Running Head: COMMUNICATION GOALS AND LANGUAGE ABSTRACTION

Effects of communication goals and expectancies

on language abstraction

Karen M. Douglas and Robbie M. Sutton

Keele University, United Kingdom

KEYWORDS: language abstraction, linguistic category model, expectancies,

motivation, communication

Uncorrected manuscript

Abstract

Language abstraction is an important aspect of the description of behavioral events (G.R. Semin & K. Fiedler, 1988) that is typically viewed as a medium by which describers transmit beliefs without conscious awareness or control. Complementary to this view, we propose that language abstraction may also be influenced by explicit communication goals such as aggrandizement or derogation, allowing describers to express beliefs that they do not themselves possess. We report five studies that support this proposal, showing that explicit communication goals have strong effects on language abstraction that are independent of effects of describers' beliefs or expectancies. Language abstraction is therefore both a medium for the transmission of existing beliefs and a tool by which communicators can create new beliefs.

Effects of communication goals and expectancies

on language abstraction

People use language every day to convey information to others and their language is subject to various types of bias, only some of which they will be aware. Often, people may consciously intend to communicate objectively and truthfully, but nonetheless produce utterances that are flavored by their own opinions and unconscious motivations (e.g., Franco & Maass, 1996,1999; Haskell, 1999; Maass, Salvi, Arcuri, & Semin, 1989; Ruscher, 2001). For example, journalists who intend to provide objective coverage of political events may inadvertently pepper their reports with biased language that is shaped by their privately held sympathies. On the other hand, people may consciously intend to communicate in a biased, persuasive manner. They may lie to others in order to manipulate their beliefs (e.g., Lewis & Saarni, 1993; Robinson, 1996), or communicate persuasively (e.g., Petty & Cacioppo, 1986; Schmid & Fiedler, 1998) in order to propagate beliefs to which they do not privately subscribe. For example, press agents who represent politicians may often issue claims or denials that they believe to be false. Features of the language they use in press statements and interviews may be affected by their conscious intention to frame events in ways that favor their clients. In this article, we examine the effects of *communication goals* and privately held beliefs or *expectancies* on the language used to describe events and behaviors.

One important aspect of language that is related to the description of behavioral events is *language abstraction*. Language abstraction refers specifically to the verbs and adjectives people use in their everyday descriptive language, and is operationalized by the *linguistic category model* or *LCM* (Semin & Fiedler, 1988, 1991, 1992). According to the LCM, there are four levels of language abstraction, ranging from concrete to abstract, at which people can describe behaviors. At the most concrete level, *descriptive action verbs* (e.g., "Bruce *hits* Jacko") provide a pure description of an event or behavior, with no interpretation. At the next

level, *interpretative action verbs* (e.g., Bruce *hurts* Jacko") provide a description and interpretation of the behavior. Thirdly, *state verbs* (e.g., "Bruce *hates* Jacko") refer to a psychological state of the actor rather than referring to a specific behavior, and finally, at the most abstract level, *adjectives* (e.g., "Bruce is *aggressive*") refer to specific personal characteristics of the person performing the behavior.

The conditions under which communicators use abstract or concrete language to describe events and behaviors have been the focus of much recent research. A great deal of this research has focused on the dynamics of language abstraction in intergroup situations, and has examined when people use abstract or concrete language to describe ingroup and outgroup behaviors. Maass and colleagues (1989) demonstrated that a *linguistic intergroup bias*, or *LIB* occurs such that people tend to describe positive ingroup and negative outgroup behaviors abstractly, whilst describing positive outgroup and negative ingroup behaviors concretely (e.g., Arcuri, Maass & Portelli, 1993; Cole & Leets, 1998; Maass, 1999; Maass & Arcuri, 1992, 1996; Maass, Milesi, Zabbini & Stahlberg, 1995; Ng & Chan, 1996; Rubini & Semin, 1994; Werkman, Wigboldus & Semin, 1999).

Other research suggests that the LIB is an example of a more general phenomenon related to the maintenance and transmission of *expectancies*, or privately held beliefs about the likelihood of behavioral outcomes. For example, Maass and co-workers (1995) showed that regardless of the valence of the behavior and the group membership of the actor, expectancy-consistent behaviors were encoded abstractly, while expectancy-inconsistent behaviors were encoded concretely. Biased use of language abstraction also occurs in interpersonal as well as intergroup settings (see Karpinski & von Hippel, 1996). Wigboldus, Semin and Spears (2000, see also Wigboldus, Spears & Semin, 1999) introduced the concept of the *linguistic expectancy bias* or *LEB* to describe this phenomenon. Behaviors of individuals or group members which are stable, consistent with expectations and resistant to

disconfirmation are encoded abstractly, whereas behaviors that are unstable, inconsistent with expectations and open to disconfirmation are encoded concretely (Maass, Montalcini & Bicotti, 1998; Wigboldus et al., 2000). Therefore, much research lends support to the notion that language abstraction is related to prior expectancies either about groups or individuals. Further, research indicates that levels of language abstraction influence what *others* think about the person whose behavior is described. In particular, Wigboldus and colleagues (2000) found that abstractly worded descriptions of behaviors led to stronger dispositional and weaker situational inferences than concretely worded descriptions, and that language abstraction *mediated* the effects of describers' expectancies on recipients' inferences about the protagonist whose behavior was described. Abstract language led recipients to infer more about the protagonist and less about the situation than concrete language.

Research suggests that people typically transmit their beliefs without explicit intent (Franco & Maass, 1996, 1999; Schnake & Ruscher, 1998; von Hippel, Sekaquaptewa & Vargas, 1997). Individuals are able to censor or alter their responses to explicit or outward measures of stereotyping such as the Modern Racism Scale (McConahay, Hardee & Batts, 1981), but appear unable to censor or alter the LIB. That is, when people have biased expectancies about groups, the effect of these expectancies on their linguistic choices appears to be "difficult to inhibit" (Franco & Maass, 1996, p. 339). von Hippel and colleagues (1997) also found that the LIB was correlated with implicit but not explicit measures of prejudice. These findings support the view that the LIB and the more general LEB are implicit phenomena by which individuals transmit biased expectancies without intending to do so.

Nonetheless, social psychological theories give us *a priori* grounds to suspect that language abstraction is not merely a medium of avolitional belief transmission, but may also be affected by communicators' goals. According to Higgins' (1981) communication game, communication is a purposeful social activity used to achieve goals, which may include

advocacy, derogation, ingratiation, politeness, and the construction of social consensus. Utterances do not simply express privately held beliefs but are tailored to suit communicators' goals. Other social psychological theories also present communication as a flexible, purposive activity (e.g., Edwards & Potter, 1993; Giles & Coupland, 1991; Jost & Kruglanski, 2002; Semin, Gil de Montes & Valencia, 2001). Once uttered, assertions or implications that departs from communicators' original beliefs come to affect the beliefs of recipients and even of communicators themselves (Higgins, 1999; Higgins & Rholes, 1978; Lau, Chiu, & Lee, 2001). In this sense communication, and possibly the goal-directed recruitment of language abstraction, results in the creation of information and not simply its transmission.

Congruent with this view of communication, some research suggests that language abstraction is affected not just by communicators' expectancies, but also by their motives. Maass, Ceccarelli and Rudin (1996) showed that the LIB is augmented under conditions of high threat to ingroup members from outgroup members, which presumably elicits a motive to protect the ingroup. Further, Webster, Kruglanski and Pattison (1997) demonstrated that people who were higher in cognitive *need-for-closure*, showing a general preference for certainty, preferred more abstract descriptions. However, the motives elicited in this research were not specifically *interpersonal* or *communicative* insofar as they did not directly concern tailoring messages for communicative recipients. It is also conceivable that the effects in these studies were mediated by motivated, intrapersonal shifts in participants' beliefs about the behaviors they were describing (cf. Zajonc, 1960).

In contrast, recent research that examines the effect of interpersonal processes on language abstraction increasingly suggests that communication goals *do* affect language abstraction. 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, therefore deflecting the blame from the defendant. Semin and colleagues (2001) found that people communicated more abstractly about a target liked by their communicative partner when the communicative context was co-operative and the behavior was positive, and when the context was competitive and the behavior was negative. Semin and Gil de Montes (in press) found that the LIB only occurred under conditions where descriptions had a clear purpose. Douglas and McGarty (2001, 2002) demonstrated that communicators used language abstraction differently depending on their identifiability to different types of audiences (ingroup and outgroup). 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.

In summary, participants in some studies are unable to control their language abstraction, which is determined by intrapersonal factors such as biased expectancies and need for cognitive closure (Franco & Maass, 1996, 1999; von Hippel et al., 1997; Webster, et al., 1997). However, participants in studies of interpersonal processes appear to use language abstraction flexibly as a tool to achieve explicit communication goals (e.g., Douglas & McGarty, 2001, 2002; Rubini & Sigall, 2002; Schmid & Fiedler, 1996, 1998; Schmid et al., 1996; Semin & Gil de Montes, in press; Semin et al., 2001). This apparent paradox raises important questions about the regulation and function of language abstraction. Is language abstraction under implicit or explicit control, or both? Are describers able to dissociate their language abstraction from their representation of events? Is language abstraction a medium by which information is transmitted, a tool by which it is created, or both?

Our thesis attempts to resolve the apparent discrepancy between present findings. We endorse the proposal that when describers have biased expectancies, they are unable to inhibit the effects of those expectancies on their language abstraction (Franco & Maass, 1996, 1999).

In such cases, language abstraction is best characterized as a medium of avolitional belief transmission (e.g., von Hippel et al., 1997). However, when describers intend to communicate biases that do not necessarily correspond to their private beliefs, we propose that their language abstraction responds appropriately. That is, certain strategic communication goals affect language abstraction independently of communicators' expectancies (as suggested by the findings of Douglas & McGarty, 2001, *inter alia*). For example, when communicators wish to aggrandize or derogate actors, their language abstraction may facilitate their goal independently of what they privately believe about the actors. In such cases, language abstraction is best characterized as a tool for the purposive creation of beliefs.

To explain this model, we first note that being unable to inhibit a behavior does not logically entail being unable to perform the same behavior when it facilitates a goal, as many addicts might attest (see also Higgins, 1997). Thus it consistent to assert that linguistic biases are difficult to inhibit and also that they are aroused by communication goals. Second, we do not propose that describers are consciously aware that their language abstraction varies with their communication goals. Indeed, given participants' documented inability to inhibit the linguistic expression of cognitive and other intrapersonal biases, we think it highly unlikely that they consciously control variations in language abstraction (cf. Franco & Maass, 1996; von Hippel et al., 1997). Language abstraction may therefore be analogous to autonomic physiological responses such as heart rate, which cannot normally be controlled or inhibited by thought alone, but which nonetheless respond to and facilitate our conscious goals, such as exercising. It is neither necessary nor feasible that we have introspective control of all the ways in which we are acting to achieve our conscious goals (Vallacher & Wegner, 1987).

Third, although specifying speech production processes is beyond the scope of this paper, the proposed dissociation between inhibiting and recruiting linguistic biases is psychologically plausible. More than the latter, the former is necessarily hindered by

describers' biased expectancies. When describers have formed a highly evaluative, dispositional representation of an action, the corresponding biases inherent in abstract descriptions are likely to be difficult for them to detect and therefore to censor. Compared to explicit ideological statements such as those in the Modern Racism Scale, the abstraction of descriptions of individuals' actions is presumably much harder for participants to consciously relate to social desirability and group-based biases. Therefore, communicators who might want to inhibit bias can rely neither on their own ability to detect bias in descriptions, nor differences in the apparent social desirability of descriptions. On the other hand, when communicators intend to produce language that may be biased, they can generate and select descriptions according to how well they fit their goal, rather than how free from bias they subjectively appear. For example, a communicator who wants to aggrandize a person who performs a positive behavior will, with all else being equal, find that an abstract description better fits their communication goal, given that abstract descriptions tend to imply more temporal stability and convey more information about actors (Semin & Fiedler, 1988).

Recent studies provide suggestive evidence for this novel prediction but are not conclusive in their support for it. For example, in Douglas and McGarty's (2001, 2002) studies, participants' private views of the outgroup may have become harsher in the presence of an ingroup audience. In Rubini and Sigall's (2002) study, participants' political views may have shifted toward their audiences'. Such interpersonal effects on private views are theoretically important in their own right (cf. Jost & Kruglanski, 2002; Zajonc, 1960). However, if these shifts in views were sufficient to account for language abstraction effects, expectancies would remain the proximal cause of language abstraction. The degree to which language abstraction can be used flexibly would be constrained by how much describers' expectancies are subject to intrapersonal revision in a given communicative context. In contrast, our model entails the expression of beliefs that describers have not privately adopted.

Research has yet to isolate the effects of goals on messages, and disentangle these from the effects of expectancies and other intrapersonal factors such as liking. This is our major aim in the present studies. To elicit communication goals, we explicitly instruct our participants to describe behaviors in different ways, orthogonally to their expectancies. To explicate our unique predictions, consider this example regarding our characters 'Bruce' and 'Jacko': Jacko sees Bruce hitting another person. Based on the LEB, we would expect Jacko to describe Bruce's behavior in a way that is consistent with his beliefs about Bruce, which may be positive or negative (e.g., Maass et al., 1995; Wigboldus et al., 2000). However, we propose that communication goals will have a *unique* effect on language abstraction. If Jacko wants to describe the act charitably and avoid attributing temporal stability or dispositionality, he can use concrete language. Likewise, Jacko can use more abstract language to attribute full responsibility to Bruce for his actions. We predict that the opposite will occur for positive behaviors. If Jacko wishes to describe them charitably, he will use abstract language, but if intends to describe them harshly, he will use concrete language.

Study 1

Study 1 was designed to provide the first test of the effects of explicit communication goals on language abstraction. As in previous research, participants were asked to view a series of cartoons depicting a person performing either a positive or negative behavior, and to choose a description from a list of four alternatives at differing levels of language abstraction (e.g., Franco & Maass, 1996; Maass et al., 1989; Maass et al., 1995; Maass et al., 1996; Werkman et al., 1999). Participants were asked to imagine the person as either someone they like, such as their best friend, or someone they dislike, such as their worst enemy. Positive behaviors should be expected of best friends but not of worst enemies, and negative behaviors should be expected of worst enemies but not of best friends (see Karpinski & von Hippel, 1996; Maass et al., 1995). We therefore predicted, following Wigboldus and colleagues

(2000), that language abstraction would be high when expectancy is high (positive behaviors of friends and negative behaviors of enemies) and low when expectancy is low (negative behaviors of friends and positive behaviors of enemies).

In addition to expectancy, participants were given an explicit, communication goal for each scene. In each case, participants were asked to select either *favorable* or *unfavorable* descriptions from the four alternatives. If communication goals have a unique influence on language abstraction, then we should obtain an interaction between instruction and behavior valence. Specifically the levels of abstraction of descriptions chosen for positive behaviors should be high given a favorable goal but low given an unfavorable goal. Conversely, the level of abstraction chosen for negative behaviors should be high for an unfavorable goal and low for a favorable goal. Further, we examined whether communication goals could *obviate or reverse* the LEB if they are incompatible with expectancies. That is, when communication goals compete with expectancies such as when participants are asked to describe a friend's positive behavior unfavorably, we examined whether the strength of any effect of communication goal would be enough to eliminate or reverse the LEB. If describers with low expectancies can, when suitably motivated, select language that is at least as abstract as other describers with high expectancies, this would underscore the ability for language abstraction to respond to communication goals independently of expectancies.

Method

Participants and design

A total of 32 undergraduate students (12 female and 20 male, Median age = 20.00 years) from the Victoria University of Wellington, New Zealand participated in this study voluntarily. Participants were offered a small number of sweets whilst completing the questionnaire. The study consisted of a 2 (behavior valence: positive/negative) x 2 (actor:

friend/enemy) x 2 (goal: favorable/unfavorable) mixed model design. Behavior valence and goal were manipulated within-participants and actor was manipulated between-participants.

Materials and Procedure

Participants were approached whilst at leisure on campus. A coversheet informed participants that they would be asked to observe a series of eight scenes depicting a person (Person A) doing something, and to choose a description for each scene from a number of alternatives. At this point, half of the participants were asked "to imagine that Person A is someone you *really like* (e.g., your best friend)" and half were asked "to imagine that Person A is someone you *really dislike* (e.g., your worst enemy)".

The following pages presented participants with eight scenes, each depicting a cartoon character performing either a positive or negative behavior. There were four positive behaviors: (1) picking up rubbish, (2) running, (3) walking an elderly person across the road and (4) picking another person up off the ground, and four negative behaviors: (1) spray-painting a wall, (2) telling a sexist joke, (3) throwing rubbish on the ground and (4) hitting another person. Two examples are presented in the Appendix. [2]

At the top of each page, participants were reminded to imagine that the person performing the behavior was either someone they liked (e.g., their best friend), or disliked (e.g., their worst enemy), depending on the condition. At this point, the instructions to induce communication goals were introduced. Participants were asked to choose a description that describes the scene favorably or unfavorably. For positive scenes, instructions to choose favorable descriptions were: "Out of the four descriptions below, please choose the one that describes the scene *most positively*". To choose unfavorable descriptions, they were asked to choose the option that describes the scene "*least positively*". For negative scenes, instructions to choose favorable descriptions were: "Out of the four descriptions below, please choose the one that describes the scene *least negatively*". To choose unfavorable descriptions, they were

asked to choose the option that describes the scene "*most negatively*". The four description

options represented the levels of the linguistic category model (Semin, 1994; Semin &

Fiedler, 1998, 1991) from descriptive action verbs to adjectives. For example, the four

options for the 'running' scene were as follows:

(a) A is *running* (descriptive action verb or DAV)

(b) A is *training* (interpretative action verb or IAV)

(c) A *loves* sports (state verb or SV)

(d) A is *athletic* (adjective or ADJ)

Please refer to the Appendix for a negative behavior example. The scenes were presented in a

random order and questionnaires were counterbalanced using a Latin squares design.

<div align="center">Results</div>

The four linguistic categories were weighted as per Semin & Fiedler (1989). DAVs

(most concrete) were weighted as '1'. IAVs were weighted as '2', SVs were weighted as '3'

and ADJs (most abstract) were weighted as '4'. For each scene the language abstraction score

was therefore a score between one and four.

Pilot study

We first conducted a pilot study ($N = 32$) using the same materials and expectancy

manipulation as Study 1, to establish that we could replicate the linguistic expectancy bias

with these materials and manipulation, so did not manipulate communication goals in this

study. The data were entered into a 2 (behavior valence: positive/negative) x 2 (actor:

friend/enemy) mixed model design with repeated measures on behavior valence. Results

revealed no significant main effects for behavior valence, $F(1,30) = 3.21$, *ns.*, or actor, F

$(1,30) = 1.27$, *ns.*, but did reveal a significant interaction between behavior valence and actor

as predicted, thus replicating the LEB, $F(1,30) = 14.32$, $p < .005$, $\eta^2 = .32$. For positive

behaviors, participants chose more abstract descriptive alternatives for friends ($M = 2.17$) than

enemies (M = 1.56), t (30) = 4.21, p < .001. There was no difference in the negative behavior

condition, but this pattern of results is not atypical of research in this area (e.g., see Maass et

al., 1989, Experiment 2; Schmid et al., 1996). Also, participants chose more abstract

descriptive alternatives for negative behaviors (M = 2.22) than positive behaviors (M = 1.56)

in the enemy condition, t (30) = 3.92, p < .001. There was no difference in the friend

condition. Having therefore established that the experimental materials yielded the expected

LEB, we continued with our test of the effects of explicit communication goals.

The data for the main study were entered into a 2 (behavior valence:

positive/negative) x 2 (actor: friend/enemy) x 2 (goal: favorable/unfavorable) mixed model

design with repeated measures on behavior valence and goal. Means are reported in Table 1.

All planned comparisons reported in this paper are directional and are therefore one-tailed

unless otherwise indicated.

Linguistic Expectancy Bias

There was a significant interaction between behavior valence and actor, replicating the

LEB, F (1,30) = 4.74, p < .05, η^2 = .14 and supporting our first hypothesis. For positive

behaviors, participants chose more abstract descriptive alternatives for friends (M = 2.45) than

enemies (M = 1.80), t (30) = 2.75, p < .01. There was again no difference in the negative

behavior condition. Also, participants chose more abstract descriptive alternatives for

negative behaviors (M = 2.45) than positive behaviors (M = 1.80) in the enemy condition, t

(15) = 3.81, p < .001. There was no difference in the friend condition.

Explicit communication goals

In accordance with our second hypothesis, there was a significant interaction between

favorability of goal and behavior valence, F (1,30) = 48.44, p < .001, η^2 = .62. Planned

comparisons revealed that when participants were instructed to choose favorable descriptions

for positive behaviors, they chose more abstract descriptions (M = 2.64) than when they were

asked to choose unfavorable alternatives for positive behaviors (M = 1.61), t (30) = 4.87, p <

.001. Conversely, when participants were asked to choose unfavorable alternatives for

negative behaviors, they chose more abstract descriptions (M = 3.01) than when they were

asked to choose favorable alternatives (M = 1.83), t (30) = 6.08, p < .001. Explicit

communication goals therefore influenced the alternatives that describers chose for positive

and negative behaviors.

We also examined the language choices participants made where they were asked to

select descriptions which describe their enemies' positive behaviors favorably and their

friends' positive behaviors unfavorably. We found that with these goals, participants chose

descriptions of their enemies' positive behaviors that were as abstract (M = 2.22) as those

chosen for their friends' positive behaviors (M = 1.84), two-tailed t (30) = 1.08, ns. Therefore

for positive behaviors, the LEB was obviated when instructions conflicted with prior

expectancies. We also examined the language choices participants made when they were

asked to select descriptions which described their friends' negative behaviors unfavorably and

their enemies' negative behaviors favorably. Here, participants chose more abstract

descriptions of their friends' negative behaviors (M = 3.01) than their enemies' (M = 1.78),

two-tailed t (30) = 4.34, p < .01. For negative behaviors, the LEB was therefore significantly

reversed when goal conflicted with expectancy. As expected, there was no three-way

interaction between behavior valence, expectancy and goal.

Discussion

Our results support previous findings that descriptions are strongly influenced by

intrapersonal factors such as their prior expectancies about events (e.g., Maass et al., 1995;

Wigboldus et al., 2000). More relevant to our unique hypotheses, results showed that the

explicit goals to select a favorable or unfavorable description strongly affect the abstraction of

the chosen alternative. Several aspects of the results also suggest that, as predicted by our

model, the effects of explicit communication goals can be orthogonal to those of expectancy. In particular, the effect size of goals was substantially larger than that of expectancy; goals obviated and even reversed the LEB when the two biases were placed in conflict. The lack of a three-way interaction between expectancies, goals, and valence shows that the effects of expectancies and goals were statistically independent.

However, a potential limitation of these results relates to our operationalization of expectancy. The best friend/worst enemy distinction may be problematic because individuals are likely to be motivated to aggrandize friends, and thus choose favorable descriptions, and derogate enemies and thus choose unfavorable descriptions, in much the same way as group members are often motivated to favor their ingroups and to derogate their outgroups in order to maintain positive collective self-esteem (e.g., Branscombe & Wann, 1994; Jetten, Spears & Manstead, 1997; Reynolds, Turner & Haslam, 2000). The net effect of this may have been an accentuation of the apparent effect of expectancies, for which the friend/enemy manipulation was intended as a proxy, at the expense of the apparent effect of communication goals. We aimed to remove this confound and re-test our hypotheses in a second study.

<center>Study 2</center>

In order to remove the possible confound in Study 1, our second study employed a manipulation of expectancy that is less likely to invoke biased communication goals than friendship and enmity. Specifically, we provided participants with consistency information, asking participants to imagine that the protagonist behaves in the manner depicted *very often* or *very rarely*. In causal attribution research, consistency refers to the frequency with which a target person performs the target behavior (cf. Cheng & Novick, 1990; Hilton & Slugoski, 1986; Kelley, 1967; McArthur, 1972; Rudolph, 1997; Sutton & McClure, 2001; for a review of the relationship between causal attribution and language abstraction see Rudolph &

Försterling, 1997). Unlike friendship and enmity, this manipulation does not entail an enduring relationship eliciting motives to mitigate, enhance, or derogate.

This modification also serves to illuminate an important theoretical point. Throughout the literature on linguistic biases, researchers have operationalized expectancy by the use of social categories. For example, participants have been asked to describe behaviors that are stereotypically male or female, and by people belonging to different racial, ethnic, sporting or other social groups. Further, experimental participants have often been members of one of the target categories. While Maass and co-workers' (1995) friend/enmity manipulation is clearly more individuated and less categorical than the ingroup/outgroup manipulation, 'friend' and 'enemy' arguably function as social categories from which participants recall particular exemplars. It is also likely that friends and enemies are frequently members of ingroups and outgroups respectively. The present study is the first therefore to directly test the hypothesis that an actor's individual history of behavior is sufficient to affect language abstraction.

We therefore asked participants to imagine that the protagonist behaves in the manner depicted *very often*, or *very rarely*. Our predictions regarding communication goal are conceptually identical to those of Study 1. High expectancy conditions in Study 2 are equivalent to friends doing good things and enemies doing bad things; low expectancy conditions are equivalent to friends doing bad things and enemies doing good things. In place of the interaction between actor and valence in Study 1, we predict a main effect of the expectancy manipulation in Study 2. As in Study 1, we predict an interaction between communication goals (favorable and unfavorable) and valence.

<center>Method</center>

Participants and design

A total of 32 undergraduate students (24 female and 8 male, Median age = 19.00 years) from Massey University at Albany, New Zealand participated in this study voluntarily.

Participants were offered a small number of sweets whilst completing the questionnaire. The study consisted of a 2 (behavior valence: positive/negative) x 2 (expectancy: consistent/inconsistent) x 2 (goal: favorable/unfavorable) mixed model design. Behavior valence and goal were manipulated within-participants and expectancy was manipulated between-participants.

Materials and procedure

This study used the same scenes as in Study 1. However, instead of being asked to imagine each protagonist as a friend or enemy, participants in the expectancy-consistent condition were asked: "In each case, we would like you to imagine that Person A *very often* behaves in the manner depicted in the scene". Participants in the *expectancy-inconsistent* condition were asked: "… that Person A *very rarely* behaves in the manner depicted in the scene". Communication goals were the same as in Study 1. Again, all scenes were presented in a random order and questionnaires were counterbalanced using a Latin squares design.

Results

The data were entered into a 2 (behavior valence: positive/negative) x 2 (expectancy: consistent/inconsistent) x 2 (goal: favorable/unfavorable) mixed model ANOVA with repeated measures on behavior valence and goal. Means are presented in Table 2.

Linguistic Expectancy Bias

As predicted, a main effect for expectancy emerged such that participants chose more abstract descriptions to describe behaviors that were 'often' performed ($M = 2.43$) than 'rarely' performed ($M = 2.13$), $F (1,30) = 4.88$, $p < .02$, $\eta^2 = .14$, thus replicating the LEB.

Explicit communication goals

As expected, there was a significant interaction between favorability of goal and behavior valence, $F (1,30) = 81.22$, $p < .001$, $\eta^2 = .73$. Participants asked to select favorable descriptions for positive behaviors chose more abstract descriptions ($M = 2.97$) than those

asked to select unfavorable descriptions ($M = 1.31$), $t (30) = 9.19$, $p < .001$. Also, participants asked to choose unfavorable descriptions for negative behaviors chose more abstract descriptions ($M = 3.13$) than those asked to choose favorable descriptions ($M = 1.70$), $t (30) = 6.95$, $p < .001$.

We also found that with a favorable goal, participants chose options to describe unexpected positive behaviors that were more abstract ($M = 2.84$) than those chosen for expected positive behaviors with an unfavorable goal, ($M = 1.47$), $t (30) = 4.58$, $p < .001$, reversing the LEB.   Similarly, for the unfavorable goal, participants chose more abstract descriptions for unexpected negative behaviors ($M = 2.97$) than expected negative behaviors for the favorable goal ($M = 1.87$), $t (30) = 3.39$, $p < .001$, also significantly reversing the LEB. There was no three-way interaction between valence, expectancy and goal, $F (1,30) <1$, *ns*.

Discussion

The results demonstrate that a communication goal can strongly influence how communicators choose to describe events for which they have target-based expectancy information, that is not confounded by social motivations such as to esteem friends and derogate enemies. As in Study 1, the effect of communication goal on language abstraction was independent of those of expectancy. When communication goals compete with prior expectancies, they may override them.

Study 3

In Studies 3a and 3b, we aimed to extend the applicability of our findings by allowing participants to *freely describe* the scenes rather than choosing an option as in previous studies. It remains to be seen whether people are able to freely make different linguistic choices in the more realistic situation where they are asked to describe situations in their own words. In Study 3a, participants were asked to describe the scenes either favorably or unfavorably as in Studies 1 and 2. To maximize continuity with the design of Study 3b, we assigned half of the

participants to an 'enhance valence' goal condition, in which they were instructed to describe positive behaviors favorably and negative behaviors unfavorably. The other participants were assigned to a 'diminish valence' condition in which positive behaviors were described unfavorably, and negative behaviors favorably. We predicted a main effect of this overall goal, such that participants trying to enhance the valence of behaviors would use more abstract language than those trying to diminish valence. In Study 3b, participants were explicitly given a goal to influence the expectancies of potential recipients: specifically, to create the impression that the actor often or rarely performs the depicted behavior. The significance of this goal is that participants seek not only to frame the behavior in certain ways but to deliberately affect the beliefs formed by recipients of their message. For Study 3b, we also predict a main effect of the communication goal, which does not depend on the valence of the behavior. We included a control in Study 3b so that we could compare participants' responses with those who had received no instructions. In doing so, we could ascertain a 'baseline' of language abstraction. This enabled us to examine whether communicators use more abstract language than baseline in attempts to increase others' beliefs that behaviors are expected, and more concrete language than baseline in attempts to decrease others' beliefs that behaviors are expected. Expectancy was not manipulated in these studies because we aimed to assess the effects of communication goals in the absence of strong expectancies.

<div align="center">Study 3a</div>

<div align="center">Method</div>

Participants and design

A total of 31 undergraduate students (22 female and 9 male, Median age = 23.00 years) from Massey University at Albany, New Zealand participated in this study. Participation was voluntary and participants were offered a small number of sweets whilst

completing the questionnaire. The study consisted of a 2 (behavior valence: positive/negative) x 2 (overall goal: 'enhance valence'/'diminish valence') mixed model design. Valence was manipulated within-participants and overall goal was manipulated between-participants. The manipulation of goal is explained in more detail below.

Materials and Procedure

On the coversheet, participants were informed that they would be asked to describe some scenes *in their own words*. On the pages following the cover sheet, participants were asked to look carefully at each scene. In the 'enhance valence' goal condition, positive behaviors were presented with the instruction to "Please write the most positive description of this scene that you can, by completing the following sentence", whereas negative behaviors were instructed to write the "most negative" descriptions that they could. In the 'diminish valence' condition participants were asked to write "least positive" and "least negative" descriptions of positive and negative behaviors respectively. As in Maass and colleagues (1989), participants were then given a sentence to complete that began with: "Person A…" so that participants would make their responses about Person A's behavior and not other peripheral factors present in the scene. As in previous studies, all scenes were presented in a random order and questionnaires were counterbalanced using a Latin squares design.

Results

Due to the free-response nature of the study, it was necessary to code the language abstraction participants used to describe the scenes. As in previous studies, DAVs were coded as '1', IAVs as '2', SVs as '3'and ADJs as '4'. To give an example, in the "least positive" condition for the running example provided earlier, one participant wrote "Person A is training for a big fight". In this case, the word "training" was coded as an IAV, yielding an overall abstraction score of 2 for the response. Typically, participants' responses were one sentence long and contained either one, or a small number of words that were suitable for

coding via the LCM. For the "least" condition, two other examples were as follows: "Person A is picking up rubbish" and "Person A is painting the wall". For the "most" condition, two other examples were as follows: "Person A is caring of the environment" and "Person A is violent". After coding all available verbs and adjectives pertaining to the behavior depicted in the scene, a participant's value of language abstraction was obtained using the formula:

Abstraction = (DAVx1 + IAVx2 + SVx3 + ADJx4)/(DAV + IAV + SV + ADJ)

(where DAV, IAV, SV and ADJ represent the number of occurrences of each category). An independent rater coded all of the communications and interrater reliability was acceptable at $r = .89$. Values of language abstraction were then entered into a 2 (behavior valence: positive/negative) x 2 (goal: 'enhance valence'/'diminish valence') mixed model ANOVA with repeated measures on behavior valence. Means are presented in Table 3.

There was no main effect for behavior valence, $F (1,29) <1$, *ns*. As expected, there was a significant main effect of overall goal, such that participants with the goal to enhance valence used more abstract language ($M = 2.40$) than those with the goal to diminish valence, ($M = 1.73$), F $(1,29) = 10.76$, $p < .002$, $\eta^2 = .27$. There was no interaction between behavior valence and overall goal, $F (1,29) = 3.82$, *ns*. Therefore, we replicated our original communication goal effect in a free-response paradigm. As one may expect, the variance accounted for by our results less than in our forced-choice studies. Nevertheless, our findings strongly support our assertion that communication goals influence descriptions of events.

<center>Study 3b</center>

<center>Method</center>

Participants and design

A total of 28 undergraduate students (17 female and 11 male, Median age = 22.00 years) from Massey University at Palmerston North, New Zealand participated in this study. Participation was voluntary and participants were offered a lollipop whilst completing the

questionnaire. The study consisted of a 2 (behavior valence: positive/negative) x 3 (goal:

'high frequency impression'/'low frequency impression'/control) mixed model design.

Behavior valence was manipulated within-participants and goal was manipulated between-

participants.

Materials and Procedure

The procedure of Study 3b was similar to that of Study 3a. However, instead of

asking participants to describe behaviors favorably or unfavorably, we instructed participants

to attempt to *influence* the expectancies of a potential recipient and we introduced a control

condition where participants received no goal instructions. In the goal condition to create the

impression of *high frequency* for the behavior, participants were asked: "Imagine that you are

describing Person A's behavior to someone else. You want them to think that Person A *often*

behaves that way. Please describe the scene by completing the following sentence:".

Participants were again given a sentence to complete that began with: "Person A…".

Participants in the goal condition to create an impression of *low frequency* for the behavior

were given the same introduction to imagine that they were describing Person A's behavior to

someone else, but instead of describing Person A's behavior as if they behaved that way

often, participants were asked: "You want them to think that Person A *rarely* behaves that

way". In addition to testing another communication goal specifically related to manipulating

expectancies, this method also allowed us to use the same goal instruction for both positive

and negative behaviors. In the control condition, participants were simply given the

introduction and no goal. Finally, as in previous studies, all scenes were presented in a

random order and questionnaires were counterbalanced using a Latin squares design.

Results

As in Study 3a, responses were coded for verbs and adjectives and entered into the

formula to obtain a total abstraction score for each response. For example, in the *high*

frequency condition, one participant's response for the scene where person A throws rubbish on the ground was "Person A does not care about much, especially his environment". In this example, the word "care" was coded as an SV, yielding an overall abstraction score of 3 for that response. As in Study 3a, participants' responses were typically one sentence long and contained either one, or a small number of words that were suitable for coding via the LCM. For the *high frequency* condition, two other examples were as follows: "Person A is a very helpful guy" and "Person A is a horrible, mean person who beats people up for no reason". For the *low frequency* condition, two examples were as follows: "Person A is helping the old lady across the street", and "Person A has just punched the other guy". An independent rater coded all of the communications and interrater reliability was acceptable at $r = .89$. Values of language abstraction were then entered into a 2 (behavior valence: positive/negative) x 3 (goal: 'high frequency impression'/'low frequency impression'/control) mixed model ANOVA with repeated measures on behavior valence. Means are presented in Table 4.

There was no main effect for behavior valence, $F (1,25) < 1$, *ns*. and no interaction between behavior valence and goal, $F (2,25) < 1$, ns. so the analysis was collapsed across this variable. As expected, there was a significant effect of communication goal, $F (2, 25) = 5.20$, $p < .015$, $\eta^2 = .29$. Language abstraction was significantly higher in the high frequency goal condition ($M = 2.67$) than in the low frequency goal ($M = 2.27$), $t (17) = 2.63$, $p < .01$, and control conditions ($M = 2.06$), $t (17) = 2.87$, $p < .01$. The difference in language abstraction between the low frequency and control groups was not significant, $t (16) < 1$, *ns*.

<div align="center">Discussion</div>

Studies 3a and 3b replicated our communication goal effect in a free-response paradigm. This shows that when communicators generate their own descriptions, their explicit communication goals affect language abstraction as when communicators select from a range of descriptions. Further, in Study 3b we replicated our results using a different

communication goal instruction. Here, the intention to create an impression of the actor in the mind of a potential recipient affected language abstraction. This impression was not directly concerned with valence, but with the presumed frequency of the behavior. Study 3b also suggests that communicators who intend to create the impression of high behavioral frequency increase their language abstraction, but communicators who intend to create the impression of low behavioral frequency do not *de*crease their language abstraction, relative to those who have no explicit goal to manipulate recipients' impressions.

The next study we report addresses the issue of ecological validity. It remains to be tested whether or not explicit, interpersonal communication goals play a role in people's descriptions of 'real-world' events and behaviors, as do expectancies (e.g., Karpinski & von Hippel. 1996; Maass et al., 1995; von Hippel et al., 1997; Wigboldus et al., 2000). In Study 4, we therefore set out to replicate our results by asking participants to provide free-response descriptions of actual events.

Study 4

In Study 4, we asked participants to think of a person they know, and to describe something that this person had done recently. We asked participants to think of something that was either characteristic or uncharacteristic of the person they know, and either to simply describe the behavior (control condition), or to describe the behavior in a way that is contrary to their expectation. For example, if the behavior was expected, participants in this condition ('misleading impression' condition) were asked to describe it as if it was unexpected. Unlike our previous studies, but like many communication settings in everyday life, Study 4 subjected participants to variables arising from their relationship with the protagonist (e.g., liking, loyalty, and rivalry) and the recipient (e.g., accountability, evaluation apprehension). More important, the expectancies in Study 4 are on-going, pre-experimental and are embedded in a range of experiences, emotions and attitudes relating to the target. This is

important as people may be able to override recent, experimentally induced expectancies in order to achieve a communication goal, but may *not* be able to override their own, long-held beliefs and attitudes. In this study, we predicted an interaction between goals and expectancies, because in one goal condition, where no explicit biasing goal is elicited, abstraction should be congruent with the LEB, whereas in the misleading goal condition, abstraction should show the reverse pattern.

Participants and design

A total of 86 male and female undergraduate students (72 female and 14 male, Median age = 26.00 years) from Massey University at Albany, New Zealand participated in this study. Participation was voluntary and participants were offered a lollipop whilst completing the questionnaire. The study consisted of a 2 (expectancy: consistent/inconsistent) x 2 (goal: control/'create misleading impression') between-participants design.

Materials and Procedure

Participants were asked to think of a person they know, this being either someone they like or dislike. They were informed that they would be writing a description about something this person has done recently. They were also informed that their description would be given to someone else who would then make judgements about the behavior being described. After writing some brief biographical information about this person (see also Wigboldus et al., 2000), participants were asked to think of something that this person had done recently. In the *characteristic* behavior condition, describers were asked to "think of something that is *characteristic* of them. That is, you should think of a behavior that is typical of this person". In the *uncharacteristic* behavior condition, participants were asked to "think of something that is *uncharacteristic*" and hence "not typical of this person".

After thinking about the behavior, participants were asked to respond to a series of questions relating to their dispositional inferences about the actor (see also Wigboldus et al.,

2000). These were "To what extent do you think the behavior of this person was due to the situation in which he or she found him or herself?", "To what extent do you think the behavior was due to his or her personality?" (both items were on a scale from '1' not at all to '7' very much), "Please estimate the percentage of future occasions in which you think this person will repeat the behavior" (participants were asked to write a number between 0 and 100), and "To what extent do you think the behavior of this person was due to the situation or his or her personality?" (on a scale of 1 'situation' to 100 'personality). The order of these questions was randomized. The responses were totaled to obtain a z-score for dispositional inferences. This z-score served as a manipulation check of the expectancy manipulation.

Participants were then asked to write their descriptions. Firstly, they were informed that their description would be given to someone else who would make some judgements about the person's behavior being described. They were also reminded that "the behavior you have thought of is *characteristic* [or *uncharacteristic*] of the person you know". At this point, the explicit communication goal was introduced. Participants in the control condition (no instruction) were asked simply to "describe the behavior". However, those in the 'misleading impression' communication goal condition were given the goal to describe the behavior in the opposite way to the typicality of the behavior. For example, if participants were asked to describe a characteristic behavior, they were instructed as follows: "However, when you are describing the behavior, I would like you to create the impression that the behavior is actually *uncharacteristic* of the person you know". The opposite was the case for those in the uncharacteristic behavior condition.

Results

As in Studies 3a and 3b, responses were coded for verbs and adjectives and entered into the formula to obtain a total abstraction score for each response. For example, in the characteristic/control condition, one participant's response was "The person I know wakes up

in the middle of the night and asks if he is invisible". In this example, "wakes" and "asks" were both coded as DAVs, yielding an overall abstraction score of 1 for that response. In contrast to Studies 3a and 3b, participants' responses ranged from one to five sentences in length, with an average of approximately two sentences. They contained a range from one to 10 words that were suitable for coding via the LCM with an average of approximately three words. For the uncharacteristic/control condition, one example was "The person I know had stayed at home to study on the last 3 weekends". For the uncharacteristic/'create misleading impression' condition, an example was as follows: "The person I know is romantic. He is able to give flowers to his wife." For the characteristic/'create misleading impression' condition, one example was as follows: "This person I know got out a lot of videos from the video store. Due to events beyond his control he never returned them." An independent rater coded all of the communications and interrater reliability was acceptable at $r = .90$.

The manipulation of expectancy was successful. Participants' dispositional inferences of characteristic behaviors were higher ($z = 2.33$) than dispositional inferences for uncharacteristic behaviors ($z = -2.46$), $t (74) = 8.63$, $p < .0001$. The reduced number of degrees of freedom is due to the fact that several participants did not complete all items, and had to be removed from this analysis. Values of language abstraction were then entered into a 2 (expectancy: characteristic/uncharacteristic) x 2 (goal: control/'create misleading impression') between-participants ANOVA. Means are presented in Table 5. There was a significant interaction between expectancy and goal, $F (1,82) = 7.91$, $p < .01$, $\eta^2 = .09$. As predicted, participants in the control condition with a mere description goal demonstrated the LEB, describing characteristic behaviors more abstractly ($M = 2.28$) than uncharacteristic behaviors ($M = 1.90$), $t (41) = 1.99$, $p < .03$. Participants intending to create a misleading impression showed the opposite pattern to the LEB, describing uncharacteristic behaviors more abstractly ($M = 2.32$) than characteristic behaviors ($M = 1.91$), $t (41) = 1.99$, $p < .03$.

Discussion

The results of Study 4 replicated, integrated and extended our findings from Studies 1, 2, 3a and 3b. As in Studies 1 and 2, communication goals to frame behaviors in certain ways were sufficient to override describers' expectancies, but this time when participants freely generated their own descriptions (cf. Studies 3a and 3b). Unlike our previous studies, the communication goal elicited by the interpersonal context affected language abstraction even in the presence of pre-experimental expectancies and, most likely, other extraneous factors such as liking, loyalty, and rivalry. This provides evidence for the robustness and generality of the communication goal effect.

Study 5

Throughout this research, we have demonstrated that language abstraction can reflect the explicit goals of describers to communicate information in certain ways. Communicators' messages contain implicit information that reflects not only their expectancies but their conscious goals at the time of communication. However, in our research we have not yet considered the possibility that an inherent confound may exist between language abstraction and the valence of descriptions. The more abstract a description is, the more it is likely to be strongly valenced (Semin & Fiedler, 1988). [3] The degree to which a description is valenced is likely to be readily accessible to conscious awareness. For example, language users may consider "athletic" to be a more positive description than "running". Likewise, people may consider "aggressive" to be more negative than "hitting". Throughout all of our studies, participants may simply have been selecting and generating descriptions on the basis of how valenced they are, irrespective of their communication goal. This strategy may be appropriate when the goal is to frame valenced behaviors in a strongly valenced way, as in Studies 1, 2 and 3a, and is also consistent with the effects observed in Studies 3b and 4. However, if the effects in all of these studies can be explained entirely by the valence of chosen descriptions,

this would suggest first that communicators may not be able to recruit language abstraction when it is not confounded with valence; for example when behaviors themselves are not necessarily valenced but are merely consistent or inconsistent with stereotypes (cf. Wigboldus et al., 2000). Second, it would suggest that language abstraction effects are merely a 'side-effect' of those on valence.

In Study 5, we attempted to address this issue empirically by eliminating the valence and abstraction confound statistically. In part 1 of Study 5 we asked participants to rate the valence of the descriptive alternatives available in Studies 1 and 2. In the second part of the study, a different set of participants were asked to view either positive or negative scenes and were asked to choose the LCM alternative that either (a) paints Person A as the type of person who often acts in the way depicted, or (b) *avoids* painting Person A as the type of person who often acts in the way depicted, thus creating a communication goal. If the effects of a communication goal on abstraction are a mere side-effect of valence, then valence should mediate the effect of communication goal on language abstraction (Baron & Kenny, 1986).

Part 1 Method

Participants and Design

A total of 32 male and female undergraduate students from Keele University, United Kingdom participated in this part of the study. Participation was voluntary and participants were offered a small number of sweets whilst completing the questionnaire.

Materials and Procedure

Participants were given a single sheet consisting of information and a table. Participants were informed that in the table, they would read a series of descriptions of a person (called Person A) doing various things. The descriptions in the table consisted of the descriptions used for the forced-choice Studies 1 and 2. There were four descriptions for each behavior ranging from most concrete (DAV, e.g., "A is running") to most abstract (ADJ, e.g.,

"A is athletic") and there were eight sets of descriptions, making a total of 32 descriptions for each participant. Participants were simply asked to rate how positive or negative they thought each description was. They were asked to provide their responses on a scale from 1 'very negative' through 4 'neutral' to 7 'very positive'. The descriptions appeared in a random order throughout the table. Valence ratings were averaged across the 32 participants for each of the 32 descriptions so that each DAV, IAV, SV and ADJ for each scene had a valence score between one and seven associated with it. The valence means are presented in Table 6.

Part 2 Method

Participants and Design

A total of 52 undergraduate students (46 female and 6 male, Median age = 21.00 years) from Keele University, United Kingdom participated in this part of the study. None of these participants completed the initial part of the study. Participation was voluntary and participants were offered a small number of sweets whilst completing the questionnaire. The study consisted of a 2 (behavior valence: positive/negative) x 2 (goal: 'create impression'/ 'avoid creating impression') between-participants design.

Materials and Procedure

Participants completed the experiment in a scheduled laboratory class. A coversheet informed participants that they would be asked to observe a series of four scenes depicting a person (Person A) doing something, and to choose a description for each scene from a number of alternatives. At this point, half of the participants were asked "to imagine that you wanted to paint Person A as the *kind of person* who often acts this way, and select the option that best meets your goal" and half were asked "to imagine that you wanted to *avoid* painting Person A as the kind of person who often acts this way, and select the option that best meets your goal".

The following pages presented participants with four scenes from the original eight used in previous studies. Half of the participants received the positive scenes, and half

received the negative scenes. After each scene, participants were reminded to imagine that

they wanted to paint Person A as the kind of person who often acts this way (or to avoid

doing so) depending on the condition. Participants were then asked "Which of the following

descriptions would you pick if you had to pick one?" and were then presented with the four

LCM alternatives as were used in Studies 1 and 2. The scenes were presented in a random

order and questionnaires were counterbalanced using a Latin squares design.

Results and Discussion

Mean valence responses from part one of the study were matched with the second set

of participants' language choices in part two. For example, every time a participant chose the

DAV for the running example, the valence value of 5.06 was entered in the data file. The data

file therefore contained valence and abstraction values for each scene. We calculated mean

language abstraction for each participant by dividing the total abstraction for the four scenes

by four. We calculated total mean valence for each participant by dividing the total valence

for the four scenes by four. For the mediation analysis, valence scores were then calculated as

absolute deviations from four, which was the neutral midpoint on the scale used in part one.

Therefore, each valence score was simply expressed as a deviation from neutral.

The data were entered into a 2 (behavior valence: positive/negative) x 2 (goal: 'create

impression'/'avoid creating impression') between-participants ANOVA. Means are presented

in Table 7. As there were no main effects or interactions for behavior valence, we collapsed

across this variable in subsequent analyses.

Explicit communication goal

As expected, there was a significant main effect for goal, $F(1,51) = 15.92$, $p < .0001$,

$\eta^2 = .24$. Participants who were asked to create the impression that Person A is the kind of

person who often acts in the way depicted, selected more abstract descriptions ($M = 2.37$)

than those who were asked to avoid creating that impression ($M = 1.60$).

Mediational analysis

To determine whether the communication goal effect on language abstraction was mediated by the valence of descriptions, we followed the procedure outlined by Baron and Kenny (1986). Step 1 showed that the independent variable (communication goal) affected language abstraction, replicating our ANOVA, $\beta = .49$, $t (51) = 3.99$, $p < .001$. The candidate mediator (description valence) was related to language abstraction, $\beta = .44$, $t (51) = 3.47$, $p < .005$, replicating results obtained by Semin and Fiedler (1988). The next step showed that the independent variable was strongly related to the candidate mediator, $\beta = .58$, $t (51) = 5.06$, $p < .001$. The final step showed that when both communication goal and description valence were entered as predictors of language abstraction, the effect of communication goal remained significant, $\beta = .36$, $t (51) = 2.38$, $p < .02$, but description valence was not related to language abstraction, $\beta = .23$, $t (51) = 1.56$, *ns*. Description valence does not qualify as a complete mediator of the communication goal effect, because controlling for valence does not obviate the effect. Neither does valence qualify as a partial mediator of the communication goal effect, because it is not related to language abstraction when communication goals are statistically controlled for. [4] We note that this is the first demonstration that effects of an independent variable on language abstraction are not explained by the valence of descriptions. Study 5 shows that the communication goal effect cannot be ascribed to a methodological confound or to describers' indiscriminate adoption of a crude valence-oriented strategy.

General Discussion

The present studies are the first to manipulate communication goals and expectancies independently, allowing us to isolate and compare their effects on language abstraction. The present studies show that explicit communication goals strongly influence how abstractly behavioral events are described. It is important to stress the robustness of this effect over a range of conditions, goals, and tasks, including forced choice tasks (Studies 1, 2, and 5) and

free response tasks (Studies 3a, 3b, and 4); including goals to frame behaviors positively or negatively (Studies 1, 2, and 3a), to create the impression that actors perform the behavior frequently or infrequently (Study 3b), to mislead recipients about whether the behavior is characteristic or uncharacteristic of the actor (Study 4), and to create or avoid creating the impression that the behavior is characteristic (Study 5). Supporting our model, the effects of communication goal are independent of and typically overturn the effects of expectancies on language abstraction, whether these are experimentally created by imagining that an actor is a friend or enemy (Study 1), by consistency information (Study 2), or are pre-experimental and embedded in relationships with peers (Study 4).

Previous research has shown that language abstraction is influenced not just by expectancies, but by intrapersonal factors such as affective reactions (e.g., Maass et al., 1996) and cognitive need-for-closure (Webster et al., 1997). Other research highlights the importance of aspects of the interpersonal relation between describers and recipients, such as identifiability (Douglas & McGarty, 2001, 2002), political agreement (Rubini & Sigall, 2002), and acting as a defense or prosecution attorney (Schmid & Fiedler, 1996, 1998; Schmid et al., 1996). Uniquely, the present research shows that communication goals to shape messages and cause recipients to form certain beliefs can affect language abstraction independently of describers' own expectancies. In turn this suggests that attorneys, political spokespeople, and similarly motivated describers can recruit language abstraction to propagate ideas that they do not privately share.

Our findings and model complement current thinking about language. In particular, Semin (2000) argues that interpersonal context is "critical in shaping the structure of a message" (p.606). Semin further argues that people use language as a "resource to structure the representation of reality in a particular way in order to shape and influence the cognitive processes of the *recipient* of a message" (p. 601). Also, Edwards and Potter (see also

Edwards & Potter, 1999, Fiedler & Schmid, 1999, and Schmid & Fiedler, 1999, for an

interesting debate about discursive approaches to language and the LCM) argue that language

is "an arena for social action, with constructive and pragmatic relationships to world and

thought" (p. 38). Our findings show that language abstraction can be precisely such a tool for

social action and construction of reality insofar as it allows describers, motivated by

interpersonal factors, to convey novel ideas to recipients about behaviors and actors.

This creative recruitment of language abstraction is much more sophisticated and

subtle than the explicit, deceitful assertion of beliefs that describers do not have but wish their

recipients to form. Rather, participants in our studies used patterns of language in which the

target belief, for example, that an observed behavior is characteristic of the actor, was merely

implicit. Our participants were not simply lying, but literally "structuring the representation

of reality" (Semin, 2000, p. 601). Previous research on language abstraction shows that it is a

'leaky' channel through which communicators may betray their biases (e.g., Franco & Maass,

1996; von Hippel et al., 1997). The present research shows that it is also a subtle and

important channel available to communicators who intend to convey misleading impressions

of others. For communicators with misleading intent, language abstraction has the particular

advantage that it conveys beliefs without the accountability entailed by their explicit

expression. Interestingly, language abstraction is a tool that deceitful communicators may not

realize they are using, and is therefore free of guilt or effort, unlike other aspects of deceit

such as monitoring one's expressions and getting one's story straight (Ekman, 2001).

The efficacy of explicit goals such as misleading one's audience in the present studies

is important in showing that language abstraction is not an entirely implicit phenomenon. For

this reason, we have focused on manipulating explicit communication goals in the present

studies. The explicit instructions used in the present studies also allows us to be confident

that participants were indeed setting out to tailor their messages. However, as noted by Bargh

(1996; Bargh, Gollwitzer, Lee-Chai, Barndollar & Troetschel, 2001), not all goals are conscious. We think it likely that in the rush of everyday communication, in which multiple objectives often need to be met by each utterance, individuals form implicit communication goals to, for example, be polite, or to aggrandize an actor. These kinds of implicit goals are likely to affect language abstraction as much as the explicit goals featured in the present studies. With regard to the creative function of language abstraction, the most important feature of our findings is the ability of communication goals, whether implicit or explicit, to cause messages to differ from private expectancies. The importance of implicit processes, and their interplay with explicit goals and expectancies, is an important issue for further research. For example, in the present studies, creative communication goals were externally induced. It remains to be seen how readily participants spontaneously form explicit goals that are at odds with their expectancies and other intrapersonal factors such as liking, given that even the formation of explicit goals may be under automatic control (Bargh et al., 2001).

Thus far in our discussion, we have focused on describers' ability to depart from their expectancies. It is also noteworthy that our findings replicate previous research showing that language abstraction is influenced by describers' expectancies (e.g., Maass et al., 1995; 1996; Wigboldus et al., 2000). This finding is consistent with our model, which follows other theorists in predicting that biased expectancies affect language abstraction when communicators are motivated simply to communicate accurately or even to suppress their biases (e.g., Franco & Maass, 1996, 1999; von Hippel et al., 1997). Indeed, in the present studies, expectancy effects sometimes emerged even when communicators were motivated to convey impressions that were independent of their expectancies (in Studies 1 and 2 but not in the 'misleading' condition of Study 4). Our replication of the LEB reinforces the view that language abstraction can serve as a sensitive, largely implicit measure of biased expectancy (von Hippel et al., 1997). It might be that descriptions are selected according to how well

they fit specific communication goals, but also how plausible or veridical they seem, allowing describers to obey, or appear to obey, Grice's (1975) maxim that messages are essentially truthful. Describers' expectancies may therefore affect language abstraction even in the presence of communication goals, because expectancies provide a benchmark for plausibility.

One aspect of the relationship between expectancies and language abstraction was not directly investigated in the present studies, and remains an important issue for future research. Our studies show that language abstraction, responding to interpersonal factors, can convey new expectancies to recipients (cf. Semin & Fiedler, 1988; Wigboldus et al., 2000). However, it remains to be seen whether these messages may actually influence the describers themselves (cf. the classic counter-attitudinal advocacy study of Bem & McConnell, 1972, and Higgins & Rholes', 1978 'saying is believing effect'). In this regard, it is useful to further explicate the distinction, made elsewhere in this article, between what might be termed *pre-utterance* and *post-utterance* effects on describers' beliefs. Specifically, interpersonal factors such as identifiability (Douglas & McGarty, 2001, 2002), and the drive for shared reality (e.g., Lau et al., 2002) can shape the attitudes and beliefs of describers before they generate a message, and in this mediated way shape the message itself. In these cases the interpersonal factors, rather than the message itself, can be primarily credited with causing describers to have new beliefs. The message fulfils the crucial role of transmitting these new beliefs to recipients. This kind of pre-utterance effect is likely to be the norm in many natural cases of motivated communication. However, at other times, as in our studies, interpersonal factors and communication goals cause describers to voice beliefs to which they are yet to subscribe privately. If describers later come to adopt the beliefs they expressed (cf. Bem & McConnell, 1972), then the message itself can be said, in a more powerful sense, to actually cause describers to form those beliefs.

We should make one final point with relation to the role of intentionality in the processes we have described in this article. We agree with Franco and Maass (1996, 1999) and others (Schnake & Ruscher, 1998; von Hippel et al., 1997) that people are not necessarily aware of their language abstraction. We do not claim that people are aware that their communication goals are facilitated by biased language abstraction. Further research is needed in order to establish the precise speech production processes whereby communication goals, and indeed expectancies, come to cause variations in language abstraction. Our results in Study 5 rule out the suggestion that people indiscriminately rely on the apparent valence of descriptions. For now we have argued that it is possible in principle, and psychologically plausible, that describers with biased expectancies are poor at detecting and censoring the biases inherent in their language, *and* that describers who intend to communicate biases can generate and select suitably biased messages. It is possible that participants rely on dimensions such as the degree to which descriptions imply temporal stability and convey information about the actor (Semin & Fiedler, 1988).

In summary, the present findings show that explicit communicative intentions are a powerful influence on the language that people use. They support a complex and contextual view of the determinants and functions of language abstraction. Specifically, the studies show that whereas language abstraction can be an implicit mechanism whereby the biased beliefs of communicators are transmitted to others, it is also subject to explicit goals to communicate biases to others. Language abstraction is thus a tool with which motivated communicators can fashion new realities for their recipients.

References

Arcuri, L., Maass, A., & Portelli, G. (1993). Linguistic intergroup bias and implicit attributions. *British Journal of Social Psychology*, *32*, 277-285.

Bargh, J.A. (1996). Automaticity in social psychology. In E.T. Higgins & A.W. Kruglanski (Eds.), *Social Psychology: Handbook of Basic Principles*. (pp. 169-183). New York: Guilford Press.

Bargh, J.A., Gollwitzer, P.M., Lee-Chai, A., Barndollar, K., & Troetschel, R. (2001). The automated will: Nonconscious activation and pursuit of behavioral goals. *Journal of Personality and Social Psychology, 81,* 1014-1027.

Bem, D.J., & McConnell, H.K. (1970). Testing the self-perception explanation of dissonance phenomena: On the salience of premanipulation attitudes. *Journal of Personality and Social Psychology, 14,* 23-31.

Branscombe, N.R., & Wann, D.L. (1994). Collective self-esteem consequences of outgroup derogation when a valued social identity is on trial. *European Journal of Social Psychology*, *24*, 641-657.

Cheng, P. W., & Novick, L. R. (1990). A probabilistic contrast model of causal induction. *Journal of Personality and Social Psychology*, *58*, 545-567.

Cole, T., & Leets, L. (1998). Linguistic masking devices and intergroup behavior: Further evidence of an intergroup linguistic bias. *Journal of Language and Social Psychology*, *17*, 348-371.

Douglas, K.M., & McGarty, C. (2001). Identifiability and self-presentation: Computer-mediated communication and intergroup interaction. *British Journal of Social Psychology*, *40*, 399-416.

Douglas, K.M., & McGarty, C. (2002). On computers and elsewhere: A model of the effects of Internet identifiability on communicative behaviour. *Group Dynamics: Theory, Research and Practice, 6,* 17-26.

Edwards, D., & Potter, J. (1993). Language and causation: A discursive action model of description and attribution. *Psychological Review*, *100*, 23-41.

Edwards, D., & Potter, J. (1999). Language and causal attribution. A rejoinder to Schmid and Fiedler. *Theory and Psychology*, *9*, 823-836.

Ekman, P. (2001). *Telling lies: Clues to deceit in the marketplace, politics, and marriage*. New York: W.H. Norton.

Fiedler, K., & Schmid, J. (1999). Implicit attributions and biases. An answer to Edwards and Potter's rejoinder. *Theory and Psychology*, *9*, 837-845.

Franco, F.M., & Maass, A. (1996). Implicit versus explicit strategies of out-group discrimination: The role of intentional control in biased language use and reward allocation. *Journal of Language and Social Psychology*, *15*, 335-359.

Franco, F.M., & Maass, A. (1999). Intentional control over prejudice: When the choice of the measure matters. *European Journal of Social Psychology*, 29, 469-477.

Giles, H., & Coupland, N. (1991). *Language: Contexts and consequences.* Milton Keynes UK, Open University Press.

Grice, H.P. (1975). Logic and conversation. In P. Cole and J.L. Morgan (Eds.*), Syntax and semantics 3: Speech acts* (pp.41-58). New York: Academic Press.

Haskell, R.E. (1999). *Between the lines: Unconscious meaning in everyday conversation*. New York: Plenum Press.

Higgins, E.T. (1981). The 'communication game': Implications for social cognition and persuasion. In E.T. Higgins, M.P. Zanna & C.P. Herman (Eds.), *Social cognition: The Ontario Symposium, Vol. 1* (pp.343-392). Hillsdale NJ: Erlbaum.

Higgins, E.T. (1997). Beyond pleasure and pain. *American Psychologist*, *52*, 1280-1300.

Higgins, E.T. (1999). "Saying is believing" effects: When sharing reality about something
    biases knowledge and evaluations. In L. L. Thompson, J. M. Levine, & D. M.
    Messick (Eds.), *Shared cognition in organizations: The management of knowledge*
    (pp. 33-48). Mahwah, NJ: Erlbaum.

Higgins, E.T., & Rholes, W.S. (1978). "Saying is believing": Effects of message
    modification on memory and liking for the person described. *Journal of Experimental
    Social Psychology*, *14*, 363-378.

Hilton, D.J., & Slugoski, B.R. (1986). Knowledge-based causal attribution: The abnormal
    conditions focus model. *Psychological Review*, *93*, 75-88.

Jetten, J.A., Spears, R., & Manstead, A.S.R. (1997). Distinctiveness threat and
    prototypicality: Combined effects on intergroup discrimination and collective self-
    esteem. *European Journal of Social Psychology*, *27*, 635-657.

Jost, J.T., & Kruglanski, A.W. (2002). The estrangement of social constructionism and
    experimental social psychology: History of the rift and prospects for reconciliation.
    Personality and Social Psychology Review, 6, 168-187.

Karpinski, A., & von Hippel, W. (1996). The role of the linguistic intergroup bias in
    expectancy maintenance. *Social Cognition*, *14*, 141-163.

Kelley, H. H. (1967). Attribution theory in social psychology. *Nebraska Symposium on
    Motivation, 15*, 192-238.

Lau, I.Y.M., Chiu, C., & Lee, S. (2001). Communication and shared reality: Implications for
    the psychological foundations of culture. *Social Cognition*, *19*, 350-371.

Lewis, M. and Saarni, C. (Eds.), *Lying and deception in everyday life*. New York: Guilford
    Press.

Maass, A. (1999). Linguistic intergroup bias: Stereotype perpetuation through language. *Advances in Experimental Social Psychology*, *31*, 79-121.

Maass, A., & Arcuri, L. (1992). The role of language in the persistence of stereotypes. In G.R. Semin & K. Fiedler (Eds.), *Language, interaction and social cognition*. London: Sage.

Maass, A., & Arcuri, L. (1996). Language and stereotyping. In C.N. Macrae, C. Stangor & M. Hewstone (Eds.). *Stereotypes and stereotyping*. New York: The Guilford Press.

Maass, A., Ceccarelli, R., & Rudin, S. (1996). Linguistic intergroup bias: Evidence for an in-group-protective motivation. *Journal of Personality and Social Psychology*, *71*, 512-526.

Maass, A., Milesi, A., Zabbini, S., & Stahlberg, D. (1995). Linguistic intergroup bias: Differential expectancies or in-group protection? *Journal of Personality and Social Psychology*, *68*, 116-126.

Maass, A., Montalcini, F., & Bicotti, E. (1998). On the (dis-)confirmability of stereotypic attributes. *European Journal of Social Psychology*, *28*, 383-402.

Maass, A., Salvi, D., Arcuri, A., & Semin, G. (1989). Language use in intergroup contexts: The linguistic intergroup bias. *Journal of Personality and Social Psychology*, *57*, 981-993.

McArthur, L.A. (1972). The how and what of why: Some determinants and consequences of causal attribution. *Journal of Personality and Social Psychology*, *22*, 171-193.

McConahay, J., Hardee, B., & Batts, V. (1981). Has racism declined in America? It depends on who is asking and what is asked. *Journal of Conflict Resolution*, *25*, 563-579.

Ng, S.H., & Chan, K.K. (1996). Biases in the description of various age groups: A linguistic category model analysis. *Bulletin of the Hong Kong Psychological Society*, *36*, 5-20.

Petty, R.E., & Cacioppo, J.T. (1986). *Communication and persuasion: Central and peripheral routes to attitude change*. New York: Springer-Verlag.

Reynolds, K.J., Turner, J.C., & Haslam, S.A. (2000). When are we better than them and they worse than us? A closer look at social discrimination in positive and negative domains. *Journal of Personality and Social Psychology*, *78*, 64-80.

Robinson, W.P. (1996). *Deceit, delusion and detection*. Thousand Oaks, CA: Sage.

Rubini, M., & Semin, G.R. (1994). Language use in the context of congruent and incongruent in-group behaviors. *British Journal of Social Psychology*, *33*, 355-362.

Rubini, M., & Sigall, H. (2002). Taking the edge off of disagreement: Linguistic abstractness and self-presentation to a heterogeneous audience. *European Journal of Social Psychology, 32,* 343-351.

Rudolph, U. (1997). Implicit verb causality: Verbal schemas and covariation information. *Journal of Language & Social Psychology*, *16*, 132-158.

Rudolph, U., & Försterling, F. (1997). The psychological causality implicit in verbs: A review. *Psychological Bulletin*, *121*, 192-218.

Ruscher, J.B. (2001). *Prejudiced communication: A social psychological perspective*. New York: Guilford Press.

Schmid, J., & Fiedler, K. (1996). Language and implicit attributions in the Nuremberg trials. *Human Communication Research*, *22*, 371-398.

Schmid, J., & Fiedler, K. (1998). The backbone of closing speeches: The impact of prosecution versus defense language on judicial attributions. *Journal of Applied Social Psychology*, *28*, 1140-1172.

Schmid, J., & Fiedler, K. (1999). A parsimonious theory can account for complex phenomena. A discursive analysis of Edwards and Potter's critique of non-discursive language research. *Theory and Psychology*, *9*, 807-822.

Schmid, J., Fiedler, K., Englich, B., Ehrenberger, T., & Semin, G.R. (1996). Taking sides with the defendant: Grammatical choice and the influence of implicit attributions in prosecution and defense speeches. *International Journal of Psycholinguistics*, *12*, 127-148.

Schnake, S.B., and Ruscher, J.B. (1998). Modern racism as a predictor of the linguistic intergroup bias. *Journal of Language and Social Psychology*, *17*, 484-491.

Semin, G.R. (1994). The linguistic category model and personality language. In J. Siegfried (Ed.), *The status of common sense in psychology*. Norwood, NJ: Ablex.

Semin, G.R. (2000). Agenda 2000 – Communication: Language as an implementational device for cognition. *European Journal of Social Psychology*, *30*, 595-612.

Semin, G.R., & Fiedler, K. (1988). The cognitive functions of linguistic categories in describing persons: Social cognition and language. *Journal of Personality and Social Psychology*, *54*, 558-568.

Semin, G.R., & Fiedler, K. (1989). Relocating attributional phenomena within a language-cognition interface: The case of actors' and observers' perspectives. *European Journal of Social Psychology*, *19*, 491-508.

Semin, G.R., & Fiedler, K. (1991). The linguistic category model, its bases, applications and range. *European Review of Social Psychology*, *2*, 1-30.

Semin, G.R. & Fiedler, K. (1992). The inferential properties of interpersonal verbs. In G.R. Semin & K. Fiedler (Eds.), *Language, interaction and social cognition*, (pp. 58-78). London: Sage Publications.

Semin, G.R., & Gil de Montes, G. (in press). Communication constraints on the linguistic intergroup bias. *Journal of Experimental Social Psychology.*

Semin, G.R., Gil de Montes, G., & Valencia, J.F. (2001). Communication context and strategic language use: The message modulation model. *Manuscript under review*.

Sutton, R.M., & McClure, J.L. (2001). Covariational influences on goal-based attribution: An integrative model. *Journal of Personality and Social Psychology*, *80*, 222-236.

Vallacher, R.R., & Wegner, D.M. (1987). What do people think they're doing? Action identification and human behavior. *Psychological Review*, *94*, 3-15.

von Hippel, W., Sekaquaptewa, D., & Vargas, P. (1997). The linguistic intergroup bias as an implicit indicator of prejudice. *Journal of Experimental Social Psychology*, *33*, 490-509.

Webster, D.M., Kruglanski, A.W., & Pattison, D.A. (1997). Motivated language use in intergroup contexts: Need-for closure effects on the linguistic intergroup bias. *Journal of Personality and Social Psychology*, *72*, 1122-1131.

Werkman, W.M., Wigboldus, D.H.J., & Semin, G.R. (1999). Children's communication of the linguistic intergroup bias and its impact upon cognitive inferences. *European Journal of Social Psychology*, *29*, 95-104.

Wigboldus, D.H.J., Semin, G.R., & Spears, R. (2000). How do we communicate stereotypes? Linguistic bases and inferential consequences. *Journal of Personality and Social Psychology*, *78*, 5-18.

Wigboldus, D.H.J., Spears, R., & Semin, G.R. (1999). Categorization, content and the context of communicative behaviour. In N. Ellemers & R. Spears (Eds.), *Social identity: Context, commitment, content*, (pp. 147-163). Oxford, England: Blackwell Science Ltd.

Zajonc, R.B. (1960). The process of cognitive tuning in communication. *Journal of Abnormal and Social Psychology, 61,* 159-167.

Author Note

Karen M. Douglas, and Robbie M. Sutton, Department of Psychology.

Correspondence concerning this article should be addressed to Karen Douglas, Department of Psychology, Keele University, Keele, Staffordshire ST5 5BG, United Kingdom. E-mail: k.m.douglas@keele.ac.uk.

Footnotes

1   We use the term *communication goal* to mean the same as Higgins' (1981) notion of *communicative intent*.

2   These cartoons were taken from previous research by Anne Maass and colleagues (e.g., Franco & Maass, 1996, 1999). From a larger set of cartoons supplied, we chose the eight that were most clearly positive or negative. Where text appeared in the cartoons, the language was modified from Italian to English. An example of two cartoons presented to participants (one positive and one negative) are presented in the Appendix, complete with LCM descriptive alternatives.

3   We are grateful to an anonymous reviewer for this suggestion.

4   When single responses (i.e., individual cartoons) were taken as the unit of analysis rather than participants, the results were similar to the overall analysis reported here. Rated valence did not qualify as a partial or complete mediator of the communication goal effect except for in one of the cartoons (where Person A was seen spray-painting a wall).

Appendix

Examples of stimuli presented to participants in Study 1

Positive example (running)

(a) A is running

(b) A is training

(c) A loves sports

(d) A is athletic

Negative example (hitting)

(a) A is hitting the other person

(b) A is hurting the other person

(c) A hates the other person

(d) A is aggressive

Table 1

Means *(and standard deviations)* for language abstraction as a function of behavior valence, expectancy and goal to describe behaviors favorably or unfavorably

	Valence of behavior	
Protagonist	Positive	Negative
Friend		
Favorable goal	3.06 *(0.89)*	1.87 *(0.85)*
Unfavorable goal	1.84 *(0.93)*	3.06 *(0.80)*
Enemy		
Favorable goal	2.22 *(1.03)*	1.78 *(0.88)*
Unfavorable goal	1.37 *(0.76)*	3.13 *(0.90)*

Table 2

Means *(and standard deviations)* for language abstraction as a function of behavior valence, 'pure' expectancy and goal to describe behaviors favorably or unfavorably

	Valence of behavior	
Expectancy condition	Positive	Negative
Often		
Favorable goal	3.09 *(0.61)*	1.88 *(0.79)*
Unfavorable goal	1.47 *(0.62)*	3.28 *(0.75)*
Rarely		
Favorable goal	2.84 *(1.03)*	1.53 *(0.67)*
Unfavorable goal	1.16 *(0.40)*	2.97 *(1.02)*

Table 3

Means *(and standard deviations)* for language abstraction as a function of behavior valence

and goal to enhance or diminish behavior valence

Overall goal	Valence of behavior	
	Positive	Negative
Enhance valence	2.48 *(0.92)*	2.32 *(0.76)*
Diminish valence	1.58 *(0.33)*	1.88 *(0.41)*

Table 4

Means *(and standard deviations)* for language abstraction as a function of behavior valence

and goal to create high or low frequency impressions

Goal	Valence of behavior	
	Positive	Negative
High frequency impression	2.69 *(0.56)*	2.65 *(0.33)*
Low frequency impression	2.42 *(0.44)*	2.11 *(0.41)*
Control	2.00 *(0.59)*	2.11 *(0.77)*

Table 5.

Means *(and standard deviations)* for language abstraction as a function of expectancy and

goal to merely describe a behavior or create a misleading impression

	Expectancy	
Goal	Characteristic	Uncharacteristic
Control ('mere description')	2.28 *(0.66)*	1.90 *(0.59)*
Create misleading impression	1.91 *(0.58)*	2.31 *(0.78)*

Table 6.

Means and standard deviations for rated valence of LCM alternatives

Cartoon	LCM code	Valence mean	Standard deviation
Picking up rubbish	DAV	5.66	0.70
	IAV	5.53	0.80
	SV	5.91	0.82
	ADJ	5.72	0.96
Running	DAV	5.06	1.19
	IAV	5.09	1.03
	SV	5.25	1.02
	ADJ	4.94	1.01
Walking elderly person	DAV	6.16	0.77
	IAV	6.53	0.72
	SV	6.25	1.02
	ADJ	6.12	0.69
Picking person up	DAV	4.97	1.20
	IAV	6.25	0.67
	SV	5.97	0.65
	ADJ	4.75	1.80
Spray-painting wall	DAV	2.41	1.10
	IAV	1.91	0.86
	SV	1.56	1.02
	ADJ	1.75	0.69
Telling sexist joke	DAV	3.06	0.80
	IAV	2.72	0.99
	SV	2.91	0.93
	ADJ	2.47	1.22
Throwing rubbish	DAV	2.00	0.72
	IAV	2.09	0.82
	SV	1.78	0.66
	ADJ	1.63	0.66
Hitting	DAV	1.53	0.62
	IAV	1.28	0.46
	SV	2.03	1.03
	ADJ	2.00	0.88

Table 7.

Means *(and standard deviations)* for language abstraction as a function of behavior valence

and goal to create an impression or avoid creating an impression

	Valence	
Goal	Positive	Negative
Create impression	2.17 *(0.71)*	2.54 *(0.78)*
Avoid creating impression	1.60 *(0.57)*	1.60 *(0.70)*