton, 2006). What was lacking in the research on the LIB up to now was in our view how linguistically biased messages contribute to the regulation of interpersonal distance.
between a sender and a receiver. The research reported here highlights how strategic use of language can contribute to the regulation of interpersonal distance. Moreover, it takes the LIB from an individual level and introduces it to an interpersonal one.

This opens the research on the LIB to the broader domain of interpersonal relationships and how language and its strategic use may be involved in the subtle and strategic communication of distance and proximity. A question that comes into mind is how the presence or absence of prior relationships affects the effect of linguistically biased messages noted in this study. Since the LIB is a very subtle bias, the question is under which conditions such subtle biased language use influences interpersonal relationships. It is possible that the subtle linguistic differences in messages do not have any effect when the relationship between a sender and receiver is well established. Obviously, the current research cannot address this issue, but delineating the conditions under which systematic biases in language use shapes perceived distance and proximity inferences remains an interesting issue.

More importantly, the current research puts the issue of stereotyping into the ‘public domain’, namely between people. It suggests that stereotyping and prejudice is a phenomenon that can be subtly driven by a few modifications to the words we choose to describe somebody else’s behavior or performance. This then, in our view, gives rise to an indefinable feeling that something simply does not gel or alternatively that it feels good. The research we have reported here makes clear that on occasions friendships may hinge on just a few words.

Endnote

1 The original messages were formulated in Dutch. A literal translation of these messages to English without losing important but subtle details is impossible. Therefore, in the translated messages the abstract and concrete versions of the messages may appear to differ more than the Dutch messages.
CHAPTER 3

Subtle differences in word choice makes you feeling close or distant

Linguistically biased messages and interpersonal distance*

The linguistic intergroup bias is a communication strategy showing that senders describe positive behaviors of people close to them (e.g., in-group member, friend) and negative behaviors of people distant to them (e.g., out-group member, enemy) abstractly. In contrast, they describe positive behaviors of people distant to them and negative behaviors of people close to them concretely. In two studies, we examined the communicative impact of such messages upon a person whose behavior was the subject of the message. A positive abstract compared to a positive concrete message was hypothesized to lead to increased proximity to the sender, while a negative abstract compared to a negative concrete message was hypothesized and shown to lead to perceived distance. In the second study, we showed that the message only influenced the perceived interpersonal distance in an interpersonal communication setting and not when a computer transmitted the message. The implications of these findings are discussed.

Introduction

Often we can tell from a very brief encounter whether we like somebody or not. The way they appear, their accent, the way they move, how they say things all convey an impression that gives rise to the feeling of whether we feel close or distant to them. Our concern in this chapter is how subtle aspects in the message we receive from another person affects how close or distant we feel towards this person. The range of what somebody says can go from the blatantly obvious and direct to the very subtle and implicit. Subtle and implicit features of what is said, such as predicate choices in the description of a social event or behavior presents an interesting case because they do have an impact (Reitsma-van Rooijen, Semin, & van Leeuwen, 2007a), and yet these features often escape conscious access (Von

* This chapter is based on Reitsma-van Rooijen, Semin, & van Leeuwen (2007c).
Hippel et al., 1997; Franco & Maass, 1996, 1999). We report two studies that examine the question how subtle differences in language use, and in particular systematic differences in the use of action verbs and adjectives in the description of the very same event, contribute to feelings of proximity and distance and whether this effect only occurs in an interpersonal communication setting.

Subtle differences in predicate use are repeatedly reported when people describe positive and negative behaviors of in- or out-group members. Positive in-group and negative out-group behaviors are described with abstract predicates (for example: ‘X is helpful’, ‘X is aggressive’). In contrast, the same positive behavior displayed by an out-group member and negative behavior displayed by an in-group member is predominantly described with concrete predicates (for example: ‘X helps’, ‘X hurts’). This systematic variation in predicate use is called the Linguistic Intergroup Bias (LIB, e.g., Maass et al., 1989). This phenomenon is found not only in intergroup settings, but has also been noted at an interpersonal level (e.g., Maass et al., 1995; Semin et al., 2003; Taris, 1999).

The available research evidence also suggests that this systematic variation in language abstraction appears to escape conscious access. The LIB has been shown to correlate with implicit, but not with explicit measures of prejudice (Von Hippel et al., 1997). Whereas people may be able to control whether they are describing a given group or person positively or negatively at the utterance level (Semin, 2006), they are not able to monitor lexical decisions such as predicate choice (Franco & Maass, 1996, 1999).

Despite the fact that people are not aware of these subtle differences in linguistic abstraction, these differences have been shown to systematically influence the types of inferences made by recipients of such messages (Semin & DePoot, 1997b; Werkman et al., 1999; Wigboldus et al., 2000). An abstract description has been shown to convey the impression that the behavior in question is due to enduring dispositions and not to some transitory state, whereas a concrete description suggests that the behavior is due to contextual or incidental features of
the situation. In this way, biased language use contributes to the transmission and maintenance of existing stereotypes. Indeed, these subtle differences in the description of positive and negative behaviors have been shown to provide information about the sender’s personal relationship with the actor as a function of the abstraction level used by the sender to describe the actor’s behavior (Douglas & Sutton, 2006).

These findings constituted an important step in examining the different ways in which linguistically biased messages impact receivers of such messages. However, in all these receiver-based studies (i.e. Douglas & Sutton, 2006; Semin & DePoot, 1997b; Werkman et al., 1999; Wigboldus et al., 2000), the target whose behavior is being described and judged is not the same person as the actual receiver of the message. Whereas this situation occurs often in daily life, it is also the case that people receive direct feedback on their behavior. A party to a social event often provides direct feedback on the behavior to an actor in that same situation. Surprisingly, the question how a message varying systematically in abstraction level contributes to the regulation of the relationship between sender and receiver whose behavior is being described has not been addressed. Recently, Reitsma-van Rooijen, Semin, and van Leeuwen (2007a) reported a preliminary study showing that receiving a positive abstract message compared to a positive concrete message leads the actor performing the behavior to feel closer to the sender. Moreover, an actor receiving a negative abstract message about their behavior compared to a negative concrete message was demonstrated to feel distant to the sender.

The current studies were conducted to extend these findings and address some of the shortcomings of this original study. The question ‘can such subtle differences in language use influence the perceived relationship to the sender’ is an important one. It provides a first step in answering how stereotypes are communicated and maintained by investigating the effects of LIB upon receivers whose own behavior is described. Stereotype maintenance and transmission was the question that drove the research on the LIB, but the LIB and related research
has been primarily concerned with how a message is strategically composed, the psychological processes responsible in the production of such strategic word choices, and stereotype transmission and maintenance in terms of the impact of such messages upon uninvolved third parties. However, an experimental examination of transmission and maintenance through communication necessitates the inclusion of a receiver toward whom a message is directed and understanding the impact of this message upon this person. Thus, the research reported here was designed to close the communication cycle, by investigating the impact of messages about a receiver’s behavior that are given directly to the receiver. To close this cycle it has to be shown that subtle but systematic differences in predicate choice in message composition have a systematic influence on receiver’s perception of his or her relationship to the sender. This would extend the LIB and related research into a full communication context. To this end, we describe two studies that were designed to investigate the impact of subtle differences in the abstraction level of messages describing positive and negative behaviors upon how an actor as the receiver of these messages perceives his or her relationship with the sender of these messages. The studies employed different experimentally induced performance settings to ascertain the generality and robustness of the phenomenon under examination. Thus, both the type of task as well as the type of messages differed across the two studies. Moreover, in the second study we additionally investigated whether this effect is manifested only in interpersonal contexts by controlling the message source. In one condition a person delivered the message about performance to the performing target and in the other condition the same message was delivered via a computer. In general, we expected that in an interpersonal communication context a positive abstract message compared to a positive concrete message lead to perceived closeness to the sender, whereas a negative abstract compared to a negative concrete message lead to perceived distance to the sender.
Study 3.1

In our first study, participants received a message from another participant, which consisted of feedback on their behavior that had either positive or negative outcomes for the sender. This message varied in abstraction whereby the valence of the message was congruent with the behavior in question. After the participants had read the message we measured their perceived interpersonal distance to the sender of the message. We hypothesized that participants receiving a positive abstract message upon a positive behavior would perceive being closer to the sender than those receiving a positive concrete message. Conversely, we hypothesized that participants who performed negatively and received a negative abstract message should perceive more interpersonal distance to the sender than participants receiving a negative concrete message.

Method

Participants and design. Eighty-six Dutch students of the Vrije Universiteit Amsterdam (65% female, $M_{\text{age}} = 21$ years) participated in this study on a voluntary basis. They received six Euros for their participation and were randomly assigned to one of the cells of a 2 (Valence: positive vs. negative) x 2 (Abstraction: abstract vs. concrete) between participants experimental design.

Procedure. Participants were seated in separate cubicles with a computer and were asked to participate in a task together with another participant whom they did not know. This task, in which they could earn points, consisted of two rounds. If the participants had jointly more than 100 points in the first round, then participant A (the fictional participant) would receive a bonus, and if they had jointly more than 100 points in the second round participant B (the real participant) would receive a bonus. The players’ task was to press a key corresponding to red and green letters appearing on the computer monitor before the letters disappeared from the screen within a second. The task lasted for three minutes. The actual participant was assigned a color to respond and the fictitious partner had the other
color. They earned a point if they pressed the key before the letter disappeared. It was repeatedly stressed that it was important to help each other, since it was impossible for one participant to get more than 100 points in one round. At the end of Round A, in the positive conditions, the fictional participant A received the bonus due to Participant’s B good performance and in the negative conditions the fictional Participant A did not receive the bonus due to Participant’s B bad performance. After this round Participant B received a message from Participant A. This message was in the positive abstract condition: ‘Thanks to you, I have got the bonus! I think, you are helpful.’ In the positive concrete condition ‘are helpful’ was replaced by ‘you have helped me’. In the negative abstract condition: ‘Thanks to you, I do not have the bonus! I think you are not helpful.’ In the negative concrete condition ‘are not helpful’ was replaced by ‘you have not helped me’.

In a pilot study ($N = 53$), we measured the valence of the feedback on a scale from 1 (negative) to 7 (positive). There was no significant interaction between Valence and Abstraction, $F(1, 49) < 1, ns$. We only found a trivial main effect of Valence, $F(1, 49) = 161.56, p < .001, \eta^2 = .77$, showing a higher score in the positive conditions ($M = 6.13, SD = 1.12$) than in the negative conditions ($M = 2.03, SD = 1.12$). There was no effect for Abstraction, $F(1, 49) < 1, ns$. Thus, abstract messages did not have a stronger valence than the concrete ones.\(^1\)

After the real participant B had read the message we measured how (s)he perceived the relationship with the source of the message, namely the fictional participant A. First, participants completed a slightly modified version of the Inclusion of Others in Self scale (IOS scale, Aron et al., 1992). This scale measures people’s sense of interpersonal connectedness. It taps into both aspects of ‘feeling close’ and ‘behaving close’. The scale we used consisted of seven pairs of circles of the same size that varied in the extent to which they were overlapping. Participants were asked to indicate which pair best represented their degree of similarity with the sender. Subsequently, we measured on a scale running from 1 (fully disagree) to 7 (fully agree) the degree to which they agreed with the following statements: “I
Subtle differences in word choice makes you feeling close or distant

have the feeling that participant A likes me.”, “I feel at ease with participant A.”, “For some reason or another, I do not care much for participant A.”, and “We do not get on with each other.”. The last two items were reverse coded. These items formed with the IOS scale a reliable interpersonal distance scale, Cronbach’s $\alpha = .79$. After answering these items, we told them that there was no time left for Round B, but that they will nevertheless receive a bonus.

At the end of the study, we asked whether the participants had any comments on the study. We removed five participants since they explicitly stated that there was no real participant A and that the message was fictitious. Including these five participants does not substantively alter the results. Finally, participants were debriefed, thanked and paid.

Results

We conducted an analysis of variance with Valence and Abstraction on the composite interpersonal distance scale. The predicted interaction between Valence and Abstraction was significant, $F(1, 77) = 4.38, p < .001, \eta^2 = .05$. Simple main effects of Abstraction revealed that there was a significant difference in the negative conditions, $F(1, 77) = 8.61, p < .01$, but not in the positive conditions, $F(1, 77) < 1, ns$. As shown in Table 3.1, participants reported feeling less close to the sender in the negative abstract than in the negative concrete condition.

In addition, we found a trivial main effect of Valence, $F(1, 77) = 36.44, p < .001, \eta^2 = .36$. Participants reported feeling closer in the positive ($M = 4.87$) than in the negative conditions ($M = 3.57$). The main effect of Abstraction, $F(1, 77) = 5.20, p < .03, \eta^2 = .06$, is fully explained by the interaction we found.
### Table 3.1

*MMeans (standard deviations) on the interpersonal distance scale as a function of Valence and Abstraction*

<table>
<thead>
<tr>
<th>Abstraction</th>
<th>Valence</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
<td>negative</td>
<td></td>
</tr>
<tr>
<td>abstract</td>
<td>4.85&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.10&lt;sup&gt;a&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.92)</td>
<td>(.79)</td>
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</tr>
<tr>
<td>concrete</td>
<td>4.89&lt;sup&gt;a&lt;/sup&gt;</td>
<td>4.04&lt;sup&gt;b&lt;/sup&gt;</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
<td>(1.22)</td>
<td></td>
</tr>
</tbody>
</table>

Note: Means in columns with a different superscript, differ significantly from each other. This has been tested with simple main effects.

### Discussion

The findings support the hypothesis that messages varying systematically in abstraction impact receivers’ perception of their interpersonal proximity and distance to the sender. Receiving a negative abstract message compared to a negative concrete message leads to feelings of distance to the sender. Notably, we did not find a difference in the positive conditions. However, this may be due to a peculiarity of the positive conditions. The research investigating the LIB has often found that the LIB effect is the strongest in the negative condition (e.g., Maass et al., 1989). This might be due to the fact that people, in general, pay more attention to negative social information (e.g., Pratto & John, 1991). It is therefore possible that in the negative conditions the subtle variations in abstraction influence the interpersonal distance to the sender. Particularly in this study, the fictional participant in the negative conditions lost the bonus in the first round and since the real participant is dependent on the fictional participant in the second round, then implicit attentiveness to the negative message may have been heightened. Obviously, this explanation remains somewhat speculative.
Study 3.2

Our second study was also designed to demonstrate that receiving a linguistically biased message influences the perceived distance to the sender. However, we modified a variety of features in this study to ascertain the generality of our findings. First of all, we formulated the messages containing the performance feedback in the present tense. In the previous study, the abstract and concrete messages differed in tense: The abstract messages were formulated in the present tense whereas the concrete messages were formulated in the past tense. Although the present tense formulation for abstract properties (’X is helpful’) and the past tense formulation for concrete predicates (’X helped’) constitute the more felicitous formulation, it is possible to argue that the present tense formulation for the abstract predicates carries more force since it implies continuity, whereas the past tense formulation for concrete predicates makes the reference much more situated. Thus, it is arguable that in the first study word tense was a confound. In this second study tense was kept constant across conditions.

The second novel feature of this study was the use of another domain in which participants received feedback. They performed a task related to their intellectual and academic abilities and received a message that provided them with feedback on their performance. The purpose of using a different domain was to ascertain that the findings from the first study generalize across behaviors and that they are robust.

Another important aim of this second study was to investigate if this effect occurs only in an interpersonal context or if it is a result that is merely driven by the message. If the effect is driven by message characteristics alone, then the linguistic properties of the message should affect perceived social distance to the experimenter even if a computer delivers the feedback on one’s performance. However, if we are dealing with a phenomenon that is inherently social, then the pattern of social distance results obtained in the first study should hold only when the message is delivered personally.
A further feature that was added to the second study is the removal of the direct outcome interdependence between recipient and sender that was present in the first study. Thus, this study was also designed to answer whether the phenomenon under investigation is a general interpersonal one or manifested only when the relationship between receiver and sender is outcome interdependent.

In sum, the second study was designed to examine the limits of the phenomenon under investigation: Is perceived social distance or proximity manifested when abstract and concrete messages do not differ in tense; is it robust; is it dependent on a personally delivered message or is any type of message source equally effective; and is it manifested only in interdependent situations? To examine these issues, the experimenter provided the performance feedback in half of the conditions, in the other half the message was given by the computer in the presence of the experimenter. In all conditions, we measured the relation between the participant and the experimenter. We expected an interaction between valence and abstraction when the experimenter provided the feedback: Positive abstract feedback compared to positive concrete feedback was expected to enhance perceived proximity to the experimenter, whereas negative abstract feedback compared to negative concrete feedback was predicted to increase perceived distance to the experimenter. We did not expect a clear-cut pattern in the conditions in which performance feedback was supplied by the computer. If one were to extrapolate from Semin et al.’s (2003) findings then one would expect that linguistically biased messages influence perceived proximity and distance to the experimenter only when the performance feedback is provided by the experimenter and not by a computer. If however, interpersonal distance is influenced only by message characteristics, then the pattern between perceived distance and proximity mentioned above should emerge irrespective of whether the message is delivered by the experimenter or a computer.
Method

Participants and design. One hundred and fifty-nine Dutch students of the Free University Amsterdam participated in this study on a voluntary basis (62% female, $M_{age} = 21$ years). They received five Euros for their participation and were randomly assigned to one of the cells of a 2 (Valence: positive vs. negative) x 2 (Abstraction: abstract vs. concrete) x 2 (Sender: computer vs. experimenter) between participants experimental design.

Procedure. Participants were seated in separate cubicles with a computer. They performed three tests that were ostensibly related to their intellectual and academic abilities. After the participants had completed the tests the experimenter entered the cubicle and typed in a code in both the experimenter and the computer conditions. In the conditions in which the experimenter was the sender of the feedback, the experimenter entered a second code, after which the feedback appeared on the screen. This feedback was read out aloud by the experimenter. In the conditions in which the computer was the source of the feedback the participant was instructed to click the mouse to receive the feedback and the feedback then appeared on the screen so that the participant could read it. Depending on the condition, the feedback participants received was either positive or negative and formulated either abstractly or concretely. In the positive abstract conditions the feedback was formulated as follows: “On average 68% of the students are worse than you and 32% of the students are better than you. This means that you are better than average.” In the positive concrete conditions the feedback was: “On average 68% of the students have a lower score than you and 32% have a higher score than you. This means that you score higher than the average.” In the negative conditions, 68% and 32% were replaced by 42% and 58%. And in the negative abstract conditions, the last sentence was replaced by: “This means that you are worse than average” and in the negative concrete conditions, the last sentence was replaced by: “This means that you score lower than the average”.

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A pilot study ($N = 151$) in which we measured the valence of the feedback running on a scale from 1 (positive) to 7 (negative) showed that there was no significant interaction between Valence and Abstraction, $F(1, 147) < 1$, ns. We only found a trivial Valence main effect, $F(1,147) = 235.26, p < .001, \eta^2 = .62$, showing a lower score for participants in the positive conditions ($M = 2.49, SD = 1.37$) than in the negative conditions ($M = 5.50, SD = 1.00$). There was no main effect of Abstraction, $F(1, 147) < 1$, ns.

After the participants had received the feedback, we measured the perceived relationship between the participant and the experimenter. Once again, we used the slightly modified version of the Inclusion of Others in Self (IOS, Aron et al., 1992) scale, running from 1 (no similarity) to 7 (maximal similarity). We did not use the other items, since in all other studies the IOS scale and the items to measure the interpersonal distance showed the same pattern (see also Reitsma-van Rooijen et al., 2007a).

At the end of the study, we asked if participants had any comments on the study. Eight out of the 159 participants gave as a comment that they thought the feedback to be fictitious. These participants were removed from further analyses. Including these eight participants did not alter the results. Finally, participants were debriefed, thanked and paid.

**Results**

Our main expectation was that in the positive abstract and negative concrete conditions the perceived distance to the experimenter was smaller than in the negative abstract and positive concrete conditions when the experimenter was the sender of the feedback message. On the IOS-scale we found a significant interaction between Valence, Abstraction and Sender, $F(1, 143) = 5.19, p < .03, \eta^2 = .04$. Analyses of the simple two-way interactions between Valence and Abstraction showed that this interaction is significant in the experimenter conditions, $F(1, 143) = 4.79, p < .03$, but not in the computer conditions, $F(1, 143)$
Subtle differences in word choice makes you feeling close or distant

= 1.08, ns. As can be seen in Table 3.2, the means in the conditions when the experimenter was the sender show the expected pattern: The perceived closeness to the experimenter was highest in the positive abstract and negative concrete conditions and the smallest in the positive concrete and negative abstract conditions.

Table 3.2

Means (standard deviations) on the IOS scale as a function of Abstraction, Valence and Sender

<table>
<thead>
<tr>
<th>Abstraction</th>
<th>Sender and Valence</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>computer</td>
<td>experimenter</td>
<td></td>
</tr>
<tr>
<td></td>
<td>positive</td>
<td>negative</td>
<td>positive</td>
</tr>
<tr>
<td>abstract</td>
<td>2.71^a</td>
<td>3.17^a</td>
<td>3.50^a</td>
</tr>
<tr>
<td></td>
<td>(1.57)</td>
<td>(1.69)</td>
<td>(1.38)</td>
</tr>
<tr>
<td>concrete</td>
<td>2.60^a</td>
<td>2.40^a</td>
<td>2.40^b</td>
</tr>
<tr>
<td></td>
<td>(1.19)</td>
<td>(1.54)</td>
<td>(1.19)</td>
</tr>
</tbody>
</table>

Note: Means in columns with a different superscript, differ significantly from each other. This has been tested with simple main effects.

Discussion

Again, we showed, in another domain, that receiving a linguistically biased message influences the perceived interpersonal distance to the sender of the message. A positive abstract message compared to a positive concrete one leads to closeness to the sender and a negative abstract message compared to a negative concrete message leads to distance to the sender. This effect is not caused by differences in the tense used in the formulation of the abstract and concrete messages (Reitsma-van Rooijen et al., 2007a). Furthermore, we demonstrated that the effect only occurs in an interpersonal communication setting and not when the computer relays the message despite the fact that the experimenter is present. Thus, it can be concluded that the observed effects are not merely a general
message effect. Finally, the effect is not limited to a setting in which the relationship between the receiver and sender is outcome interdependent, but seems to be a general interpersonal one. Although we did not find a significant interaction in the computer conditions, it is striking that the highest level of closeness is found in the negative abstract condition. Another striking finding is that in the experimenter conditions the largest difference was found between the positive abstract and the positive concrete condition and not between the negative abstract and the negative concrete condition. An explanation, that is speculative, is that negative feedback by the experimenter on academic skills is so overwhelming that this overrides the subtle differences in linguistic abstraction.

General Discussion

The two studies reported here underline the robustness of the finding that linguistically biased messages about one’s own behavior influence the perceived interpersonal distance to the sender of the message as a function of the systematic differences in language use to describe the same behaviors or performances. Receiving a positive abstract message compared to a positive concrete message leads to perceived closeness to the sender (Study 3.2) and receiving a negative abstract message compared to a negative concrete message leads to perceived distance to the sender (Study 3.1). Moreover, the two studies show that these effects are due to the variation in message abstraction and not to any differences in valence between concrete and abstract formulations of the same message. The second study also showed that the message has a systematic influence on perceived distance and proximity only in an interpersonal context. If the same message is delivered by an impersonal source, such as a computer, then differences in message formulation do not affect perceived distance or proximity to the same person. This underlines the situated nature of message impact (Smith & Semin, 2004).

It should be noted that the effect of systematic differences in message composition (abstract versus concrete predicate use as a function of positive or
Subtle differences in word choice makes you feeling close or distant upon perceived proximity and distance have been obtained by the use of a between participants design. This means that participants had no possibility to compare or consider the significance of changes in a single word in the feedback they received. It is therefore unlikely that they were aware of the fact that they received feedback in which merely one word was either abstract or concrete depending on the condition they were in. However, the two studies attest to the fact that even such an apparently trivial change such as a single word that varies in abstraction is sufficient to have a significant impact upon perceptions of proximity or distance to the source of the message. Thus, the choice of a single word, albeit consciously or unconsciously driven, is likely to make a significant difference on how a potential relationship is likely to be shaped.

The main contribution of the current research is that it closes the communication circle that was opened by the influential research on the ‘linguistic intergroup bias’ by Maass and her colleagues (cf. Maass, 1999). The linguistic intergroup bias is about the cognitive and motivational processes that play a role in shaping the linguistic choices that people make in formulating descriptions of positive and negative behaviors on others towards whom they have a positive or negative relationship. Thus, it is a model of message production, which is crucial in communication, but the model does not extend to the impact of the message upon the person who has performed the behavior in question. There is earlier research showing that messages varying systematically in predicate use do give rise to differences in the inferences people generally make, but these inferences are only concerned with what ‘neutral’ third parties think was the ‘cause’ of the behavior that is described, namely enduring, dispositional factors or transient, situational ones (e.g., Semin & DePoot, 1997b; Werkman et al., 1999; Wigboldus et al., 2000). Indeed, more recent research shows that participants are also able to deduce the relation between a sender and the described person from the abstraction level of the description (Douglas & Sutton, 2006). However, the impact of systematically biased messages upon the performer of a behavior has never been examined. It is
in that sense that the studies reported here close the communication cycle and provide an insight into how messages that are systematically biased in language use affect targets whose behavior is represented in the messages.

In our view, the current research complements and extends research on the LIB by putting it into the general context of how specific features of linguistic communication contribute to the regulation of interpersonal distance between a sender and a receiver and extends earlier work (Reitsma–van Rooijen et al., 2007a). The perspective driving the research reported here opens the work on the LIB to the broader domain of how language contributes to the regulation of interpersonal relationships and its strategic role in the subtle and strategic communication of distance and proximity. Finally, the current research puts the issue of stereotyping into the ‘public domain’, namely a process that takes place between people. It suggests that stereotyping and prejudice can also be studied as an interpersonal phenomenon that can be subtly driven by a few modifications to the words we choose to describe somebody else’s behavior or performance. Such subtle differences that are likely to escape conscious access can be responsible for that indefinable feeling that one has about something that simply does not gel about the other or alternatively that the other simply feels good. The research we have reported here makes clear that with a few wise or unwise words we may set the stage to make friends or enemies.

Endnote

1 We checked for the valence of the message, since in our first study (Reitsma-van Rooijen et al., 2007a) the abstract messages had a stronger valence than the concrete ones. So, the positive abstract message was evaluated more positive than the positive concrete one and the negative abstract message was evaluated more negative than the negative concrete one. A mediation analysis showed that this did not mediate the effect we found on interpersonal distance, since there was still a non-negligible significant direct effect of the message on the interpersonal distance. Nevertheless, we think it is more elegant to use messages of which the abstract ones do not have a stronger valence than the concrete ones.
CHAPTER 4
When is a linguistically biased message informative? Type of relationship and the perceived impact of a linguistically biased message on this relationship

Recent research has revealed that people, who receive a message about their positive behavior, feel closer to an unknown sender if the message is formulated abstractly rather than concretely. Moreover, if their behavior is negative they feel more distant to an unknown sender if the message is abstractly than concretely. Here, we examined when a linguistically biased message is informative about the perceived interpersonal distance to the sender. In Study 1, we hypothesized and found that when the sender and receiver are enemies or do not know each other the message influences the perceived social distance to the sender, but not when they are friends. In Study 2, we hypothesized and found that a message is informative about social distance, only when the sender has power over the receiver but not when the receiver has power over the sender. The implications of these findings are discussed.

Introduction
We all meet people. Mostly, we know these people very well and our relationship with them is quite clear. Sometimes, we come across people we have never met before and in our first encounter, we develop an intuitive sense of whether we feel close to them or not. There are many factors that give rise to such feelings of proximity, including physical appearance, accent, the way people move, and how they say things (e.g., Giles & Coupland, 1991, Giles & Hewstone, 1982, Giles & Robinson, 1990). The range of what somebody says can go from the blatantly obvious and direct to the very subtle and implicit. Subtle and implicit features of what is said, such as predicate choices in the description of a social event or behavior presents an interesting case because they have an impact on the inferences people make about the causes of the actor’s behavior being described.
(Werkman et al., 1999; Wigboldus et al., 2000), and on judgments of the sender’s relationship with the actor whose behavior is described (Douglas & Sutton, 2006), despite the fact that that linguistically biased language use escapes conscious access (e.g., Von Hippel et al., 1997; Franco & Maass, 1996, 1999). More recently, it has been shown that these subtle differences also have an impact on the perceived interpersonal distance to a sender if the receiver is also the actor of the behavior being described (Reitsma-van Rooijen et al., 2007a, 2007c). However, in the studies by Reitsma-van Rooijen et al., (2007a, 2007c) the sender and the receiver did not know each other which is an optimal condition for the message to have an effect on the interpersonal distance, since the message is the only source of information to judge on the interpersonal distance. An interesting question is what the impact of a message is in a relationship in which the sender and the receiver do know each other, which is a situation that happens quite often in life. The studies described in this chapter answer the question in which type of relationships the subtle linguistic cues are informative about the interpersonal distance to the sender.

Language plays an important role in regulating interpersonal interactions. It often functions to reflect, perpetuate, and communicate relationship perceptions and is a dominant medium by which we maintain, foster, and support our social relationships. There are many studies that suggest that language may play a role in conveying as well as creating relationship perceptions (e.g., Agnew, Van Lange, Rusbult, & Langston, 1998; Fiedler, Semin, & Koppetsch, 1991) and that language’s effects on interpersonal interactions are likely to be especially powerful (Fitzsimons & Kay, 2004). The variations in language use that influence these relationship perceptions have many properties, some of which are more evident and accessible and others that are more tacit and subtle. One such subtle property of language that conveys and creates relationship perceptions is the type of predicates that people use to describe the behavior of others. People systematically vary the type of predicates they use as a function of describing positive or negative behaviors of in- or out-group members (Linguistic Intergroup Bias, LIB, e.g.,
Maass et al., 1989). Positive in-group and negative out-group behaviors are described with abstract predicates (for example: ‘X is helpful’, ‘X is aggressive’). In contrast, the same positive behavior displayed by an out-group member and negative behavior displayed by an in-group member is predominantly described with concrete predicates (for example: ‘X helps’, ‘X hurts’). This phenomenon is found not only in intergroup settings, but has also been noted at an interpersonal level (e.g., Maass et al., 1995; Semin et al., 2003; Taris, 1999).

The available research evidence also suggests that this systematic variation in language abstraction appears to escape conscious access (Von Hippel et al., 1997; Semin, 2006; Franco & Maass, 1996, 1999; Semin & DePoot, 1997a). Despite this fact, these differences have been shown to systematically influence the types of inferences made by recipients of such messages (Semin & DePoot, 1997b; Werkman et al., 1999; Wigboldus et al., 2000). An abstract description has been shown to convey the impression that the behavior in question is due to enduring dispositions and not to some transitory state, while a concrete description suggests that the behavior is due to contextual or incidental features of the situation. By describing stereotype consistent behavior in abstract terms and stereotype inconsistent behavior in concrete terms, the systematic variation in linguistic abstraction contributes to the transmission and maintenance of existing stereotypes. Furthermore, these subtle differences in the description of positive and negative behaviors have been shown to provide information about the sender’s personal relationship with the actor on the basis of the abstraction level used by the sender to describe the actor’s behavior (Douglas & Sutton, 2006). This research on the impact of linguistically biased messages upon receivers who are not the same as the actor of the behavior being described in the message shows that these messages do have an impact on these receivers.

More recently, it has been shown that these linguistically biased messages also have an impact upon receivers who receive a message in which their own behavior is described. Reitsma-van Rooijen et al. (2007a, 2007c) included such a
receiver and demonstrated that subtle but systematic differences in predicate choice in message composition have a systematic influence on the receiver’s perception of his or her relationship to the sender: a *positive abstract* message compared to a *positive concrete* message leads the actor performing the behavior to feel closer to the sender. Moreover, an actor receiving a *negative abstract* message about their behavior compared to a *negative concrete* message was demonstrated to feel distant to the sender. Furthermore, they demonstrated (Study 2, Reitsma-van Rooijen et al., 2007c) that this interpersonal distance effect does not occur when the computer is the source of the message, but that it only occurs in an interpersonal communication context. In their study, in half of the conditions the experimenter was the source of the message, and in the other half of the conditions the computer was the source of the message. In all conditions, the interpersonal distance to the experimenter was measured. The linguistically biased message influenced the perceived interpersonal distance to the experimenter only when the experimenter was the source and not the computer. Based on these results, Reitsma–van Rooijen et al. (2007c) concluded that it is not the message alone that causes feelings of distance or proximity, but that it is the message contextualized in a personalized manner that causes this interpersonal distance effect.

An important question is whether it is always the case that, receiving a linguistically biased message influences the perceived interpersonal distance to the sender. While the research on the LIB started to focus on the conditions for this bias to occur and showed that this occurrence is sensitive to the communication context (e.g., Semin et al., 2003, Wigboldus et al., 2005), in the research on the impact of receiving linguistically biased messages mainly conditions were used in which the impact is always manifested. In this research, on the impact of these biased messages, the message was the only source of information that was available to make a judgment about the person being described (Wigboldus et al., 2000; Douglas & Sutton, 2006). This was also the case in the research by Reitsma–van Rooijen et al. (2007a, 2007c). In their studies, the sender and the receiver did not
know each other, which is an optimal condition for these subtle differences in language abstraction to have an effect, because if the sender is unknown to the receiver, then the only information that the receiver can rely on are the subtle linguistic cues. In this type of situation, it is likely that these subtle differences in language abstraction influence the perceived interpersonal distance to the sender. An important issue is whether these biased messages also influence the perceived interpersonal distance to a sender with whom the receiver has a well-established relationship. After all, most of the time one does not receive messages from people one does not know, but from people with whom one has an established relationship. In general, one would expect the effect of a linguistically biased message on the perceived interpersonal distance to the sender to be stronger in a situation in which one does not know a lot about this relationship than in a situation in which the relationship between the sender and the receiver is well-established. In an established relationship the subtle differences in language use need not be the only source of information and have to compete against what one knows of the other in a well-established relationship. However, there might be situations, even in a well-established relationship, where it is important to get information about the social relationship. This might especially be the case when the relationship makes the receiver sensitive to the subtle differences in linguistic abstraction. One type of relationship, which we assume to make receivers sensitive, is when the sender is the receiver’s enemy. An enemy is a negative stimulus and research has shown that negative information is attention grabbing (Pratto & Johns, 1991) and leads people to narrow and focus their attention (e.g., Peeters & Czapinski, 1990). The more attention that is paid to the message, the higher the chances that the subtle difference in linguistic abstraction will influence the relationship with their enemy. Another type of relationship in which we assume it is important to get information about the relationship is when the sender has power over the receiver. In this situation, the receiver is dependent upon the sender, since the sender is a person who can affect their outcomes, so it is important for them to
know what the sender thinks about them. In contrast, if the receiver has power over the sender, then the chances are high that the receiver doubts the credibility of the information, since what a subordinate says is often not reliable, but subject to distortion, namely sliming.

In the current chapter, two studies are described in which we examine how the effect of receiving a linguistically biased message on the perceived interpersonal distance to the sender depends on the type of relationship between the sender and the receiver. To investigate this, we used prior acquaintance and power as two central variables that can influence the information value and significance of subtle variations in linguistic abstraction in messages. We manipulated two different types of relationships. In the first study, we manipulated the prior acquaintance between the sender and the receiver, namely the sender and the receiver were enemies, friends or did not know each other. In the second study, we manipulated whether the receiver was in a low or a high power position in relation to the sender.

**Study 4.1**

In the first study, we examined the role of prior acquaintance (namely the sender and the receiver are friends, enemies or do not know each other) on the impact that receiving a linguistically biased message has on the perceived interpersonal distance to the sender. If the sender and the receiver do not know each other, we expect that the receiver is sensitive to the subtle differences in language use, since the receiver needs cues to infer the relationship to the sender. Therefore, we expect in this condition that receiving a linguistically biased message influences the interpersonal distance to the sender, which is a replication of the effects we found in our earlier studies (Reitsma–van Rooijen, et al., 2007a, 2007c). We also expect the receiver to be more sensitive to the subtle differences in linguistic abstraction of the message if the sender is an enemy compared to when the sender is a friend. The reasoning behind this is that if the sender is a friend, the receiver will simply not attend to the subtle cues of the message, since they rely on
When is a linguistically biased message informative?

a much broader resource of information, namely shared knowledge that is already built up over time, so that subtle differences in the formulation of a message are simply not attended. Furthermore, there is no reason to pay careful attention to the message, since the situation is safe. However, if the sender is an enemy, the receiver will be very attentive to any information because the enemy is a negative stimulus and any signal needs careful attention.

In sum, we hypothesized that linguistically biased messages will influence the perceived interpersonal distance to the sender only when the sender and the receiver do not know each other or are enemies and not when they are friends. If the sender is an enemy or an unknown person, then we expect that receiving a positive abstract compared to a positive concrete message leads to feelings of closeness to the sender, whereas a negative abstract compared to a negative concrete message leads to feelings of distance to the sender. To test this hypothesis, we conducted a study in which participants were asked to imagine that they received either positive or negative messages from an unknown sender, a friend or an enemy. These messages varied in abstraction level. We used four different levels of abstraction. We asked them to indicate for each message the consequences of receiving that message for the perceived interpersonal distance to the sender.

Method

Participants and design: 97 students of the Vrije Universiteit Amsterdam participated in this study (49% women, $M_{\text{age}} = 20$ year). They were randomly assigned to one of the cells of a $3$ (Sender: friend vs. enemy vs. unknown) x $2$ (Valence: positive vs. negative) x $4$ (Abstraction: very concrete, concrete, abstract, very abstract) mixed factorial design with repeated measures on the last factor.

Procedure: Participants were seated in separate cubicles with a computer and we presented them with a test battery that allegedly measured their intellectual and academic abilities. Participants received linguistically biased feedback on their
fictive performance on this test battery. First, we asked them to read three example questions of this test battery. We told them that this battery consisted of a number of similar questions to be solved in a fixed amount of time. We asked them to imagine that they had taken this battery and presented them with a graph in which their results in terms of a fictitious score was depicted with a line at a specific position of a normal distribution curve. This score was depending on condition either positive or negative. We told them that an unknown other, a friend or an enemy (manipulation of sender) had been asked to tell this score to them. In the friend and enemy conditions, we asked them to type in the name of a specific friend or enemy.

After they had read these instructions and had typed in a name in the friend and enemy condition, four formulations differing in linguistic abstraction were presented one at a time in a random order. For the positive conditions we used the following formulations: Formulation 1: “On average 68% of the students have a lower score than you and 32% have a higher score than you. This means that you answered more questions correctly than average on tests that are relevant for intellectual and academic abilities.” Formulation 2: “On average 68% of the students have a lower score than you and 32% have a higher score than you. This means that you score higher than the average on tests that are relevant for intellectual and academic abilities.” Formulation 3: “On average 68% of the students are worse than you and 32% of the students are better than you. This means that your intellectual and academic abilities are higher than average.” Formulation 4: “On average 68% of the students are worse than you and 32% of the students are better than you. This means that you are better than average.” In the negative conditions, 68% and 32% were replaced by 42% and 58%. In Formulation 1, ‘more’ was replaced by ‘less’, in Formulation 2 and 3 ‘higher’ was replaced by ‘lower’, and in Formulation 4 ‘better’ was replaced by ‘worse’. If we code these four formulations according the Linguistic Category Model (LCM; Semin, & Fiedler, 1988, 1991, 1992) that distinguishes different categories of
predicate types (i.e., verbs and adjectives) differing in linguistic abstraction, Formulation 1 and Formulation 2 are more concrete formulations than Formulation 3 and Formulation 4.

In a pilot study \((N = 79)\), we measured the valence of these formulations on a scale from 1 (negative) to 7 (positive). There was no significant interaction between Valence and Abstraction, \(F(3, 71) < 1\), \(ns\). So, abstract messages did not have a stronger valence compared to concrete ones. We only found a trivial main effect of Valence, \(F(1, 71) = 128.07, p < .001, \eta^2 = .64\), showing a higher score in the positive conditions \((M = 5.29, SD = 0.98)\) than in the negative conditions \((M = 2.63, SD = 1.15)\). There was no effect for Abstraction, \(F(3, 71) = 2.13, ns\). So it is safe to conclude that the abstract formulations do not have a stronger valence than the concrete formulations.

After the participants had read the four formulations, we asked them to judge each formulation on the consequences for the perceived interpersonal distance to the sender. To measure these consequences, we used in the first place a slightly modified version of the Inclusion of Other in Self scale (IOS scale, Aron et al., 1992). This scale measures people’s sense of interpersonal connectedness. It taps into both the feeling close and behaving close aspects. The scale we used consisted of seven pairs of circles of the same size that varied in the extent to which they were overlapping. Participants were asked to indicate which pair best represented their degree of similarity with the sender. In the second place, participants were presented with 6 lines that differed in length. The participant was placed on the one side of the line and the sender on the other side and we asked participants which line represented best the relation between the participant and the sender. The scores on these items were standardized and formed together a reliable scale, Cronbach’s \(\alpha > .76\). The higher the score, the smaller the distance to the sender.
Results

Our hypothesis was that the message would not influence the perceived interpersonal distance if the sender and receiver are friends, but that it would if they are enemies or do not know each other. To test this hypothesis, we conducted an analysis of variance with Sender and Valence as between subjects factor and the judgments for the different levels of Abstraction as a within subjects factor. We collapsed the two concrete and the two abstract levels for the benefit of interpretation. The three-way interaction between Sender, Valence en Abstraction is marginally significant, $F(2, 91) = 2.70, p = .07, \eta^2 = .06$. We found a significant two-way interaction between Valence and Abstraction, $F(1, 91) = 31.52, p < .001, \eta^2 = .26$. Since we predicted specific two-way interactions between Valence en Abstraction for the different levels of Sender, we tested these interactions. If the sender is a friend, there is no significant interaction between Valence and Abstraction, $F(1, 32) = 2.91, ns$. So, the message did not influence the perceived distance to a friend. If the sender is an enemy or unknown, there is a significant two-way interaction between Valence en Abstraction, respectively, $F(1, 31) = 28.63, p < .001, \eta^2 = .48$ and $F(1, 28) = 9.24, p < .006, \eta^2 = .25$ (analyses with four levels of abstraction produced the same results). The means in Table 4.1 show that both in the enemy and unknown condition, participants reported feeling closer to the sender after receiving a positive abstract message compared to a positive concrete message and reported feeling more distant to the sender after receiving a negative abstract compared to a negative concrete message.

There is also a trivial main effect of Sender, $F(2, 91) = 25.91, p < .001, \eta^2 = .36$: Participants reported feeling closer to a friend ($M = .59$, $SD = .69$) than to an enemy ($M = -.44$, $SD = .65$) or unknown ($M = -.20$, $SD = .85$). The other effects were not significant.
Table 4.1

Means (standard deviations) on the interpersonal distance scale as a function of Valence, Abstraction and Sender

<table>
<thead>
<tr>
<th>Sender and Valence</th>
<th>Abstraction</th>
<th>friend</th>
<th>enemy</th>
<th>unknown</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>positive</td>
<td>negative</td>
<td>positive</td>
<td>negative</td>
</tr>
<tr>
<td>abstract</td>
<td>.64\textsuperscript{a}</td>
<td>.56\textsuperscript{a}</td>
<td>-.18\textsuperscript{a}</td>
<td>-.67\textsuperscript{a}</td>
</tr>
<tr>
<td></td>
<td>(.75)</td>
<td>(.65)</td>
<td>(.65)</td>
<td>(.57)</td>
</tr>
<tr>
<td>concrete</td>
<td>.43\textsuperscript{a}</td>
<td>.65\textsuperscript{a}</td>
<td>-.70\textsuperscript{b}</td>
<td>-.29\textsuperscript{b}</td>
</tr>
<tr>
<td></td>
<td>(.76)</td>
<td>(.60)</td>
<td>(.78)</td>
<td>(.44)</td>
</tr>
</tbody>
</table>

Note: Means with a different superscript in the columns, within the levels of sender differ significantly from each other, tested by simple main effects.

Discussion

The findings of this first study indicate that receiving a linguistically biased message does not influence the perceived interpersonal distance between the sender and the receiver when they are friends but does so when they do not know each other or are enemies. Receiving a positive abstract message leads to more perceived social proximity than a positive concrete message and receiving a negative abstract message is assumed to lead to more perceived distance than a negative concrete message.

We think that this pattern of results can be explained by the fact that when the sender and the receiver do not know each other or are enemies they will be more sensitive to subtle differences in language use than when they are friends. If the receiver does not know the sender the receiver will be sensitive for the subtle cues since the message is the only source of information. If the sender and the receiver are enemies, the receiver will be sensitive to the subtle differences in language use, since this is a situation that makes a receiver alert. And the more sensitive the receiver, the more attention will be paid to the message and the higher the chances that the subtle differences in language use do have an influence in the perceived interpersonal distance to the sender. This study is the first to show that
the impact of subtly biased messages upon the perceived interpersonal distance to the sender depends on the type of relationship between the sender and the receiver.

**Study 4.2**

In the second study, we examined how asymmetrical power relationships influence the perceived interpersonal distance to the sender as a function of how the message is composed. Based on earlier research on power (Fiske, 1993), we argue that it would make a difference for the interpretation of linguistically biased messages whether the sender has power over the receiver, or whether the receiver has power over the sender. If a sender has power over the receiver, then it is important for the receiver to know whether the sender likes him or her. Therefore, the receiver will be sensitive to subtle cues in the message that gives an indication of inclinations of the sender. However, in the reverse situation when the receiver has power over the sender, it is less important to know for the receiver to know whether the sender likes him or her. In such a situation, it is more likely that a message is corrected for the possibility of brownnosing. We know from the literature (Vonk, 1998) that when one person has power over the other, this power difference is one of the most prominent reasons for people to ingratiate themselves towards the person that has the power to affect their outcomes. As a consequence, when a person performs likeable behavior toward a more powerful person, perceivers may correct their inference for the possibility of brownnosing and it is more likely that the behavior is recognized as ingratiation (Jones, 1964, 1990). Therefore, positive behavior is perceived as less credible when it is enacted towards a superordinate than when it is enacted toward a subordinate. In the former case, it is less likely that the actor was driven by ingratiation motives, so the behavior seems genuinely likeable (Vonk, 1999).

In sum, we expected that if the sender has power over the receiver these subtle differences are informative for the perceived relationship to the sender. In contrast, when the sender is in a subordinate position compared to the receiver
then the message is likely to be interpreted as sliming. In other words, we expect that if the receiver is the sender’s subordinate, receiving a positive abstract message compared to a positive concrete message leads to feelings of closeness and receiving a negative abstract message compared to a negative concrete message leads to feelings of distance. If the receiver is the sender’s superordinate, we expect that receiving a positive abstract message compared to a positive concrete message will be seen as sliming even as a negative concrete message compared to a negative abstract message. To test this hypothesis, we designed a study in which participants received a message that varied in valence and abstraction from a sender who was either in a subordinate or superordinate position and measured the feelings of closeness to the sender and sliming.

Method

Participants and design 122 students of the Free University of Amsterdam participated in this study (59% women, \(M_{\text{age}} = 21\) year). They were randomly assigned to one of the cells of a 2 (Valence: positive, negative) x 2 (Abstraction: concrete, abstract) x 2 (Power: low, high) between participants design and received 5 euros for their participation.

Procedure The study was run on computers in individual cubicles. It was a vignette study in which we asked participants to imagine that they were at work and were sitting in the coffee room with one of their colleagues. In this room, there were some magazines. In one of these magazines there was a short intelligence test that they made. They performed badly (in the negative conditions) or well (in the positive conditions) on this test and their colleague made a comment on this. The valence of this comment was congruent with the valence of their performance and was either abstractly or concretely formulated. In the positive abstract conditions, the comment was ‘You are intelligent’ and in the positive concrete conditions ‘You have a high score’. In the negative abstract conditions the comment was ‘You are not so intelligent’ and in the negative concrete conditions ‘You have a low score’. 
The power of the receiver was manipulated by telling them that they were boss (high power position of the receiver) or that the colleague that made the comment was the boss (low power position of the receiver).

To measure the interpersonal distance we used the Inclusion of Other in Self Scale of Aron et al., (1992). The scale we used consisted of seven pairs of circles of the same size that varied in the extent to which they were overlapping. Participants were asked to indicate which pair best represented their degree of similarity with the sender. To measure sliming we used the following item: “My colleague is sliming by making this comment.”, on a scale from 1 (completely disagree) to 7 (completely agree).

As a manipulation check of power, we used five items: “My colleague is superior to me.”, “My colleague has power over me.”, “My colleague is my boss.”, “I’m independent of my colleague.” and “My colleague has no authority over me.”. These items formed a reliable power scale, Cronbach’s alpha = .79. The scale was running from 1 (completely disagree) to 7 (completely agree) and the last two items were reverse coded so that a higher score always means that the colleague has power over the receiver.

We also asked participants to judge the valence of the comment on a scale running from 1 (negative) to 7 (positive). Finally, participants were debriefed, thanked and paid.

Results

An analysis of variance on the power scale with Valence, Abstraction and Power as factors showed that our power manipulation was successful. We found a significant main effect of Power, $F(1, 114) = 13.69, p < .001, \eta^2 = .11$. Participants in the low power condition reported their colleague to have more power over them ($M = 3.69, SD = .63$) than participants in the high power condition ($M = 3.22, SD = .75$). There were no other effects, $F$s < 1, $ns$. 

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We hypothesized that only when the receiver was in a low power position the linguistically biased comment would lead to feelings of proximity or distance to the sender and not when the receiver was in a high power position. To test this hypothesis we conducted an analysis of variance with IOS as the dependent variable and Valence, Abstraction and Power as the independent variables. Within the low power condition we found a significant two-way interaction between Valence and Abstraction, $F(1, 114) = 4.00, p < .05$. As predicted in the low power condition and can be seen in Table 4.2, people reported feeling closer to the sender after receiving a positive abstract comment than after a positive concrete comment and reported feeling more distant to the sender after a negative abstract comment than after a negative concrete comment. In the high power condition, there was no two-way interaction between Valence and Abstraction, $F(1,114) < 1, ns$. There was also a main effect of Valence, $F(1, 114) = 28.79, p < .001, \eta^2 = .20$ ($M_{positive} = 4.10, SD_{positive} = 1.40$, $M_{negative} = 2.84, SD_{negative} = 1.37$), and Power $F(1, 114) = 10.77, p < .001, \eta^2 = .09$ ($M_{low \ power} = 3.08, SD_{low \ power} = 1.49$, $M_{high \ power} = 3.85, SD_{high \ power} = 1.46$), and a significant two-way interaction between Valence and Power, $F(1, 114) = 4.09, p < .05, \eta^2 = .04$. The three-way interaction was not significant, $F(1, 114) = 2.27, p = .13$.

On the sliming item we predicted and found a significant two-way interaction between Valence and Abstraction only in the high power condition and not in the low power condition, respectively $F(1, 114) = 5.64, p < .02$, and $F(1, 114) < 1, ns$. As can be seen in Table 4.2, in the high power condition a positive abstract comment compared to a positive concrete comment was judged as sliming, even as a negative concrete comment compared to a negative abstract comment. Besides a main effect of Valence, $F(1, 114) = 53.71, p < .001, \eta^2 = .32$, that showed that a positive comment was judged as more sliming ($M = 3.54, SD = 1.37$) than the negative one ($M = 1.95, SD = 1.02$), there were no other significant effects, $Fs (1, 114) < 1, ns.$
Table 4.2
Means (standard deviations) on the Inclusion Of Other in Self scale and on the sliming item as a function of Power position of the receiver, Valence, and Abstraction

<table>
<thead>
<tr>
<th></th>
<th>Power position of the receiver and Valence</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>high</td>
</tr>
<tr>
<td>Abstraction</td>
<td></td>
</tr>
<tr>
<td>abstract</td>
<td>3.93&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.27)</td>
</tr>
<tr>
<td>concrete</td>
<td>4.56&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.50)</td>
</tr>
<tr>
<td>Sliming</td>
<td></td>
</tr>
<tr>
<td>abstract</td>
<td>4.07&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(1.14)</td>
</tr>
<tr>
<td>concrete</td>
<td>3.25&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>(.87)</td>
</tr>
</tbody>
</table>

Note: the higher the score the more the other is included in self and the more sliming, scale running from 1 to 7. Means with a different superscript in the columns differ marginally significantly from each other, tested by simple main effects.

We also measured the valence of the comment. Both in the low power as in the high power conditions there was no significant interaction between Valence and Abstraction, respectively $F(1, 114) = 2.47$, \textit{ns} and $F(1, 114) = 1.68$, \textit{ns}.

\textit{Discussion}

This second vignette study shows that if the sender has power over the receiver, the linguistically biased message is assumed to influence the perceived interpersonal distance to the sender of the message: a positive abstract message compared to a positive concrete message leads to feelings of closeness to the sender, whereas a negative abstract message compared to a negative concrete message leads to feelings of distance to the sender. However if the receiver has power over the sender, the message is not interpreted in terms of interpersonal
distance or proximity, but in terms of sliming. In this situation, a positive abstract message compared to a positive concrete message is judged as sliming as well as a negative concrete compared to a negative abstract message. With other words, being the sender's subordinate makes a receiver sensitive to subtle cues in the message that might give an indication of whether the sender likes you or not, but being the sender's superordinate the subtle cues are interpreted as sliming.

This study shows also that the type of relationship between the sender and the receiver determines whether the message is informative about the relationship between the sender and the receiver or not. Only if it is important to know whether the sender likes you or not, receiving a linguistically biased message influences the perceived interpersonal distance.

**General Discussion**

The results of these two studies showed that the impact of receiving linguistically biased messages about one's own behavior on the perceived interpersonal distance to the sender of this message depends on the type of relationship between the sender and the receiver. In the first study we examined the role of prior acquaintance and showed that receiving a linguistically biased message does not influence the perceived distance to a friend as sender, but that such a message influences the distance if they do not know the sender or if the sender is their enemy: receiving a positive abstract message compared to a positive concrete one is assumed to lead to feelings of proximity and receiving a negative abstract message compared to a negative concrete one is assumed to lead to feelings of distance to the sender. In the second study we examined the role of asymmetrical power relationships and showed that if the sender has power over the receiver, the message influences the perceived interpersonal distance to the sender. If the receiver has power over the sender, people interpret the message in terms of sliming.
As argued in the introduction, we think that the finding that receiving a linguistically biased message seems to have an impact on the interpersonal distance to the sender in some types of relationships and not in others, is mainly due to the fact that some types of relationships make receivers more sensitive to subtly biased messages than others. If the sender and the receiver do not know each other, then the receiver will be sensitive to the subtle cues in the message that can be used to infer interpersonal distance or proximity to the sender, since the message is the only source of information that is available to judge on the interpersonal distance to the sender. If the sender and the receiver are enemies or if the sender has power over the receiver, then the receiver will also be sensitive to these subtle linguistic cues, since in these types of relationships it is important to pay attention to any cue that gives an indication of what the sender’s relationship opinion is about the receiver.

Another factor that might play a role in the fact that in some types of relationships the message has an impact on the perceived interpersonal distance to the sender and in other types of relationships not, might be that in each type of relationships, there are certain norms or expectations of what is socially acceptable to say. And if a sender deviates from these norms or expectations, this might have consequences for the receiver’s perceived interpersonal distance to the sender. To our knowledge, there is no research on these kinds of norms or expectations. However, since the research on the LIB shows that the abstraction level of the messages depends on the relation between the sender and the person being described and on the communicative context, an obvious conclusion is that the type of messages being expected also depends on the relationship between the sender and the person being described. Future research has to make clear what precisely causes the fact that a linguistically biased message influences the perceived interpersonal distance to the sender in some types of relationships and not in others. Another important issue for future research is to examine whether the effects we found in the reported vignette studies, are also found in a
communication setting in which there is a real interaction between the sender and receiver.

The main contribution of the research reported in this chapter is that it extends the research that has been done on the impact of receiving linguistically biased messages. Most research focused on the impact of these messages upon an uninvolved receiver, namely a receiver who is not the same person as the person whose behavior is described in the message. More recent research focused on the impact for an involved receiver, who received a linguistically biased message about the own behavior and showed that these messages play an important role in regulating the interpersonal distance between the sender and the receiver. The studies reported in this chapter highlight that this effect of linguistically biased messages on the perceived interpersonal distance to the sender is a dynamic one. Just as the occurrence of biased language use is sensitive to the communication context, the impact the message has on the perceived interpersonal distance to the sender is also sensitive to the communication context. Only if, for whatever reason, the type of relationship between the sender and the receiver sensitizes the receiver to the subtle cues hidden in the message, these subtle cues influence the perceived interpersonal distance to the sender.

Endnote
1 If we use the four levels of Abstraction we also do not find a significant two way interaction between Valence and Abstraction if the sender is a friend, $F(3, 30) = 1.04, ns$, whereas we do find a significant two way interaction between Valence and Abstraction when they are enemies, $F(3, 29) = 9.69, p < .001, \eta^2 = .50$ or unknowns, $F(3, 26) = 3.41, p < .04, \eta^2 = .28$. 


CHAPTER 5
The impact of linguistically biased feedback on performance*

Although differences in linguistic abstraction of a description are so subtle that they often escape conscious access, they have been shown to imply different inferences. We examined whether subtle linguistically biased feedback on one task affects performance on a subsequent task. Negative abstract compared to negative concrete feedback was hypothesized and shown to lead to lower performance in an interpersonal communication context, but to higher performance in an impersonal communication context. In the positive conditions, we expected the reversed pattern of the negative conditions. The effect of the feedback on performance was mediated by motivation.

Introduction

Feedback upon one’s performance is a common feature of daily life starting from early childhood, and following us through education, work, and the neighborhood circle into family life. We also know that there are many circumstances when such feedback affects our performance, depending on whom it comes from, when, and how. We address two aspects of the how in the study reported here. The first aspect is the use of specific linguistic categories (Semin & Fiedler, 1988) in the formulation of feedback that is known to escape conscious access (e.g., Von Hippel et al., 1997; Franco & Maass, 1996, 1999). The second aspect is how the feedback is delivered where we contrast feedback delivered face-to-face with the same feedback delivered by a computer.

The subtle differences in the use of action verbs and adjectives in feedback are based on the Linguistic Category Model (LCM; Semin & Fiedler, 1988, 1991, 1992). The LCM distinguishes different categories of predicate types that people use to describe persons and behavior. These predicate types run from a concrete to an abstract level. A specific behavior (e.g., John’s fist connecting with David’s jaw)

* This chapter is based on Reitsma-van Rooijen, Semin, & van Leeuwen (2007b).
can be described with a concrete term (e.g., a verb as in: ‘John punched David’) or an abstract term (e.g., an adjective as in: ‘John is aggressive’) without distorting the verity of the event. While the former suggests a situated and transient event, the latter signals the manifestation of a dispositional or enduring tendency of the actor.

What is the likely consequence of receiving abstract versus concrete feedback upon performance? In the context of stereotype research, it has been shown that receivers of linguistically biased descriptions about a third party make precisely the inferences predicted by the LCM (e.g., Werkman et al., 1999; Wigboldus et al., 2000). More recently, we (Reitsma–van Rooijen, Semin, & van Leeuwen, 2007a) have shown that systematic differences in describing an actor’s behavior influence perceived social distance to the source. While these studies have focused on social judgment variables, there is—to our knowledge—no research on how subtle linguistic cues affect behavior in general and performance in particular.

Extrapolating from earlier research (e.g., Dweck & Leggett, 1988; Werkman et al., 1999; Wigboldus et al., 2000) we predicted that when the feedback upon a participants’ poor performance is expressed in abstract terms, namely with an adjective, then this should affect their performance on a subsequent task adversely compared to expressing it in concrete terms. The abstractly formulated negative feedback implies an enduring incapability and might induce an entity mindframe, which reduces performance motivation, whereas a concrete formulation implies situated and transient factors contributing to the outcome and might lead to an incremental mindframe, which enhances performance motivation, (e.g., Dweck & Leggett, 1988). Thus, negative abstract feedback was predicted to reduce motivation and accordingly lead to a poor performance on a subsequent task. More importantly, this pattern was expected to occur only in the case of interpersonal feedback. In this situation one’s ‘self worth’ is publicly accessible. However, if the very same message is delivered by a computer that mechanically produces the message about one’s performance then there is no such public access until the entire set of tasks are performed. One could possibly argue that in this situation the
second task offers a ‘self-worth repair’ opportunity and then one would expect that negative abstract feedback, provided by a computer would enhance performance on the second task.

Similarly, we predicted that positive abstract feedback enhanced performance relative to positive concrete feedback in the case of interpersonal feedback and the other way around if the feedback is delivered by a computer, although probably in not an as differentiated manner since negativity enhances a more vigilant processing of information (e.g., Pratto & John, 1991) compared to positive conditions. Moreover, research on the Linguistic Intergroup Bias (LIB) has shown that this bias is strongest for negative behaviors (e.g., Maass et al., 1989).

These considerations led to the study reported below, in which we manipulated the source of the feedback (experimenter versus computer), the valence of the feedback on the first performance task (positive versus negative), and the abstraction level of the feedback (concrete versus abstract) in a between participants design. The dependent variable was performance on the second performance task and participant’s motivation to perform on this task.

Study 5.1
Method

Participants and design. One hundred and sixty Dutch students at the Vrije Universiteit participated in this study on a paid voluntary basis (62% female, $M_{age} = 21$ years). They were randomly assigned to one of the cells of a $2$ (Valence: positive vs. negative) x $2$ (Abstraction: abstract vs. concrete) x $2$ (Source: computer vs. experimenter) between participants experimental design.

Procedure. Participants were instructed individually via a computer. They performed three tests that were ostensibly related to their intellectual and academic abilities. After they had completed the tests, they received feedback on their performance. When the experimenter was the source, she entered the cubicle a few minutes after the participants had completed the tasks and gave a piece of paper on
which the name and birth date of the participant was written as well as the feedback. When the computer was the source, the feedback appeared on the monitor, together with the name and birth date of the participant. Depending on condition, the feedback participants received was either positive or negative and formulated either abstractly or concretely. In the positive abstract conditions, the feedback was formulated as follows: “On average 68% of the students are worse than you and 32% of the students are better than you. This means that you are better than average.” In the positive concrete conditions the feedback was: “On average 68% of the students have a lower score than you and 32% have a higher score than you. This means that you score higher than the average.” In the negative conditions, 68% and 32% were replaced by 42% and 58%. And in the negative abstract conditions, the last sentence was replaced by: “This means that you are worse than average” and in the negative concrete conditions, the last sentence was replaced by: “This means that your score lower than the average”.

Participants were then asked to take a second test after receiving the feedback, which was also related to intellectual and academic abilities. Here participants had to complete twenty number series (e.g., 52, 69, 88, 109, ... ). The number of correct answers constituted the dependent variable. There was no time limit.

To measure motivation as a potential mediator we examined the degree to which they found the task challenging on a scale from 1 (fully disagree) to 7 (fully agree). Finally, participants were debriefed, thanked and paid.

In a pilot study (N = 151), we measured the valence of the feedback on a scale from 1 (positive) to 7 (negative). This revealed that there was no significant interaction between Valence and Abstraction, $F(1, 147) < 1$, ns. There was only a trivial Valence main effect, $F(1,147) = 235.26, p < .001, \eta_p^2 = .62$, showing a lower score for participants in the positive conditions ($M = 2.49, SD = 1.37$) than in the negative conditions ($M = 5.50, SD = 1.00$). There was no main effect of Abstraction, $F(1, 147) < 1$, ns.
Results

Performance: The chief prediction was that in the negative abstract condition performance would be lower than in the negative concrete condition when the experimenter was the source with a reverse pattern of outcomes when the computer was the source. For the positive conditions we tentatively predicted that participants would perform better after abstract than after concrete feedback with the experimenter as source, but worse after abstract than after concrete feedback with the computer as source. Using the number of correct answers as the dependent variable, we found the predicted significant three-way interaction between Valence, Abstraction and Source, $F(1, 152) = 4.68, p < .04, \eta_p^2 = .03$.

Within the negative conditions the two-way interaction between Source and Abstraction was significant, $F(1, 152) = 5.67, p < .02$. As can be seen in Table 5.1, we found the expected pattern of means: The performance was lower in the negative abstract compared to the negative concrete condition when the experimenter was the source and higher in the abstract than in the concrete condition when the computer was the source. The pattern of means in the positive conditions was as expected, but the interaction was not significant, $F(1, 152) < 1, ns$.

Additionally, there was a significant main effect of Source, $F(1, 152) = 5.15, p < .03, \eta_p^2 = .03$, which was moderated by a significant interaction between Valence and Source, $F(1, 152) = 5.18, p < .03, \eta_p^2 = .03$. In the positive conditions, participants performed better in the experimenter ($M = 13.63, SD = 3.51$) than the computer condition ($M = 11.03, SD = 3.58$). In the negative conditions there was no difference in performance between the experimenter ($M = 12.15, SD = 3.91$) and computer conditions ($M = 12.18, SD = 3.67$). These effects, however, are fully qualified by the three-way interaction.
Table 5.1
*Means (standard deviations) of the number of correct answers and on motivation as a function of Valence, Source and Abstraction*

<table>
<thead>
<tr>
<th>Valence and Source</th>
<th>Abstraction</th>
<th>negative</th>
<th>positive</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>computer</td>
<td>experimenter</td>
<td>computer</td>
</tr>
<tr>
<td># Answers</td>
<td>abstract</td>
<td>13.45 (3.19)</td>
<td>11.50 (3.03)</td>
</tr>
<tr>
<td></td>
<td>concrete</td>
<td>10.90 (3.74)</td>
<td>12.84 (4.65)</td>
</tr>
<tr>
<td>Motivation</td>
<td>abstract</td>
<td>4.90 (1.29)</td>
<td>4.75 (1.33)</td>
</tr>
<tr>
<td></td>
<td>concrete</td>
<td>4.55 (1.43)</td>
<td>4.90 (1.33)</td>
</tr>
</tbody>
</table>

Motivation: On the item that measured motivation, we found a significant three-way interaction between Valence, Abstraction and Source, $F(1, 152) = 4.52, p < .04, \eta^2_p = .03$. There were no other significant effects. To test whether motivation mediated the three-way interaction on the performance task, we used the procedure proposed by Baron and Kenny (1986). The interaction between the factors Valence, Abstraction and Source was predictive of how challenging participants judged the task, $\beta = -.17, t(152) = 2.13, p < .04$. The interaction effect between Valence, Abstraction and Source on performance, $\beta = -.17, t(152) = 2.16, p < .04$, decreased to non-significance, $\beta = -.12, t(151) = -1.58, ns$ (Sobel’s test, $z = 1.85, p < .06$, Sobel, 1982) when motivation was added as a predictor.

Discussion

The results support the argument that receiving linguistically biased feedback about one’s performance influences performance on a subsequent task. Receiving negative abstract compared to negative concrete feedback leads to lower performance in an interpersonal communication context and to higher
The impact of linguistically biased feedback on performance in an impersonal communication context. In the positive conditions we did not find an effect. As mentioned in the introduction this is possibly due to the fact that people pay more attention to negative information, which heightens the likelihood of subtly biased feedback to influence performance. Importantly, the effect of feedback on performance was mediated by motivation suggesting that the feedback influences the motivation to perform.

These results complement those reported by Dweck and colleagues (e.g., Dweck & Leggett, 1988; Chiu, Hong, & Dweck, 1997; Hong, Chiu, Dweck, Lin, & Wan, 1999; Molden & Dweck, 2006) from a different perspective. They showed that people hold either an entity or an incremental theory and that this theory influences their reactions to failure. People with an entity view see a personal attribute as relatively fixed and underperform after failure whereas people with an incremental view see the attribute as malleable and perform better after failure. Since abstract formulations imply dispositional causality and concrete formulations situational causality, it might well have been the case that abstract feedback induced an entity mindframe while concrete feedback activated an incremental mindframe, which may be responsible for the lower performance in the negative abstract relative to the negative concrete conditions.

The main contribution of this study is that it introduces a new perspective to research on linguistically biased language. The primary focus of earlier research was on the LIB (e.g., Maass et al., 1989), and showed that people systematically vary the type of predicates they use as a function of whether they are describing positive and negative behaviors of in- or out-group members. Positive in-group and negative out-group behaviors are described abstractly, whereas positive behavior of an out-group member and negative behavior of an in-group member is predominantly described concretely. In extension, research on the impact of these linguistically biased descriptions upon uninvolved receivers revealed that such descriptions contributed to judgments highlighting the transmission of stereotypes. The current study has revealed the impact of linguistically biased messages upon
Chapter 5

the performance of actors after they received feedback on their earlier outcomes and
the contextual conditions under which this outcome emerges. Thus we were able to
specify the two hows of feedback people may receive in the course of their daily
life and the subtle often-undetectable linguistic cues that drive the message home in
a subtle manner.

These findings are comparable to the effects obtained in the research on
stereotype threat. This research addressed performance decrease in people (e.g.,
females; Steele & Aronson, 1995) when stereotypes involving them are explicitly
activated (e.g., women underperform in mathematics; Spencer, Steele, & Quinn,
1999; Steele & Ambady, 2006). Although there are many ways to make a stereotype
salient, our research shows that very subtle linguistic cues, which have been shown
to escape conscious access, are sufficient to achieve the same effect analogous to
an explicit manner of enhancing stereotype salience. Indeed, the current study
suggests that this pattern of outcomes can be effectuated in a context where no
explicit stereotype is activated, but simply a linguistically biased message on
performance. Moreover, our study shows the social nature of this phenomenon,
since this effect only occurs in an interpersonal context and not in an impersonal
communication context. This finding has important implications and suggests that
not only stereotype activation, but subtle linguistic biases are sufficient to enhance
or impair one’s performance and that judicious choices of a few words to describe
somebody else’s behavior or performance can influence their subsequent
performance favorably or adversely.
CHAPTER 6
General Discussion

In the research reported in this dissertation, we examined the impact of receiving linguistically biased messages upon receivers who are also the actor of the behavior being described in the message. In a series of studies it has been demonstrated that receiving linguistically biased messages influences the interpersonal distance the receiver experiences to the sender. Furthermore, it has been shown that these linguistically biased messages also influence the performance on a subsequent task. In this final chapter, our research is summarized and the findings are discussed. After that we focus on the implications and outline directions for future research.

Summary

In Chapter 1, an overview is given of the relevant literature for this thesis. We made clear that language plays an important role in social life. The language we use is influenced by our social environment, and our language use also influences this social environment (e.g., Semin, 2001). This bi-directional link between the social environment and language is obviously manifested in the Linguistic Intergroup Bias (LIB, e.g., Maass et al., 1989). The LIB shows that people use different levels of abstraction to describe positive or negative behaviors of in-group or out-group members: Positive in-group and negative out-group behavior’s are described in abstract terms, whereas positive out-group and negative in-group behavior’s are described in concrete terms. The same biased language use does occur at an interpersonal level (e.g., Maass et al., 1995; Semin et al., 2003; Taris, 1999).

The research on this linguistically biased language so far has mainly focused on how a message is strategically composed and on the psychological processes responsible for the production of this biased language use. Although the occurrence of the LIB seems to be an implicit and very subtle phenomenon that
escapes conscious access (Franco & Maass, 1996, 1999; Von Hippel et al., 1997), more recent research showed that this linguistically biased language use is moderated by the communicative context in general and by recipient characteristics in particular (e.g., Douglas & McGarty, 2001, 2002; Douglas & Sutton, 2003; Rubini & Sigall, 2002; Semin et al., 2003; Wigboldus et al., 2005). This suggests that these biased messages are also used strategically to influence the receiver of the message.

Considerable research has been done showing that these biased messages indeed influence a receiver. For example, these biased messages influence the inferences receivers make about the dispositionality or situationality of the behavior (Werkman et al., 1999; Wigboldus et al., 2000, Wigboldus et al., 2006) and people are able to deduce the interpersonal distance between the sender and the person being described on the basis of the linguistic abstraction level of the message (Douglas & Sutton, 2006). This research on the impact of biased messages has used receivers who were not the same as the actor being described in the message. In our view, an important unanswered question is what the impact is of these linguistically biased messages for an involved receiver, namely a receiver who is also the person being described in the message. To our knowledge, this question has never been examined in the research on the LIB. The aim of the research in this dissertation was to fill this missing link in the research on linguistically biased language use.

In Chapter 2, a study is presented in which participants received a linguistically biased message in which they received feedback on their own socially (ir)responsible behavior. The sender of the message was another unknown participant. We examined the communicative impact of these biased messages on the perceived interpersonal distance to the sender of the message. Participants reported more interpersonal proximity to a sender of a positive abstract message than to a sender of a positive concrete message and reported more proximity to a sender of a negative abstract message than to a sender of a negative concrete
message. This research constitutes an important step in showing that receiving a linguistically biased message about one’s own behavior regulates the interpersonal distance to the sender as perceived by the receiver.

In Chapter 3 we extended the findings reported in Chapter 2 by demonstrating this interpersonal distance effect in two different experimentally induced performance tasks, which ascertained the generality and robustness of the phenomenon under examination and addressed some of the shortcomings of the study described in Chapter 2. We showed that a positive abstract compared to a positive concrete message lead to increased perceived proximity to the sender, while a negative abstract compared to a negative concrete message lead to perceived distance. Moreover, in the second study we additionally investigated whether this effect is manifested only in interpersonal contexts by controlling the message source. In half of the conditions, a person delivered the message about performance to the performing target and in the other half of the conditions the same message was delivered via a computer. When a computer transmitted the message, we did not find an effect of the message. The effect of the message on the perceived interpersonal distance thus seems to be limited to an interpersonal communication setting and is not a general phenomenon.

In the studies described in Chapter 4, the central question was in which types of relationships, receivers are sensitive for the subtle differences in language use in the sender’s message. In the studies described in Chapter 2 and Chapter 3, we used an unknown sender. In this situation, the chances are high that the subtle variations in linguistic abstraction influence the perceived interpersonal distance to the sender of the message, since the message is the only source of information to infer interpersonal proximity or distance to the sender. This is not necessarily the case when the sender and the receiver have a well-established relationship. Although even when the sender and the receiver have a well-established relationship, there might be conditions in which the receiver is sensitive for subtle differences in language use, for example when the sender and the receiver are
enemies. In the first study, we found that when the sender and the receiver are ‘enemies’ or do not know each other, the message influences the interpersonal distance to the sender, but not when they are friends. In the second study, we showed that receiving a linguistically biased message influences the perceived interpersonal distance to the sender if the sender had power over the receiver, but not when the receiver had power over the sender. In this last situation, receiving a linguistically biased message is not interpreted in terms of liking but in terms of sliming.

In Chapter 5, a final study is presented in which we examined whether linguistically biased feedback on one task influences the performance on a subsequent second task. Participants did a task on which they received linguistically biased feedback, either from the computer (an impersonal communication context) or from the experimenter (an interpersonal communication context). We measured their performance on a second task and their motivation to perform well on this second task. The results showed that receiving negative abstract compared to negative concrete feedback lead to lower performance in an interpersonal communication context and to higher performance in an impersonal communication context. No effects were found in the positive conditions. Importantly, the effect of feedback on performance was mediated by motivation suggesting that the feedback influences the motivation to perform. This study expands the implications of the linguistic biases from the mere inferential domain to a quasi-behavioral one, namely performance.

In sum, we showed that receiving linguistically biased messages about one’s own behavior does have an impact upon the receiver in two important domains: receiving biased messages influences the perceived interpersonal distance to the sender and has consequences for the performance on a subsequent task. This was demonstrated in different feedback domains: feedback on their (ir)responsible social behavior (Study 2.1), feedback on their cooperation with others (Study 3.1), feedback on their performance on test battery that measured their intellectual and
academic abilities (Study 3.2, Study 4.1, Study 4.2, and Study 5.1) and in different communication forms: written feedback (Study 2.1, Study 5.1), feedback generated by a computer (Study 3.2, and Study 5.1), personal feedback via the computer (Study 3.1), and spoken feedback (Study 3.2). Although the effects we found were small, the fact that we demonstrated its occurrence in different domains and in different communication forms shows the robustness and the generality of the phenomenon under investigation.

Moreover, in Study 3.2, Study 4.1, Study 4.2, and Study 5.1 we found important moderators that underline the social nature of language. It is not simply the message that influences the perceived interpersonal distance to the sender and the performance on a subsequent task, but it is the message attached to a person that leads to the effects we found. When the same message was sent by the computer, we did not find an effect on perceived interpersonal distance and we found a reversed effect on the performance on a subsequent task. In the studies reported in Chapter 4, we also showed that the effect of the message on the perceived interpersonal distance to the sender depends on the social context. When the sender was a friend or had no power over the receiver, we did not find any effects of the perceived interpersonal distance to the sender, whereas we found these effects when the sender and receiver did not know each other or when the sender was the receiver’s enemy. This underlines the function of language in different contexts.

**Main contribution**

In our view, the main contribution of the research reported in this dissertation is that it extends the voluminous work on the Linguistic Intergroup Bias, by including a receiver, who received a message about his/her own behavior (see Figure 6.1). The research reported in this dissertation is the first demonstration of the impact of receiving linguistically biased message upon an involved receiver. This finding is important since we know that people are not aware of the fact that
they use this biased language and probably also do not notice these subtle but systematic variation in linguistic abstraction when they receive these messages, but these messages nevertheless influence such important aspects as perceived interpersonal distance and performance.

![Image](Sender.png)

**Figure 6.1**

The consequences of receiving a linguistically biased message (M) for a receiver who is also the actor of the behavior being described

**Stereotyping**

The findings reported in this dissertation might have important implications for the research on stereotyping and prejudice. Ample research has been done on prejudice and stereotyping. From one of the earliest works (Allport, 1954) to more recent research (Macrae, Stangor, & Hewstone 1996) on stereotyping and prejudice, the important role language plays in stereotyping and prejudice has been acknowledged. As Wigboldus and Douglas (2007) describe in their overview of the research on language, stereotypes, and intergroup relations, the earliest research on language and stereotyping was mainly limited to the content of stereotypes in the language of traits (e.g., Katz & Braly, 1933; Linville, Fischer, & Salovey, 1989; McCauley & Stitt, 1978; Miller 1982; Park & Judd, 1990) or the organizing function provided by traits in associative networks (cf., Allport, 1954; Stangor & Lange, 1994). More recently, research on language and stereotyping started to examine the interpersonal aspects (e.g., Lyons & Kashima, 2003, Ruscher, 2001; Ruscher & Lawson Duval, 1998; Schaller & Conway, 1999). The development of the Linguistic Category Model (LCM, Semin & Fiedler, 1988, 1991, 1992) was important for the research on how stereotypes are transmitted and maintained by linguistically biased language. In the research on the Linguistic Intergroup Bias (for
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an overview, see Maass, 1999), which is based on the LCM, evidence is found that
people’s linguistic abstraction level of the descriptions of the behaviors is
systematically influenced by the stereotypes they hold. Moreover, more recent
research demonstrated that these linguistically biased descriptions contribute to the
transmission and maintenance of stereotypes (Werkman et al., 1999; Wigboldus et
al., 2000). However, in this research up to now, the person being stereotyped is an
uninvolved person, and does not answer the question what the direct consequences
are of linguistically biased language use for the person being stereotyped. Our
research is a first step in examining how people who are the subject of stereotyping
do react on this. We showed that receiving linguistically biased messages, in which
a person is, although very subtly, the subject of prejudice, this message influences
the perceived interpersonal distance to the sender and the performance on a
subsequent task. However, although the messages we used in our studies were
discriminative, they were not based on stereotypes. An interesting question is how
people react on receiving stereotypically consistent messages (e.g., women receiving
positive concrete and negative abstract feedback on mathematical tasks) and
stereotypically inconsistent feedback (e.g., women receiving positive abstract and
negative concrete feedback on mathematical tasks). Will women who receive
stereotypically consistent feedback feel more prejudiced than women who receive
stereotypically inconsistent feedback? Will women underperform on a subsequent
mathematical task after stereotypically consistent feedback, since they feel
handicapped and enhance their performance after receiving stereotypically
inconsistent feedback? These are questions to be answered in future research.

From interpersonal to intergroup

Another direction for future research is extending this research to the
intergroup level. In our studies we focused on the effects of receiving linguistically
biased messages upon a receiver in interpersonal relationships. There was just one
sender and one receiver. We did not manipulate the sender’s and receiver’s group
membership. In future research we can extend our paradigm by introducing groups. The LIB is originally about describing the behaviors of in-group or out-group members. It is an important question whether these linguistically biased messages not only regulate interpersonal distance between a sender and a receiver, as we demonstrated in the research reported in this dissertation, but whether these biased messages also regulates perceptions of group membership. Based on our findings, we hypothesize that receiving positive abstract and negative concrete messages leads the receiver to see him/herself as the sender’s in-group member, whereas receiving positive concrete and negative abstract messages leads the receiver to see him/herself as the sender’s out-group member. Based on the studies reported in Chapter 4, we expect that this pattern changes when the sender and the receiver have a well-established relationship with each other: If the sender is a receiver’s in-group member, we expect that the message has no consequences for the receiver’s perceived group-membership, whereas it has consequences when the sender is the receiver’s out-group member.

**Underlying mechanisms**

The research reported in this dissertation was mainly designed to examine whether linguistically biased messages do influence interpersonal distance to the sender and the performance on a subsequent task. It was not designed to answer the question how these messages influence the interpersonal distance the receivers of these messages report to the sender and how they influence performance, although we found in the performance study (Study 5.1) that motivation mediated the effect of a linguistically biased message on performance.

Our central argument is that the effects we found are due to the different linguistic abstraction levels of the message. However, as mentioned in Chapter 1 of this dissertation, the different levels of abstraction imply different cognitive inferences. That is, the more abstract, the more information is given about the subject, less information is given about the specific situation, the information
appears to be more endurable, less verifiable, and more likely to be the object of
disagreement or dispute (Semin & Fiedler, 1988, 1992), the temporal duration
increases, more alternative behaviors can be visualized for the statement (Semin &
Fiedler, 1992), and the estimated repetition likelihood of the event increases (Maass
et al., 1989, Exp. 3). An interesting question is whether these cognitive inferences
are activated by the receiver after receiving a linguistically biased message and to
what extent these inferences mediate the effect of receiving a linguistically biased
on the perceived interpersonal distance to the sender and the performance on a
subsequent task. And to make it more complicated, it could also be the case that
the receivers do not make these inferences themselves but that they think that the
sender makes these inferences about their behavior and that this causes the effect
of receiving linguistically biased message on the interpersonal distance to the
sender and on performance. However, it might be difficult to measure the
mediating processes, since the differences between abstract and concrete language
are very subtle, and it is possible that it is just a feeling of being closer or more
distant to the sender. Future research has to make clearer how these messages
impact involved receivers.

Another factor that might play a role in the effect of receiving these
linguistically biased messages on the interpersonal distance to the sender is norms
or expectations. It is possible that (depending on the type of relationship) there are
certain norms or expectations of what is socially acceptable to say and that if a
receiver deviates from this norms, this has consequences for the perceived
interpersonal distance to the sender of the message or has consequences for the
performance on a subsequent task.

**Conclusion**

The studies reported in this dissertation show that receiving linguistically
biased messages about his or her own behavior do have an impact upon a receiver.
These linguistically biased messages influence the perceived interpersonal distance
to the sender as well as their performance on a subsequent task. Furthermore, the studies made clear that this impact of receiving linguistically biased message upon a receiver depends on the communication context. The research reported in this dissertation opens the research on the LIB to the broader domain and extends the previous research of using linguistically biased language when one talks about others to the consequences of linguistically biased language use when one talks directly to these others. The main contribution of this research is that it closes the communication cycle by investigating the impact of messages about a receiver’s behavior that are given directly to the receiver. This extends the research on the LIB and related research into a full communication context and underlines the important role of subtle differences in language use in interpersonal communication settings.
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Taal speelt een belangrijke rol in ons dagelijks leven. Het is een van de meest centrale aspecten bij de interactie tussen mensen. Ons taalgebruik wordt beïnvloed door onze sociale omgeving, maar ons taalgebruik beïnvloedt deze sociale omgeving op haar beurt ook weer. Deze bi-directionele relatie tussen taal en onze sociale omgeving komt duidelijk tot uiting in de Linguïstische Intergroepsvertekening. Deze Linguïstische Intergroepsvertekening (Linguistic Intergroup Bias, LIB) laat zien dat mensen het abstractieniveau waarmee zij het gedrag van anderen omschrijven systematisch variëren als een functie van de relatie die zij met deze personen hebben en de valentie van het gedrag. Positief gedrag van een lid van de eigen groep en negatief gedrag van een lid van de andere groep worden relatief abstract omschreven (bijvoorbeeld ‘A is behulpzaam’ en ‘A is agressief’), terwijl negatief gedrag van leden van de eigen groep en positief gedrag van leden van de andere groep relatief concreet worden omschreven (bijvoorbeeld ‘A slaat B’ en ‘A helpt B’).

Deze Linguïstische Intergroepsvertekening is veelvuldig aangetoond. Hierbij heeft men zich voornamelijk gericht op de processen die aan het LIB-effect ten grondslag liggen en op de condities waaronder deze vertekening optreedt. Uit deze onderzoeken blijkt dat het LIB-effect niet alleen op intergroepsniveau optreedt, maar ook op interpersoonlijk niveau: Gedrag dat consistent is met de verwachting wordt abstract beschreven, gedrag dat inconsistent is met de verwachting wordt concreet beschreven (Maass, Milesi, Zabbini, & Stahlberg, 1995). Ook is aangetoond dat boodschappen die verschillen in taalabstractie tot verschillende gevolgtrekkingen leiden (Wigboldus, Semin, & Spears, 2000). Een abstracte omschrijving van gedrag leidt tot een dispositionele gevolgtrekking, maar bij een concrete formulering van gedrag wordt het gedrag aan situationele factoren
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toegeschreven. Zo wordt door omschrijvingen die variëren in taalabstractie een bepaald beeld dat men van een groep of van een persoon heeft, doorgegeven: wanneer negatief gedrag abstract en positief gedrag concreet wordt beschreven, wordt het negatieve gedrag als typerend voor de persoon of groep gezien en wordt het positieve gedrag toegeschreven aan voorbijgaande situationele factoren. Hierdoor wordt een negatiever beeld van de omschreven groep of persoon gegeven dan wanneer positief gedrag abstract en negatief gedrag concreet wordt omschreven.

Deze systematische variaties in taalabstractie vinden veelal plaats op onbewust niveau. Zo blijkt uit eerder onderzoek dat systematische variaties in taalabstractie reeds bij het coderen van informatie kunnen optreden. Uit ander onderzoek blijkt daarnaast dat vertekend taalgebruik gebruikt kan worden om een bepaald beeld te creëren. Semin, Gil de Montes, en Valencia (2003) toonden in een experiment aan dat het LIB-effect alleen optrad wanneer de zender wist dat zijn/haar beschrijving over een andere deelnemer, die een opponent of een partner was, aan de andere deelnemer werd gegeven en niet wanneer duidelijk was dat de beschrijving niet aan deze deelnemer zou worden gegeven. De afwezigheid van het LIB-effect bij het ontbreken van een communicatiedoel, en de aanwezigheid ervan in het bijzijn van een communicatiedoel, kunnen erop duiden dat de systematische variatie in taalabstractie een strategische keuze is om de ontvanger van de boodschap te beïnvloeden. In het onderzoek dat in dit proefschrift is beschreven, staat de vraag centraal of boodschappen die variëren in valentie en abstractie de persoon die in de boodschap wordt omschreven, beïnvloeden.

Centrale vraag in Hoofdstuk 2 en 3 is of linguïstisch vertekende boodschappen de relatie tussen de zender en de ontvanger beïnvloeden. De verwachting is dat net zoals de relatie tussen de zender en de omschreven persoon de formulering van de boodschap bepaalt, het ontvangen van een boodschap met een bepaalde formulering de relatie tussen de ontvanger en de zender beïnvloedt. We verwachten dat een positief abstracte boodschap in vergelijking met een
positief concrete boodschap tot waargenomen interpersoonlijke nabijheid tot de zender leidt en dat een negatief abstracte boodschap, in vergelijking met een negatief concrete boodschap tot waargenomen interpersoonlijke afstand tot de zender leidt.

In Hoofdstuk 2 staat een studie beschreven waarin deelnemers een beschrijving gaven van een situatie waarin zij zich sociaal (positieve condities) of asociaal (negatieve condities) gedroegen. Een fictieve andere deelnemer (de zender) vormde zich op basis van deze beschrijving een eerste indruk van de deelnemer (de ontvanger). Deze eerste indruk was positief in de positieve condities en negatief in de negatieve condities. Daarnaast was deze indruk of abstract of concreet geformuleerd. Deze eerste indruk werd bij de beschrijving geschreven en kreeg de ontvanger te lezen. Vervolgens werd de waargenomen interpersoonlijk afstand van de ontvanger tot de zender gemeten. Deelnemers gaven aan meer interpersoonlijke nabijheid tot de zender te ervaren na het ontvangen van een positief abstracte dan na het ontvangen van een positief concrete boodschap. Na een negatief abstracte boodschap in vergelijking tot een negatief concrete boodschap ervoer men meer afstand tot de zender. Dit onderzoek is een belangrijke eerste stap waarin wordt aangetoond dat het ontvangen van een linguïstisch vertekende boodschap de waargenomen relatie die de ontvanger tot de zender ervaart, beïnvloedt.

In Hoofdstuk 3 worden twee studies beschreven waarin we laten zien dat het effect dat we in Hoofdstuk 2 aantoonden ook in andere experimentele settingen optreedt. Hiermee tonen we de robuustheid en de generaliseerbaarheid van het effect aan. In de eerste studie kregen de deelnemers feedback van een andere deelnemer met wie zij samen aan een taak werkten. Deze feedback was positief of negatief en was of abstract of concreet geformuleerd. Uit de resultaten blijkt dat het ontvangen van linguïstisch vertekende boodschappen de door de ontvanger waargenomen nabijheid tot de zender beïnvloedt. In de tweede studie kregen de deelnemers linguïstisch vertekende feedback op een taak die hun academisch werk- en denkniveau mat. Deze feedback ontving men of van de onderzoeksleider (een
interpersoonlijke communicatiecontext) of van de computer (een niet persoonlijke communicatiecontext). Alleen in een interpersoonlijk communicatiecontext beïnvloedde de linguïstisch vertekende feedback de waargenomen relatie tot de onderzoeksleider en niet wanneer de computer de bron van de feedback was. Het effect van een linguïstisch vertekende boodschap op de waargenomen afstand tot de zender lijkt beperkt te zijn tot een interpersoonlijk communicatie context en is geen algemeen fenomeen.

In de studies die in Hoofdstuk 4 worden beschreven is de centrale vraag in welke soorten relaties de ontvangers gevoelig zijn voor subtiele verschillen in taalabstractie. In de studies die in de voorgaande hoofdstukken zijn beschreven, was de zender van de boodschap een onbekende van de ontvanger. Wanneer de zender en de ontvanger onbekenden van elkaar zijn, is de kans groot dat de subtiele verschillen in taalabstractie in de boodschap de waargenomen relatie tot de zender beïnvloeden, omdat de boodschap de enige bron is om de relatie met de zender op te beoordelen. Dit is niet het geval wanneer de zender en de ontvanger elkaar al kennen. Echter, we beargumenteren in dit hoofdstuk dat ook wanneer de zender en de ontvanger elkaar al kennen, er situaties kunnen zijn waarin de ontvanger toch gevoelig is voor subtiele verschillen in taalabstractie. In de eerste studie vonden we dat wanneer de zender en de ontvanger vijanden of onbekenden van elkaar zijn, een linguïstisch vertekende boodschap de waargenomen relatie van de ontvanger tot de zender beïnvloedt. Wanneer de zender en de ontvanger vrienden van elkaar zijn, beïnvloeden linguïstisch vertekende boodschappen de waargenomen relatie met de zender niet. In de tweede studie toonden we aan het ontvangen van een linguïstisch vertekende boodschap de waargenomen interpersoonlijke afstand tot de zender beïnvloedt wanneer de zender macht over de ontvanger heeft, maar niet wanneer de ontvanger macht over de zender heeft. Wanneer de ontvanger macht heeft over de zender, wordt een positief abstracte in vergelijking met een positief concrete boodschap als slijmen geïnterpreteerd, evenals een negatief concrete boodschap in vergelijking met een negatief abstracte boodschap.
In Hoofdstuk 5 is een laatste studie gepresenteerd, waarin we het effect van linguïstisch vertekende feedback op een taak op de prestatie op de erop volgende tweede taak onderzochten. Deelnemers maakten een taak waarop zij linguïstisch vertekende feedback ontvingen van de computer (een niet-persoonlijke communicatiecontext) of van de onderzoeksleider (een persoonlijke communicatiecontext). Vervolgens maten we hun prestatie op een erop volgende tweede taak evenals de motivatie voor het maken van deze tweede taak. De resultaten toonden aan dat negatief abstracte feedback in vergelijking tot negatief concrete feedback tot een lagere prestatie leidt in een persoonlijke communicatiecontext en tot een hogere prestatie in een niet-persoonlijke communicatiecontext. In de positieve condities vonden we geen effect. Belangrijk is dat het effect van feedback op prestatie gemedieerd werd door motivatie, wat suggereert dat linguïstisch vertekende feedback de motivatie om te presteren beïnvloedt.

Samengevat toonden we aan dat het ontvangen van linguïstisch vertekende boodschappen gevolgen heeft voor de ontvanger in twee belangrijke domeinen. In de eerste plaats werd aangetoond dat dergelijke boodschappen de waargenomen relatie tot de zender beïnvloeden. In de tweede plaats lieten we zien dat dergelijke boodschappen ook de prestatie op een erop volgende taak beïnvloedden. Dit werd aangetoond in verschillende domeinen en met verschillende communicatievormen. Alhoewel de effecten die we vonden klein waren, laat het feit dat we het in verschillende domeinen en met verschillende communicatievormen aantoonden zien dat het effect robuust is. Bovendien vonden we belangrijke moderatoren: het is niet alleen de boodschap sec die de waargenomen interpersoonlijke afstand tot de zender beïnvloedt, maar de boodschap beïnvloedt alleen de waargenomen afstand in een interpersoonlijke communicatiecontext. Wanneer dezelfde boodschap door de computer werd gezonden, vonden we geen effect op de interpersoonlijke afstand en vonden we een omgekeerd patroon op prestatie. In de studies beschreven in Hoofdstuk 4, lieten we zien dat het effect van de boodschap
Samenvatting

op de waargenomen interpersoonlijke afstand tot de zender afhangt van de sociale context. Wanneer de zender een vriend van de ontvanger was of wanneer de ontvanger macht over de zender had, beïnvloedde de boodschap de interpersoonlijke afstand tot de zender niet, maar wel wanneer de zender macht had over de ontvanger of een vijand of onbekende van de ontvanger was.

Met de studies beschreven in dit proefschrift is een eerste stap gezet in het demonstreren dat linguïstisch vertekende boodschappen de ontvanger van een boodschap inderdaad kunnen beïnvloeden. Het onderzoek dat in dit proefschrift wordt beschreven opent het onderzoek naar het LIB in een breder domein en breidt het LIB onderzoek uit van linguïstisch vertekend taalgebruik bij het praten over anderen naar linguïstisch vertekend taalgebruik wanneer degene wiens gedrag wordt beschreven ook de ontvanger is van de boodschap. Het onderzoek laat zien dat subtiele verschillen in taalgebruik een wereld van verschil kunnen uitmaken in belangrijke domeinen. Dit onderstreept de belangrijke rol die taal speelt in ons dagelijks leven.
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