

# THE IMPACT OF ANONYMITY IN ELICITATION OF BRAND ASSOCIATIONS: THEORETICAL AND EMPIRICAL DEVELOPMENTS

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#### **ABSTRACT**

Effective brand management requires a thorough understanding of the consumer. In particular, managers need to know which associations consumers have for their brands. In this study, we address the role of anonymity in interviews designed to elicit brand associations from consumers' memories. First, the concept of anonymity is examined in order to arrive at a useful definition. Based on a review of potential psychological motives for response distortion and a review of the nature of brand associations, we derive two types of anonymity; social - and self anonymity. Social anonymity is defined as the degree to which respondents believe that someone else can identify him or her as a respondent. Self anonymity denotes the extent of outer-directed awareness during an interview, or in other words, the lack of self-focus.

An experiment involving 205 undergraduate students was conducted to test the effects on elicitation outcomes of different techniques selected to induce different types of anonymity. Specifically, techniques offering self anonymity (such as third-person questioning) were deemed more effective in alleviating motives of response distortion than techniques offering no anonymity or social anonymity (such as self-administered questionnaires). Self-anonymity was expected to be more effective because this type of anonymity guards against both socially-directed and intra-psychic motivations for response distortion. In support of this contention, for a brand with latent symbolic associations, self anonymity was shown to evoke different and more valid associations than a non-anonymity condition. Moreover, self-monitoring was found to be a significant negative moderator of the ability of associations to predict brand attitudes when no anonymity was provided, whereas no such effect of self-monitoring was observed for associations elicited under conditions of self anonymity. This finding supports a motivational explanation of the effects of self anonymity observed in this study.

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#### TABLE OF CONTENTS

Chapter 1: INTRODUCTION	1
1.1. Background and positioning	2
1.2. Socially desirable responding and anonymity	4
1.3. Research questions	5
1.4. Significance of the topic	6
1.5. Structure of the dissertation	7
1.5. Stratiate of the dissolution	,
Chapter 2: SOCIALLY DESIRABLE RESPONDING: REVIEW AND SYNTHESIS	9
2.1. Socially desirable responding	10
2.2. Private self management and situational self-deception	12
2.3. Synthesis: Motivational response distorion	14
2.4. Behavioral consequences of motivatioal response distortions in	
elicitation interviews	16
2.5. What is a «true» unbiased response?	17
2.6. Summary	19
Chapter 3: THE CONCEPT AND THE ELICITATION OF BRAND ASSOCIATIONS	20
3.1. Properties of associative networks	21
3.1.1. The representation of brand associations	21
3.1.2. Structural properties of the associative network model	22
3.1.3. Processing properties	23
3.1.4. Implications for the study	24
3.2. Dimensions of brand associations	25
3.2.1. Favourability	25
3.2.2. Strength	25
3.2.3. Uniqueness	26
3.2.4. Sensitivity	26
3.2.5. Predictive ability	27
3.2.6. The content of brand associations	27
3.2.6.1. Review of the Keller typology of brand associations	28
3.2.6.2. Additional categories of brand associations	29
3.3. Summary and implications	30
3.4. Elicitation of brand associations	32
3.4.1. A process model of elicitation interviews	32
3.4.2. Summary	36
Chapter 4: DEFINING AND MANIPULATING ANONYMITY	37
4.1. The denotation of anonymity	38
4.2. Defining anonymity	39
4.2.1. Social anonymity	40
4.2.2. Self anonymity	41
4.2.3. Discussion	42
4.3. Manipulation of anonymity: A review	43
4.3.1. Review of techniques	43
4.3.2. Manipulation checks	48
4.3.3. Potential moderators	49
4.3.4. Summary and implications	49

Chapter 5: MODEL AND RESEARCH HYPOTHESES	50
5.1. Conceptual model of anonymity-effects	51
5.2. Hypotheses	53
5.2.1. Manipulation of social- and self anonymity	53
5.2.2. Premises for anonymity-effects: Sensitivity of brand associations	56
5.2.3. Anonymity-effects on response latencies	59
5.2.4. Anonymity-effects on the level of sensitivity and the number of	
sensitive types of associations reported	61
5.2.5. Anonymity-effects on the favourability of associations reported	63
5.2.6. Anonymity-effects on the predictive ability of associations	64
5.2.7. Interactions with self-monitoring	65
5.2.8. Summary	67
Chapter 6: METHODOLOGY	68
⋄ 6.1. Research design for the empirical study	69
6.2. Overview of the experiment	70
6.3. Selection of stimulus brand and elicitation technique	72
6.3.1. Stimulus brand	72
6.3.2. Elicitation technique	73
7 6.4. Sample	74
6.5. Experimental procedure	75
6.6. Measurement	80
6.6.1. Measures for manipulation checks	80
6.6.1.1. Social anonymity: Interviewer anonymity and	
public anonymity	80
6.6.1.2. Self anonymity	82
6.6.1.3. Task involvement and task ambiguity	84
6.6.2. Dependent variables	85
6.6.2.1. Type of associations reported	85
6.6.2.2. Strength of associations	85
6.6.2.3. Distortion-sensitivity of associations	85
6.6.2.4. Latency of associations	86
6.6.2.5. Attitudes and intentions	86
6.6.2.6. Predictive ability of associations	86
6.6.3. Moderator	87
Chapter 7: DATA DESCRIPTION AND TESTS OF CONFOUNDS	90
<sup>9</sup> 7.1. Data description	91
7.2. Test of assumptions	96
7.2.1. Test of ANOVA assumptions	97
7.2.2. Test of MANOVA assumptions	99
7.3. Test of confounds: Task ambiguity and task involvement	100

Chapter 8: TESTS OF HYPOTHESES	102
8.1. Manipulation of self- and social anonymity	103
8.2. Premises for anonymity-effects: Perceived sensitivity of brand associations	106
8.3. Anonymity-effects on response latencies	107
8.4. Anonymity-effects on the sensitivity of associations reported	109
8.5. Anonymity-effects on the level of favourability of associations	114
8.6. Anonymity-effects on the predictive ability of reported associations	115
8.7. Tests of interactions	119
8.7.1. Tests of interactions with self-monitoring for number of association latencies of associations, favourability of associations,	
and sensitivity of associations	119
8.7.2. Self-monitoring as a moderator of predictive ability	121
Chapter 9: DISCUSSION	125
9.1. Summary of findings	126
9.2. Discussion of explanations	129
9.2.1. Motivational explanations	129
9.2.2. Cognitive explanations	132
9.2.3. Reconciliation	133
9.3. Contribution	133
9.3.1. Contribution to theoretical research	133
9.3.2. Managerial implications	134
9.4. Limitations and directions for future research	136
T. Stromborn	138
Literature	-
Appendix 1: Questionnaire for elicitation interview variables	149
Annendix 2: Questionnaire for stage two	153

## LIST OF TABLES

2.3.	Psychological dimensions of motivational response distortion	14
3.3.	Connotations of brand associations: Content, representation, structure and process	31
4.3.	Techniques for manipulating anonymity in consumer research	46
6.2.	Outline of experimental design	71
6.4.	Sample size obtained	75
6.5.	Treatment: Instructions for manipulation of anonymity	76
6.6.1.	Dimensionality and internal consistency of social anonymity	81
6.6.3.	Dimensionality and internal consistency of the Lennox and Wolfe self-monitoring scale	88
7.1.1.a	Descriptive statistics for study variables	92
7.1.1.b	The 15 associations most frequently mentioned (cue: Mercedes)	93
7.1.1.c	Correlations between dependent variables and manipulated variables	95
7.2.1.	Tests of assumptions of univariate homogeneity	98
7.2.2.	Tests of homogeneity for dependent variables and variance-covariance matrices	99
7.3.1.	Results of ANOVA for differences in task ambiguity	101
7.3.2.	Results of ANOVA for differences in task involvement	101
8.1.a	Kruskal-Wallis one-way analysis of variance for group differences in self anonymity	103
8.1.b	ANOVA for group differences in self anonymity	104
8.1.c	Multivariate and univariate nalysis of group differences in public- and interviewer anonymity	105
8.1.d	Kruskal-Wallis one-way analysis of variance for group differences in public anonymity	105
8.2.	ANOVA and T-test for differences in sensitivity between categories of brand associations	106
8.1.a	Kruskal-Wallis one-way analysis of variance for group differences in self anonymity	103
8.3.b	Kruskal-Wallis test of group differences in latency of intentions	109
8.4.a	Univariate tests for group differences in number of hedonic, functional, and symbolic	
	brand associations	110
8.4.b	Kruskal-Wallis one-way analysis of variance for group differences in number of	
	attitudes and intentions	111
8.4.c	Multivariate test for group differences in perceived sensitivity of distortion of hedonic,	
	and functional associations	112
8.4.d	Univariate tests for group differences in perceived sensitivity of symbolic associations,	
	attitudes and intentions	113
8.5	Multivariate test for group differences in the favourability of benefit associations	114
8.6.a	Correlations between evaluations of associations and self-reported attitudes and intentions	116
8.6.b	Correlations between evaluations of five most salient associations and self-reported	
	attitudes and intentions	117
8.6.c	Regression results: The five most salient associations regressed against self-reported	
	attitudes and intentions	117
8.7.1.	Significant interactions with self-monitoring for number of associations, latencies of	
	associations, and sensitivity of associations	120
8.7.2.a	Moderated regression analysis (MRA) with standardized coefficients for the control group	122
8.7.2.b	Moderated regression analysis (MRA) with standardized coefficients for the group	
	subjected to self anonymity	123
9.1.	Summary of tests of hypotheses	128

## LIST OF FIGURES

1.	State of knowledge about response bias in measurement of brand associations	4
2.3.	A process model of motivational response distortion	15
3.1.2	Structural dimensions of brand associations	23
3.4.	The elicitation interview process	33
4.2.	Directions of anonymity	39
5.1.	Main relationships examined in the empirical study	51

#### CHAPTER 1

# INTRODUCTION

In this introductory chapter the focus of the present research is clarified in terms of two major research questions. The first one focuses on the concept of anonymity: how should we define it? The other question concerns possible effects of anonymity in elicitation interviews with the purpose of eliciting brand associations from consumer memory: what are the effects of inducing anonymity in such interviews? The opening section provides a background for the problems addressed. The chapter concludes with a brief overview of the structure of subsequent chapters.

# 1.1. Background and positioning

During the last decades, brand management has become a dominant issue within marketing research and practice (Shocker et al. 1993). In the words of Kapferer (1997, p.15), "The 1980s marked a turning point in the conception of brands. Management came to realise that the principal asset of a company was in fact its brand names". Moreover, managers recognized that the value of brands was not rooted in the brand names as such, but in the positive and unique meaning attached to brand names in customers' memories (Keller 1993). Thus, the focus on brands and brand management lead to a stronger emphasis on customer perception and on customer memory than ever before. As a result of this focus, brand associations (tentatively defined here as information about a brand held by customers in their memories; see chapter 2 for a discussion of the concept) became a fundamental concept in theoretical research on brand management as well as in practical planning and implementation of brand strategies (e.g., Aaker 1996; Kapferer 1997; Keller 1993; 1997). In fact, the essence of brand management can be described as the act of strategically selecting, and subsequently communicating, persistently over time, the same set of favourable associations so that the brand becomes uniquely related to these particular associations in the minds of customers (e.g., Keller 1993). Stated differently, a main objective of brand management is to link a target set of associations more strongly to one's own brand than to competitors' and thus create a favourably unique brand image.

When the overall purpose of brand management is to create a certain position for the brand in the minds of customers, measuring and monitoring customers' brand associations becomes imperative; brand associations can not be effectively managed if they are not appropriately measured. However, because brand associations are not directly observable, managers have to rely on indirect measures of customer's memories -- typically in the form of introspective reports, interviews, focus groups, and questionnaires. Such methodologies have many weaknesses potentially resulting in various kinds of biases (to be explicated below) and researchers are advised to exercise caution in the use of results from this kind of research (e.g., LeDoux 1996; Nisbett and Wilson 1977; Russo, Johnson, and Stephens 1989; Weiser 1993). The strategic importance of brand associations on the one hand and the inherent difficulties associated with measurement of memories in general, raise some intruiging questions for brand managers: Can our measurements of brand associations be trusted? How valid is elicited information about the status of a brand in the mind of customers? Are we missing some important aspects of consumers' brand perceptions?

The significance of these questions to brand managers implies that response validity should be a central issue in research on brand associations. Different problems are subsumed under the label

of response validity. Here, we make a basic distinction between two general types of response problems in measurement of brand associations. First, there is a problem of *accessibility* (e.g. Wilson and Nisbett 1977). As pointed out by Zaltman (1997) and others, associations are often stored in terms of visual images which are not easily verbalized. In fact, it has been argued that most mental life is unconscious (Plutchik 1993). This raises the question of whether conventional methods based on consumers' verbal self-reports are only capable of scratching the surface of what we are really trying to measure.

Second, for verbally accessible associations, we have the problem of *response bias*, that is, different kinds of response artifacts blurring or even altering "true" responses and thus threatening the validity of research results. In this dissertation, we focus on response bias in the measurement of brand associations. Certainly, the problem of accessibility is an important one, however, new basic theortical insight is needed on how to access non-verbal associations, and specialised disciplines within psychology, such as psycholinguistics are more capable of meeting this kind of research challenge than marketers. Response bias, on the other hand, is an area of specific problems which can be more easily understood by means of established theories from psychology such as theories of framing, impression management, and cognitive dissonance (e.g., Schwarz, Strack, Hippler, and Bishop 1991; Jobe and Mingay 1991). Thus, it seems like a tenable division of labour to let relevant specialised subdisciplines of psychology search for new insights on the problem of accessibility and for market researchers to exploit the full potential of existing theories and empirical findings to understand different forms of response bias in the measurement of brand associations.

The measurement of brand associations can be divided into two phases: (1) elicitation of brand associations, and (2) measurement of different dimensions of elicited associations, e.g. strength, favourability, uniqueness, etc. The purpose of the former is qualitative: to gain insight into the nature of a brand's association set, whereas the purpose of the latter is more quantitative: to assess key dimensions producing differential consumer responses (Keller 1993). In qualitative elicitations of associations, numerous factors may influence respondents to report other associations than those actually activated. For example, respondents could choose to withold sensitive associations because such associations are not consistent with the kinds of images respondents would like to display (Schlenker 1985;1986). When using rating scales in quantitative measurements of various dimensions of elicited associations (e.g., favourability), the kind of scale used, the wording of scale anchors, and the order in which associations are rated -- as well as the broader context in which associations are measured -- may influence the results of analyses (see Biemer, Groves, Lyberg, Mathiowetz, and Sudman 1991). Thus, response bias probably is a highly relevant problem both in qualitative elicitation of brand associations and in quantitative measurement of different dimensions of associations. However,

the existing body of research on response bias has largely been concerned with quantitative measurement, typically focusing on survey measurement techniques (e.g., Bradburn and Sudman 1983; Schwarz et al. 1991). Moreover, rather few theoretical contributions are found explaining relevant concepts and mechanisms underlying empirical findings (Jobe and Mingay 1991). For qualitative elicitation of associations, the literature on response bias is very meager both on the empirical and the theoretical side (see our review of anonymity in Chapter 4). Because little is known about the nature of response bias in this context, very few guidelines exists to help managers and researchers avoid response bias in elicitation of brand associations. Thus, as illustrated in Figure 1, there is a void in the literature on theoretical development as well as empirical investigation of response bias in elicitation of brand associations. The overall purpose of this dissertation is to contribute to filling this gap in the literature.

Figure 1
STATE OF KNOWLEDGE ABOUT RESPONSE BIAS IN
MEASUREMENT OF BRAND ASSOCIATIONS

	Quantitative	Qualitative
Empirical	Extensive	Very limited
Theoretical	Limited	Very limited

# 1.2. Socially desirable responding and anonymity

Response bias in elicitation interviews is a complicated and multifacted issue. Many different kinds of biases could be addressed and it not possible to investigate them all within the context of a single dissertation. Hence, we have chosen to focus on one particular kind of bias. In this dissertation we concentrate on an important class of motivationally conditioned response bias often subsumed under the label of *socially desirable responding*. This type of bias is caused by

a general need of respondents to make a good impression and develop their self-concepts and, hence, to adjust responses accordingly (Bradburn and Sudman 1983; Schlenker 1985). As for most kinds of response biases, socially desirable responding has been largely investigated within the context of quantitative survey measurements. For instance, people have been found to overreport socially desirable behaviors such as library card ownership (Parry and Crossley 1950), voting at elections (National Opinion Research Center 1972; cited in Bradburn et al. 1979), and charitable giving (Parry and Crossley 1950). The majority of studies, though, have focused on undesirable behaviors and revealed substantial underreporting of behaviors such as traffic violations, consumption of alcohol (see Sudman and Bradburn 1983), use of drugs (Aquillino 1990; 1994), and large numbers of sex partners (Tourangeau and Smith1996). Correspondingly, for attitudes, individuals have been found to systematically underreport socially undesirable attitudes, e.g., sexist attitudes (Faranda, Kaminski, and Giza 1979) and discriminatory beliefs about immigrant job applicants (Supphellen, Kvitastein, and Tvedt-Johansen 1997).

The traditional way to mitigate such biases is to use some kind of procedure for inducing anonymity amongst respondents (e.g., Bradburn and Sudman 1983). It is believed that under conditions of anonymity, respondents are less concerned with the impressions they display and thus engage in less strategic management of responses.

Whereas the survey literature is rich in empirical investigations on this topic, little is known about social desirability biases in qualitative interviews and the potentially alleviating effect of anonymity. Specifically, no study have been found on the issue of social desirability bias and the role of anonymity in elicitation of brand associations.

# 1.3. Research questions

In order to explore the impact of anonymity in elicitation interviews, a concise understanding and definition of anonymity is imperative. Inspection of the literature on anonymity-inducing techniques (see chapter 3 for a review) and the broader literature on anonymity reveals that development and clarification of the concept of anonymity is needed. In many studies anonymity is manipulated, but not measured (i.e., there is no manipulation check). Thus, we are led to believe that anonymity is equal to the manipulation as such. Other researchers, however, explicitly treat anonymity as a psychological variable, usually referring to whether respondents feel that their identity is revealed to others or not. Projective techniques, in turn, seem to imply the existence of another kind of intrapsychic anonymity (Fisher 1993). Prior to

any empirical comparison of anonymity manipulations, it is therefore deemed important to clarify the conceptual properties of anonymity and develop a definition which is useful in the context of elicitation. Conceptual clarifications imply that the denotations and connotations of the concept are thoroughly defined (Zaltman et al. 1973).

# RQ 1: How should anonymity be defined in the context of elicitation of brand associations?

When the concept has been clarified, empirical effects of anonymity manipulations can be explored. As previously noted, the role of anonymity in elicitation of consumer memory is largely unexplored. In particular, no studies have been found comparing the relative effects of different anonymity approaches on elicitation outcomes. We address this issue by focusing on effects of different anonymity techniques in elicitating brand associations. Anonymity manipulations are potentially believed to affect outputs in two ways. First, anonymity may effect the kind of associations reported. For instance, instead of reporting sensitive associations such as ....I like the way the jeans make me look to the opposite sex, subjects may report less relevant and less sensitive associations (e.g., the jeans are durable). Second, inducing anonymity may effect the order in which associations are reported (response latencies). Specifically, subjects may postpone reporting of sensitive associations until a favourable impression has been displayed. Consequently, anonymity could result in sensitive associations being reported earlier than in non-anonymity-conditions. These two effects may in turn affect the ability of associations to predict brand attitudes and purchase intentions.

# RQ 2: Will manipulations of anonymity affect elicitation results? How will results be affected?

# 1.4. Significance of the topic

Anonymity is a central concept in marketing and empirical social science research in general. In spite of fifty years of research on the effects of anonymity on socially desriable responding in market research, little -- if anything -- is known about anonymity effects in elicitation of consumer memory. To a large extent the scientific development within research on anonymity has been hampered by underconceptualization of central concepts such as anonymity and socially desirable responding (DeMaio 1984). Clarification of the concept of anonymity may lead to a more unified semantic understanding and usage of the concept, which in turn, will

likely facilitate the comparison of theories and techniques (Zaltman et al. 1973). Also, conceptual clarifications provide a basis for more valid operationalizations, which is a necessary precondition for controlling potential confounds in empirical examinations of effects of anonymity. Thus, conceptual clarification may accelerate the scientific progress within this field of research.

On the practical side, knowledge of the effects of various anonymity manipulations may ultimately result in more effective brand management. Invalid data provide vague or -- at worst -- misleading information about the brand, which in turn may result in poor marketing decisions and nonoptimal or even harmful marketing activities. If, for instance, important associations are not reported, brand managers may fail to detect strengths or weaknesses, which could be instrumental in determining the success or failure of the brand. Moreover, if sensitive associations are reported but latency scores distorted, managers may wrongly assume that such associations are not salient in the mind of consumers, and therefore omit these associations from further analysis and from strategic or tactical considerations. Thus, the validity of elicited brand associations (and corresponding latency scores) can be conceived of as highly relevant and important competitive factors. Brand managers possessing thorough and valid information about their brands have a competitive advantage over managers holding vague, incomplete, or misleading information.

### 1.5. Structure of the dissertation

The pupose of Chapters 2 and 3 is to form a basis for answering the research questions. In order to decide on a relevant and fruitful conceptual definition of anonymity (RQ1), and to judge the effects of anonymity in an elicitation interview (RQ2), it is necessary first to understand the psychological mechanisms that anonymity is supposed to guard against, and to understand the nature of what we are trying to measure: brand associations. Consequently, Chapter 2 presents a review of the psychology of response distortion, and Chapter 3 provide a review of the concept and elicitation of brand associations. Subsequently, anonymity is defined in Chapter 4. On the basis of the conceptual reviews, hypotheses are developed in Chapter 5 regarding the nature of anonymity and it's effects on elicitation outcomes. Since manipulations of anonymity often have not been subjected to manipulation checks, or -- when checks have been performed -- only have been checked for one type of anonymity, the first hypotheses concerns the abilities of different methodological approaches for inducing the two major kinds of anonymity defined in Chapter 4. The following hypotheses regards the effects of the anonymity manipulation on the types and latencies of associations reported and expected effects of the manipulation on the

ability of associations to predict brand attitudes and intentions. Also, hypotheses are developed for interactions between self-monitoring and the anonymity-manipulation. In Chapter 6, the methodology used to test hypotheses are presented and discussed. Chapter 7 contains descriptive statistics and tests of two potential confounds, and Chapter 8 presents the results of hypothesis-testing. Finally, the results are summarized and discussed, and directions for future research delineated in Chapter 9.

#### CHAPTER 2

# SOCIALLY DESIRABLE RESPONDING: REVIEW AND SYNTHESIS

Our first research question asked for a definition of anonymity. When defining concepts, it is seldom friutful to speak of right and wrong. Rather, definitions should be evaluated in terms of their usefulness (Zaltman, Pinson, and Angelmar 1973). The concept of anonymity serves a very specific purpose in the consumer research literature: it is considered as the major means of reducing social desirable responding in empirical investigations. On that account, it seems pertinent to review the concept of socially desirable responding first in order to define relevant dimensions of anonymity. Moreover, such a review is needed in order to understand potential effects (and non-effects) of anonymity-inducing techniques on elicitation outcomes (research question 2).

In this chapter we first present a brief review of socially desirable responding (section 2.1.). Next, we introduce some psychological mechanisms that might lead to response distortion, but which are not commonly included in the concept of socially desirable responding (section 2.2). These mechanisms are synthesised into a more generic concept of motivational response distortion, for which socially desirable responding is regarded as a subdimension (2.3.). Subsequently, the nature of response distortion in elicitation interviews is addressed in section 2.4. The final section (2.5.) focus on the question of how social desirable responding can be detected.

## 2.1. Socially desirable responding (SDR)

A thorough discussion of socially desirable responding (SDR) would be a dissertation in itself. We can only afford a brief review of major dimensions. In this section, we focus on the covert psychological processes leading to biased responding. The kinds of overt behavioral responses resulting from these processes are highly dependent on the specific kind of research conducted. Potential behavioral biases in the elicitation of brand associations are discussed in section 2.4.

DeMaio (1984) reviewed the concept and measurement of SDR in surveys and concluded that:

The literature reviewed here shows that conceptual ambiguities plague the notion of social desirability. Simply conceived, social desirability is a tendency on parts of respondents to give favourable impressions of themselves. The source of a respondent's notion of what are favourable expectations is ambiguous (DeMaio 1984, p.276)

In other words, the major conceptual problem of SDR is the definition of desirability. In her review, DeMaio gave examples of different translations of the term found in previous research. One source of conceptual confusion has been the distinction between social desirability as a personality trait and as a response set. In this dissertation we concentrate on response sets. Still after this limitation, no clear-cut and consistent definition is available. Instead, several different measurement procedures can be found reflecting different (implicit) conceptual models. For instance, Sudman and Bradburn (1974) measured SDR by letting a staff of researchers code the social desirability of answers given. The underlying notion of what was socially desirable was adapted from the concept of need for social approval. According to the degree to which answers were consistent with such a need, they were coded on a three-point scale: no possibility, some possibility, or a strong possibility of socially desirable answering. Others added the notion of threat in their definition of SDR (Cannel et al. 1977), including events that are perceived as embarrassing or sensitive in nature. In later work by Bradburn and colleagues (1979) the terms "acceptable" and socially desirable were used interchangeably, thereby indicating yet another notion of SDR.

This conceptual confusion over SDR in survey research could, to a large extent, be due to a seemingly disproportionate focus on behavioral responses at the expense of preceding psychological mechanisms. Thus, we turn to the psychological literature in order to identify major psychological dimensions of SDR. Since SDR is viewed as "the tendency on parts of respondents to give favourable impressions of themselves", the literature on impression management appeared especially pertinent for this purpose.

Consonant with the notion of SDR, impression management pertains to conscious motivations to display a favourable impression to other people (Leary and Kowalski 1990). In the context of elicitation, impression management then refers to respondents' cognitions aimed at creating a favourable impression with the interviewer or imagined others. Hence, the focus of attention is mainly outwardly directed towards the reactions of the interviewer or imagined others. The underlying motivational mechanisms might be either defensive or assertive. Specifically, three kinds of motivations may be operating (Leary and Kowalski 1990).

First, the objective of impression management might be to maximize the reward-cost ratio (Schlenker 1980). The right impression is more likely to result in desired outcomes or the avoidance of undesired outcomes. In the context of elicitation, desired outcomes could be social approval or a sense of acceptance or companionship, or an expected monetary reward or gift for participating in the research.

A second motivating factor is the *maintenance or enhancement of respondents' self-esteem*. For instance, the interviewer's reactions to the responses given (e.g., nodding or verbal comments) might raise or deflate the subject's self-esteem. Likewise, some associations might be more or less compatible with a feeling of self-confidence. The respondent is likely to make impressions that will elicit esteem-enhancing reactions. Notably, this kind of distortion can happen even in the absence of overt feedback from an interviewer, based on the *imagined* reactions of others (Darley and Goethals 1980).

Third, impression management can serve the function of *identity development* (e.g., Gollwitzer 1986). Respondents may display certain thoughts or opinions in order to indicate the possession of certain identity-relevant characteristics. For example, a young promising business woman can solidify or develop her identity as a successful business woman by reporting identity-consistent associations when interviewed about some clothing brand. The three motives usually overlap. For example, the business woman's successful display of an identity-consistent impression would likely also raise her self-esteem.

From this brief review of motivations underlying impression management we assume that SDR results from three motivational objectives: (1) maximizing of reward-cost ratios, (2) maintainance or enhancement of self-esteem, and (3) identity development. The two latter objectives expand the traditional notion of SDR as an expression of needs for social approval. Moreover, when self-esteem maintainence and identity development are acknowledged as sources of motivational response bias, other motivational processes than impression management -- which might lead to distortion of responses -- become relevant. Such processes or mechanisms are addressed next.

# 2.2. Private self management and situational self-deception

Several researchers have reported findings indicating that individuals are concerned with the presentation of self under private conditions, i.e., when no other persons are present. For instance, Schlenker, Hallam, and McCown (1983) reported that self-enhancement occurred about equally under private and public conditions when their subjects made attributions for the positive act of helping another person. Similar findings are reported by Arkin et al. (1980), Burger (1980), Frey (1978), and Greenwald and Breckler (1985). Thus, it seems pertinent to speak of the private dimension of impression management, tentatively termed private self-management. Whereas impression management refers to strategic self-presentation to others, private self-management is defined here as respondents' conscious efforts to control their own impressions of themselves (the private self). The private self is the set of salient self-associations which are activated when the consumer is objectively self-aware. Like impression management, private self-management refers to a strategic conscious process and is mainly based on the motivations of self-enhancement or identity development. However, impression management is outwardly directed toward the interviewer and thus concerned with the social self concept, while the private variant is inwardly directed, focused on the actual or ideal private self (Sirgy 1982). The inclusion of a private side of self-presentation is consonant with Schlenker's (1984; 1985) notion of self-identification, which is defined as "the process, means, or result of showing oneself to be a particular type of person, thereby specifying one's identity (Schlenker 1986, p. 23). This concept explicitly accounts for both a private and a public side to identity development:

Fixing and expressing identity involves systematically defining and categorizing oneself, bringing relevant evidence and experiences to bear. It is accomplished privately, through contemplation of oneself, and publicly, through self-disclosure, self-presentation, and other activities that serve to construct one's identity for audiences (Schlenker 1986, p. 23)

The distinction between social and intrapsychic concepts is much debated in the psychological literature (for a critical review, see Tetlock and Manstead 1985). In our conceptualization of response distortion we maintain that impression management and private self-management are partly overlapping but still separate concepts. In general, two concepts should be regarded as distinct if their antecedents and/or consequences are different (Singh 1991). There are indications of such differences in the literature (see Carver and Scheier 1985). For instance, in the above-cited study by Bradley et al. (1982) subjects showed self-enhancing biases only when their attributions were made in a private as opposed to a public setting. Thus, the private context resulted in another psychological process than the public one. Correspondingly, and most importantly, the antecedents (and possibly consequences) of impression management and private self-management are expected to be different in elicitation interviewes. For example, the use of self-administered questionnaires

(SAQ) is likely to result in private self-management rather than impression management. When a SAQ is used, the subjects respond on a standard questionnaire, which is subsequently put in an anonymous envelope. There is no interaction between the respondent and the interviewer during the response session and the interviewer cannot couple responses and respondents under or after the interview. In this situation, private self-management is more likely to occur than impression management because the respondent is left alone with his/her private self. Vice versa, impression management is probably the more dominant mechanism in more public response situations, e.g., when respondents report their responses directly to the interviewer verbally. These examples illustrate that both mechanisms are relevant within the context of interviewing.

Yet another mechanism described in the psychological literature seems relevant to an interview context: self-deception. Whereas impression management is characterized as conscious selfpresentation to others and private self-management as conscious management of the private self. self-deception is a more unconscious or pre-conscious process mainly serving the function of protecting one's self-esteem (Greenwald 1980). Major contributors within cognitive social psychology have described self-deception as a pre-conscious "front-end processor" which enables people to avoid knowing negative and threatening things about themselves (Greenwald 1980; 1988). In our conceptualization of motivational response distortion in the elicitation interviews, we adopt this perspective on self-deception. This position is consistent with the fundamental and pervasive assumption within this stream of research -- that self-deception is usually characterized by lack of awareness (Gur and Sackeim 1979; Sackeim 1988). In the context of elicitation, subjects report on established associations in long-term memory. Thus, self-deception is defined here as pre-conscious avoidance of attention to threatening information in the associative network. The respondent is obejectively self-aware, that is, his focus is inwardly directed towards his/her own opinions and beliefs (Duval and Wicklund 1972), but s/he is not consciously aware that some threatening information is censored. Threatening information in this context refers to brand associations which are highly inconsistent with the real or ideal self-concept (Sirgy 1982). For example, associating a Mercedes with a certain group of people (selfish materialists) that conflicts with one's self-concept.

## 2.3. Synthesis: Motivational response distortion

In addition to impression management, two other psychological mechanisms potentially resulting in the motivationally conditioned distortion of responses have been identified. We suggest that all three mechanisms are included in a generic concept of *motivational response distortion*. This concept embraces three different established psychological mechanisms of which all may lead to the distortion of interview responses. The properties of the three mechanisms are summarized in Table 2.3.

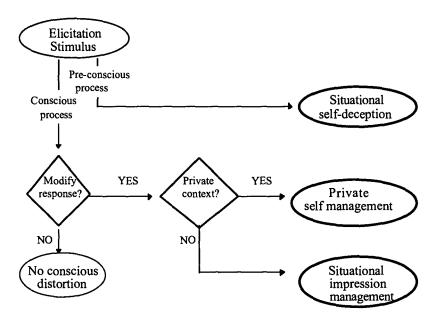
Table 2.3.
PSYCHOLOGICAL DIMENSIONS OF MOTIVATIONAL RESPONSE DISTORTION

	Mechanisms		
Characteristic	Situational self- deception (SSD)	Private self management (PSM)	Situational impression management (SIM)
Psychological context	Private or social	Private	Social
Level of consciousness	Pre-conscious	Mostly conscious	Mostly conscious
Type of psychological mechanism	Defensive	Defensive or assertive	Defensive or assertive
Psychological function	Avoid threatening self-knowlege	Maintain or enhance private self-concept	Maintain or enhance socia self-concept

In order to distinguish between impression management as a trait and as a response set, we use the term situational impression management (SIM). SIM is not a stable personality factor, but a temporary reaction caused by the interaction of a self-relevant social situation (an interview) and a self-relevant stimulus (e.g., instructions to report brand associations). Self-deception is a preconscious process initiated by the stimulus. No conscious management of activated thoughts are involved, but still, different stimuli (e.g., instructions to report associations about different brands) might evoke different levels of self-deception. Thus, self-deception is also considered as a psychological response set and termed situational self-deception (SSD).

Furthermore, the characteristics of the three mechanisms imply that at least two of them may occur together in a given situation. Also a likely order of mechanisms can be posited. More precisely, SSD as a pre-conscious process is likely to happen first. When long-term memory is searched for associations which are then transferred to working memory, some associations are pre-consciously censored -- probably the most threatening associations -- in order to protect the self. This contention that SSD is the first mechanism to be evoked is consistent with the principle of cognitive economy (Conrad 1972) in the sense that SSD, as the most important self-protective mechanism, is an automated pre-conscious process. The concept of cognitive economy implies that the cognitive system seeks to minimize it's workload due to limited processing capacity. Thus, important cognitive tasks which are frequently performed, may be automated because automated processing does not occupy as much cognitive capacity as more conscious processing. Subsequently, when SSD has been operating, SIM or PSM may occur depending on whether the context is private or social. A process model of motivational response distortion is depicted in Figure 2.3.

Figure 2.3.
A PROCESS MODEL OF MOTIVATIONAL RESPONSE DISTORTION



# 2.4. Behavioral consequences of motivational response distortions in elicitation interviews

In personality psychology and the survey literature in general, the major behavioral expressions of motivational response distortion are under-reporting and over-reporting of specified behaviors or attitudes. In the context of elicitation, the objective is different: to bring forth associations from consumers' memory. Thus, we need to identify the behavioral expressions of motivational response distortions in this context. Three major kinds of distortions are posited.

Non-response. The first obvious kind of behavioral response distortion pertains to situations where respondents withold activated information and do not report it at all. Non-response is a major kind of distortion within survey research (Bradburn and Sudman 1983), and is a serious type of behavioral response distortion in the elicitation of brand associations. When important associations are not reported, brand managers have biased guidelines for managing the brand.

Constructive reporting. Instead of refusing to respond, respondents might avvoid the sensitive response activated from memory, and rather report something else, or report a modified version of the activated response. For example, experiments have shown that when people are asked to respond to sensitive issues, they tend to replace disclosure depth with disclosure breadth (Jones and Archer 1976). Thus, respondents give the impression of reciprocating while still maintaining boundary control over the private domain or, alternatively, while avoiding the display of socially undesirable characteristics. Probably, in such a situation respondents will tend to activate information which is perceived of as socially acceptable according to prevalent social norms.

Latency-bias. Finally, respondents might actually report the sensitive activated associations, but at a later point of time than they were actually activated in order to first ensure that an acceptable impression is displayed. This kind of response can be explained by theories of conversation. Elicitation interviews may be regarded by respondents as a kind of conversation. Bringham and More (1959) even defined the research interview as a "conversation with a purpose". Hence, normative principles for natural conversations might also apply to elicitation interviews. Strack and Schwarz (1990) demonstrated that cognitive processes underlying several well-known response-effects in survey interviews (though response distortion was not addressed) are compatible with the principles of conversation suggested by Grice (1975). One major principle discussed by Grice is the principle of cooperation. Cooperation means, among other things, that people want their contribution to be "as informative as is required" (p. 117). To withold information is not consistent with this principle and is likely to cause at least moderate levels of stress. The conflict is between the concern of displaying a favourable impression with respect to the focal issue and the concern

for appropriate conversational behavior. When the respondent feels that s/he has made an acceptable impression, s/he might eventually report the sensitive associations in order to relieve the tension. This is most likely to happen after pauses in the elicitation interview, when the subject runs out of (alternative) less sensitive responses.

Discussion. It should be noted that all three forms of behavioral distortions may occur witin the same interview. In fact, if respondents are engaged in constructive reporting or distortion of response latencies, at least one other type of distortion is also present. For example, if latencies are distorted, this would necessarily imply prior constructive reporting, and vice versa; constructive reporting leads to distortions of latencies or non-response. Non-responding is the only type of distortion that theoretically may occur alone. Still, the cost of conscious non-responding is probably higher than the cost of constructive reporting and distortion of response latencies. Thus, constructive reporting (and hence distortion of response-latencies) assumably occur prior to non-responding in many instances. Non-response resulting from preconscious motivational distortions, i.e., situational self-deception, is however more likely to happen alone.

# 2.5. What is a "true" unbiased response?

In order to decide when responses are subjected to motivational distortions, we need a basis of comparison: what is a "true" unbiased response? This question is as tricky as it is important.

In studies on socially desirable responding in the survey literature, the true answer is sometimes known because the object of study is some kind of known behavioral frequency (e.g., speeding fees, voting frequencies, or abortion frequencies in a specified area). Notably, however, the true answer is seldom known on an indicidual level. By means of random sampling from a population with known frequencies, distortions can usually be detected on the group level only by comparing group and population figures (see Sudman and Bradburn 1983). Usually, the true response is not known. Especially, for variables such as opinions, beliefs, attitudes, and intentions, which are all mental constructs residing in people's memories, no measure exists for deciding what is a true response. How can we decide then, whether a given response has been distorted?

When the true answer is not known in the absoulte sense, researchers have to use a *relative* approach. For example, Aquillino (1994) found that more drug use was reported when subjects responded on self-administered questionnaires (SAQ) than when answers were given on ordinary questionnaires with their names on them. From this finding, Aquillino inferred that less distortion occured under the SAQ-condition because drug use is a sensitive issue which people tend to underreport, and the SAQ-procedure provides a sense of anonymity, which make people more free

to report their true repsonses. Relatedly, the ability of beliefs - measured under conditions of varying degrees of anonymity - to predict attitudes or intentions has been used to infer distortion. Specifically, when some beliefs are known to be sensitive, and the predictive ability is lower for conditions with no anonymity than for conditions under which subjects are anonymous, this is taken as an indicator of distortion in the non-anonymity condition (see Supphellen et al. 1997).

This kind of logic is fundamental in most research on social desirable responding and implies that in order to infer the presence of distortion, researchers need to show that (a) less sensitive responses are reported in the control group than under anonymous conditions, and (b) that people actually feel more anonymous in the anonymity-condition than in the control group. The latter criterion refers to the significance of effects of anonymity manipulations, which are often taken for granted in studies of effects of anonymity on social desirable responding (no manipulation checks). Another more serious problem with this approach is the measurement of sensitivity (criterion a). The task of measuring whether a given belief or attitude is sensitive (to distortion) is a difficult task, which itself is susceptible to social desirable responding because distortion of responses will usually be regarded as inconsistent with appropriate or desirable conduct. Therefore, Sudman and Bradburn (1983) have recommended that sensitivity is measured by means of third-person questioning. Their measure of sensitivity focused on the emotional reaction of respondents when asked specific questions: "please, tell me whether you think those questions would make most people very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy." (Bradburn et al. 1978, p.223). This measure relies on the process of projection: that respondents, when subjected to the focal questions, will transfer their own uneasiness to other people. We will come back to operationalization issues in later chapters.

Whereas the two criteria mentioned above are necessary, they are not *sufficient* in order to infer that motivational distortion of responses has occured or that some kind of anonymity manipulation have reduced motivational distortions. There are possible rival explanations: effects of anonymity are not necessarily moderated or mediated by motivational mechanisms. For example, anonymity manipulations may in some instances lead respondents to believe that they are expected to report sensitive associations (see Singer, Hippler, and Schwarz 1992). Hence, reporting of more sensitive beliefs under conditions of anonymity may stem from selective activation of sensitive beliefs. This and other alternative mechanisms have to be considered in the design of the empirical study and in discussions of findings.

When discussing the truthfulness of responses, another aspect of the conventional approach to investigating socially desirable responding should be mentioned: the phenomenon is studied within a research context. Correspondingly, in elicitation of brand associations, the focus is on the extent to which associations reported in an interview can be assumed to reflect the same set of

associations which are actually activated from memory in that situation. Notably, a «true» non-distorted response in this situation may or may not be similar to the set of associations that would be activated in a real purchase situation.

# 2.6. Summary

In this chapter, we developed a generic concept of motivational response distortion (MRD) consisting of three types of distortion: (a) situational impression management (SIM), (b) private self management (PSM), and (c) situational self-deception (SSD). All three mechanisms may occur in an interview setting. Specifically, PSM and SSD may even operate when no interviewer is present. This recognition have important bearings on the discussion of how to define and measure anonymity (see Chapter 4).

Based on the discussion of antecedent psychological processes, we also addressed the behavioral consequences in an elicitation context. Three types of distortions were identified: (1) non-response (holding back activated associations), (2) constructive reporting, that is reporting of irrelevant, non-sensitive associations instead of sensitive associations, and relatedly, (3) latency-bias, instances in which associations are reported later than actually activated. More specific consequences of distortion in elicitation of brand associatios are discussed in later chapters.

Finally, we addressed the question of how motivational distortions can be detected. At this point we concluded that no objective standard of true responses is available, but that the *relative* ability of different techniques to elicit sensitive and predictive associations can be measured. Hence, the presence of motivational response distortions (and the presence of rival mechanisms) must be inferred from the characteristics of elicitation outcomes and the attributes of the different conditions under which associations are elicited.

#### CHAPTER 3

# THE CONCEPT AND THE ELICITATION OF BRAND ASSOCIATIONS

In Chapter 2, three different types of motivational response distortions in elicitation interviews were presented. In order to develop an understanding of more specific effects of distortion in elicitation of brand associations, and to arrive at a definition of anonymity pertinent to such distortions, we need to explore the nature of brand associations and the process of elicitation. What kinds of associations will be affected? How? Though testable hypotheses are not presented until Chapter 5, the conceptual basis for the hypotheses is developed here. Moreover, in this chapter we seek to define the measurement task of elicitation in order to explore potential rival effects of anonymity manipulations.

The chapter opens with a brief review of general properties of associative networks (section 3.1.). Next, relevant dimensions of brand associations that may be affected by motivational distortions are discussed in section 3.2. Characteristics of elicitation interviews is the focal matter of section 3.3.

# 3.1. Properties of associative networks

Brand associations are organised in cognitive networks in consumers' memories (Keller 1993; 1997). In this respect, brand associations are not any different from any other kind of association. In this section, major properties of associative networks and memory representations are briefly reviewed. The literature on this topic is extensive (see Collins and Loftus 1975; Raaijmakers and Shiffrin 1981; and Anderson 1983 for more elaborate presentations). Again, we can only afford a brief look at major properties. First we discuss how brand associations might be *represented* in the associative network, that is, the relevant kinds of memory codes. Second, we address the major *structural properties* of associative networks, and finally, *processing properties* are reviewed, that is properties describing how the network of associations works when it is subjected to some kind of internal or external stimulus and cognitive processing takes place. Finally, implications for motivational response distortion in elicitation interviews are discussed.

#### 3.1.1. The representation of brand associations.

Contemporary conceptualizations of brand memory define brand associations as nodes in semantic networks (Keller 1993; Aaker 1991). As a consequence, brand associations are most often viewed as propositional representations of brand-related knowledge. Propositions are sentence-like representations consisting of a set of nodes and links in which each node is a noun, verb or adjective and each link is the relation between ideas (Anderson 1983), e.g., «Mercedes is a highquality automobile». However, restricting the mode of representation of brand associations to the propositional mode reflects an outdated view of associative memory. In fact, in other areas of the marketing literature the dual-coding theory of Paivio (1971) and related theories has since long been adopted. Paivio contended that pictoral and sometimes also verbal stimuli result in the formation of both verbal (propositional) and visual/spatial memory codes. The relevance of imagery representations to marketing problems is well documented in the literature (e.g., Lutz and Lutz 1978; Houston et al. 1987; Unnava and Burnkrant 1991; Rossiter 1980). For instance, it has been shown that high imagery words (words that evoke visual images, e.g.; Ford Mustang) are remembered better than low imagery words (Ford Mondeo). This effect is attributed to the assumption that high imagery words are represented in two codes which in turn enhances retrievability. Moreover, a third kind of memory code has gained widespread acceptance in the cognitive literature; the mode of representation termed temporal strings (Anderson 1983). This kind of representation preserve the sequential structure of information and seems particularly pertinent to memory of behavior (Fiske and Taylor 1995). In other words, some of the knowledge derived from the observation of behavioral actions involving the brand probably is stored in the

form of temporal strings (such as a series of actions for how to operate a Xerox machine). For example, current conceptions of long-term memory imply that information can be represented in the form of (at least) three kinds of memory codes: propositions, imagery or temporal strings. Moreover, Anderson (1983) has argued that all three memory codes are compatible with an associative network model of long-term memory. Finally, a triparite-view of the representation of brand associations is consistent with the current view of how *product knowledge* is represented in long-term memory (Brucks 1986; Johnson 1989).

#### 3.1.2. Structural properties of the associative network model.

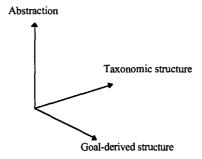
Several variants of the associative network model are found in the cognitive literature. In this brief review we mainly borrow perspectives from Anderson's (1983) conceptualization. According to Anderson, knowledge (e.g. brand associations) is stored in memory in terms of cognitive units (or associations). Each cognitive unit can appear as an element in other units. For instance, two associations can be represented in different codes, e.g., one as a proposition (Mercedes signals German quality) and the other as a visual image (Germany pictured on a map). The element Germany links the units together even though it is represented in different memory codes in the two units. Thus, cognitive units (or associations) are tied together in networks by joining elements.

Following the basic principles of categorization (Rosch 1975) and cognitive economy (Conrad 1972), brand associations within the network are assumed to be organized into *hierarchical structures* according to their level of similarity and abstractness. Abstraction implies a concentration of concrete associations into more general associations. Various attributes tap into benefits, which in turn are linked to attitudes. Correspondingly, a single category of brand associations, e.g., *functional benefits* may be found at different levels of abstraction. This conception of hierarchical relationships is consistent with Anderson's (1983) notion of *tangled hierarchies*. One major implication of this hierarchical organization is that the abstractness of product attributes applied in consumer judgements varies directly with the abstractness of the product (Johnson and Fornell 1987).

Further, cognitive theory suggests two organizing principles, and thus two kinds of categories of associations which may overlap or cut across the hierarchies based on abstraction: taxonomic and goal-derived categories (Barsalou 1983; 1985). Taxonomic categories contain "dictionary-knowledge" of natural objects, independent of contexts, e.g. associations describing what a car is. *Goal-derived categories* are organized according to specific processing objectives, for instance "things to consider when buying a car". Previous conceptualizations of brand image and brand

associations have devoted little attention to the distinction between taxonomic categories and goalderived categories. However, this could be an important distinction for brand managers and researchers. Brands and brand associations are probably organized in both taxonomic and goalderived categories, or only in one or the other. For instance, benefit associations are more likely found in goal-derived categories than taxonomic categories whilst the opposite probably is true for physical product attributes. Thus, an overall brand image may consist of several taxonomic and goal-derived categories which are only partly overlapping. Some associations are only found in specific goal-derived categories because they are only relevant to particular processing objectives and not to a general comprehension of the brand as such. For instance, brand usage presuppose some behavioral goal. Therefore, usage or user information is probably stored in goal-derived categories (e.g., "people I know would be impressed seeing me drive a BMW"). Many of these associations referring to specific persons are likely not to be stored in other goal-derived categories like "driving comfortably" or in taxonomic categories like "BMW models". In short, the organization of brand associations into units seems to rest on three structural principles: abstraction, taxonomic relevance (comprehension), and goal-relevance. Hence, the structure of brand associations could be represented in a three-dimensional space, see Figure 3.1.2.

Figure 3.1.2.
STRUCTURAL DIMENSIONS OF BRAND ASSOCIATIONS



#### 3.1.3. Processing properties

The network approach to consumer memory reviewed here considers long term memory as a large network of nodes and links (Anderson 1983; Wyer and Srull 1989). Nodes are stored information (associations) connected by links that vary in strength. When the brand name -- or some other information in the network -- is activated, a "spreading activation" process, which is largely automated, takes place from node to node around the association first activated (Collins and Loftus 1975; Raaijmakers and Shiffrin 1981). The spread of activation decays gradually and the decrease in activation is inversely related to the strength of links. An association is activated (that is, reaches

a level of consciousness) if the extent of activation for that association reaches a certain threshold value (working-memory is simply viewed as the set of associations activated at a given point in time). The degree of activation for an association is the sum of activation received from all links to that association. Thus, the probability that a given association is activated (that is it's strenght) is dependent on the number of links between the starting point (e.g., the brand name) and the focal association and the strength of links between them. If many strong links exist, the association is very likely activated even if the stimulus is relatively weak. For more comprehensive reviews of processing properties of memory associations in the psychological literature, we refer to Anderson (1983), Collins and Loftus (1975), Gillund and Shiffrin (1984), Raaijmakers and Shiffrin (1981), Rateliff and McKoon (1988), and Wyer and Srull (1989).

#### 3.1.4. Implications for the study

The general properties of associative networks reviewed here, may contribute to our understanding of distortion in elicitation of brand associations. First, the notion that associations are linked together in neat networks supports our contention that sensitive associations could be replaced in elicitation reports by associations which are less sensitive per se, but which have much the same connotations as the sensitive associations they are replacing because they are closely linked together in the network. For example, the associations expensive and personal success could be closely related in a network for the car brand Mercedes. Thus, the meaning of expensive in this context, as perceived by the consumer, implies an aspect of personal success because adjacent associations provide meaning to each other (Anderson 1983). If personal success is perceived as a sensitive association to disclose, the respondent may instead report expensive and still keep a feeling of «having said the truth» since expensive in the mind of the consumer strongly implies persoal success. One implication of this is that asking respondents whether they held back any information, or whether they believe that others would do so, may not provide valid estimates.

Another property of associative networks with bearing on the present investigation, is that some associations are organized in goal-derived categories (Barsalou 1983). Specifically, it seems reasonable to expect that benefit associations, attitudes and intentions will tend to be stored in this type of category, whereas physical attributes are more often stored in taxonomic categories. If our contention is that benefit associations, attitudes and intentions are generally more sensitive than physical attributes, then we would expect more motivational response distortion when goal-derived categories are evoked compared to taxonomic categories. In order to derive a more detailed understanding of the effects of motivational response distortions in elicitations of brand associations, we need to address specific dimensions of brand associations.

#### 3.2. Dimensions of brand associations

In this section, central dimensions of brand association which might be affected by motivational response distortions are reviewed. Dimensions constitute important connotations of brand associations because they have been developed in order to investigate aspects of associations that produce differential responses with the consumer (Keller 1993). Keller and others are mainly concerned with four dimensions: content, favourability, strength, and uniqueness. Two other dimensions of brand associations highly relevant for the present study are added here: sensitivity and predictive ability of associations.

#### 3.2.1. Favourability.

Favourability refers to how associations are evaluated by consumers. Clearly, this is a critical dimension of brand associations as a major goal of brand management is to link a set of favourable associations to the brand in the mind of consumers. The concept of favourability is related to the concept of importance (MacKenzie 1986). Attributes or benefits considered as not very important are neither evaluated as very good (and vice versa). Thus, importance has been been equated with attribute polarity by Fishbein and Ajzen (1975). Though favourability is a significant dimension of brand associations, Keller (1993) noted that some associations that are not seen as particularly favourable or important by consumers may facilitate recognition and awareness or lead to inferences of quality (e.g. the star logo of a Mercedes). Moeover, the faviourability of associations may differ across situations (Miller and Ginter 1979). For example, air condition in a car obviously is more important in some seasons and some geographical areas than others.

#### 3.2.2. Strength.

Strength of associations refers to how closely associations are related to the brand name in the network. Strong associations come to mind immediately after the brand name is activated. Hence, they are often termed "top-of mind associations". Strength of an association is largely a function of the quantity and quality of processing it receives at encoding. Large amounts of processing, such as when an individual thinks at length/often about the information, cause the strength of this information in memory to be increased. Second, when consumers actively elaborates on the meaning or significance of some brand association, stronger associations are created in memory than if less elaborate processing takes place (i.e., the depth-of-processing approach, Craik and Lockhart 1972). Strength is a very important dimension to brand managers as their job is to make the right kind of (favourable) associations come to mind first when customers encounter their

brands. Again, the context in which a brand is considered is important. Generally strong associations may not be very *accessible* or easily retrieved in specific situations (conf. Tulving and Psotka 1971).

#### 3.2.3. Uniqueness.

The objective of brand managers is not merely to create an image of strong and favourable associations -- these associations should also be differentiated from those of competing brands (Aaker 1982; Kapferer 1997; Keller 1997). There are two kinds of uniqueness. First, associations can be unique in the sense that no other brand holds the same association. This kind of uniqueness is rare for important associations in competitive markets. More obtainable is uniqueness in terms of significantly higher strength of strategically important associations than competitors. For example, Volvo tries to be uniquely associated with safety. Of course safety as an association is found in the associative networks of other car brands too, but safety is probably more strongly linked to Volvo than to other brands.

From a managerial perspective, favourability, strength, and uniqueness are the key dimensions of brand associations. When recognizing that elicitations of brand associations may be subjected to social desirable responding, two additional dimensions seem important.

#### 3.2.4. Sensitivity.

It is a widely held assuption that respondents generally try to make a good impression with interviewers (Bradburn and Sudman 1983). In chapter 3, we argue that needs to display a favourable self-image are present in many -- if not most -- situations, also in response conditions in which no researcher is present (conf. Schlenker 1985; 1986). Thus, motivational distortion of responses in order to display a desired self-image probably is a serious problem in elicitation of brand associations. A major question in this respect is whether some kinds of associations are more sensitive to such a response bias than others. In this study, we define sensitivity as the perceived probability of holding back associations. This is a very important dimension because if some types of associations tend to be witheld by respondents, brand managers have incomplete or even misleading information about the status of the brand. However, little is known about the differential sensitivity of various types of brand associations to social desirability effects.

#### 3.2.5. Predictive ability.

The issue of sensitivity points to another critical dimension of brand associations: predictive ability. Managers need to know which associations are most predictive of general attitudes toward the brand, of purchase intentions, and behavioral purchase decisions. Zaltman et al. (1973, p.43) made a distinction between two types of prediction: (a) predictions in which the criterion and the predictor concepts are measured at the same time (termed concurrent validity), and (b) predictions in which the criterion measured is separated in time from the predictor concept (predictive validity). However, the term prediction (or predictive ability) is commonly used for both situations.

Though predictive ability has seldom been explicitly addressed as a dimension of brand associations, we argue that predictive ability is an important -- if not the most important -- dimension. The rationale for this argument follows from the recognition of response bias in measurements of brand associations. If important associations are witheld by respondents, predictive ability will suffer, and measures taken to position the brand may not be optimal -- or in the worst case even harm the brand image. For example, when responses are distorted, this may often take the form of negative associations being witheld or strategically rated by respondents (i.e. Haire 1950; Fisher 1993). Thus, the level of favourability of associations may often be too high and misleading. In other instances, when social norms indicate a negative attitude towards the brand (e.g. for erotic magazines), the level of favourability may be too low. This and other kinds of bias cannot be detected by investigations of favourability or other dimensions in isolation, but can be discovered in terms of low predicive ability scores of associations. In fact, predictive ability can be seen as an overall indicator of the vailidty of elicited associations.

#### 3.2.6. The content of brand associations

The content of BAs mirror the complexity of physical, psychological and physiological aspects of brand-related experiences accumulated over time. Therefore, we need some extra space in order to cover the different types of brand associations that can be found in consumer memories. Several typologies of BA are found in the brand management literature (Aaker 1991; Farquhar and Herr 1993; Keller 1993). Additionally, typologies presented within two related streams of research have been been applied for classification of brand knowledge. First, there is a literature on different coding schemes for cognitive response analysis (Brucks et.al. 1988; Dickson and Sauer 1987; Sauer et.al. 1992) which also presents coding schemes for brand-related knowledge (Dickson and Sauer 1987). Second, means-end theory provide different typologies, or means-end chains, which have been applied for descriptions of consumers' brand memory (e.g. Gutman and Reynolds

1982; Howard 1977; Reynolds et.al. 1995). However, the most comprehensive typology of BAs developed from a brand management perspective is Keller's (1993).

Keller suggests that the content of brand associations can be devided into three major categories, based on their increasing level og abstraction: (1) product attributes, (2) brand benefits, and (3) brand attitudes. Attributes and benefits are subdivided into five subcategories of attributes and three subcategories of benefits according to the content of the associations. Here, we briefly review Keller's scheme. Moreover, we argue for the inclusion of one more category.

#### 3.2.6.1. Review of the Keller typology of brand associations

Attributes. Attributes are «those descriptive features that characterize a product or service - what a consumer thinks the product or service is or has and what is involved with its purchase or consumption» (Keller 1993, p.4). Five distinct subcategories are suggested. (1) Product-related attributes (refer directly to the physical components of the product or a service's requirements) (2) packaging or appearance information, (3) price information, (4) user imagery (type of users), and (5) usage imagery (where and in what types of situations the product or service is used).

Compared to other typologies, there is some confusion regarding the concept of *attribute*. Whilst Keller and several others (i.e. Gutman 1982) restrict the content meaning of the attribute term to perceptions of physical characteristics, some researchers use the term as a more generic concept including both physical descriptions and abstracted evaluations, i.e. «beneficial attributes» or «benefits» (Lefkoff-Hagius and Mason 1993; Meyers and Shocker 1981; Finn 1985). Here, Keller's narrow definition of attribute is prefered as a conceptual distinction between attributes and benefits seems tenable. Benefits stem from the experience of attributes. Attributes have direct physical counterparts, and are thus «actionable» for the brand or product manager, whereas benefits merely exist in the mind of the consumer. Moreover, it is a major concern for a brand or product manager to consider the effect of variations in attribute levels on perceived benefits. As the relationship between attributes and benefits are important and the terms originate from different psychological processes, it seems warranted to make a conceptual distinction.

Another comment is warranted on the use of the category labels of *user imagery* and *usage imagery*. «Imagery» refers to a specific type of representation or memory code in the cognitive literature (cf. Anderson 1983). Imagery is defined as visual or spatial representations of perceptual impressons, e.g. the shape of a car. However, there is no evident reason why representations of brand users or situational brand information should be represented exclusively in an imagery mode. Especially, we would expect situational brand-usage information also to be stored in terms of *temporal strings* (Anderson 1983). This type of memory code preserves the sequential structure

(the order) of experiences (cf. Santa 1977). The order of events probably is an important aspect of brand memory because benefit associations are often derived from causal inferences, which, in turn, are dependent on the sequential structure of events. Hence, to allow for different kinds of memory codes, we suggest that the terms «user imagery» and «usage imagery» is substituted with user - and usage information.

Benefits. Benefits are extracted from brand usage and represent knowledge of brand performance. Based on Park, Jaworsky, and MacInnis (1986), three categoies of benefits are suggested. (1) Functional benefits are related to specific functional or «practical» problems, e.g. how to move as quickly and safely as possible from A to B. These benefits usually correspond to the product-related attributes (e.g. the size of a car engine). (2) Hedonic benefits (also termed experiential benefits) stem from the emotional experiences of using the brand, e.g. sensory pleasure, variety and cognitive stimulation (e.g. pleasure of driving). (3) Symbolic benefits relate to consumers underlying needs for personal expression and outer-directed self esteem. Hence, symbolic benefits contain consumers' evaluations of the effects on the self concept of owing and/or using the brand (e.g. Mercedes indicates status or prestige).

Attitudes. The last category of associations in Keller's typology is attitudes. Historically, two different perspectives are found in the study of attitudes. The tripartite view specifies three components of attitudes: cognition (beliefs), affect (emotional reactions), and conation (intended and actual behavior) (Lutz 1991). The unidimensionalist conception of attitude is often seen as an evolution of the tripartite view (Eagly and Chaiken 1993). Under this approach, attitude is considered as a single affective dimension. Beliefs are seen as antecedents and intentions as consequences of attitude (Fishbein and Ajzen 1975). Since this latter conception dominates extant consumer research, we adhere to this perspective. Thus, brand attitudes are defined as affective evaluations of the brand as a whole. For an extensive review of attitude research, see Eagly and Chaiken (1993).

#### 3.2.6.2. Additional categories of brand associations

Other typologies of brand associations presented in the marketing literature include several other kinds of associations not included in Keller's scheme. For instance, Howard (1977) in his conceptualization of a brand's semantic structure included values, and Farquhar and Herr (1993) present a typology based on Aaker (1991) which encompasses product category associations, that is associations referring to a specific product category. In this study, we use Keller's typology because it seems to include the most important types of brand associations and because it is

commonly used in market research. However, we suggest that one important type of association is added.

Intentions. Behavioral intentions are, as the proximal cause of behavior (Fishbein and Ajzen 1975), highly relevant to brand managers. Indeed, Fishbein and Ajzen demonstrated that better predictions of behavior were obtained when intentions were included in their models. The question is whether intentions can be conceived of as stable components of associative networks. The answer to this question is probably yes -- and no, depending on the type of brand in question. For low-involvement products, intentions are often formed spontaneously few minutes ahead of purchase -- often just before or even after entering a store. For such brands, intentions are seldom found as stable associations. For expensive luxury products, however, intentions may occupy a central position in brand memory for long periods of time. Luxury brands such as BMW or Rolex often are more expensive than consumers can readily afford. Hence, consumers may desire these brands for some time -- perhaps for several years -- before they can afford to buy them. Moreover, brands with symbolic brand concepts (Park et al., 1986) often are positioned by means of market shielding (minimizing transaction barriers toward the target group whilst maximizing barriers toward non-target groups). Such a strategy may include selective distribution which generally restricts the availability of the brand. Thus, even without financial restrictions consumers may store purchase intentions in long term memory because desired brands are not available in the immediate environment. On this account, we suggest that purchase intentions are included as a separate category in Keller's typology.

# 3.3. Summary and implications

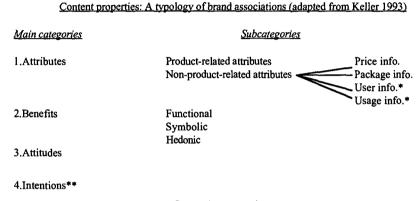
What is the nature of brand associations? So far in this chapter we have attempted an answer to this question. Major properties of associative networks and important dimensions of brand associations have been reviewed. A slightly revised version of Keller's typology of brand associations is shown in Table 3.3. together with main structural, representational, and processing properties of associations. The next question to be asked is: What dimensions and types of associations will be affected by motivational response distortions in an elicitation interview? We have indicated that benefit associations, attitudes, and intentions are expectedly more sensitive to distortion than physical attributes. Moreover, symbolic benefit associations seem particularly susceptible to distortion because this type of association is strongly related to the self-concept of respondents and their need for outer-directed self-esteem. Also, the strength of brand associations in terms of response latencies is likely affected because respondents will tend to postpone mentioning of sensitive brand associations. The extent to which the favourability of reported associations is affected is likely dependent on the particular brand in question and the sensitivity of holding a

positive versus a negative attitude toward the brand. Finally, because some associations are withheld and irrelevant non-diagnostic information reported instead, the ability of associations to predict brand attitudes and intentions is probably affected. All these effects are more systematically addressed in Chapter 5 in terms of testable hypotheses.

Table 3.3

CONNOTATIONS OF BRAND ASSOCIATIONS:

CONTENT, REPRESENTATION, STRUCTURE, AND PROCESS



#### Processing properties

When some association is activated, a spread of activation is takes place along all links departuring from the initially activated association. The spread of activation decreases gradually in a manner inversely related to the strength of links. A given association is retrieved if the level of activation reaches a threshold value. The level of activation equals all incoming activation from all related links. Hence, the probability of activation of an association is a product of the number of links and the strength of those links.

#### Representational properties

Brand associations can be represented in the from of three different memory codes: as *propositions*, *imagery* or *temporal strings*. Propositions are sentence-like representations consisting of a set of nodes and links in which each node is a noun, verb or adjective and each link is the relation between ideas. Imagery refers to spatial representations, whereas temporal strings are ordinal representations preserving the sequential structure of encoded information.

#### Structural properties

Brand associations are organized in *taxonomic* and/or *goal-derived categories*. Additionally, associations are organized into hierarchies according to their *level of abstraction*. Hierarchies might overlap or cut across taxonomic and goal-derived categories. Separate links between associations in the network has a *dual structure*: one connection going from A to B and one connection going from B to A. The strength of the two directional connections might be asymmetric.

<sup>\*</sup> New category labels

<sup>\*\*</sup> Category added to Keller's typology

#### 3.4. Elicitation of brand associations

Previous sections of this chapter have presented relevant properties and dimensions of brand associations. In this section, the focus is on the task of eliciting brand associations. In addition to the characteristics of the focal brand, the measurement process itself may stimulate or reduce motivational response distortions. Thus, we need to address the potential sources of motivational distortion in elicitation interviews.

Elicitation is defined here as the process through which a researcher personally interacts with a respondent such that brand associations are activated and identified from the individual's memory. Several qualitative methods are suggested in the literature for use in elicitations of brand associations; e.g. focus groups, free association, picture interpretation, brand personality description, sentence completion, thought listing and direct questioning (Aaker 1991; Keller 1993). Because some kind of personal interview is most commonly applied (Keller 1998), we concentrate on this mode of data collection. Very few attempts at comparing different methods emprically or theoretically are found in the literature. Consequently, guidelines for selection of methods are scarce and vague. Generally, individual interviews are recommended in favour of group discussions if detailed information on personal and/or sensitive matters are required (Aaker 1991; Malhotra 1996; Sampson 1986). Also, triangulation is recommended across respondents under the assumption that no single method capture the total dimensionality of a brand or product (Sampson 1972). Beyond these very generic rules of thumb, few guidelines exist to support marketing researchers in the selection of elicitation techniques. Specifically, no guidelines are found for when -- or how -- to induce anonymity.

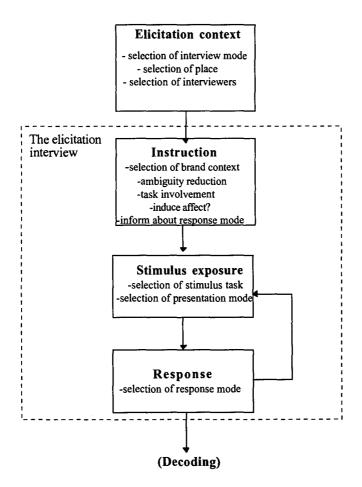
#### 3.4.1. A process model of elicitation interviews

One major problem in discussions of elicitation methods in the marketing literature is the lack of a precise definition of the concept of *elicitation method* or *elicitation technique*. Still, an implicit consensus of what an elicitation method is. Most researchers seem to equate the term with what we suggest is called *the stimulus task*. The stimulus task is the cognitive assignment to which the respondent is exposed in order to activate brand associations, for instance the reporting of «free associations» when hearing a stimulus word, or answering a set of direct questions. However, we contend that focusing exclusively on the stimulus task is too narrow a perspective. Several other important aspects of elicitation should be broached by the concept of the elicitation method, namely the selection of an elicitation context, the instructions made before the stimulus task exposure, the presentation mode, and the response mode. Most importantly, these other aspects are needed in order to complete a picture of choices made by the researcher in an elicitation interview that

potentially influence the level of motivational response distortion. Other influential factors than anonymity manipulations represent potential confounds to observed effects of anonymity and should be controlled in experiements designed to measure the impact of anonymity.

In this section, we present a four-stage process model of elicitation interviews describing the different concerns and decision problems related to different stages of an elicitation interview (see Figure 3.4.).

Figure 3.4.
THE ELICITATION INTERVIEW PROCESS



As methodological decisions influencing the elicitation outcome have to be made at each stage of the process, the whole model is included in our conceptual definition of *elicitation*. *Elicitation method*, in turn, refers to a specific combination of choices made at each of the four stages of the process. While addressing the choices to be made at the different stages of the model, our attention is devoted to choices potentially affecting the level and type of anonymity and corresponding motivational response distortions.

Elicitation context. Before deciding on what to do during the interview, several concerns regarding the context of the interview need to be considered which may effect the level of motivational response distortion. First, one has to decide on whether to interview individuals or groups and to select a proper interview mode. As we have already pointed out, individual face-to-face interviews are generally preferred when the objective is to study consumers' brand associations in detail (Malhotra 1995; Sampson 1986). However, other interview modes such as telephone interviews and group discussions might suffice when there is no need for details and motivational response distortion is likely not to be a problem (e.g. simple, non-expensive, low-involvement products). Further, the researcher should consider what place and what kind of interviewers to use. For instance, Chaikin, Derlega and Miller (1976) found that respondents disclosed more personal information in a cozy room with pictures on the wall, cushioned furniture, a rug and soft lighting. Thus, the place of the interview is assumed to influence the degree to which personal brand associations are elicited, that is hedonic and symbolic benefit associations rather than functional benefits or physical attributes (Hirschman and Holbrook 1982). These effects are not directly relevant to a discussion of motivational response distortion. Still, they are important to empirical investigations of anonymity by implicating that the place of interviews is a potential confound and should be controlled across experimental conditions when comparing effects of alternative approaches to anonymity. When it comes to the effects of interviewer characteristics, there are several interesting findings. For instance, findings from social psychology suggest that respondents tend to engage in impression management toward people they like or admire (Leary and Kowalski 1990). High levels of liking, in turn, relate to the degree to which an interviewer is perceived as similar to the respondent (Rohrberg and Sousa-Poza 1976) and to the physical attractiveness of the interviewer (Brundage, Derlega, and Cash 1977).

Instruction. The instruction is often neglected in discussions of how to elicit brand associations. However, the initial instructions made to prepare respondents for the stimulus task are highly important, especially when focusing on anonymity and motivational response distortion. Four major concerns demand attention. First, the researcher must decide on the proper brand context: Should the respondent be put in the context of brand choice, evaluation, or usage or should s/he be presented to any specific context at all? If, for instance a choice context is chosen, a smaller set of

associations high in discriminative ability is typically elicited, whereas no specification of the context will result in a larger and more diverse set of associations being elicited. Moreover, a focus on choice is likely to increase motivational response distortions because choices are more personal than an unrestricted listing of thoughts. Second, the researcher should be concerned with how to reduce respondents' perception of ambiguity during the elicitation interview. In clinical psychology, it is deemed important that clients are fully aware of their role responsibilities in treatment. For instance, in support of this contention, Skinner and Anderson (1959) found that «therapy readiness» was related to the realism and accuracy with which clients perceived the therapy process. Correspondingly, respondents' level of accuracy, and hence the validity of elicited associations, probably are dependent on a precise and instructive explanation of what s/he is supposed to do during the elicitation session. In fact, non-responses or irrelevant responses typically assumed to stem from social-desirability-mechanisms, might in stead be due to high levels of perceived task ambiguity. Techniques for ambiguity reduction include detailed task descriptions, warm-up-tasks and observational modeling (e.g., observing an «exemplary» respondent) (see Chelune et al. 1979). Third, task involvement is a prerequisite for obtaining deep and rich information. Fourth, some findings within advertising research on the effects of inducing positive affect might have some bearing on elicitation. For example, Isen et al. (1985) found that the positive valence of a stimulus word as well as the affective state of the subject, led to more diverse and more unusual first associations to common words. This stream of research indicates that researchers, by inducing positive affect in the introduction of the elicitation process, probably can influence the way associations are activated and the kind of associations elicited from memory. Furthermore, by altering the emotional state of subjects, inducing affect might influence the kind of motivational distortion operating under an interview. Finally, and most importantly, careful instructions before the stimulus task about anonymous response modes are imperative for any effects of such response modes to occur. Respondents have to keep the anonymous characteristics of the response mode in mind when responding to the stimulus task in order to feel anonymous.

Stimulus exposure. In this phase, the researcher must select the appropriate stimulus task and mode of presentation. Stimulus tasks vary on several dimensions. For instance, some are highly structured and dominated by the researcher, e.g., Q-sorting and repertory grid techniques (Sampson 1986), whilst other tasks are less structured and to a large extent dominated by the respondent, such as free one-word associations (Friedman 1986) and picture association. Others, in turn, fall between these extremes and are characterized by a concurrent dialogue between the researcher and respondents, e.g., in-depth interviewing and The Critical Incident Technique (Flanagan 1954). Recently, Zaltman and associates (Zaltman and H. Coulter 1995) have developed an interesting technique (ZMET: Zaltman Metaphor Elicitation Technique), which is a combination of several complementary stimulus tasks. For the purpose of inducing anonymity, we have discussed two classes of stimulus-tasks: subject-projective questioning and stimulus-projective

questioning. Though the need is indeed recognized, a general review of different stimulus tasks is beyond the scope of this study.

The role of presentation mode in elicitations has so far been largely ignored in the market research literature. Theoretically, stimulus tasks can be presented in a number of ways corresponding to all of the human senses. The effect of presentation mode on motivational response distortion is uncertain.

Response. A final issue in the elicitation of brand associations is the choice of response mode. Again, the marketing literature is very scant with respect to empirical and theoretical investigations of the elicitation of brand associations. However, as previously noted, important findings within the survey literature suggest possible techniques for inducing anonymity which might apply at this stage of the elicitation process (e.g. self-administered questionnaires, see Chapter 4). Several researchers have demonstrated that anonymous response modes may affect responses (e.g. Aquillino 1992; 1994; Tourangeau and Smith 1996). The question of whether such response mode effects can be found in the elicitation of brand associations is so far unanswered.

Finally, responses have to be decoded. In the context of the elicitation of brand associations, the different typologies (Table 3.3) can be used as coding schemes. Alternatively, traditional content analysis can be applied in order to discover new categories or relationships between associations. However, because no methodological decisions regarding the outcome of the elicitation interview are advocated at this stage, decoding is not included in our definition of the concept of elicitation.

#### 3.4.2. Summary

The four-stage process model of elicitation presented here provides an overview of major concerns and corresponding decisions that researchers should address in planning an elicitation interview. The majority of decisions may actually influence the level of motivational response distortion during an interview. Several of these decisions do not regard the level of anonymity induced in the interview, but are rather assumed to have a direct impact on motivations to distort responses, e.g., selection of interviewers and selection of brand context. Further, all decisions at every stage of the elicitation process may potentially affect elicitation outcomes. On that account, they have to be considered when designing experiments on effects of different approaches to anonymity in elicitation interviews. In order to isolate effects of anonymity, controlling for all other factors that can potentially influence the dependent variables is necessary. In fact, the present process model may function as a checklist for such experiments: every concern in the model should be controlled for in order to secure high internal validity of reported effects of anonymity manipulations.

#### CHAPTER 4

# DEFINING AND MANIPULATING ANONYMITY

In preceding chapters, psychological and behavioral processes which anonymity is supposed to cope with have been examined and the special nature of brand associations and of elicitation interviews have been explored. On this basis, we are now in a position to make a choice of definition for the concept of anonymity and thus answer the first research question.

In the first section of this chapter (4.1), we ask the question of what should be the denotation of anonymity, that is, the class of objects or events embodying the concept (Zaltman et al. 1973). Section 4.2. defines the central dimensions and connotation of anonymity. Here we argue for the existence of two distinct constructs of anonymity. In section 4.3. various techniques for manipulating anonymity are reviewed.

# 4.1. The Denotation of Anonymity

Who or what possesses anonymity? Two different answers to this question are found in the literature. First, many researchers, especially within survey research, treat anonymity as an objective characteristic of a response condition. For example, if respondents are instructed not to identify themselves by writing their names in a questionnaire, responses are classified as anonymous (e.g., Aquillino 1994; Downs and Kerr 1986; Fuller 1974; Futrell and Swan 1977). Within this perspective there is no need for manipulation checks. If respondents names are not on the questionnaire, responses are anonymous, per se.

The second denotation suggested in the literature is rooted in a psychological approach to anonymity. Here, anonymity is defined as the *psychological perception* that other persons cannot identify the subject as respondent (e.g. Schwarz et al. 1991; Fisher 1993). Thus, the denotation of anonymity is within *the respondent* -- not the response. At first glance, the difference may seem trivial, but further elaboration of the consequences of accepting the response or the respondent shows that this is a very important conceptual distinction.

When anonymity is considered as a psychological state -- and not as an objective characteristic of a response condition -- manipulations intended to induce anonymity may not necessarily lead to perceived anonymity. Correspondingly, conditions defined as no-anonymity conditions may in fact induce significant levels of perceived anonymity. Indeed, several studies comparing assumed anonymous and non-anonymous conditions reveal that respondents perceive significant levels of anonymity also under non-anonymous conditions. For example, manipulation checks reported by Fisher (1993) show a significant difference between the anonymous and non-anonymous conditions (means = 17.17 vs 10.96, respectively, measured on a summated four-item scale including items such as «my responses on this survey can be traced back to me»), but the absolute level of anonymity reported in the no-anonymity condition revealed that respondents also felt substantial degrees of anonymity under this condition. Why? We contend that perceptions of anonymity can be directed toward different parties. Some respondents in the no-anonymity condition may have focused -- not on the researchers, but -- on the concern for whether some third party (the general public, other participants in the study, etc) would likely see their responses and reveal their identity. A general trust in the integrity of researchers may have led to significant levels of felt anonymity. This scenario illustrates an important aspect of the psychological approach to anonymity: when perceived as a psychological state, anonymity becomes a complex and potentially multifaceted concept embracing different psychological mechanisms. Most importantly, we recognize that it is not manipulations as such, but the psychological reactions that determine the effects of manipulations. Therefore, in order to be useful it is imperative to select the respondent -and not the response condition -- as denotation for the concept of anonymity.

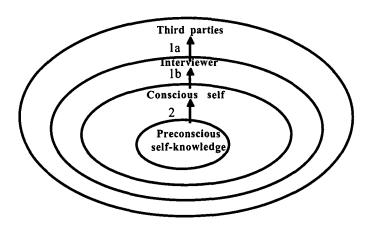
# 4.2. Defining Anonymity

Based on the reviews of antecedent psychological process of motivational response distortions and the reviews of brand associations and the process of elicitation, we are now in a position to discuss what should be the properties or dimensions of anonymity. First we suggest a general definition:

Anonymity is the degree -- perceived by the respondent-- to which responses can be coupled with the respondent's identity by some person or group of persons -- including the respondent himself.

This definition contains an important directional aspect. More precisely, three different dimensions of anonymity can be derived from the different *directions* of the anonymity concern. The relevant directions are illustrated in Figure 4.2 and follow from the psychological mechanisms of situational impression management (SIM), private self-management (PSM), and situational self-deception (SSD).

Figure 4.2.
DIRECTIONS OF ANONYMITY



1 = Social anonymity

1a = Public anonymity

1b = Interviewer anonymity

2 = Self anonymity

#### 4.2.1. Social anonymity

First, anonymity may be externally directed toward some other party than the respondent. This is the classic view of anonymity. Two subdimensions of social anonymity are postulated.

Interviewer-anonymity. This kind of anonymity is the classic type of anonymity targeted at the interviewer or researcher. Under full interviewer-anonymity respondents feel that the interviewer cannot link their responses and their identities. Interview-anonymity as defined here is consistent with Aquilino's (1994) definition of perceived anonymity in an interview setting:

Anonymity of responses refers to whether or not responses become known to the interviewer during the interview (p. 212)

In relation to Figure 4, interviewer-anonymity corresponds to arrow 1b. When there is full interviewer-anonymity, the respondent feels that s/he is the only individual who knows what associations s/he has reported.

Interviewer-anonymity should have substantial impact on situational impression management (SIM). When the respondent feels that the interviewer cannot link his responses to his identity, he is unlikely to try to make a good impression with the interviewer because he will not receive self-enhancing or self-deflating feedback from this person.

Public anonymity. This dimension refers to the concern for avoiding leakage of disclosed information to uninvited third parties. Thus, public anonymity is the felt degree to which third parties will be able to link responses and respondents. This kind of anonymity has often been termed confidentiality and is usually provided by verbal assurances of confidentiality in personal interviews. Under conditions of public anonymity, information may be revealed directly and openly to the interviewer, but the respondent is confident that the information is not passed on to other people. In Figure 4, public anonymity is illustrated by arrow 1a.

A concern for this kind of anonymity does not necessarily imply that the respondent would not disclose information to any third party. The essence of the concern is the sense of control over what information about the self is displayed to whom. The respondent may well disclose to other persons than the interviewer if a context of trust is provided.

Public anonymity is included in the concept of interviewer-anonymity. If a respondent is confident that an interviewer cannot link his responses and his identity, he is also confident that no third party will be able to do that. Thus, public anonymity could be considered as a weaker kind of

social anonymity than interviewer-anonymity and should have a weaker effect on situational impression management (SIM).

#### 4.2.2. Self anonymity

Notably, social anonymity -- by focusing on the relationship between respondents and other persons -- only is expected to influence one out of three kinds of motivational response distortions. Another type of anonymity is needed in order to mitigate distortions stemming from situational self-deception (SSD) and private self-management (PSM). Therefore, we introduce a new kind or a new dimension of anonymity: self-anonymity. Self-anonymity has not been explicitly integrated in previous conceptualizations of anonymity. However, this dimension is logically developed from the literature on subject-projective questioning. Self-anonymity is defined here as the degree to which respondents are subjectively self-aware during the interview. Subjective self-awareness is in turn defined by Duval and Wicklund (1972, p 2):

Subjective self awareness is a state of consciousness in which attention is focused on events external to the individual's consciousness, personal history, or body, whereas objective self awareness is exactly the opposite conscious state.

Third-person questioning (e.g. Fisher 1993) is a typical example of a method aimed at providing this kind of anonymity. By moving the focus of attention from the subject to a comparable third party (e.g.: «what do most teenagers associate with the magazine Playboy?»), the respondent may project self-threatening information onto others (e.g., Holmes 1968; 1978). A psychological separation is created between the respondent and his/her own associations as s/he focuses on a third party and reports associations on behalf of this other (similar) person. In this respect, the respondent is anonymous vis-a-vis his own self. In Figure 4, self-anonymity is illustrated by arrow 2.

However, extreme levels of subjective self awareness are not tenable nor realistically obtainable within the context of interviews. The logic of self-anonymity is that removing the focus from the respondent to another person will reduce motivations to distort responses whilst remaining within the contexts of a similar in-group individual made for projections of respondents' own thoughts and opinions (Holmes 1978; Lewis, Bates, and Lawrence 1994). If the target of the projections is not perceived to be similar to the respondent, he will likely not project his own thoughts, but rather activate information from long-term memory about the target (Lewis et al. 1994). Hence, in order to elict valid information in a context of self-anonymity, we are dependent on projection to work. When the focus of attention is on a similar in-group person, the sense of similarity is likely to backfire in terms of spontaneous activations of the self of the respondent (i.e. Duval and Wicklund

1972). This position also is reminiscent of the notion of collective selves or we-facets of the self (Greenwald and Breckler 1985). A focus on similar in-group persons may evoke the we-facet of the self, which are the internalized goals of groups with which the respondent is identified. Thus, self-anonymity can be seen as providing a refocus from the private self to another more collective (and thus less sensitive) aspect of self. However, since the different selves are connected and elicitation interviews usually last for several minutes, full self-anonymity in the sense of no activation of the private self is improbable.

Self-anonymity has the virtue of potentially affecting all three kinds of motivational response distortions. When the focus is not on the respondent himself, he is probably not very concerned with making a good impression with the interviewer (situational impression management). Furthermore, to the extent that subjective self-awareness is stimulated, respondents' concern for identity development and private self-enhancement (PSM) is releaved, and automatic self-protective mechanisms such as situational self-deception (SSD) should be alleviated.

#### 4.2.3. Discussion

The three-dimensional framework of anonymity presented here has several strengths compared to previous conceptualizations. First, it is explicitly grounded in relevant psychological theories of self-presentation and self deception. Specifically, inspection of possible psychological antecedents of motivationally conditioned response distortions showed that previous conceptualizations have failed to take potentially important intrapsychic mechanisms into account. Second, our conceptualization intergrates several different perspectives on anonymity and response distortion. Third, the present conceptualization provides a framework for evaluating and classifying anonymity manipulations with respect to their potential for mitigating different types of motivational response distortion. Fourth, the recognition of different motivational mechanisms operating under different conditions inherent in the framework shed new light on previous findings on anonymity reported in the literature. In particular, the long record of equivocal findings on the effects of "traditional anonymity", that is, what we have termed social anonymity (e.g., selfadministered questionnaires (SAQ)), could be due to an unidimensional understanding and conceptualization of anonymity whereas multidimensional mechanisms of distortion could have been operating. For example, when no effects of using a self-administered questionnaire were found (see Bradburn and Sudman 1981), the reason might have been that sensitive issues were equally important to the private and social selves. Hence, even though respondents were anonymous to the interviewer in the SAQ condition, they were still motivated to distort responses in order to develop their own private identity (Greenwald and Breckler 1985).

It should be noted that different dimensions of anonymity can be combined within the same study. Fisher (1993) combined the use of social anonymity (SAQ) and third-person questioning (self anonymity). To our knowledge, this is the only study investigating the effect of such a combination. The effect of combining social- and self anonymity is uncertain. On the one hand, the result could be very strong and complete. One the other hand, instructions highlighting the (social) anonymity provided by the SAQ procedure may seem redundant or irrelevant whithin a context of self anonymity. At worst, such additional instructions may backfire and make respondents suspicious. Findings reported by Fisher (1993) are more in favour of the latter than the former explanation since less social desirable responding was found in the group subjected to third-person questioning than in the group where third-person questioning and SAQ were combined.

# 4.3. Manipulation of anonymity: A review

The preceding discussion and development of the concept of anonymity provide a basis for comparing different approaches and techniques for the manipulation of anonymity. In this section, major approaches and techniques previously used in the literature to reduce motivational response distortion are reviewed. Six different approaches are identified. For each approach different techniques are listed. The list is not exhaustive, but the techniques most frequently reported in the literature are included, see Table 4.3.

#### 4.3.1. Review of techniques

#### (1) Direct manipulation of accountability

First, some researchers have studied the effects of anonymity -- or rather its opposite -- by informing respondents that they will be asked to discuss their responses with a researcher after an interview. Sometimes this manipulation is used in combination with instructions to state or write down subjects' names in order to maximize effects of manipulations (e.g., Fisher 1993). Direct manipulation of accountability is a viable technique for studying theoretical psychological mechanisms related to anonymity, or lack thereof, but is less pertinent to applied market research. When considering this kind of manipulation in view of the present conceptual framework of anonymity and motivational response distortion, it is assumed to affect the level of social anonymity and, hence, the degree of situational impression management (SIM).

#### (2) Assurance of confidentiality

Assurance of confidentiality is a very popular approach. According to our conceptualization of anonymity, this technique may induce public anonymity, a weaker kind of social anonymity, and may thus have a moderate effect on SIM. A review of the effects of this technique suggests that inducing a sense of public anonymity only affects responses to (very) sensitive questions, such as questions about drug use or sexual behavior. Moreover, such effects are usually reported as relatively small (Singer et al. 1995). For insensitive questions, it has been indicated that assurances of confidentiality might even arouse respondent's suspicions rather than alleviating them (Singer et al. 1992). Still, confidentiality assurances are very common in all kinds of interviews.

#### (3) Selection of interview mode

Selection of *interview mode* also has been much debated and empirically investigated for its potential effect on socially desirable responding (see Sudman and Bradburn 1983). Traditionally, the anonymity-inducing ability of three different modes of administration are discussed in the literature: mailed questionnaires, telephone interviews, and personal interviews. The pool of findings is rather equivocal, but the tendency is in favour of mailed questionnaires as the most anonymous and face-to-face interviews as the least anonymous interview mode (Sudman and Bradburn 1983; Schwarz et al. 1993). However, a meta-analysis of 31 mode comparison studies suggested that administration mode differences have declined over time (de Leeuw and van der Zouwen 1988). This finding may indicate that progress have been made with personal interviews and telephone interviews in alleviating respondents anonymity concerns. When speaking of anonymity, we are again referring to *social anonymity* and corresponding effects on SIM.

#### (4) Response modes

Anonymous response modes represent by far the most extensively investigated approach to manipulating anonymity. Again, the kind of anonymity affected is social anonymity and SIM is probably the only type of motivational response distortion alleviated. Many different techniques have been used to provide a sense of response anonymity. The most common mode for directly inducing response anonymity is simply instructing respondents not to identfy themselves when responding to a questionnaire (Downs and Kerr 1986). Other more elaborated techniques directly influence the structure of responding. When using self-administered questionnaires (SAQ), respondents write down responses on a standard sheet of paper, which is subsequently put in a standard envelope and posted by the respondent. No names are disclosed. With one variant of this technique questions are asked by means of a walkman (audio-SAQ). The randomized response technique (RRT) is another frequently investigated technique within survey research. With this method respondents are asked two behavioral questions, one threatening and the other completely innocuous (Warner 1965; Sudman and Bradburn 1983). Both questions have the same possible answers, "yes" or "no". The distribution of answers to the innocuous question is known (for

example, such a question could be about gender: "are you female?"). Which question is answered by the respondents is decided by a probability mechanism and the researcher is not aware of which question is answered. Because the distribution of the innocuous question is known, the response on the sensitive question can be estimated. Hence, RRT allows for estimations of sensitive behaviors at the group level under conditions of very high social anonymity. However, this method is not applicable for elicitation purposes. Another group of survey techniques makes use of the computer in order to provide a sense of anonymity. Computer-assisted personal interviewing (CAPI) is now one of the most commonly used face-to-face data collection methods in the U.S. (Tourangeau and Smith 1996, p. 276). With this method subjects respond to oral questions from a researcher on the computer. CAPI has been found to be more effective than ordinary personal interviews in making subjects report sensitive behaviors (e.g. Bradburn et al. 1991). Even better results have been obtained by computer-assisted self-administered interviewing (CASI) where the questions appear on the computer instead of being asked by a researcher (Locke et al. 1992; Erdman et al. 1983).

Moreover, there are some results indicating that audio computer-assisted self-administered interviewing (ACASI) may even perform better than CASI on very sensitive questions. ACASI is similar to CASI except for the mode of asking questions; ACASI features auditory presentation of questions (e.g. Tourangeau and Smith 1996). Despite the great creativity observed within survey research in designing a variety of anonymous response modes, they are all assumed to affect only one kind of anonymity: social anonymity, and are thus not deemed effective in alleviating biases stemming from private self management (PSM) or situational self-deception (SSD). One final response technique developed by Jones and Sigall (1971) should be mentioned: the bogus pipeline technique. This method, which is a kind of fictitious lie detector, has been developed and tested within the context of experimental psychological research. For instance, Tedeschi and Rosenfeld (1981) used this technique to test hypotheses derived from impession management theory. The bogus pipeline technique makes use of lie detector-like equipment (e.g. detectors linked to the skin of respondents). Respondents are instructed that the lie detector is real and that the apparatus can measure the truthfulness of responses from implicit muscle responses. Unlike the other response mode techniques reviewed in this section, the bogus pipeline may affect the level of PSM in addition to SSM since respondents are manipulated to believe that any deviation from the truth will be detected.

When considering the fifth and sixth approaches to manipulating anonymity, which are both based on the mechanism of projection, a very important change is noted in the potential effects of manipulations. Projective techniques may provide a different type of anonymity from the foregoing techniques; self anonymity, which may affect all three kinds of motivational response distortions: SIM, PSM, and SSD.

Table 4.3. TECHNIQUES FOR MANIPULATING ANONYMITY IN CONSUMER RESEARCH

Approaches to manipulation of anonymity	Techniques studied	Selected references	Type of anonymity	Type of motivational distortion affected
1.Direct manipu- lation of accountability	Telling/not telling subjects that they will be asked to discuss their responses	Fisher 1993 Tetlock 1983	Social	Situational impression management
2.Confidentiality assurances	Verbal assurance of confidentiality prior to interview	Reamer 1979 Singer et al. 1992 Singer et al. 1995	Social ano. (public)	Situational impression management
3.Selection of anonymous interview modes	Face-to-face interw., Telephone interw., Questionnaires	Colombotos 1965 Grooves and Kahn 1979 de Leeuw and van de Zouwen 1988 Short et al. 1976	Social ano.	Situational impression management
4.Selection of anonymous response modes	Name disclosed/no name disclosed, SAQ audio-SAQ CAPI CASI ACASI RRT Bogus pipeline	Andreasen 1970 Aquilino 1994 Aquilino and LoScuito 1990 Bradburn et al. 1981 Fuller 1974 Jones and Sigall, 19 Tourangeau and Smith 1996 Warner 1965	Social ano. (public and interviewer)	Situational impression management (Private self management)
5.Use of person- projective techniques	Third-person questioning, Shopping-list techniques	Alpert 1971 Anderson 1978 Bearden and Etzel 1982 Fisher 1993 Haire 1950	Self ano.	Situational impression management, Private self management, Situational self-deception
6.Use of object- projective techniques	Modified TAT, Projective questioning referring to cars, animals, etc.	Rogers and Beal 1958 Zober 1956 Levy 1985	Self ano.	Situational impression management, Private self management, Situational self-deception

NOTE: SAQ=self-administered questionnaire, audio-SAQ=walkman-administered questionnaire, RRT=randomized response technique, CAPI=computer-assisted personal interviewing, CASI=computer-assisted self-administered interviewing, ACASI=audio computer-assisted self-administered interviewing, TAT=thematic apperception technique.

#### (5) Person-projective techniques

Person-projective techniques instruct respondents to answer questions or respond to some stimulus task from the perspective of another ambiguous person; for instance third-person questions like "what do you think most consumers associate with Mercedes?" By focusing on another person, respondents become less objectively self-aware (that is, more subjectively self-aware), which is the demarcating characteristic of self-anonymity. It is believed that allowing respondents to focus on another person creates a facade of impersonality. Behind this facade respondents are thought to speak more freely in terms of projecting their own attitudes and beliefs onto a smilar but ambiguous other person (Lawrence et al. 1994).

Person-projective techniques have been used in several surveys reported in the literature (e.g., Alpert 1971; Brinberg and Plimton 1986; Fisher 1993; Park and Lessig 1977). In these studies. respondents were instructed to answer questions about predefined beliefs or attitudes from the perspective of another ambiguous person. However, the effects of using this kind of anonymityinducing questioning are not known in many of the studies because no control groups were included, and hence no comparisons were made. For qualitative interviews, the majority of attention has been devoted to one single variant of person-projective techniques; the shopping list technique introduced by Haire (1950). Haire asked respondents to describe the character and personality of the author's of two shopping lists. The lists were identical except from one item: coffee. One of the lists contained Maxwell House Coffee (ground), and the other Nescafe instant coffee. In this classic study several negative and socially undesirable characteristics of women buying instant coffee were elicited which may not have been reported if respondents were asked directly. While the shopping-list study and its many replications (see Fram and Cibotti 1991 for a review) have certainly been useful to the discipline, the strong -- and largely warranted -- criticism directed toward this stream of research (e.g., Hill 1968; Anderson 1978) seem to have hindered further explorations and comparative investigations of other and potentially more useful personprojective techniques (e.g. projective word association tests). Thus, research on the shopping-list technique is extensive, but published qualitative research using person-projective techniques in general is rather limited.

#### (6) Object-projective techniques

Object-projective techniques ask questions directly in the first person, but use another stimulus than the one of interest. Instead of asking about the focal brand as such (e.g. Ranx Xerox), object-projective techniques may ask respondents to describe the brand as an animal, as a car, etc. (Levy 1985). In addition to potentially evoking unconscious material (Levy 1985), such techniques may provide a sense of self-anonymity because the focus of attention is moved from the relationship between the respondent and the brand to the relation between the brand and some well-known

object. However, the self-anonymity-inducing effect of object-projective techniques seems more uncertain than the effect of person-projective techniques. The thematic apperception test (TAT) is another well-known object-projective technique. It was originally developed by Murray (1938) for use in clinical psychology. The original test consists of 30 ambiguous pictures selected from paintings and drawings. Respondents are asked to tell stories about the pictures. It is assumed that individuals will organize their responses around their personal experiences, hopes, needs, and aspirations, and that the stories may reflect unconscious conflicts and attitudes (Kassarjian 1974). In the context of market research, pictures of the original TAT are changed to fit the particular marketing problem under study (for some examples, see Kassarjian 1974). Both objects and persons can be included in a TAT (thus, TAT can be both person-projective and object-projective).

#### 4.3.2. Manipulation checks

An important, but often neglected issue in studies of anonymity is the question of whether manipulations had a significant psychological effect compared to a control condition. For example, the psychological effects of confidentiality assurances are typically not checked (e.g., Reamer 1979; Singer et al. 1992). In fact, no studies on the effects of confidentiality assurances have been found in which manipulation checks were carried out. Also, in previous studies of anonymity (that is, interviewer anonymity) manipulation checks are sometimes not performed, in particular within survey research (e.g., Wildman 1977; Aquilino 1994; Aquilino and LoScuito 1990). However, within other disciplines or streams of research such as social psychology, decision behavior, and management research, manipulations of (interviewer-) anonymity are typically checked by means of simple rating scales. For instance, subjects are instructed to rate the extent to which they believe that responses can be traced back to the respondents (e.g., Connolly, Jessup, and Vlacich 1990; Cotton and Baron 1980; Jessup and Tansik 1991; Weldon and Mustari 1988). This type of measurement corresponds to our conception of interviewer anonymity.

Self anonymity is a new concept introduced in this study and no measure is readily available for manipulation checks. Still, several studies have used techniques which are deemed adequate for inducing this type of anonymity. For example, Fisher (1993) used third-person questioning in a study of consumer beliefs about new products. However, no manipulation check was performed. Similarly, other studies on the effects of projective techniques (e.g., Anderson 1978; Haire 1950; Supphellen et al. 1997) have not directly measured the psychological effect of the manipulation as such -- but only inferred from the results that manipulations caused respondents to project their own beliefs or attitudes. The concept of self anonymity focuses on a precondition for projection: that respondents during an interview focus their attention on a similar in-group person. To perform manipulation checks for self anonymity, we develop a new measure for this concept in section 6.6.

#### 4.3.3. Potential moderators

Manipulations of anonymity are expected to affect the outcome of elicitation interviews. Several personality traits may moderate such effects. In particular, self-monitoring (Snyder 1974; Lennox and Wolfe 1984) seems to be a relevant variable in this respect. Self-monitoring is an individual personality measure for the tendency of people to monitor and adapt their behavior in social situations. Thus, high self-monitors are more concerned with projecting social images that allow them to meet the requirements of different social situations. Moreover, high self-monitors have been found to be more concerned with the self-presentational significance of products (i.e. symbolic benefits) than low self-monitors (Snyder and DeBono 1985). Because of this, high self-monitors may hold more sensitive associations in their memories than low self-monitors and may be more concerned with displaying a favourable image during interviews. On that account, we expect that high self-monitors engage in more motivational response distortions and therefore are more susceptible to manipulations of anonymity.

#### 4.3.4. Summary and implications

Previous research on manipulations of anonymity have largely focused on alternative response modes and assurances of confidentiality in surveys. No studies have been found on effects of anonymity-manipulations in qualitative interviews. Most importantly, the emphasis on anonymous response modes apparently has lead to a narrow focus on only one type of anonymity: social anonymity. In order to investigate the relative efficacy of social and self-anonymity, projective techniques need to be included in experimental designs.

The conceptual development of anonymity in this chapter suggest that the two kinds of anonymity - social anonymity and self anonymity -- may affect different types of distortions and thus lead to different outputs of elicitation interviews. Furthermore, the review of techniques for the manipulation of anonymity suggests that different techniques are adequate for inducing different types of anonymity. In the following chapter specific hypotheses are developed for the effects of different anonymity-inducing techniques on elicitation outcome variables.

#### CHAPTER 5

# MODEL AND RESEARCH HYPOTHESES

In the introductory chapter, two main research questions were posed. The first question called for the clarification and development of the concept of anonymity. In Chapter 4 we attempted an answer to this query and concluded that a distinction can be made between two types of anonymity and that one of them can be further devided into two sub-constructs. In this chapter, we go on to investigate which techniques are adequate for manipulating different types of anonymity. The second research question focused on possible effects of anonymity manipulations on outcomes of an elicitation interview. To answer this question, empirical experimentation is necessary.

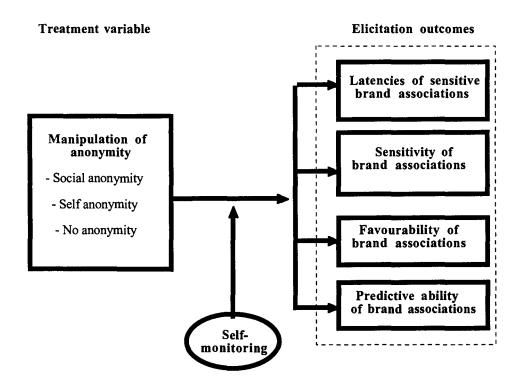
In section 5.1. of this chapter, we develop a model of the empirical relationships investigated in the study. This model provides a framework for subsequent development of hypotheses in section 5.2.

## 5.1. Conceptual model of anonymity effects

In the preceding chapter, two different kinds of anonymity were defined; social - and self anonymity. We have further advanced the conjecture that the two types of anonymity are adequate for alleviating different kinds of motivations to distort responses. Specifically, social anonymity was only deemed relevant for reducing social motivations directed toward the interviewer or some other person. Self anonymity, on the other hand, should affect all kinds of motivations for distortion -- also intrapsychic motivations -- because this type of anonymity creates a psychological distance between the self of the respondent and his or her responses. Due to the inherent differences between self- and social anonymity, the two are expected to have different effects on outcomes of elicitation interviews for a brand with sensitive associations. In particular, self-anonymity is expected to elicit other and more valid associations than non-anonymity conditions due to its greater potential for alleviating different types of distortion. A model of hypothesized effects of anonymity is described in Figure 5.1. The variables in the model are further described below.

Figure 5.1

MAIN RELATIONSHIPS EXAMINED IN THE EMPIRICAL STUDY



Manipulation of anonymity. Different techniques were selected to provide the different types of anonymity. Testable hypotheses are developed for this manipulation. Two techniques were selected for the purpose of inducing social anonymity and one for manipulation of self-anonymity. Additionally, one condition was included in which both social- and self anonymity were induced simultaneously. Finally, a control group with no manipulation of anonymity was included for the purpose of comparison. The specific techniques used for the different conditions are presented in section 5.2.1 below.

Dependent variables. The dependent variables follow from our discussions of response distortion in elicitation interviews (Chapter 2) and discussions of dimensions of brand associations (Chapter 3). First, we have suggested that one type of motivational distortion in elicitation interviews could be that sensitive associations are withheld until a favourable impression has been made and thus reported later than actually activated. The result of this kind of distortion would be that sensitive associations obtain too low latency scores when motivations for response distortions are not effectively alleviated. Non-response is the other major type of distortion in elicitation interviews. This kind of distortion will likely lead to differences between experimental conditions in the amount of different types of associations, in the sensitivity of associations, and the favourability of associations reported. Finally, some respondents are likely to distort their responses in terms of constructive responding, that is, reporting of irrelevant non-sensitive associations in stead of more relevant sensitive associations. This kind of distortion in combination with non-responding is likely to affect the predictive ability of brand associations reported. Predictive ability is defined here as the correlations between evaluations of brand associations and self-reported attitudes and intentions for the same brand (see section 6.6, for a discussion of measurement issues).

Moderator. One moderator was selected for the purpose of investigating possible interactions with anonymity manipulations. Self-monitoring is a well-known and extensively examined trait concept (Briggs and Cheek 1988; Lennox and Wolfe 1984; Snyder 1974; 1987) which seems particularly relevant to our investigation because it represents the tendency of individuals to observe and adjust their conduct according to situational cues to social appropriateness (Snyder 1974). This kind of tendency will probably interact with variations in anonymity conditions.

To provide a basis for testing the effects depicted in Figure 5.1, we first test specific expectations regarding two related issues: (a) which techniques that are adequate for manipulating the two kinds of anonymity, and (b) the relative sensitivity of different types of brand associations.

# 5.2. Hypotheses

In the following sections, hypotheses are developed regarding the manipulation of two forms of anonymity, the level of sensitivity of different types of associations, and the differential effects of anonymity manipulations on elicitation outcome variables.

Many different types of associations are discussed in the literature (see the summary in Table 3.3., Chapter 3). In the empirical study we have chosen to focus on the three types of benefit associations: functional -, hedonic-, and symbolic benefit associations -- and on attitudes, and intentions. These kinds of associations are deemed most relevant in consumer evaluation and purchase of brands and are therefore particularly important to brand managers (Park et al. 1986; Keller 1993; Keller 1998).

One assumption should be mentioned here. Different types of brands may be characterized by different kinds of brand associations. For example, Shavitt and Nelson (1997) found that the extent of symbolic associations -- or associations about the users of a product -- was moderated by the functions served by the product attitude. For example, products that primarily engaged attitudes serving a utilitarian function (e.g., aspirin and air conditioner) were shown to elicit less associations about users than products primarily serving a social identity function (e.g., team banner and class ring). A similar relationship is likely to be present at the brand level. In developing hypotheses in this section, we assume a brand with a rich associative network of different kinds of brand associations. In particular, we assume that symbolic associations are salient. Our choice of brand for the empirical study was guided by these considerations (see section 6.3.1., Chapter 6).

#### 5.2.1. Manipulation of social- and self-anonymity

Conceptual development of anonymity has been a central concern in this dissertation, i.e, research question 1 (chapter 1). The results of the theoretical review and synthesis of the concept in Chapter 4 resulted in the selection of anonymity techniques that are expected to induce principally different kinds of anonymity. Because no previous studies have addressed the comparative ability of techniques to induce different kinds of anonymity, development and testing of hypotheses on this issue is warranted.

In Chapter 4, two main kinds of anonymity were developed: Social anonymity and Self anonymity. Self-anonymity is conceptualized as the degree to which a respondent's attention is directed away from the self during an interview. Though researchers have not previously

conceptualized anonymity in this way, theoretical arguments for the mechanism of projection (Holmes 1968; 1978; Lawrence et al. 1994) and of subjective self-awareness (Duval and Wicklund 1972) is consistent with our notion of self-anonymity. Correspondingly, by inducing subjective self-awareness in an elicitation interview, respondents' reporting of associations is kept away from their egos. Projective techniques, in particular person-subjective techniques, are likely to induce this kind of anonymity.

One well-known technique presumably adequate for moving the focus away from the subject to a similar other person and thus inducing self-anonymity, is the person-projective technique of thirdperson questioning (3P). Person-projective methods are specifically designed to reduce distortion by asking respondents to report on the nature of the external world (a similar, but ambiguous person or group) rather than about themselves (Westfall et al. 1957, p. 138) and thereby facilitating projection of sensitive cognitions and motives. Thus, subjective self-awareness (= self-anonymity) is instrumental in obtaining projection, and an important product of person-projective techniques. Correspondingly, Freud in his first clinical description of projection as a method concluded that: "something was gained by this (the projective task)....the judgement, the reproach, was kept away from her ego" (Freud 1895/1966, p. 208, paranthesis added). Moreover, in specifically addressing third-person questioning, Simon and Simon (1975, p. 586) argue that this technique allows respondents to "describe their own feelings behind a facade of impersonality". In support of these theoretical arguments, empirical studies show that different and more sensitive reports are obtained for respondents subjected to third-person questioning than for respondents subjected to selfadministered questionnaires (Fisher 1993; Supphellen et al. 1997) or no-anonymity conditions (Haire 1950), respectively. Hence, there seems to be another psychological process going on under conditions of third-person questioning that is different from processes operating under conditions of self-administered questionnaires and conditions of no anonymity. In fact, the nature of these effects are consistent with the notion of projection (Fisher 1993; Supphellen et al. 1997).

As previously noted, though, full self-anonymity in the sense of no activation of the private self is not very likely since the target of subject-projective techniques needs to be a similar ingroup person. If the target is not perceived to be similar to the respondents, s/he will likely not project his own thoughts, but rather activate information from long-term memory about the target (Lewis, Bates, and Lawrence 1994). The flip side of this is that self-anonymity can only be obtained within certain boundaries. Still, significantly higher levels of self-anonymity should be observed in the groups subjected to third-person questioning (the 3P and SAQ3P groups) than in the other experimental groups.

H1a Respondents subjected to third-person questioning (the 3P and SAQ3P groups) will experience higher levels of self anonymity than respondents in the control group.

Social anonymity was devided into the sub-concepts of Interviewer anonymity and Public anonymity. Interviewer anonymity refers to the feeling of respondents that no person other than himself can link his responses to his identity, whereas Public anonymity refers to the feeling that nobody but the researchers will know the respondent's identity. The highest levels of Interviewer anonymity are expected for the groups responding by means of self-administered questionnaires (the SAQ and SAQ3P groups). When responses are made on standardized questionnaires, which are put in neutral envelopes and then posted by respondents, higher levels of felt anonymity toward other people are likely to result than when assurances of confidentiality are made but no measures are taken to hide the identity of respondents (CONF). In turn, confidentiality assurances should produce higher levels of Public anonymity than conditions in which no steps are taken to alleviate concerns for anonymity (the 3P and CTRL groups). Several findings within survey research suggest that the use of SAO results in the reporting of more sensitive behaviors than ordinary paper-and-pencil response modes (e.g. Aquilino and LoScuito 1990; London and Williams; Turner et al. 1992). Also, some studies support the effect of confidentiality assurances (Singer et al. 1996); however, in line with our contentions, findings are more mixed than for SAO, thus indicating that confidentiality assurances provide a weaker (and possibly different) form of social anonymity than SAQ. According to our conceptual framework of anonymity, the characteristics of the methods involved, and previous findings, the following hypotheses should hold:

- H1b Respondents subjected to self-administered questionnaires (the SAQ and SAQ3P groups) will experience higher levels of Interviewer anonymity than respondents in the control group.
- H1c Respondents subjected to confidentiality assurances (the CONF group) will experience higher levels of Public anonymity than respondents in the control group.

#### 5.2.2. Premises for anonymity-effects: Sensitivity of brand associations

A fundamental assumption underlying the present research is that brand associations are -- to some degree -- perceived as sensitive by respondents. Moreover, we contend that different kinds of associations are differentially sensitive. The consequence of this premise, if confirmed, is that anonymity manipulations may not only affect the amount of sensitive associations elicited, but also the relative amount of different types of associations reported.

Sensitivity in this study is defined as the perceived probability -- from the perspective of respondents -- that some brand association would be withheld in an elicitation interview (for a discussion of the concept and its operationalization, see Chapter 6). Thus, such a concept leave the antecedent motivational mechanism(s) -- which are hardly accessible for measurement -- open and focuses on the behavioral side of sensitivity in terms of perceived probabilities of withholding specific information in an interview. Before discussing the different degrees of sensitivity of various types of associations, a more fundamental question is posed: Is there any reason to believe that brand associations are perceived as sensitive at all?

Pragmatic analysis of beliefs (Schlenker 1980: 1982: 1985) and empirical findings from market research (e.g., Haire 1950) strongly support a positive answer to this fundamental question. According to Schlenker, there are two main reasons why people hold particular beliefs/ associations: (a) believability, and (b) personal beneficiality, or the extent to which the beliefs serve the holder's goals and values. Applied to the case of self-identification, "the analysis suggests that within the range of potentially believable self-identifications, people endorse those that best serve their goals and values" (Schlenker, 1986, p. 25.). Similarly, people develop networks of brand associations in accordance with goals and values related to the kind of product or brand in question. This contention is reminiscent of Barsalou's (1983;1985) work on goal-derived cognitive categories. Barsalou found that some categories of cognitions were organized according to specific processing objectives such as "arguments defending the purchase of a Mercedes" (my example). Thus, some brand associations -- in particular those stored in goal-derived categories -- are likely to reflect the personal goals and values of consumers. These personal goals and values of an individual are, in turn, closely related to his/her self concept (e.g., Belk 1988; McClelland 1951; Sirgy 1982), and generalizations about the self are intimate topics that subjects hesitate to disclose (Jourard 1971). Moreover, several empirical studies indicate that information held in memory is sometimes withheld by respondents (e.g., Haire 1950; Stouffer 1950; Zober 1956). Thus, there are good reasons to believe that some associations are perceived as sensitive. However, it is also evident that some are not. For example, the second category of cognitive categories in Barsalou's framework, taxonomic categories, contain more "neutral" "dictionary-knowledge" concepts of objects (e.g., brands), independent of contexts. Associations belonging to such categories are likely to be very low in sensitivity.

The next question then is: which kinds of associations are sensitive? In attempting an answer to this question, we turn to the typology of brand associations developed in Chapter 3 (see Table 3.3). As previously noted, we focus on benefit associations, attitudes and intentions.

*Benefits*. Significant differences in sensitivity are expected between different types of benefits. It is not only the degree of closeness to the self concept that determine the sensitivity of associations, but also the function of the relationship.

Symbolic brand benefits are expected to be more sensitive than other types. Symbolic associations are strongly self-relevant and central types of brand associations (Belk 1988; Keller 1993; Solomon 1983), Indeed, from a symbolic interactionist perspective (see Solomon 1983 for a review), brands may primarily serve a symbolic function. For example, the use of a Rolex may signal personal success and wealth. Consumers rely on the social meanings inherent in brands as a guide to the performance of social roles and the development of identity (e.g., Belk, Bahn, and Mayer 1982; Haire 1950). Through interactions with others we learn how others see us -- and how we should be seen. Thus, according to this perspective, the self is to a large extent a result of other's appraisals, whether imagined or actual. On this account, it seems tenable to assume that an important aspect of consumers' self-related brand associations consist of perceptions of how others see -- or would see -- them when using or owning the brand. This need for social recognition, social approval, and role definition is accentuated when people are uncertain of other's beliefs and lack experience in satisfying role expectations. For example, Wicklund et al. (1981) reported a study in which male MBA students with a lower chance of career success (as assessed by grade points, number of job offers, etc.) were more prone to display symbols of belonging to the group of successful businessmen, e.g. luxury watches and specific shoe brands. This urge for social approval through consumption is undesirable in the Western culture. For example, Americans have been shown to consistently assign a low rank to social recognition and a high rank to independence as cultural values (Rokeach 1979, p. 133; Rokeach and Ball-Rokeach 1989, p. 778). Functional (and to some extent hedonic) benefits are more socially acceptable reasons for liking or preferring a brand. Correspondingly, previous research has found that consumers tend to downplay symbolic aspects in their reports and instead focus on the functional attributes of products such as roominess or horse power (e.g. Haire 1950; Fisher 1993).

H2a Symbolic brand associations will be perceived as more sensitive to distortion than functional and hedonic associations.

Attitudes and intentions. Intentions are expectedly more sensitive to distortion than attitudes. The main rationale for this contention is that intentions are more closely linked to behavior (Fishbein and Ajzen 1975). More precisiely, behavior in terms of brand choice more explicitly signifies actual personal preferences than do attitudes and benefits. Consequently, intentions to select one brand over another more directly displays "the true self" of an individual than do stated attitudes which are more open to the concerns of what is appropriate and socially acceptable and thus may hide consumers' true feelings for a brand. Breckler's (1985; 1986) notion of believability is compatible with this position. We contend that his position that people come to hold beliefs that are believable (and personally beneficial) also applies to the question of which associations are reported in an interview because the same fundamental needs for self-identification are likely present in both instances. For attitudes, there is no other salient evidence for evaluations of believability than, perhaps, consumers' previous statements. However, in interviews, researchers normally lack such information. Thus, consumer reports on attitudes are easily subjected to situational impression management (and possibly private self management) since the researcher (or an imagined audience) cannot control the believability of responses. For behavioral intentions, however, there is less room for strategic management of responses since stated intentions can be checked against overt behavior. On that account, respondents' concern for believability is probably more dominating for intentions than for attitudes. When stating intentions, respondents may therefore feel less free to mask their real intentions and are thus more prone to withhold intentions than attitudes.

Yet another psychological concept is consonant with this reasoning: the concept of *psychological reactance* (Brehm 1966). According to Brehm, people are very alert to reductions in their behavioral freedom. If their freedom to act out of free will is threatened, a state of psychological reactance will result, followed by actions to re-establish their freedom or hinder any further loss of freedom. Applied to an elicitation interview, reporting of intentions and attitudes could result in psychological reactance since stated intentions and attitudes are perceived to pose restrictions on future behavior. Indeed, Brehm argued that; «..reactance can be aroused in regard to opinions and attitudes» (Brehm 1966, Chapter 6). We have argued that this is probably more the case with intentions than attitudes due to intention's proximity to actual behavior.

Reactance is stronger for more important behaviors (Brehm 1966, pp 4-5). Hence, we might expect that the level of reactance aroused by activating -- and thus challenging respondents to report -- intentions or attitudes is proportional to the importance of the product/brand in question. However, a given increase in product importance will likely cause more arousal of reactance for intentions than for attitudes since there is more room for strategic management of stated attitudes. On that account, differences in sensitivity between intentions and attitudes are probably accentuated

at higher levels of product involvement. Based on these lines of argument, we propose the following hypothesis:

H2b: Intentions will be perceived as more sensitive to distortion than attitudes

### 5.2.3. Anonymity-effects on response latencies

Three kinds of behavioral response distortion in elicitation interviews were suggested in Chapter 2: (1) non-responding, that is withholding particular associations, (2) constructive reporting of non-sensitive and irrelevant associations in order to display a positive or neutral image, and (3) latency bias referring to distortion of the order at which associations are reported. We argue here that the latter type of distortion probably is the most common in the elicitation of brand associations.

Conscious distortion has a psychological price. According to Grice (1975), asking and answering qustions is a form of social discourse, governed by some fundamental principles of conversation. One central maxim set forth by Grice is: «make your contribution as informative as is required». Applied to an elicitation context this principle could, perhaps, be translated as: «report all associations you can think of». Furthermore, this principle is explicitly emphasised in most elicitation interviews by the researcher with verbal or written instructions to report everything that comes to mind. When the respondent is culturally «programmed» -- and, additionally, explicitly instructed -- to report all associations that come to mind, s/he will likely experience at least moderate levels of stress when associations are consciously not reported. One solution to this problem may be to report other related but less sensitive associations first (constructive reporting), and subsequently, when a satisfactory impression has been displayed (towards oneself or others), report sensitive associations. In this case, the result is latency bias: sensitive associations are reported later than actually activated from long term memory. We believe that latency bias is a dominant kind of motivational distortion in the elicitation of brand associations. Conscious nonresponding is more likely to occur for very sensitive associations, and though we have argued that brand associations can be sensitive, they are seldom extremely sensitive when compared to topics typically studied in the survey literature, such as racial discrimination, abortion, and sexual behavior (e.g., Aquilino 1994; Tourangeau and Smith 1996). Instead, symbolic brand associations and intentions are probably -- at most -- sensitive at moderate levels. Furthermore, in traditional studies of anonymity effects, the researcher focuses explicitly on specific sensitive behaviors or attitudes. In the context of the elicitation of brand associations, relatively general cues are used

(e.g., a brand name in a word-association task) and there is no evidently «true» or «correct» answer either in the view of respondents or interviewers. Hence, there is considerable room for private self management or situational impression management. Since sensitive associations that are consciously activated are merely moderately sensitive, they are likely reported, but due to ample opportunities for active management of responses, sensitive associations are probably reported later than actually activated. At the beginning of interviews, associations consistent with a desired self image are reported. Later in the interview, moderate tensions resulting from temporarily withholding sensitive information might be relieved by reporting those sensitive associations. Again, this reasoning is in line with Schlenker's (1986, p. 25) position that within the range of potentially believable self-identifications, ..., people endorse those that best serve their goals and values». When not addressing specific sensitive issues directly but allowing respondents to report «everything that comes to mind», a large set of potential responses is seen as believable. Thus, the other concern of respondents, namely the personal beneficiality of associations in terms of developing or maintaining their identities, will dominate, resulting in management of responses. However, since conscious censoring of sensitive associations causes some stress, sensitive associations withheld by respondents because they are not perceived as consistent with desired identities, may be eventually reported. Provision of some kind of anonymity will likely reduce the concern of respondents for displaying an optimal image and, thus, affect distortions of latency scores.

Specifically, only one kind of anonymity is expected to have any effect on latency bias: self-anonymity. This is because self anonymity is the only type of anonymity adequate for alleviating processes of private self management and situational impression management.

One important outcome of our conceptual review of antecedent processes for response distortion was that the management of responses for the purpose of self-esteem enhancement or identity development -- and, thus, subsequent behavioral distortions -- may occur in private as well as public situations (e.g. Schlenker 1985; 1986). Traditional manipulations of anonymity, such as allowing respondents not to identify themselves or use of SAQ-procedures, are only adequate for alleviating biases stemming from socially-directed motivations to distort responses (hence, our notion of social anonymity). Private self management may still occur because the same basic needs for esteem-enhancement and identity-development are present under private conditions. However, one potentially important aspect differentiating private and social settings regards the believability of responses (Schlenker 1986). In a social setting, the definition of which responses are believable are seen largely from the perspective of some audience (e.g., the researcher), whereas in private settings the respondent himself defines the range of believable responses. We believe that this distinction explains much of the positive effects of SAQ and other techniques inducing social anonymity reported in previous studies. When people are asked sensitive behavioral questions, for

instance about consumption of alcohol or drugs (e.g. Aquilino 1990), reporting a falsely low figure is perceived as more believable when taking the perspective of the researcher than when respondents are "left alone with their private selves". Under private conditions, respondents are stuck with the (perceived) truth, and non-responding or reporting of false figures will likely cause higher levels of stress than under social conditions. Thus, social anonymity does not reduce motivations to distort, but rather restricts the perceived range of believable responses so that they more closely resemble the (perceived) truth. In a context of elicitation, however, this restriction of believability under private conditions is probably not taking place. As previously noted, elicitation stimuli do not focus on specific behaviors or attitudes but ask for relatively free listings of cognitions, thus leaving the question of what constitutes a "true" answer more open. On this account, manipulations providing a sense of social anonymity in elicitation interviews may not have any substantial effect over no-anonymity conditions on the level of response distortion.

On the other hand, self-anonymity will likely affect the level of response distortion in elicitation interviews. By moving the focus of attention from the subject to another party, the concern for esteem-enhancement and identity development could be alleviated. Consequently, distortions resulting from situational impression management (SIM) or private self management (PSM) -- such as latency distortions -- should be less serious under conditions of self-anonymity.

H3 Sensitive associations will be reported earlier under conditions of selfanonymity than under non-anonymity conditions.

# 5.2.4. Anonymity-effects on the level of sensitivity and the number of sensitive types of associations reported

Will manipulations of anonymity affect the amount of different associations reported? From the discussion of sensitivity of associations, it would seem reasonable to assume that a greater number of symbolic associations and intentions would be reported under more (self-) anonymous conditions.

Variations in the number of sensitive associations across experimental conditions would indicate the presence of non-responding. We have argued that conscious non-responding is probably not a pervasive phenomenon in the elicitation of brand associations due to moderate levels of sensitivity of brand associations and flexibility of responding. Still, in Chapter 2 we discussed another

motivational mechanism resulting in *pre-conscious* non-responding: Situational self-deception (SSD). Self deception is a pre-conscious process protecting the conscious self from threatening self-knowledge (Greenwald 1980; 1988). Such processes are more pertinent for the most sensitive types of associations, for example symbolic brand associations and intentions (see H2a and b). Due to the cultural unfavourability of symbolic reasons for liking or preferring a product, consumers that like or prefer a symbolic brand because of its symbolic benefits are likely to experience an intrapsychic conflict: on the one hand they like the brand, but, on the other, the reasons why they do so might be partly in conflict with their values. The result could be self-deception.

Self-anonymity is the only kind of anonymity deemed effective in reducing self deception. Only by taking the perspective of another person will the tension caused by threatening self-knowledge be relieved when respondents are allowed to project sensitive associations onto similar others. Thus, a greater number of sensitive associations such as intentions and symbolic associations should be reported under conditions of self anonymity.

H4a A greater number of sensitive types of associations will be reported under conditions of self anonymity than under non-anonymity conditions.

In addition to non-responding, constuctive reporting of irrelevant non-sensitive associations will probably occur in the non-anonymity condition. Self-anonymity should alleviate this problem and result in higher levels of sensitivity of associations reported.

H4b Higher levels of sensitivity of reported associations will be observed under self-anonymity conditions than under non-anonymity conditions.

### 5.2.5. Anonymity-effects on the favourability of associations reported

The effect of the anonymity manipulation on the overall favourability of associations reported is not clear. Some favourable associations may be sensitive (e.g., "this car make me feel I'm something"), whereas other favourable associations are not (e.g., "this is a nice car"). Correspondingly, some negative associations are common and thus not very sensitive (e.g., "it's too expensive"), whereas other associations may be regarded as sensitive to disclose (e.g., "that's a car for people who need to compensate for poor self-confidence"). Though it is difficult to evaluate the effect of our manipulation on the overall level of favourability, we expect an effect on the level of favourability for one specific type of association.

Positive symbolic associations are probably more sensitive than negative or less positive symbolic associations because they signal a culturally unfavourable desire of social approval (Rokeach 1979). Hence, favourable symbolic associations are expectedly more prone to be withheld than less favourable symbolic associations. The flip side of this is that effective use of self-anonymity may result in more favourable symbolic associations being reported. Interestingly, in his study of third-person questioning, a technique inducing self-anonymity (see H1a), Fisher (1993) found that normative beliefs such as "students I know would have a favourable reaction if I bought one of these new products" were evaluated as more important when respendents responded in the third person (the typical college student will...), than when answers were given more directly (I will ...). In a similar vain, we believe that respondents will feel more free to report favourable symbolic associations when subjected to self-anonymity in an elicitation interview.

H5 The level of favourability of symbolic associations reported will be higher under conditions of self-anonymity than under non-anonymity conditions.

### 5.2.6. Anonymity-effects on the predictive ability of associations

Predictive ability in this study is defined as the correlation between strength ratings of a set of brand associations and self-reported ratings of attitudes or intentions toward the brand (see Measurement section in Chapter 6). The question is: will different manipulations of anonymity produce association sets with different abilities to predict attitudes and intentions? When sensitive but relevant associations are withheld, the predictive ability of reported associations may suffer. Also, constructive reporting, that is reporting of less relevant associations to compensate for those sensitive associations that are withheld, may lower predictive ability.

Sensitive associations (e.g., symbolic associations and intentions) are probably very salient because they are highly self-relevant and diagnostic of overall preferences for the brand (i.e., Solomon 1983). When they are salient, they are also more likely to be activated in evaluations and choice (Fishbein and Ajzen 1975). Because different manipulations of anonymity are expected to produce different levels of sensitive associations (H4b), the predictive ability of associations are likely to vary across manipulations. Moreover, even when sensitive associations are not withheld but respondents engage in constructive reporting of irrelevant associations, different levels of predictive ability are probably observed across conditions because irrelevant non-diagnostic information tends to weaken the impact of diagnostic information (Nisbet and Zukier 1981). This negative impact of non-diagnostic information on predictive ability is expected to be differentially alleviated across manipulations because different levels of constructive reporting are expected across conditions. Again, self-anonymity is expected to be most effective in reducing distortions and, hence, improving the predictive ability of associations because this method has an impact on all three types of antecendent psychological mechanisms leading to overt distortions.

- H6a Associations elicited under conditions of self-anonymity will be more predictive of self-reported attitudes than associations elicited under non-anonymity conditions.
- H6b Associations elicited under conditions of self-anonymity will be more predictive of self-reported intentions than associations elicited under non-anonymity conditions.

We have argued that the distortion of response latencies probably is the most common type of motivational distortion in elicitations of brand associations. If sensitive associations are reported later than they are actually activated and these associations are important to predict attitudes and

intentions, the mitigating effect of anonymity manipulations are expected to be more significant for the first associations reported than for whole sets of associations reported. When the whole set is used, sensitive associations important to prediction -- which are reported at the end of thought listings -- should be included in predictions, and the effect of anonymity manipulations are less significant.

H6c The difference in predictive ability between associations elicited under self-anonymity conditions and associations elicited under non-anonymity conditions will be larger for the most latent associations than for all associations reported.

### 5.2.7. Interactions with self-monitoring

Brands for some products (e.g. cars) may serve many kinds of needs or functions, allowing consumers to focus on different functional goals (Shavitt 1989; 1990), for example the social identity function of how the car makes them look to others or the utilitarian function of its safety. Thus, individual differences in consumer goals will likely emerge for such brands. Indeed, previous research indicates that personality may influence the focus of consumers on certain kinds of benefits or attributes. In particular, the concept of self-monitoring has been addressed in this respect (e.g., Snyder and Debono 1985; Shavitt, Lowrey, and Han 1992). Self monitoring refers to the degree to which individuals are concerned with projecting favourable social images in social situations (Snyder 1974). High self-monitors are most attuned to the shifting requirements of different social situations and tend to adjust their behavior accordingly. Low self-monitors, on the other hand, are less concerned with social appropriateness and more concerned with being consistent with their internal feelings and preferences. These individual differences have an impact on peoples relationship with products. For example, research by Snyder and DeBono (1985) suggested that low self-monitors tend to be concerned with attributes or benefits related to product quality, such as taste of coffee, whereas high self-monitors tended to focus more on symbolic aspects such as the image associated with serving a particular type of coffee. Correspondingly, low self-monitors are probably more convinced by advertising appeals focusing on functional and hedonic aspects whereas high self-monitors are more influenced by symbolic appeals (i.e., Shavitt 1990). Most important to the present study, the kinds of associations deemed more relevant to high self-monitors, symbolic associations, should be more sensitive than associations most pertinent to low self-monitors (utilitarian associations). Consequently, high self-monitors should hold more sensitive associations in memory than low self-monitors. Moreover, during an elicitation interview

high self-monitors are likely to be more concerned with displaying a favourable image than would low self-monitors. On this account, the postulated effects of anonymity manipulations are probably greater for high self-monitors than for consumers low in self-monitoring.

H7a Any observed effects of anonymity manipulations on number-, latencies-, favourability-, or sensitivity of associations will be more accentuated for high self-monitors than for low self-monitors.

For predictive ability, we suggest a different type of interaction. If our contention is correct that respondents will engage in distortions of responses when no anonymity is provided (the control group), we expect self-monitoring to be a negative moderator of the predictive ability of associations in this group. This is because high self-monitors will tend to distort their responses, and thus lower the predictive ability of reported associations, to a larger degree than low self-monitors. Respondents subjected to self-anonymity, on the other hand, should not be motivated to distort their responses since this type of anonymity alleviates all three psychological mechanisms leading to distortions (situational impression management, private self management, and situational self-deception, see Chapter 2). Consequently, self-monitoring should not have any moderating effect on the predictive ability of associations reported under this condition.

H7b Self-monitoring will be a negative moderator for the predictive ability of associations elicited under non-anonymity conditions, but not for associations elicited under conditions of self anonymity.

### 5.2.8. Summary

In the opening section of this chapter we presented a set of hypotheses on which techniques that would be appropriate for inducing social- and self-anonymity, respectively. To form a basis for discussing effects of the anonymity manipulation, we also developed hypotheses on the relative levels of sensitivity of different types of associations. The basic logic of postulated effects of the anonymity manipulation rested to a large extent on the premise that self-anonymity provides a fundamentally different kind of anonymity which is expected to alleviate all three forms of motivations for distortion. Self-anonymity was hypothesised to significantly reduce behavioral distortions such as suspending reporting of sensitive associations (thus distorting latency scores) and the holding back of some sensitive kinds of associations. On this account, we have also argued that associations elicited under conditions of self-anonymity should be more predictive of brand attitudes and purchase intentions than associations elicited under non-anonymity conditions. Finally, interactive effects of self-monitoring and the manipulation of anonymity were suggested.

### CHAPTER 6

# **METHODOLOGY**

The first research question posed in the introductory chapter asked for a clarification of the concept of anonymity in market research. Based on previous studies on anonymity and borrowing theoretical perspectives from psychology, we anwered this query in Chapter 4. In this chapter we go on to operationalize our three-dimensional framework of anonymity. The second research question focused on possible effects of anonymity manipulations in elicitation interviews on the type, latencies, and predictive ability of brand associations reported. Here we present a methodology amenable to answer this second question and to test the specific hypotheses developed in Chapter 5.

In the first section, the choice of an experimental design is explained and discussed (6.1.) followed by a brief overview of the experimental manipulation (6.2.). Subsequent sections describe and explain the selection of stimulus brand and elicitation technique (6.3.), sample for the study (6.4.), details of the experimental procedure (6.5.), and the measurement of study variables (6.6.).

# 6.1. Research design for the empirical study

As pointed out in the review of studies on anonymity and anonymity-effects in Chapter 4, little research exists on the effects of anonymity in elicitation interviews. Thus, our study is exploratory in the sense that we are looking for potential effects of anonymity manipulations for this kind of measurement task with limited prior knowledge about what effects to expect. However, we Still, our major concern is with the manipulations of anonymity as such and the *causal* effect of manipulations of anonymity on elicitations outcomes. Furthermore, in order to develop specific causal hypotheses, some *descriptive* hypotheses were also presented regarding differences in levels of sensitivity between various kinds of brand associations. On that account, we chose an experimental design though the overall character of the study is exploratory. Still, our choice is consistent with the reasoning of Zaltman et al. (1982) and Troye (1985) that experiments may well be used in exploratory research when researchers have hunches that specific effects or relationships exist. Specifically, a laboratory experimental design was chosen for three main reasons.

First, descriptive problems are more easily investigated within the context of an experiment than causal problems in a non-experimental design (Nachmias and Nachmias 1992). The level of sensitivity on different types of brand associations (H2a and b) can be studied in an experiment designed to investigate the effects of anonymity manipulations on elicited associations provided that the product or brand chosen is fairly rich in different types of associations. However, investigation of causal effects of anonymity manipulations on elicitation outcomes is problematic within a non-experimental design because such designs are not adequate for isolating effects of independent variables (Cook and Campbell 1979).

Second, to isolate the effects of anonymity manipulations is a major objective in this study. Because little is known about the effects of anonymity in elicitation interviews, we first need to verify whether there are any effects at all, and then we wish to explore the nature and boundaries of effects. We believe, based on a literature review and theoretical developments, that there are good reasons to expect effects of anonymity manipulations in elicitation interviews. Hence, our focus is on theory application as opposed to effects application (Calder, Phillips, and Tybout 1981), and for applications of theories, Calder et al. argue that researchers should prioritize internal validity. Internal validity is maximized in laboratory experiments in which conditions for controlling confounding variables -- and thus isolating the effects of independent variables -- are better than for any other design (Cook and Campbell 1979).

Third, the variables included in our model and the hypotheses proposed are of such a kind that experimental investigation is possible. It is possible to control the experimental situation (elicitation interviews) and extraneous variables threatening the internal validity of findings, such as task

ambiguity and task involvement which can be measured and controlled for. Furthermore, anonymity can be manipulated by means of different well-known techniques, which in turn can be compared for their differential effect on dependent variables (i.e., Cook and Campbell 1979). Finally, experiments have been used in previous research on anonymity effects -- though a majority of experiments have been conducted within surveys (e.g., Aquilino 1990; 1994; Fisher 1993). Thus, the use of an experimental design facilitates comparison with previous studies on effects of anonymity.

# 6.2. Overview of the experiment

Five experimental conditions were developed in which response and question modes were varied. In group 1, the control group (CTRL), subjects were not provided with any kind of measure to create anonymity. Respondents names were written on the response sheets and subjects responded to direct questions about their associations to a brand name. Thus, group 1 functioned as a benchmark in testing the effects of anonymity manipulations. In group 2, subjects responded to a self-administered questionnaire (SAQ). The same direct question was asked, but respondents were instructed not to write down their names. They were given a standard sheet of paper and an envelope prior to the interview with instructions to put their response in that envelope and post it in a given mailbox used for the purpose of the study. Hence, group 2 was designed to obtain social anonymity (interviewer-anonymity). In group 3, subjects wrote down their names like those in the control group, but here questions were asked in the third person ("what do you believe most students would associate with...") (3P). The type of anonymity induced here was self-anonymity. Group 4 was subjected to the combination of third-person questioning and self-administered questionnaires (SAQ3P). Thus, both social- and self-anonymity were induced in this condition. So far, the experiment could be described as a 2(SAQ vs. no SAQ) × 2 (third-person- vs. direct questioning) factorial design. However, a fifth condition was added. Group 5 was similar to the control group except from the difference that respondents in group 5 were subjected to assurances of confidentiality at the introductory stage of the interview. This condition was included for two reasons. First, it provides another "milder" subtype of social anonymity than SAO, namely public anonymity. Second, confidentiality assurances probably represent the most common technique for mitigating response distortions in market research. The characteristics of the five experimental conditions are summarized in Table 6.2.

Anonymity techniques were varied between subjects. Because we wanted to measure felt (social and self) anonymities and several other variables pertaining to feelings and focus of attention during the stimulus task, we needed to address these feelings right after stimulus exposure when

they were still "fresh" in working memory. Repeating the stimulus task with another anonymity manipulation would most likely result in hypothesis guessing and extensive practice effects. Thus, our choice of design can be described as a 2(SAQ response mode vs. not SAQ response mode) × 2 (third-person- vs. direct questioning) + 1 (confidentiality assurance) between subjects factorial design.

Table 6.2
OUTLINE OF EXPERIMENTAL DESIGN

	Group 1 (CTRL)	Group 2 (SAQ)	Group 3 (3P)	Group 4 (SAQ3P)	Group 5 (CONF)
Response mode	Name stated	SAQ	Name stated	SAQ	Name stated
Questioning mode	Direct	Direct	Third person	Third person	Direct
Instruction					Confiden- tiality
Type of anonymity	None (	Social interviewer)	Self	Self and social	Social (public)

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

The levels of sensitivity of different kinds of brand associations, however (H2a and b), were analysed within subjects. Immediately after the interview, respondents filled in a questionnaire measuring different variables about the interview experience such as felt anonymity and task involvement. One month later, subjects responded to another questionnaire based on the responses from the elicitation interviews. More details about the experimental procedure and the questionnaire are provided in sections 6.5. Expreimental procedure) and 6.6. (Measurement).

# 6.3. Selection of stimulus brand and elicitation technique

Mercedes was chosen as the stimulus brand and the free association technique was used to elicit brand associations. Background and reasons for these choices are discussed next.

### 6.3.1. Stimulus brand

Three criteria were used in selection of stimulus brand. First, since our hypotheses address different kinds of brand associations, brand images for the chosen brand should be rich in different kinds of associations (different benefits, attitudes, and intentions). Psychological research on attitude functions has shown that many - if not most -- products engage many functions (Shavitt 1989). In particular, Ennis and Zanna (1991) showed that automobiles may serve three kinds of needs: utilitarian (gain rewards and avoid punishment), social adjustment (facilitate and maintain social relationships), and value-expressive needs (expressing personal values and other core aspects of the self concept). Thus, images for automobile brands would likely contain many different kinds of associations. Second, some associations for the chosen brand should be sensitive. Specifically -- as indicated by H1b -- brand images should contain symbolic brand associations. Solomon (1983) has argued that automobiles often are taken as indicators of underlying characteristics of the people driving them. From this we might expect that most car brand images contain symbolic brand associations. However, Mercedes was selected because this is a differentiated and luxurious brand -- and thus more likely to evoke salient symbolic associations than other car brands (Wright et al. 1992). Moreover, Mercedes is often regarded as a symbol of success and typically associated with business people -- an aspect highly relevant to the (ideal) self concepts of business students participating in our study. The third criterion for selection was that the chosen brand should be a relatively common and well-known brand. One fundamental conjecture advanced in this thesis is that response distortion may result from very common and fundamental psychological needs such as self-esteem enhancement and identity development. Thus, response distortion is believed to be a pervasive phenomenon in any kind of social interaction, including elicitations of brand associations. On that account, we did not opt for marginal brand names for which people obviously hold very sensitive associations such as erotic video brands or brands for contraceptives. If effects of anonymity manipulations were found for these brands, findings could be attributed to the unique characteristics of the product categories. If interesting effects of anonymity manipulations are found for a car brand, however, many other brands belonging to other product categories could be seen as candidates for similar effects. Hence, if significant effects of anonymity manipulations are found for Mercedes, further investgation of the external validity of findings would be highly warrented.

### 6.3.2. Elicitation techniques

Several techniques are suggested in the literature for the purpose of eliciting brand associations from consumer memory. For example, Keller (1993, p.14) proposed three groups of techniques for this purpose: free associations tasks, projective techniques, and depth interviews. However, several other and more structured techniques could be used such as the repertory grid technique or a-sort techniques. Moreover, more complex combinations of different stimulus techniques have been developed recently for the purpose of elicitation, i.e. Zaltman's Methaphor Elicitation Technique (Zaltman 1997). Still, free association probably is the kind of technique most commonly used by marketers. With this technique, consumers are given a stimulus cue, typically a brand name, and asked to report all thoughts that come to mind when reading or hearing the cue word. In this study, we selected this technique for the elicitation of brand associations. The unstructured and simple nature of this technique was considered beneficial because it allows respondents to report associations relatively freely, without interruptions from a researcher and without being subjected to an artificial structure of responding. Thus, any observed effects of anonymity manipulations for a free elicitation task would not be attributed to the peculiarities of the elicitation technique. Most importantly, the unstructured nature of this technique allows respondents to engage in any kind of distortion discussed in this study (see Chaper 2), including self-deception, private self-management, and situational impression management -- and corresponding behavioral distortions of non-responding, constructive reporting and distortion of response latencies. Also, the common use of this technique implied that any observed effects of anonymity manipulations would likely be of interest to a broader audience.

Interestingly, free association techniques have been described as very reliable and valid measures of consumer memory (e.g., Freedman 1986). We agree with this contention in the sense that this method probably is less susceptible to various kinds of response bias than other more structured techniques. However, since motivational distortions result from very fundamental and pervasive psychological needs (Schlenker 1980; 85), we believe that anonymity will also have an impact on the results of free elicitation tasks.

# 6.4. Sample

The sample consisted of 205 undergraduate business students recruited from two Norwegian business schools (the Norwegian School of Economics and Business Administration (NHH) in Bergen, and the Norwegian School of Management (BI) in Oslo). Students were randomly assigned to the five anonymity conditions.

Type of sample. A focal issue in sample selection is whether the sample should be composed of members of a readily available homogenous group -- such as students -- or should be more representative of some relevant population (e.g. owners of Mercedes). The critical question here is whether the research objective is generalization or theoretical explanation (Calder et al. 1981; Sternthal et al. 1994). As previously noted in the discussion of the design for this study (section 6.1.), our goal is to discover and explain effects of anonymity manipulations in elicitation interviews. With this goal, a homogenous sample is preferred (Calder et al. 1981). This is because the chances that the experimental treatment will have the same impact on all participants (within conditions) are greater when the subjects are similar. Thus, homogenous samples increases the likelihood of observing causal relations when they exist.

Sample size. Conventional rules of thumb indicate that 30 subjects per cell is appropriate in order to meet the assumptions of statistical analyses performed on experimental data such as ANOVA and ANCOVA (Sawyer and Ball 1981). However, studies with smaller sample sizes are often reported and even recommended. Cohen (1977) and others have demonstrated the importance of another issue in selections of sample size for empirical studies. In addition to meeting the assumption of analyses performed on the data, a sample size should be selected so as to provide sufficient statistical power for the effects investigated. The smaller the expected effects of manipulations, the more power that is needed to detect them. Power is increased by accurate measurement and large sample sizes (Cohen 1977). Because no studies have been conducted in the literature on the effects of anonymity in elicitation interviews, we do not know what effect sizes to expect. However, since we have argued that elicitations of brand associations probably are subjected to only moderate levels of distortion, it seems reasonable also to expect moderate effect sizes, that is  $\omega^2$  - values of about .06 in ANOVAs, i.e., Cohen 1977). However, with a conventional sample size of 30, the probability of detecting a moderate effect of  $\omega^2$  = .06 is less than 50% (Sawyer and Ball 1981). Hence, we planned to recruit enough students to obtain cell sizes of about 40. Though desirable, a larger sample was not obtainable on financial and practical grounds. Students were recruited at the end of lectures of two obligatory courses (introductory courses in marketing and organizational theory) at the two business schools. Between 300 and 400 students were typically present at these lectures. Students were requested to participate in a market

research project for a well-known brand and they were told that all participants would take part in a lottery for two cheques of about 400 dollars each. The final sample, distributed on the five anonymity conditions, is presented in table 6.4.

Table 6.4
SAMPLE SIZE OBTAINED

	Group 1 (CTRL)	Group 2 (SAQ)	Group 3 (3P)	Group 4 (SAQ3P)	Group 5 (CONF)
Total: n = 205					
Number of respondents	40	43	42	37	43

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

# 6.5. Experimental procedure

The experimental study consisted of two measurements at two different points in time. First, elicitation interviews were conducted in which subjects were randomly assigned to one out of five anonymity conditions. Immediately after the interview, subjects responded to a short questionnaire containing variables asking about the elicitation interview experience, e.g., felt anonymity and task involvement. Then questionnaires were developed based on the elicitation results. This was done on an individual basis, that is, a unique questionnaire was developed for each of 226 subjects (the final N was 205). Rating scales for attitudes, intentions, and self-monitoring were equal across subjects, but the brand associations that were included corresponded to the individual sets of associations reported by each respondent in the elicitation interviews. These second questionnaires were distributed one month after the elicitation interviews. Further details about the two stages of the experiment are provided below.

Elicitation interviews. The interviews were conducted at the two business schools involved. Students were welcomed by a research assistant and assigned to one out of three vacant offices at one of the schools and one out of two small meeting rooms at the other. All rooms and offices

### Table 6.5.

### TREATMENT: INSTRUCTIONS FOR MANIPULATION OF ANONYMITY

### 1. CONTROL GROUP (CTRL)

"WHAT IS YOUR NAME? (WRITES IT ON TOP OF THE RESPONSE SHEET SUBSEQUENTLY HANDED TO THE SUBJECT). In a moment you will receive a sheet of paper with an instruction asking you to write down thoughts that come to mind for a specific brand name. Please, write down all thoughts or associations that come to mind. Take the time you need and let me know when you run out of thoughts."

Written stimulus: "What do you associate with Mercedes?"

### 2. SELF-ADMINISTERED QUESTIONNAIRE (SAQ)

"In a moment you will receive a STANDARD sheet of paper with an instruction asking you to write down thoughts that come to mind for a specific brand name. Please, write down all thoughts or associations that come to mind. Take the time you need and let me know when you run out of thoughts. YOU ARE NOT SUPPOSED TO GIVE ME THE RESPONSE SHEET BUT TO PUT IT IN THIS ANONYMOUS ENVELOPE (HANDING IT TO THE RESPONDENT). AFTER THE INTERVIEW YOU MAY PUT THE ENVELOPE IN THE MAILBOX OUTSIDE THIS ROOM"

Written stimulus: "What do you associate with Mercedes?"

### 3. THIRD-PERSON QUESTIONING (3P)

"WHAT IS YOUR NAME? (WRITES IT ON TOP OF THE RESPONSE SHEET SUBSEQUENTLY HANDED TO THE SUBJECT). In a moment you will receive a sheet of paper with an instruction asking you to write down thoughts that come to mind for a specific brand name. Please, write down all thoughts or associations that come to mind. Take the time you need and let me know when you run out of thoughts."

Written stimulus: "What do you think MOST BUSINESS STUDENTS associate with Mercedes?"

### 4. THIRD-PERSON QUESTIONING AND SELF-ADMINISTERED QUESTIONNAIRE (SAQ3P)

"In a moment you will receive a STANDARD sheet of paper with an instruction asking you to write down thoughts that come to mind for a specific brand name. Please, write down all thoughts or associations that come to mind. Take the time you need and let me know when you run out of thoughts. YOU ARE NOT SUPPOSED TO GIVE ME THE RESPONSE SHEET BUT TO PUT IT IN THIS ANONYMOUS ENVELOPE (HANDING IT TO THE RESPONDENT). AFTER THE INTERVIEW YOU MAY PUT THE ENVELOPE IN THE MAILBOX OUTSIDE THIS ROOM"

Written stimulus: "What do you think MOST BUSINESS STUDENTS associate with Mercedes?"

### 5.. CONFIDENTIALITY ASSURANCE (CONF)

"WHAT IS YOUR NAME? (WRITES IT ON TOP OF THE RESPONSE SHEET SUBSEQUENTLY HANDED TO THE SUBJECT). In a moment you will receive a sheet of paper with an instruction asking you to write down thoughts that come to mind for a specific brand name. Please, write down all thoughts or associations that come to mind. Take the time you need and let me know when you run out of thoughts. WE CAN ASSURE THAT ALL RESPONSES ARE CONFIDENTIAL"

Written stimulus: "What do you associate with Mercedes?"

were sparsely furnished and any vivid pictures or other attention-catching elements were removed prior to interviews. Upon arrival at the offices/meeting-rooms, subjects were introduced to the interviewers. Interviewers were five carefully trained graduate students at each school, three males and two females. Subjects were reminded that the study was about a well-known brand and that they would be asked a general question about this brand and respond in writing. Next, students were randomly assigned to one of the five anonymity conditions. All interviewers administered all five manipulations in order to control for interviewer-bias. The five oral instructions corresponding to the five experimental conditions are presented in Table 6.5. Note that the only aspects varying between conditions were the manipulations of anonymity. All other aspects of instructions were held constant. Also, other extraneous elements of the elicitation method (see our model of the elicitation process, Figure 3.4 in Chapter 3) were controlled for or held constant: interviewereffects, place of interviews, presentation mode, and brand context (not specified). However, two important extraneous variables possibly confounding the effects of anonymity manipulations were not controlled: task involvement and task ambiguity. If different anonymity instructions induce different levels of task ambiguity and/or involvement, such effects represent rivalry explanations for any observed effects of our treatment variable. Therefore, task ambiguity and task involvement were measured in order to check for this potential confound.

When the respondent indicated that he/she had nothing more to add, the elicitation task was ended, and the response sheets for the CTRL, 3P, and CONF group members were handed in. Next, respondents received a short questionnaire with measures of self anonymity, social anonymity, task involvement, task ambiguity, age, and gender, Additionally, questions about the purpose of the interview task and whether respondents had met the interviewer before were included (recall that the interviewers were graduate students at the same schools). None guessed the true purpose of the elicitation task; the majority simply thought that the purpose was to get information about consumers' associations with Mercedes. Only two respondents reported to have seen or met their interviewers earlier; however, they were not friends -- the interviewers had been instructed not to interview anybody they knew. Since there were only two respondents of this kind, and they belonged to different experimental conditions (SAQ3P and CONF), they were not excluded from the sample.

For the respondents subjected to the SAQ and SAQ3P conditions, the same envelope was used as was handed out before the elicitation task, whereas the others (CTRL, CONF, and 3P) received their envelope together with the questionnaire. When the questionnaire was filled in, the elicitation response sheets were put in the same envelopes as the questionnaire. For respondents subjected to the CTRL, 3P, or CONF conditions (for which the elicitation sheet had been handed in and names were written on them), the interviewer tore off the name and handed the sheet back to the respondent for him or her to put it in the envelope.

Before receiving the questionnaire, subjects were informed that:

You are not supposed to hand back this questionnaire or write your name on it. When you have finished the questionnaire, you may put it in this(the same) anonymous envelope and drop it in the mailbox outside the room

In other words, the questionnaire was self-administered and thus answered under conditions of social anonymity. This response mode was chosen because the self-report measures for self anonymity and task involvement (see section 6.6) could be subjected to response distortions. The self-anonymity measure focuses on the extent to which respondents aim their attention at themselves compared to other people when reporting associations. For example, if more sensitive associations were reported by SAQ-respondents in the elicitation phase, and no anonymity was provided in the questionnaire measuring self-anonymity, SAQ-respondents would tend to report less self-focus than was actually the case because they might feel a need to distance themselves from the sensitive associations they had reported. Correspondingly for task involvement, respondents reporting sensitive associations might feel a need to signal low degrees of involvement if no anonymity was provided. SAQ induces social anonymity - the most common kind of anonymity used in previous research - and the strongest kind available for this purpose. Before the subjects left the room, they were asked to write the first letter(s) of the first name of a person they knew very well and this person's day of birth on the front of the envelope. The researcher did not observe what letters and figures were written down. The students were instructed to note the code because it would be needed in order to participate in the lottery. The codes were used to match respondents from the first stage with their individual questionnaires in the follow-up study. A total of 226 students participated in the first part of the experiment.

The follow-up questionnaire. About one month after the elicitation interviews, 226 questionnaires were distributed to the same students participating in the first phase of the study. Students were told that only those questionnaires that were adequately filled in would participate in the lottery. The questionnaires were distributed at the end of lectures for the same courses as for the elicitation interviews. Questionnaires were put in envelopes and ordered alphabetically according to the codes on a large table. Students found their questionnaires by checking the codes written on the envelopes. However, nothing was said to reveal that each questionnaire was uniquely adopted to the individual student. Subsequently, students found a place in the auditorium and were asked to keep one free chair between each individual and were told not to cooperate. When they had completed the questionnaire, they placed it back in the envelopes and dropped it in a mailbox at the entrance. Thus, the questionnaires at this final stage were also self-administered (SAQ) -- providing social anonymity. Typical response times were about 15 minutes; 205 out of 226 students completed this second data collection (N=205).

The SAQ response mode was chosen for the following reasons. It was deemed important to induce some kind of anonymity also for the second questionnaire because ratings of the strength. favourability, and sensitivity of brand associations would likely be distorted to some degree. For example, findings by Fisher (1993) suggested that ratings of the favourability of normative beliefs (e.g., «students I know would have a favourable reaction if I bought one of the new products») were distorted. Most importantly, if more sensitive associations were elicited under some of the experimental conditions -- as was expected -- the questionnaires for these conditions would more likely be subjected to distortions. Consequently, potential effects of our manipulation would be "hidden" or weakened. One apparently appealing solution would be to match the kind of condition and anonymity for the questionnaires with the conditions subjects were assigned to in the elicitation interview. However, in order to compare the manipulations, we needed a common baseline. If subjects assigned to the CTRL condition responded to the questionnaire under the same condition and subjects assigned to the 3P condition answered the questionnaire also in the third person, etc., this would rather allow for a test of consistency within subjects rather than a test between techniques for inducing anonymity. In order to compare the outcome of elicitation interviews under different anonymity conditions, the ratings of the various characteristics of elicited associations had to be performed under the same condition for all respondents. On these grounds, it seemed tenable to induce the same kind of anonymity on all students. SAO was chosen over confidentiality assurances because SAQ induces higher levels of (social) anonymity. Third person questioning was not considered as an alternative because the questionnaire contained a personality scale (selfmonitoring) which should not be measured by means of third person questioning -- and using both third person questioning and direct questioning within the same questionnaire was not considered tenable. Still, by using SAQ, the experimental group in which brand associations were elicited by SAO might have been favoured since both measurements were performed under the same anonymity condition. However, this potential advantage would only occur if distortion mechanisms are the same for elicitation of associations and ratings of predefined associations.

The questionnaire started with ratings of attitudes and purchase intentions for Mercedes and three other comparable car brands (BMW, Audi, and Volvo, see appendix x). We were only interested in evaluations of Mercedes, but included the other brands in order to provide a realistic evaluation context. The selection of the other brands were based on a focus group interview with five business students not participating in the study. In the next section, the strength, favourability, and sensitivity of associations were measured on standard rating scales. The final section contained measures of product knowledge, product involvement and self-monitoring (for details, see section 6.6. on measurement).

### 6.6. Measurement

In this section we describe operationalizations of variables measured in the study. The independent treatment variable was described in Table 6.5. Here, we focus on the measurement of dependent variables, manipulation checks, and the covariate.

### 6.6.1. Measures for manipulation checks

Our conceptualisation of anonymity contains two types of anonymity: social and self anonymity. Social anonymity is further divided into public and interviewer anonymity.

Because public and interviewer anonymity are related subconcepts, their dimesnionality and internal consistency were analysed together.

### 6.6.1.1. Social anonymity: Interviewer anonymity and public anonymity

Interviewer anonymity. This construct refers to the extent to which respondents feel that the interviewer can couple the respondent's identity and his/her responses. This type of anonymity is reminiscent of the traditional (unidimensional) conception of anonymity (Aquilino 1990; Fisher 1993). However, in previous studies this kind of anonymity has seldom been measured -- usually it is merely assumed to be present under specific response condition such as SAQ or under conditions in which respondents were not allowed to identify themselves. Fisher (1993), on the other hand, evaluated his anonymity manipulation (SAQ) via a summated five-item self-report scale with items such as «My responses on this survey can be traced back to me». Unfortunately, only one item was reported as an example. We first developed a five-item scale from Fisher's manipulation check. The measure included items such as «I felt that nobody -- not even the researcher -- could trace my responses back to me» and was measured on nine-point Likert-scales with anchors «completely agree - completely disagree». Two items were removed as 8 out of 12 pre-test subjects (business students at a third business school) indicated that those items were perceived as identical to one of the other items.

Public anonymity. Public anonymity refers to the degree of felt confidence that respondents' identity will not be revealed to any third party. Stated differently, this construct focuses on the believability of confidentiality assurances. No measure was found in the literature for this psychological variable. A three-item measure was developed in this study with items such as «I was confident that only the researchers would know my responses», see Table 6.6.1. below.

Because public anonymity and interviewer anonymity are distinct subconcepts of the same superordinate concept of social anonymity, the two scales were combined and submitted to confirmatory factor analysis via LISREL 8 (Jøreskog and Sørbom 1993) in which the three items of the public anonymity scale formed the first factor and the three items of the interviewer-anonymity scale the second factor. This model did not obtain an acceptable level of fit (RMSEA = .14). As exploratory factor analyses clearly indicated the presence of two factors, we examined modification indices and factor loadings in order to improve the two-factor model. This resulted in the removal of one of the items in the public anonymity scale (this item is shown in parenthesis in Table 6.6.1.). Fit statistics for the improved model and indicators of internal consistency of the two subscales are reported in Table 6.6.1.

Table 6.6.1.

DIMENSIONALITY AND INTERNAL CONSISTENCY OF SOCIAL ANONYMITY

Variable/item	Model fit	Alpha	(Mean inter-item correlation)
	χ = 11.38, p = .01 df = 4 RMSEA = .09 GFI = .98 NNFI = .99 CFI = .99		
Public anonymity			
I. I felt that nobody except the researchers would know my responses     (2. I was certain that my response was confidential)*     3. I was confident that only the researchers would learn what I wrote		.91	
Interviewer anonymity			
1. This way of responding scured that nobod but myself would know what I wrote 2. I felt that nobody, not even the researcher, could trace my responses back to me 3. I was confident that nobody would be able to couple my name with the responses I gave	e	.80	(.57)

<sup>\*</sup>This item was removed in the final version based on inspection of modification indices and factor loadings.

The final model depicted in Table 6.6.1. does not meet all relevant criteria for close fit: the chi-square compared to degrees of freedom has a ratio above 2 (Bollen 1989) and the RMSEA is above .05 (Browne and Cudeck 1993). However, these are absolute fit indices and should be complemented with relative indices adjusting for sample size (CFI) and the simplicity of models (NNFI) (Gerbing and Anderson 1993). Notably, these relative fit indices indicate a very good fit for our model (CFI = .98, NNFI = .99). In sum, the various indices imply an acceptable level of fit.

### 6.6.1.2. Self anonymity

The concept of self-anonymity was defined in this study as the degree to which respondents are subjectively self-aware (Duval and Wicklund 1972) -- or not focusing on their own selves but one similar ingroup figure -- when reporting associations. As noted in Chapter 4, extreme levels of subjective self-awareness are neither desirable nor realistically obtainable in an elicitation interview. In the course of an interview, typically lasting for several minutes, repondents will likely focus on aspects of the external world (subjective self-awareness) as well as on their own selves (objective self-awareness). Still, we believe that the relative degree of non-self focusing versus self-focusing can be manipulated. Indeed, a number of studies have been reported in which the level of objective self-awareness was manipulated (for a review, see Carver and Schreier 1981). The vast majority of studies manipulating self-awareness has focused on the objective state and used some kind of artificial stimulus such as mirrors or cameras to increase the level of objective self-awareness (e.g. Duval and Wicklund 1972; Geller and Shaver 1976; Wicklund and Duval 1971). In several of these studies researchers have tried to measure the effect of manipulations on subjects' selfattention. Self-attention was typically measured by some kind of post-experimental response task resting on the assumption that enhanced awareness of self will lead to increased mention of self or self-relevant words. For example, Carver and Scheier (1978) used a measure of egocentricity based on sentence completions. Responses to the sentences were scorable as reflecting either focus on the self or focus on the external world. Consistent with predictions, subjects made proportionally more self-focus responses in the presence of a mirror than when the mirror was absent.

In trying to provide a state of self-anonymity, the purpose is not to induce objective self-awareness but exactly the opposite: to increase the level of subjective self-awareness,- and specifically, to direct respondents' attention toward a similar ingroup figure in order to provide a basis for projection of sensitive information. In our context, this is done by means of third-person questioning. When subjects are asked to respond on behalf of «most business students», they are likely to focus on prototypes or exemplars of this category -- and focus less on their own selves

than respondents asked to report their own associations. However, subjects responding in the third person are also believed to become objectively self-aware (self-focused) during the interview. First, they may choose to focus on themselves as representatives of business students. Second, when thinking of business students they are likely to think of friends who, in turn, could be considered as extentions of their own selves (Belk 1988). On this account, an initial focus on a friend may lead to the subsequent activation of respondents private selves. Still, the focus on a known similar group of persons may facilitate projection (Holmes 1968; 1978) and thus result in less self-focus than conventional direct questionning. However, whereas several studies have used third-person questioning and some theorizing have been made as to what psychological mechanisms are induced by this method (Fisher 1993; Supphellen et al. 1997), no operationalizations of the psychological state induced by this method is known. We believe that the concept of self anonymity is useful in this regard and suggest a three-item self-report scale to measure this construct.

The sentence-completion measure and similar measures of self-attention used in previous research within social psychology (e.g. Carver and Scheier 1978; Davis and Brock 1975) could perhaps be adapted and used as measures of self anonymity. However, we decided to develop a new rating scale for two reasons. First, we needed a measure not simply distinguishing between self focus and focus on the environment, but a measure targeting relevant ingroup persons corresponding to the thrid-person questioning technique. Second, as several other measures pertaining to experiences of the elicitation task such as social anonymity, task involvement, and task ambiguity were administered along with the self-anonymity measure, all measures should be relatively short and concise. Hence, we were looking for a more simple and more targeted operationalization of self anonymity than those readily available.

When developing our measure, we tried to identify the potential external foci at which our respondents might direct their attention (in addition to their own selves). When asked to report associations on behalf of «most business student», theories of cognitive categorization (for a review, see Fiske and Taylor 1995) and theories of self-attention (Carver and Scheier 1981) suggested that students would probably switch their attention between three alternative foci: (1) an abstracted pototype of business students stored in memory, (2) one or more exemplars of business students, e.g. fellow students, and (3) their own selves. Self-anonymity was then defined as the extent to which respondents focused on (1) and/or (2), and not on (3). Thus, the extent of "otherfocus" (1+2) and the absence of self-focus are the two major components of our measure of self anonymity. Both are important because they interact and give each other meaning. Moreover, if we only asked for the degree of self-focus, respondents' would lack a common frame of reference for judging what should be considered "a large extent" or "a small extent" (scale anchors) of self-focus. When respondents are provided with three alternative foci of attention, they can respond

according to a crude opinion of the *relative amount* of attention devoted to the alternatives. Pretesting of a subsample of 12 business students who were interviewed after a free elicitation task (stimulus cue: Mercedes) confirmed that the three foci of attention were relevant and fairly representative of their thinking. We developed three rating scales for the three foci and asked students to rate on seven-point Likert-scales «the degree to which you had the following persons in mind when writing down associations»: (a) a typical business student, (b) one or several business students you know, and (c) yourself (scale anchors: «to a small extent - to a large extent»). Self anonymity was then computed from the following equation:

Self anonymity = 
$$(a+b) \times c$$
 reversed

From the equation it is seen that high levels of self-anonymity are obtained when students focus a lot on others and little on themselves during the interview. Why is c reversed multiplied with a + b -- instead of simply subtracted? The reason is theoretically grounded. As previously noted, focusing on a similar ingroup individual will likely backfire to a certain degree in the sense that such individuals can be related to the "we-facet" of respondent's selves (Greenwald and Breckler 1985), which in turn activate the more private aspects of self (Duval and Wicklund 1972). Thus, we contend that it is the joint effect of -- or in other words the interaction between -- "other-focus" and absence of self-focus that determine the level of self anonymity in an elicitation interview.

### 6.6.1.3. Task involvement and task ambiguity

Our measure of task involvement was adopted from Mittal's (1995) operationalization of product involvement. This is a unidimensional scale consisting of five differential scales developed in order to tap the essence of product involvement. Empirical research indicates that Mittal's operationalization possesses sound psychometric properties (Mittal 1995). To fit our purpose, the items of the Mittal scale were rephrased so as to focus on the degree of felt involvement when responding to the elicitation task (e.g., "It was not important to me what answers I gave" - "it was important to me what answers I gave"). See appendix A for a full display of items. The alpha (.79) and the mean inter-item correlation (.43) for this measure indicate high internal consistency.

Task ambiguity was measured in terms of three seven-point Likert scales focusing on the instruction given prior to the elicitation task and the level of felt uncertainty when responding to the task. Items included "The instruction given prior to the task was unclear", and "It was fully clear to me what I was supposed to do in this task" (reversed). Cronbach's alpha and the mean interitem correlation for this measure were .68 and .44, respectively.

### 6.6.2. Dependent variables

The majority of dependent variables were measured by standard rating scales used in previous research or modifications of established operationalizations in order to facilitate comparisom and secure valid operationalizations.

### 6.6.2.1. Type of associations reported

Elicited associations were coded according to the typology of brand associations presented in chapter 2. Specifically, we concentrated on the five categories pertinent to our hypotheses: functional benefits, hedonic benefits, symbolic benefits, brand attitudes, and purchase intentions. These five categories of associations are commonly discussed and researched in the marketing literature (e.g. Keller 1993; 1997) and represent the most important types of brand associations (i.e. Park et al. 1986). Associations reported in this study were classified by three graduate students blind to the purpose of the study. The inter-rater agreement rate was 86%. Disagreements were solved by negotiation.

### 6.6.2.2. Strength of associations

The strength of associations were measured in terms of one general item: "to what extent are the thoughts below descriptive of the four car brands?" (recall that Audi, BMW, and Volvo were included in order to provide a realistic evaluative context). Responses were made on nine-point Likert scales with labels: not at all descriptive (1) - not descriptive (3) - neither nor (5) - is descriptive (7) - very descriptive (9).

### 6.6.2.3. Distortion-sensitivity of associations

Sensitivity was defined in this study as the perceived probability that an association would be held back by respondents. Accordingly, we constucted a nine-point Likert scale with anchors "he/she would defenitely hold back this thought (9) - he/she would defenitely report this thought (1)". Another established measure was initially evaluated as an alternative. Bradburn et al. (1978) introduced the measure of question threat, asking subjects to indicate whether they thought "those questions would make most people very uneasy, moderately uneasy, slightly uneasy, or not at all uneasy" (p. 223). Correspondingly, we could have asked the same question for each brand association listed in the individual questionnaires. However, the question threat measure was

developed for specific sensitive behavioral questions about issues such as drinking habits, sexual activies, and use of drugs. In an elicitation interview, very moderate levels of uneasiness are probably activated. Hence, the Bradburn et al. measure would probably obtain little variance in our context. Moreover, we preferred a measure explicitly addressing the susceptibility of associations being held back by respondents. Still, as recommended by Sudman and Bradburn (1983), our measure asked subjects to respond in the third person.

### 6.6.2.4. Latency of associations

The latency of brand associations was simply measured by recording the order at which associations were reported and assigning figures accordingly. The first association mentioned by a subject was assigned a 1, the next a 2, the third a 3, and so forth. This is a standard procedure for measuring latency and can be seen as an alternative measure of association strength (Fishbein and Ajzen 1975).

### 6.6.2.5. Attitudes and intentions

Attitudes were measured by means of four standard items: "I like this brand", "this is a good brand", "this brand has high quality", and "I have a good impression of this brand" (labels were: strongly disagree -- disagree -- neither nor -- agree -- strongly agree). This type of attitude measure is very common in the marketing literature and is believed to cover the core facets of brand-related attitudes while simultaneously possesing high levels of internal consistency. Our attitude measure obtained an alpha of .87 and a mean inter-item correlation of .64. Purchase intention was operationalized in terms of one general statement: "I will probably choose this brand the next time I purchase a car" (again labels were: strongly disagree -- disagree -- neither nor -- agree -- strongly agree).

### 6.6.2.6. Predictive ability of associations

Predictive ability of brand associations can be meaured in a number of ways and with respect to different criterion variables. In this study, we measured predictive ability at the group level by means of Pearson correlations between the average strength of associations reported and self-reported brand attitudes and intentions, respectively. This type of prediction (termed concurrent validity by Zaltman et al. 1973 since predictor and criterion variables are measured at the same point in time, see section 3.2.5.) was chosen because we wanted to test how well elicited

associations reflected overall attitudes and intentions. Alternatively, favourability ratings of brand associations could have been used (i.e. Nelson et al. 1995). However, findings by Fisher 1993 indicate that importance ratings of symbolic beliefs are susceptible to social desirability bias. Furthermore, predictive ability could have been measured with respect to future behavior or evaluations, e.g. actual selection of a car brand. Though desirable, this kind of measure was not considered due to practical and financial limitations. In addition to estimating correlations, we regressed the five most latent associations in each group against the attitude and intention measures in order to examine how much variance were explained in the different groups.

### 6.6.3. Moderator

Two (three) alternative measures of self-monitoring are found in the literature: Lennox and Wolfe's (1984) 13-item measure and Snyder's (1974) 25-item scale (Snyder's scale was later reduced to 18 items in Snyder and Gangestad 1986). Lennox and Wolfe's scale was selected here for two reasons. First, the Snyder scale is a complex two-dimensional scale for which the first factor is strongly correlated with a number of other personality constructs such as extraversion, exhibitionism, and social potency, and the other factor represents a tendency of other-directedness that correlates negatively with self-esteem and positively with shyness (Briggs and Cheek 1988). The Lennox and Wolfe scale consists of two simple factors representing a measure of protective self-presentation and a measure of aquisitive or assertive self-presentation (Briggs and Cheek 1988; Lennox and Wolfe 1984). These two factors were considered particularly pertinent to our study since we have argued that the nature of subjects' motivational response distortions can be both protective and assertive (see Table 2.3.a, Chapter 2). Second, the Lennox and Wolfe scale is shorter than the Snyder scales.

The thirteen items of the Lennox and Wolfe scale were translated into Norwegian by the author and back-translated into English by a bilingual Phd student. Incompatabilities with the original scale were solved by negotiation. According to Lennox and Wolfe, the scale is two-dimensional. Consequently, we submitted the original two-factor model to a confirmatory factor analysis via LISREL 8. The initial model with all 13 items did not fit the data well (RMSEA = .12, GFI = .84). Since the theory -- and the results of exploratory factor analyses favoured a two-factor model -- we examined modification indices and factor loadings in order to improve the fit of this model. By this procedure we removed two items from the first factor (acquisitive self-presentation) and one item from the second factor (protective self-presentation). Items, fit statistics, and indices of internal consistency for the two factors are reported in Table 6.6.3.

### Table 6.6.3.

# DIMENSIONALITY AND INTERNAL CONSISTENCY

### OF THE LENNOX AND WOLFE SELF-MONITORING SCALE

(Mean inter-item

Variable/item	Model fit	Alpha	correlation)
	$\chi = 62.05, p = .00$ df = 34 RMSEA = .06 GFI = .94 NNFI = .92 CFI = .94		
Acquisitive self-presentation			
1. In social situations, I have the ability to behavior if I feel that something else is c (2. I have the ability to control the way I people, depending on the impression I w 3. When I feel that the image I am portra I can readily change it to something that (4. I have trouble changing my behavior people and different situations.)* 5. I have found that I can adjust my behavior requirements of any situation I find myse 6. Even when it might be to my advantage putting up a good front.* 7. Once I know what the situation calls it to regulate my actions accordingly.	alled for. come across to vish to give them.) rying isn't working, does. to suit different rvior to meet the elf in. ge, I have difficulty	.64	(.28)
Protective self-presentation			
1. I am often able to read people's true enthrough their eyes. 2. In conversations, I am sensitive to ever in the facial expression of the person I'n 3. My powers of intuition are quite good understanding other's emotions and mot 4. I can ususally tell when others considerate, even though they may laugh convict (5. I can ususally tell when I've said some by reading it in the listener's eyes.) 6. If someone is lying to me, I usually kethat person's manner of expression	en the slightest change in conversing with. I when it comes to ives. er a joke to be in bad incingly. nething inappropriate	.77	(.39)

NOTE: Items in parenthesis were removed from the final version based on inspection of modification indices and factor loadings.

The model depicted in Table 6.6.3. obtains reasonable levels of fit on both the absolute fit indices (the Chi-square/d.f. ratio and RMSEA) and the relative ones (CFI and NNFI). Thus, our

<sup>\*</sup> denotes items that require reverse coding

Norwegian version of the Lennox and Wolfe self-monitoring scale supports the notion of two distinct and internally consistent subscales of self-monitoring: aquisitive self-presentation and protective self-presentation. Also, more traditional indicators suggest that the self-monitoring scale should not be analyzed as a single construct, but as consisting of two subscales: the mean correlation between items from the two subscales is significantly greater than zero (r = .21), yet less than the average within-subscale correlations (.28 and .39, respectively) (Clark and Watson 1995). On this account, the two subscales were kept apart and entered separately in subsequent analyses.

### CHAPTER 7

# DATA DESCRIPTION AND TESTS OF CONFOUNDS

The purpose of this chapter is to form a basis for accutrate and valid testing of hypotheses in Chapter 8. The first section (7.1.) offers descriptions of the data, such as mean values, correlations, and distributions of study variables. In section 7.2. we test and discuss the assumptions of the statistical analyses. Finally, in section 7.3. the results of tests of two potential confounds of our manipulation -- task involvement and task ambiguity -- are reported.

## 7.1. Data description

Three kinds of description are offered in this section. First, we show mean values, standard deviations, extreme values and distributional indices for the study variables. Next, the 15 associations most frequently mentioned are presented. The section concludes with an analyses of correlations between the manipulated variables and between the dependent variables.

Table 7.1.1.a. summarices descriptive statistics for all study variables for the entire sample. All means, maximum and minimum values seem to be reasonable and not affected by any miscalculations of indices or other errors. The high maximum value for Self anonymity is due to the multiplication of scores in the calculations of this index. The standard deviations are fairly low for attitude, the favourability of the different types of associations, and the covariates. Specifically, these results indicate that our student subjects hold consistently favourable associations and attitudes toward Mercedes and that they are comparatively similar with respect to tendencies of aquisitive and protective self-presentation. The remaining variables have higher standard deviations implying that these variables discriminate more between our subjects.

Another important observation from Table 7.1.1.a. is the low number of respondents for some of the variables. For example, only 29 subjects (14.1%) mentioned attitudes and 42 mentioned intentions (20.5%) in their elicitation reports. This affects the latency, favourability, and sensitivity variables. N for Number of attitudes and Number of intentions is 205 because non-response was coded as zero. Measurements of latency, favourability, and sensitivity of attitudes and intentions, however, were based on those subjects reporting at least one attitude or intention.

The mean total number of associations reported across categories was 8.27 (Max. 23, Min. 2, Standard Deviation = 3.28). The values for kurtosis and skewness indicate distributional problems for several variables. Nine out of 28 variables have skewness values greater than 1, and six out of 28 variables have kurtosis values above 2. All variables with kurtosis values above 2 are also skewed. This has to be accounted for in the analyses (see section 7.1.2).

Table 7.1.1.a. shows descriptive statistics for the study variables. This table does not give any information about what specific associations were mentioned in the elicitation interviews. To get a picture of what associations that were typically reported, the 15 most frequently mentioned are shown in Table 7.1.1.b.

Table 7.1.1.a

DESCRIPTIVE STATISTICS FOR STUDY VARIABLES

Variable	Mean	St. Dev	Kurtosis	Skewness	Max.	Min.	N
Manipulated variables							
Self anonymity	18.58	14.31	2.56	1.53	78.00	2.00	202
Public anonymity	11.26	3.14	.32	-1.08	14.00	2.00	205
Interviewer anonymity	13.05	5.35	92	28	21.00	3.00	203
Control variables							
Task ambiguity	7.04	3.69	.16	.84	19.00	3.00	205
Task involvement	22.32	5.96	.10	46	35.00	5.00	204
Dependent variables							
Attitude (rating scale)	29.93	4.83	1.82	-1.16	36.00	10.00	205
Intention (rating scale)	4.08	2.36	89	.27	9.00	1.00	205
Number of hedonic assoc.	.82	.97	1.34	1.24	4.00	0.00	205
Number of functional assoc.	1.26	1.18	.42	.91	5.00	0.00	205
Number of symbolic assoc.	3.16	1.86	.45	.51	10.00	0.00	205
Number of attitudes	.17	.43	6.71	2.67	2.00	0.00	205
Number of intentions	.23	.48	3.12	1.96	2.00	0.00	205
Latency of hedonic assoc.	4.43	2.71	.55	.85	14.00	1.00	110
Latency of functional assoc.	4.22	2.38	3.12	1.46	14.25	1.00	142
Latency of symbolic assoc.	5.47	2.56	1.28	.82	16.00	1.00	191
Latency of attitudes	4.02	3.01	10.10	2.62	16.50	1.00	29
Latency of intentions	4.70	3.14	1.27	1.30	14.00	1.00	42
Favourability of hedonic assoc.	6.01	1.83	46	06	9.00	1.00	110
Favourability of functional assoc	. 6.62	1.85	.35	43	9.00	1.00	142
Favourability of symbolic assoc.	4.65	1.40	.37	.44	9.00	1.00	191
Favourability of attitudes	6.79	1.64	-1.51	.20	9.00	4.00	29
Favourability of intentions	6.66	.86	6.99	-2.52	8.00	3.00	42
Sensitivity of hedonic assoc.	2.81	1.51	1.78	1.12	9.00	1.00	110
Sensitivty of functional assoc.	2.65	1.62	2.20	1.41	9.00	1.00	142
Sensitivity of symbolic assoc.	4.12	1.85	21	.39	9.00	1.00	191
Sensitivity of attitudes	2.59	1.37	43	.61	6.00	1.00	29
Sensitivity of intentions	3.43	1.73	1.44	.90	9.00	1.00	41
<u>Moderators</u>							
Aquisitive self-presentation	16.25	3.04	.10	20	24.00	7.00	204
Protective self-presentation	15.26	4.01	02	20	24.00	2.00	205

Table 7.1.1.b.

THE 15 ASSOCIATIONS MOST FREQUENTLY MENTIONED (CUE: MERCEDES)

Association	Frequency	Percent	Category
1. Expensive	154	75.1	Product-related
2. Status	142	69.3	Symbolic
3. Quality	121	59.0	Functional
4. Success/successful	111	54.1	Symbolic
5. German/Germany	78	38.0	Product-related
6. Rich people	47	22.9	Symbolic
7. The star symbol	43	21.0	Product attribute
8. Luxury	39	19.0	Symbolic
9. Safety	39	19.0	Functional
10. Elegant/good looking	37	18.0	Hedonic
11. Car	33	16.1	Product category
12. Good car	21	10.2	Attitude
13. Exclusive	20	9.8	Symbolic
14. Comfort	17	8.3	Hedonic
15. Yuppie	15	7.3	Symbolic

NOTE: Frequencies refer number of respondents mentioning the focal association. N = 205. The categorization refers to the typology presented in Chapter 3.

Table 7.1.1.b. indicates that all three kinds of benefit associations - hedonic, functional, and symbolic associations - are central associations in our subjects' memories. Yet, the symbolic associations are dominating: 6 out of the 15 most frequently mentioned are symbolic. Also, Table 7.1.1.a. shows a higher mean number of symbolic associations than for any other type of association. Though some hedonic associations are mentioned, Tables 7.1.1.a. and b. indicate that they are not very dominating in the memories of our subjects. This is not very surprising because most hedonic associations are derived through direct experience with the brand over time, and only a minority of our student subjects have probably owned a Mercedes or have parents who own one. Otherwise, the associations listed in Table 7.1.1.b. seem reasonable and do not not include any special associations that would not be found in a sample of ordinary consumers.

The skewness and kurtosis values reported in Table 7.1.1.a. have bearing on the choice of statistical tests (to be further explicated in section 7.2. and Chapter 8). Another issue influencing the choice of test techniques is the correlational pattern between dependent variables. Specifically, when dependent variables are significantly correlated, multivariate analysis of variance

(MANOVA) should be considered in stead of univariate analysis of variance (ANOVA). Table 7.1.1.c. shows correlations among the dependent variables and the manipulated variables. The three anonymity constructs are included for the purpose of tentative evaluations of discriminant validity.

Several interesting correlations are found in Table 7.1.1.c. Some of these are addressed when discussing the tests of the hypotheses in Chapter 9. Here, we concentrate on correlations pertinent to the discussion of appropriate statistical techniques for the analyses, that is inter-correlations between dependent variables belonging to the same group of variables, such as number, latency, favourability, and sensitivity of associations. Inter-correlations between dependent variables within these groups (e.g., number of hedonic associations, number of functional associations, number of symbolic associations, etc.) are relevant because we would like to identify which variables within the groups are most affected (if any) by our manipulations.

Table 7.1.1.c. shows that within three of the four groups of dependent variables (number, latency, favourability, and sensitivity of associations) several variables are significantly correlated. Three significant correlations are found for the number of different kinds of associations. First, the number of functional benefits reported is negatively correlated with the number of symbolic associations reported. This might imply that some subjects are more concerned with the symbolic aspects of the brand whereas others are more attuned to the symbolic side of it. Alternatively, some respondents (for example those subjected to the weaker forms of anonymity or the control condition) may have reported functional associations with are rich in symbolic implications in stead of the more sensitive symbolic associations they are related to (e.g., functional associations such as high quality and unique performance could be related to -- and thus reported in stead of -- symbolic associations such as successful and exclusive). Second, the number of intentions is negatively correlated with the number of functional associations and positively correlated with the number of attitudes reported.

The latency of hedonic, functional, and symbolic associations are all significantly and positively inter-correlated, though no correlation is above .5. The latencies of attitudes, however, are very strongly correlated with the latency of intentions (r = .88). Overall, for all groups of variables, measures concerning attitudes and intentions are strongly correlated. (her kommer tabellen) Also, the latencies of different types of associations are negatively correlated with the number of associations reported. This is very plausible because a large number of a given type of association necessarily leads to a greater mean latency score than a smaller number of associations (recall that latency scores correspond to the order at which associations are reported).

Table 7.1.1.c.

# CORRELATIONS BETWEEN DEPENDENT VARIABLES AND MANIPULATED VARIABLES

Self anonymity   2 Public anonymity   2 Public anonymity   3.7 Public anonymity   3 Interview a monymity   2 Public anonymity   3 Interview a monymity   3 Interview a monymity   3.7   3.2   3.3   3.3   3.4   4.4		_	2	m	4	~	9	7 8	0	2	=	12	13	4	15	2	17	81	≘	20	21	22	23 2	24
c	Manupulated variables					l										ļ	ľ							
	1. Self anonymity																							
	2. Public anonymity					· <b>-</b> ·																		
	3. Interviewer anonymity		.57																					
c	Dependent variables		•																					
c	4. Attitude (rating scale)		, cT:		;																			
C	5. Intention (rating scale)		.T3		.33	9																		
20°	o. Number of functional accor				9 6	× -	,				- <b>-</b>													
20°	8. Number of symbolic assoc.				-20			.14b																
20°	9. Number of attitudes						,									<u>-</u> -								
oc. $17^{h}$ $.17^{h}$ $.17^{h}$ $.17^{h}$ $.19^{h}$ $.29^{h}$ $.29^{h}$ $.29^{h}$ $.20^{h}$ $.29^{h}$ $.20^{h}$	<ol><li>Number of intentions</li></ol>	.20		,	,			.17		12°	-					. <b>.</b> .								
oc17° 1.7°19°29°30°20°19°29°44°19°29°44°10°29°44°30°29°44°30°29°44°30°29°44°30°55°54°28°40°88°	11. Latency of hedonic assoc.	•		,	,	,	23	Ι΄	'	20° -	Ι-													
c	12. Latency of functional assoc.	17	.17			,			.30"	20° -	.28	*												
5c	<ol><li>Latency of symbolic assoc.</li></ol>			•					.44	•	<u>ب</u>		•							-				
5c	14. Latency of attitudes				.32€				.32° -	•	74.		،											
5c	15. Latency of intentions		•		.30°				.28° -	•	Ŀ	•	Ì							_				
	<ol><li>16. Favourab. of hedonic assoc.</li></ol>								.30°	•			34	-	•									
5	<ol><li>Favourab. of funct. assoc.</li></ol>	.19		.15				•	1	Τ.	. 6	.16	7	3°.	•	.52								
50c	<ol><li>Favourab. of symb. assoc.</li></ol>				.27	.13°			.23	•	٠	١	4.	·	•	.39				-				
soc	19. Favourav. of attitudes				.25		,		ř	406 -	7.	٠	.35	ا و <u>.</u>	•	.61 <sup>b</sup>		.50						
assoc37 <sup>b</sup> 21 <sup>s</sup> 18 <sup>b</sup> 22 <sup>s</sup> 24 <sup>b</sup> .30 <sup>s</sup> 59 <sup>s</sup> 25 <sup>b</sup> 380c12 <sup>c</sup> 18 <sup>b</sup> 20 <sup>s</sup> 48 <sup>s</sup> 20 <sup>s</sup> 48 <sup>s</sup> 26 <sup>c</sup> 48 <sup>s</sup> 56 <sup>c</sup> 48 <sup>s</sup> 56 <sup>c</sup> 48 <sup>s</sup> 56 <sup>c</sup> 48 <sup>s</sup> 56 <sup>c</sup> 48 <sup>s</sup> 50 <sup>c</sup> 50	20. Favourab. of itensions				.25		,		•	•	•	•	•	•	•	.21°	•	.31		-				
assoc37 <sup>b</sup> 21 <sup>s</sup> 18 <sup>b</sup> 22 <sup>s</sup> 24 <sup>b</sup> 30 <sup>s</sup> 59 <sup>s</sup> 25 <sup>b</sup> 350c12 <sup>c</sup> 18 <sup>c</sup> 13 <sup>c</sup> 48 <sup>s</sup> .32 <sup>c</sup> 48 <sup>s</sup> .32 <sup>c</sup> 48 <sup>s</sup> .32 <sup>c</sup> 48 <sup>s</sup> 32 <sup>b</sup> 32 <sup>b</sup> 32 <sup>b</sup>	21. Sensitivity of hedonic assoc.								1	•	٠	•	ı	•	•		,							
ssoc	22. Sensitivity of functional assoc.		,		37	21			18°	•	٠	2	2ª -	١		24°	30		59	,	.25 <sup>b</sup>			
.32 <sup>b</sup> .48 <sup>a</sup> .32 <sup>c</sup> .41 <sup>b</sup> .34 <sup>c</sup> 48 <sup>a</sup> 36 <sup>c</sup> 48 <sup>a</sup> .49 <sup>c</sup> 31 <sup>b</sup> 49 <sup>a</sup> 31 <sup>b</sup> 31 <sup>b</sup> 31 <sup>b</sup> 31 <sup>b</sup> 31 <sup>b</sup>	23. Sensitivity of symbolic assoc.		1			18b		- 1	- 20.	•	•	•	Τ.	3.	•			.27	32°	,				
	24. Sensitivity of attitudes						.32°	٠,	41° .3	14° -	•	٠	4.	**	•		56				.49¢	,		
	25. Sensitivity of intensions				32 <sup>b</sup>	,			•	•	•	,	•	•	.33 <sup>b</sup>			,	,		.57		٠.	08

The favourability of the different kinds of associations are generally positively correlated. That is, all types of benefit associations are strongly (positively) correlated with attitudes, and somewhat weaker with each other and with intentions. The sensitivity variables are less inter-correlated than latency variables and favourability variables. Still, significant correlations are observed between sensitivity of hedonic associations, and the sensitivity of functional associations and the sensitivity of attitudes. Sensitivity is generally negatively correlated to favourability variables, indicating that our subjects perceived a greater probability of holding back unfavourable than favourable associations.

As expected, the two subscales of Social anonymity, Public anonymity and Interviewer anonymity, are positively correlated. However, none of these subscales are correlated with the other type of anonymity: Self anonymity. Thus, the correlational pattern observed in Table 7.1.1.c. and the confirmatory factor analyses of these constructs in Chapter 5 support our theoretical postulation that Social anonymity and Self anonymity are distinct constructs, and that Social anonymity can be meaningfully divided into two subscales of Public and Interviewer anonymity.

# 7.2. Test of assumptions

The correlational pattern between dependent variables along with the other descriptive statistics indicate when MANOVA should be used in stead of ANOVA to test hypotheses. Also, the number of respondents (N) for the different variables is highly relevant in a discussion of what techniques to use and to evaluate if statistical testing is possible at all.

Our hypotheses imply that groups of dependent variables should be compared, e.g. the effect of anonymity manipulations on the number of symbolic associations vs. the effect on the number of functional and hedonic associations, etc. Correspondingly, we were interested in comparing effects within the groups of dependent variables regarding latency, favourability, and sensitivity, respectively. Inspection of inter-correlations within these groups of variables suggest that MANOVA should be used in stead of ANOVA in some instances (for further details see Chapter 8). In the following we test whether the assumptions for ANOVA and MANOVA are met by the relevant variables.

### 7.2.1. Test of ANOVA assumptions

Three main assumptions should be met in order to use ANOVA: (a) treatment populations should be normally distributed, (b) homogeneity of variances across the five experimental groups, and (c) independence between subjects belonging to the different experimental conditions (Keppel 1982). The latter assumption is met by our experimental design in which subjects were randomly assigned to one of the five conditions. The other two assumptions need to be addressed more carefully.

Table 7.1.1.a. shows that several variables are skewed (skewness values above 1) and peaked (kurtosis values above 2). Not surprisingly, the problems are most accute for attitude and intention variables -- the variables with lowest sample size (29 and 42, respectively). Moreover, these variables have very unequal numbers of cases in the experimental groups. For example, 19 intentions are found in the SAO3P group (the group subjected to both a self-administered questionnaire and third-person questions) and only 2 intentions in the CTRL (control) and CONF (confidentiality assurance) groups. Similarly, for attitudes, there are 14 observations in the SAO3P group and merely 3 in the CONF group. When the normality assumption cannot be met, when sample sizes are small and cell sizes very different, non-parametric tests should be applied (Tabachnick and Fidell 1983). Self anonymity, Sensitivity of functional associations, and Sensitivity of functional associations are also variables that violate the normality assumption (see Table 6.1.1.a.). However, these violations are less serious because the three variables have higher sample sizes (N = 142 for sensitivity and favourability of functional associations and 202 for self anonymity) and relatively equal cell sizes. Thus, the selection of an appropriate test technique for these variables is more influenced by the degree to which the other main assumpton is met: the homogeneity of variances.

Cochran's C and Bartlett-Box's F statistics were used to test for homogeneity of variances across the five experimental groups. Both tests were used because the two tests may lead to different conclusions (Wiener, Brown, and Michel 1991). In fact, our data provide an example of such incidents (see Table 6.2.1. below). Test statistics for the variables subjected to univariate analyses of variance are depicted in Table 6.2.1. The other variables were submitted to MANOVAs due to the pattern of inter-correlations (tests of MANOVA assumptions are reported in section 6.2.2.). Notably, all attitude and intention variables are investigated by means of univariate test even though the pattern of correlations in Table 6.1.1.c. indicate that these variables should be included in MANOVAs with other dependent variables. However, MANOVA could not be performed on attitude and intention variables because of empty cells (recall that these variables had low numbers of observations in some cells).

The Cochran and Bartlett-Box statistics test the null hypothesis that variances in the five experimental groups are equal. Hence, significant findings indicate violations (rejection of the null hypothesis). Table 7.2.1. shows that the attitude and intention variables with poor distributional properties also violate the homogeneity assumption. This supports our choice of non-parametric tests for these variables. Also, two other variables violate the homogeneity assumption: Latency of intentions (only Cochran's C is significant) and Number of functional associations. However, Number of functional associations is a variable with large and fairly equal cell sizes, and is thus fairly robust to this violation (Shavelson 1981). The Latency of intention variable, on the other hand, has unequal cell sizes, but the seriousness of the violation is questionable for this variable since only one of the test statistics is significant. Therefore we analysed effects on this variable both by means of ANOVA and a non-parametric test (see Chapter 7).

Table 7.2.1.
TESTS OF ASSUMPTIONS OF UNIVARIATE HOMOGENEITY

Variable	Cochran's C	Bartlett-Box's F
Self anonymity	C(39,5) = .369  p = .00	F(4,57904) = 5.761 $p = .00$
Number of hedonic assoc.	C(40,5) = .225 p = 1.00	F(4,59000) = .275 p = .89
Number of functional assoc.	C(40,5) = .332 p = .00	F(4,59000) = 2.764 $p = .03$
Number of symbolc assoc.	C(40,5) = .246  p = .64	F(4,59000) = .911 p = .46
Number of attitudes	C(40,5) = .446  p = .00	F(4,59000) = 8.382 $p = .00$
Number of intentions	C(40,5) = .441  p = .00	F(4,59000) = 21.712 p = .00
Latency of attitudes	C(5,5) = .810 p = .00	F(4,367) = 3.789 p = .00
Latency of intentions	C(7,5) = .465 p = .04	F(4,146) = .884 p = .48
Favourability of attitudes	C(5,5) = .258 p = 1.00	F(4,357) = .127 p = .97
Favourability of intentions	C(30,5) = .512 p = .00	F(4,33289) = 33.897 p = .00
Sensitivity of symbolic assoc.	C(37,5) = .233 $p = 1.00$	F(4,50791) = .734 p = .73
Sensitivity of attitudes	C(5,5) = .459 p = .11	F(4,357) = 1.719 p = .15
Sensitivity of intentions	C(7,5) = .482 p = .03	F(4,146) = .600 p = .66
Aquisitive self-presentation	C(40,5) = .271  p = .22	F(4,59000) = 1.984 p = .09
Protective self-presentation	C(40,5) = .288  p = .10	F(4,59000) = 1.984 p = .09

### 6.2.2. Tests of MANOVA assumptions

When dependent variables are correlated, MANOVA is preferred to a series of ANOVAs because MANOVAs account for the pattern of correlations between variables and thus protect against Type 1 errors (Iacobucci 1994). In this study, MANOVA was selected to test hypotheses involving the two subscales of social anonymity (public and interviewer anonymity) and two groups of benefit associations: latencies of hedonic, functional, and symbolic associations, and the favourability of hedonic, functional, and symbolic associations of MANOVA are (a) homogeneity of variance for dependent variables, (b) homogeneity of variance-covariance matrices, and (c) multi-normally distributed dependent variables (Tabachnick and Fidell 1983). Assumption (a) was tested by means of the Cochran's C and Bartlett-Box's F statistics, whereas assumption (b) was tested by means of Box's M statistic for multivariate equality of covariances. The results are reported in Table 7.2.2.

Table 7.2.2.

TESTS OF HOMOGENEITY FOR DEPENDENT VARIABLES
AND VARIANCE-COVARIANCE MATRICES

Variables	Cochran's C		Bartlett-Box's F	Box's M
Public anonymity	C(40,5) = .339	p = .01	F(4,367) = 3.560 p = .01	
Interviewer anonymity	C(40,5) = .286	p = .11	F(4,367) = 1.595 p = .17	
				M = 30.859 p = .00
Latency of hedonic assoc.	C(12,5) = .289	p = .59	F(4,3760) = .498 p = .74	
Latency of funct. assoc.	C(12,5) = .273	p = .78	F(4,3760) = .533 p = .71	
Latency of symb. asoc.	C(12,5) = .522	p = .00	F(4,3760) = 1.823 p = .12	
				M = 27.941 p = .46
Favourab. of hedonic assoc.	C(12,5) = .299	p = .47	F(4,3760) = .372 p = .83	
Favourab. of funct. assoc.	C(12,5) = .309	p = .38	F(4,3760) = .940 p = .44	
Favourab. of symbolic assoc.	C(12,5) = .300	p = .47	F(4,3760) = .737 p = .57	
				M = 35.273 p = .17
Sensitivity of hedonic assoc.	C(15,5) = .348	p = .10	F(4,6178) = 2.263 p = .06	
Sensitivity of functional assoc.	C(15,5) = .271	p = .70	F(4,6178) = .460 p = .77	
				M = 13.729 p = .39

One of the variables in Table 7.2.2. violates the homogeneity assumption: Public anonymity. However, since the sample size is large for this variable (N = 205), cell sizes relatively equal, and there are no outliers, this violation is not serious enough to prevent the use of MANOVA. The Box M statistic is, however, also significant for the multivariate test including public anonymity and interviewer anonymity as dependent variables. Thus, we tested the hypotheses for these variables by means of both multivariate and univariate analyses of variance.

Violations of assumption (c), that dependent variables should be multi-normally distributed, can be tentatively tested by examining univariate tests. Univariate normality does not guarantee multivariate normality, but does increase the probability of multivariate normal distributions. Table 7.1.1.a. shows that one of the variables is not normally distributed: Latency of functional associations (Kurtosis = 3.12, Skewness = 1.46). Still, MANOVA is fairly robust to this violation because sample sizes are above 20 in each experimental group and no outliers are observed for this variable (Tabachnick and Fidell 1983).

## 7.3. Test of confounds: task ambiguity and task involvement

Task ambiguity and task involvement represent rival explanations for potential effects of our manipulations. For a given effect observed in one of the experimental groups, say the SAQ group (the one subjected to self-administered questionnaires), one might speculate whether the effect is actually caused by the type of anonymity induced, or whether this manipulation simply affected the level of ambiguity or involvement in a special way. Since the task ambiguity and task involvement variables are not significantly correlated (r = .01, p = .88), we tested for group differences by means of two separate ANOVAs. Tests of distributional properties and homogeneity of variances for the variables detected no serious violations to these assumptions. The results of ANOVAs are reported in Tables 7.3.1. and 7.3.2.

The results presented in Tables 7.3.1. and 7.3.2. show no differences between the five experimental groups for task involvement or task ambiguity. Thus, we can eliminate these two variables as rival explanations for any observed effects of our manipulation.

Table 7.3.1.
RESULTS OF ANOVA FOR DIFFERENCES IN TASK AMBIGUITY

	Sum of		Mean		Sig. of
Source of variation	squares	df ——	square	F	F
Main effects	32.46	4	8.11	.59	.67
Experimental Group	32.46	4	8.11	.59	.67
Explained	32.46	4	8.11	.59	.67
Residual	2742.15	200	13.71		
Total	2774.60	204	13.60		

Table 7.3.2. RESULTS OF ANOVA FOR DIFFERENCES IN TASK INVOLVEMENT

Source of variation	Sum of squares	df	Mean square	F	Sig. of
Main effects	152.35	4	38.09	1.07	.37
Experimental Group	152.35	4	38.09	1.07	.37
Explained	152.35	4	38.09	1.07	.37
Residual	7064.30	199	35.50		
Total	7216.65	203	35.55		

### CHAPTER 8

# TESTS OF HYPOTHESES

In this chapter, tests of the hypotheses developed in Chapter 5 are reported. The sections are organized in the same order as the hypotheses were presented in Chapter 5. In section 8.1., we report the results of manipulations of social- and self anonymity. In section 8.2., posited differences in sensitivity between the various types of brand association are tested. Further, in section 8.3., tests of hypotheses about anonymity-effects on response latencies are reported. Sections 8.4. and 8.5. reports on tests of hypothesized effects of our manipulation on the sensitivity of associations reported (8.4.), and on the favourability of associations (8.5). Section 8.6. reports on tests of posited effects on the predictive ability of associations. Finally, interactions between self-monitoring subscales and our manipulation of anonymity are analysed in section 8.7. Findings are summarised at the beginning of Chapter 9 (section 9.1.).

All hypotheses on the effects of the anonymity manipulation focus on effects of self anonymity compared to a control condition. To test these hypotheses, it is sufficient to compare CTRL (the control group) and the 3P (third-person questioning) and SAQ3P groups (self-administered questionnaire and third-person questioning). However, as the overall purpose of this study is to explore effects of different types of anonymity and different types of anonymity-inducing techniques in a new context, we consistently include analyses for all five experimental groups.

## 8.1. Manipulation of self- and social anonymity (H1a-c)

The techniques used to elicit brand associations in this study were expected to evoke different types of anonymity. Three specific hypotheses were developed in Chapter 5:

- H1a Respondents subjected to third-person questioning will experience higher levels of self anonymity than respondents in the control group.
- H1b Respondents subjected to self-administered questionnaires will experience higher levels of interviewer anonymity than respondents in the control group.
- H1b Respondents subjected to confidentiality assurances will experience higher levels of public anonymity than respondents in the control group.

H1a addresses group differences in self anonymity. Tables 7.1.1.a. and 7.2.1. in Chapter 7 showed that the self anonymity variable did not meet the ANOVA assumptions of normal distribution and homogeneity of variances. Though ANOVAs usually are robust to non-normality and to violations against the homogeneity of variance assumption (Tabachnick and Fidell 1983), we chose to use both ANOVA and the Kruskal-Wallis non-parametric analysis to test H1a. The Kruskal-Wallis one-way analysis of variance is considered as a very useful technique for comparison of three or more groups when scores cannot be assumed to come from a population distributed in a certain way (Siegel and Castellan 1988). The test is based on ranks of scores and tests the probability that average ranks for each group come from the same population (see Siegel and Castellan 1988, p.207). The results of the Kruskall-Wallis one-way analysis of variance for group differences in self anonymity is reported in Table 8.1.a. and the results of the ANOVA in Table 8.1.b.

Table 8.1.a

KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE FOR GROUP
DIFFERENCES IN SELF ANONYMITY

	Experime	ntal grou	ps: mear	Corrected for ties				
Variable	CTRL	CONF	SAQ	3P	SAQ3P	Chi-square	df	Sign.
Self anonymity	84.53	76.98	89.49	132.89	126.20	30.92	4	.00
	(14.90)	(12.54)	(16.30)	(24.32)	(25.57)			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning. \*The scores in parenthesis are mean scores. The Kruskal-Wallis test indicates that the level of self anonymity experienced in the five groups differed significantly. Furthermore, the mean ranks for the two groups subjected to third-person questioning (3P and SAQ3P) are considerably higher than for the other groups. This finding lends support to H1a. The results of the ANOVA (see Table 8.1.b.) are consistent with the Kruskal-Wallis test: the main effect is significant and Scheffe comparisons of mean scores show that scores for the 3P and SAQ3P groups are significantly higher than for the control group.

Table 8.1.b.
ANOVA FOR GROUP DIFFERENCES
IN SELF ANONYMITY

			Exp	erimenta	l groups	(mean s	cores)	C-1	
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	Scheffe comparisons	Sign.
Self anonymity	7.47	.00	14.90	12.54	16.30	24.32	25.57	3P>CTRL SAQ3P>CTRL	.00

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

Since the two subscales of social anonymity, public- and interviewer anonymity were correlated (.57), MANOVA would be a natural choice for testing group differences concerning these variables. However, the assumptions of homogeneous covariances and homogeneity of variances of public anonymity across groups were violated (see Table 7.2.2.). Because these violations were not very serious, we performed both a MANOVA including both variables simultaneously, and a univariate test for public anonymity by means of the Kruskal-Wallis non-parametric test. The results of the MANOVA is reported in Table 8.1.c. and the Kruskal-Wallis test in Table 8.1.d.

The pattern of findings from the MANOVA strongly support hypotheses H1b and H1c. Public anonymity scores are significantly higher in the CONF group than in the control group, and interviewer anonymity scores are higher in the SAQ and SAQ3P groups than in the control group. Effect sizes are large for Interviewer anonymity (Eta-square= .15) and moderately large for public anonymity (Eta-square= .09) (Cohen 1977). Notably, public anonymity scores for the SAQ and SAQ3P groups are also higher than for the control group. This is consistent with our previous analyses of public anonymity and interviewer anonymity showing that these constructs are related and tap into the more general construct of Social anonymity (see section on measurement in Chapter 6). The results of the Kruskal-Wallis test for group differences in public anonymity support the results of the MANOVA. The Chi-square value is significant and the pattern of mean ranks parallels the Scheffe comparisons in the MANOVA model.

Table 8.1.c.

MULTIVARIATE AND UNIVARIATE ANALYSES OF GROUP
DIFFERENCES IN PUBLIC- AND INTERVIEWER ANONYMITY

			Exp	erimenta	l groups	(mean s	cores)	C-1	
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	Scheffe comparisons	Sign.
Multivariate test (Wilk's)	5.19	.00			·				
Univariate tests Public anonymity	5.11	.00	9.80	11.81	12.17	10.48	12.14	CONF>CTRL SAQ>CTRL SAQ3P <ctrl< td=""><td>.00 .00 .00</td></ctrl<>	.00 .00 .00
Interviewer anonymity	8.36	.00	10.85	12.05	15.88	11.50	15.14	SAQ>CTRL SAQ3P>CTRL	.00 .00

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

Table 8.1.d.

KRUSKAL-WALLIS ONE-WAY ANALYSIS OF VARIANCE FOR GROUP
DIFFERENCES IN PUBLIC ANONYMITY

	Experimen	ntal group	Corrected for ties					
Variable	CTRL	CONF	SAQ	3P	SAQ3P	Chi-square	df	Sign
Public anonymity	82.38	108.53	116.01	87.99	120.78	14.20	4	.01

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

Overall, H1a-c are strongly supported by our data: we have demonstrated that the techniques used to elicit brand associations induced principally different kinds of anonymity in a manner consistent with our predictions.

# 8.2. Premises for anonymity-effects: Perceived sensitivity of brand associations (H2a-b)

Two hypotheses were developed regarding the relative perceived sensitivity of different types of brand associations:

H2a Symbolic brand associations will be perceived as more sensitive to distortion than functional and hedonic associations.

H2b Intentions will be perceived as more sensitive to distortion than attitudes.

Descriptive analyses in Chapter 7 showed no serious violations to the assumptions for ANOVA for any of the variables of perceived sensitivity of distortion. Only Sensitivity of functional associations was not normally distributed. However, since the sample size is not very small for this variable and cell-sizes are not very different across experimental groups, ANOVA is robust to this violation (Tabachnick and Fidell 1983). In comparing the level of sensitivity of the different types of brand associations, we could not include all categories in a single ANOVA due to empty cells (recall that there were very few subjects that reported attitudes and intentions in some groups). Thus, in accordance with the hypotheses, we performed one ANOVA for the benefit associations (with Scheffe comparison of group means), and a t-test for comparison of Sensitivity of attitudes vs. Sensitivity of Intentions. The results are reported in Table 8.2.

Table 8.2.

ANOVA AND T-TEST FOR DIFFERENCES IN SENSITIVITY
BETWEEN CATEGORIES OF BRAND ASSOCIATIONS

			•	Types of a	ssociations	(mean so	ores)	Scheffe	
Variable	F-ratio	Sign.	Funct.	Hedonic	Symbolic	Attitude	Intention	comparisons	Sign.
Sensitivity	19.33	.000	2.65	2.81	4.12			Symb.>Funct. Symb.>Hedoni	•
Sensitivity	<u>T-ratio</u> 2.02	.070				2.59	3.43	Symon rivuom	ор 100

The ANOVA resulted in a significant main effect and a pattern of contrasts consistent with our hypotheses: the subjects reported significantly higher levels of sensitivity for symbolic associations than for hedonic and functional associations. Though marginally significant, the level of sensitivity of intentions was higher than for attitudes.

The higher level of sensitivity of symbolic associations indicates that the low ranks typically assigned to social recognition in studies of cultural values (Rokeach 1979, p. 133) may transfer to ratings of the probability of reporting symbolic brand associations in elicitation interviews. Moreover, to our knowledge, this study is the first to document that intentions are seen by respondents as more sensitive to distortion in elicitation interviews than attitudes.

So far we have demonstrated that our manipulation of anonymity worked as hypothesised and that the relative levels of sensitivity of different kinds of brand associations were consistent with our theoretical contentions. What follows are tests of hypotheses regarding specific effects of anonymity-inducing techniques.

## 8.3. Anonymity-effects on response latencies (H3)

In this thesis we have advanced the conjecture that anonymity may affect the order at which associations are reported. The underlying contention is that associations which are inconsistent with respondents actual or desired self-images will tend to be reported later than actually activated under conditions of low or no anonymity. However, we believe that this kind of distortion can be overcome by inducing the right kind of anonymity Specifically, the following hypothesis was suggested:

H3 Sensisitive associations will be reported earlier under conditions of self anonymity than under non-anonymity conditions.

In section 8.2., symbolic associations and intentions were found to be the most sensitive types of brand associations. Group differences for Latency of symbolic associations was tested by means of a MANOVA including Latency of hedonic associations, and Latency of functional associations because these three variables were found to be positively inter-correlated (see Table 7.1.1.c.) and belonged to the same group of variables. For example, if group differences were found for Latency of symbolic associations by a univariate test, this effect will be partly influenced by the other two correlated variables. Hence, Latency of hedonic associations and Latency of functional associations were included in the analysis in order to account for the inter-correlations and thus guard against

TESTS OF HYPOTHESES 107

Type 1 error. In Chapter 7, we detected that Latency of functional associations was not normally distributed, and that the variance of Latency of symbolic associations was not homogeneous across groups. However, due to reasonable sample sizes and fairly equal cell sizes for these variables, violations were not serious enough to prevent the use of MANOVA. The results of the MANOVA are presented in Table 8.3.a.

Table 8.3.a.

MULTIVARIATE TEST FOR GROUP DIFFERENCES
IN RESPONSE LATENCIES OF BENEFIT ASSOCIATIONS

			Exp	erimenta	l groups	(mean s	cores)	
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	•
Multivariate test (Wilk's)	1.51	.13						
Latencies of: Functional ass			4.79	3.66	4.42	3.72	4.69	(no comparisons made)
Symb. assoc.			6.29	5.46	6.00	4.88	8.23	
Hedonic assoc.			4.00	4.02	6.00	3.80	4.48	

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning. Mean scores are average order values, i.e. a large numbers indicate that associations were reported late (low degree of latency).

No significant main effect was observed for the multivariate test of differences in mean latencies of symbolic, hedonic, and functional brand associations across the five groups. In other words, the data does not support our contention that self anonymity influence the order at which symbolic associations are reported. Still, we believe that rejection of this theoretical proposition is premature at this point. Firstly, this is the first study empirically investigating this issue. Second, the means observed in Table 7.3.a. seem to indicate differences between groups though differences are not large enough to obtain a significant effect in this study. Moreover, the statistical power is not very close to one (power =.71 when  $\alpha$ = .05 for Wilk's criterion), implying that significant effects might have been observed with a larger sample.

Though Latency of intentions was correlated with several other variables (see Table 7.1.1.c.), this variable had to be tested by univariate tests due to small cell sizes (resulting in empty cells when

other variables were included in multivariate analysis). Caution is therefore needed in the interpretation of findings. Also, the variance of Latency of intentions is not homogenous across conditions, but this variable is fairly normally distributed (see Chapter 7). Because cell sizes are very unequal, violations pose a serious threat to the validity of conclusions drawn from a common ANOVA. Therefore, we used a non-parametric Kruskal-Wallis analysis in order to test for group differences in Latency of intentions.

Table 8.3.b.

KRUSKAL-WALLIS TEST OF GROUP DIFFERENCES IN

LATENCY OF INTENTIONS

	Exp	erimenta	l groups:	Correct	ed for ti	ies		
Variable	CTRL	CONF	SAQ	3P	SAQ3P	Chi-square	df	Sign.
Latency of intentions	26.25	35.50	38.50	19.94	16.66	13.57	4	.01
	(6.50)	(8.03)	(10.50)	(4.03)	(3.50)			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

\*Mean scores reported in parenthesis are average order values, i.e. a large number indicates that associations were reported early (high degree of latency).

# 8.4. Anonymity-effects on the sensitivity of associations reported (H4a-b)

Hypotheses 4a posits that our manipulation of anonymity will effect the number of certain sensitive associations reported. The basic assumption behind the hypotheses is that respondents will tend to hold back undesirable associations - consciously or unconsciously - in order to display a favourable self-image toward themselves and the interviewers. Self anonymity is expected to mitigate this kind of distortion:

for the control group (and the other groups).

The findings observed in Table 8.3.b. lend support to H3b: intentions are reported earlier for the two groups subjected to self-anonymity (see the clearly lower average ranks for these groups) than

To test H4a we focus specifically on the two types of associations shown to be most sensitive; symbolic associations and intentions. Number of symbolic associations was only weakly correlated with one other relevant variable: Number of functional associations (r= -.14, p< .05, see Table 7.1.1.c.). Also, Number of symbolic associations did not violate any of the assumptions for running ANOVAs (see Tables 7.1.1.a. and 7.2.1.). Also, univariate tests for Number of hedonic associations and Number of functional associations were performed to provide more detail. The latter variable violated the assumption of homogeneous variances across groups (Table 7.2.1.), but due to fairly equal cell sizes for this variable (less than 2:1), ANOVA could still be used. Results of ANOVAs for Number of symbolic associations, Number of hedonic associations, and Number of functional associations are reported in Table 8.4.a.

Table 8.4.a.
UNIVARIATE TESTS FOR GROUP DIFFERENCES IN NUMBER OF HEDONIC, FUNCTIONAL AND SYMBOLIC BRAND ASSOCIATIONS

			Exp	erimenta	groups	(mean s	cores)	Scheffe	
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	comparisons	Sign
Univariate tests:								(no comparisons made	ie)
N of hedonic	.72	.58	1.13	.91	.74	.76	.57		
N of symbolic	1.39	.24	3.05	2.98	3.49	3.36	2.89		
N of functional	1.40	.24	1.35	1.37	1.53	.88	1.19		

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

The results of ANOVAs for the three types of benefit associations all suggest that our manipulation did not significantly affect the number of hedonic, functional, or symbolic associations reported by our subjects. Again, however, we maintain that rejection of the hypothesis that anonymity affects the number of symbolic associations reported in elicitation interviews is premature. In particular, the low level of power for our test (power = .43 for  $\alpha$  = .05), indicates that significant effects could have been observed for a larger sample. It is also interesting to note that group differences for Number of hedonic associations and Number of functional associations seem to be larger than

for Number of symbolic associations -- though no differences are large enough to be significant in this study.

Chapter 7 showed that Number of intentions and Number of attitudes violated both the assumption of normality (see Table 7.1.1.c.) and the assumption of homogenous variance (see Table 7.2.1.) for ordinary parametric univariate analysis of variance. Because attitudes and intentions have very unequal cell sizes, violations were considered as serious (Tabachnick and Fidell 1983) and the Kruskal-Wallis analysis was selected in stead of ANOVA to test for group differences for Number of intentions (H4b) and Number of attitudes. Results are reported in Table 8.4.b.

Table 8.4.b.

KRUSKAL-WALLIS TEST OF GROUP DIFFERENCES IN NUMBER OF INTENTIONS AND ATTITUDES

	Ехр	erimenta	Corrected for ties					
Variable	CTRL	CONF	SAQ	3P	SAQ3P	Chi-square	df	Sign
N of intentions	87.00	86.65	91.30	125.86	126.95	40.93	4	.00
	(.05)	(.05)	(.09)	(.48)	(.51)			
N of attitudes	96.36	95.48	98.14	107.55	119.41	12.47	4	.01
	(.10)	(.07)	(.12)	(.19)	(.38)			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning. \*Mean scores are reported in parenthesis.

The results of the Kruskal-Wallis tests show that significantly different numbers of intentions are reported across experimental conditions. Specifically, substantially higher average ranks are observed for the two groups subjected to self anonymity (3P and SAQ3P). Correspondingly, a significant effect is also observed for Number of attitudes, and again the highest ranks are found in the 3P and SAQ3P groups. In sum, H4a is supported for intentions, the second most sensitive type of associations, but not for the most sensitive kind, symbolic associations.

In addition to withholding sensitive associations, respondents may engage in constructive reporting of less sensitive associations in stead of reporting sensitive associations and may thus lower the level of sensitivity of associations reported. Hence, we expected that:

H4b A higher level of sensitivity of associations will be observed under conditions of self anonymity than under non-anonymity conditions.

Sensitivity of functional and hedonic associations are moderately correlated (r= .25, p<.05) (see Table 7.1.1.c.). Though moderate violations to the assumption of normality were detected for these variables (see Tables 7.1.1.a.), a MANOVA was used to test for group differences in Sensitivity of hedonic associations and Sensitivity of functional associations because MANOVA is robust to moderate violations to the normality assumption when cell sizes are not very different and there are no outliers. Results of the MANOVA are reported in Table 8.4.c.

Table 8.4.c.

MULTIVARIATE TEST FOR GROUP DIFFERENCES IN PERCEIVED
SENSITIVITY OF DISTORTION OF HEDONIC AND FUNCTIONAL ASSOCIATIONS

	Experimental groups (mean scores)									
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P			
Multivariate test (Wilk's)	1.26	.27						(no comparisons made)		
Perceived sens	itivity of:									
Hedonic asso	c.		3.39	2.17	2.74	3.29	2.81			
Functional as	ss.		2.84	2.26	2.86	2.42	2.77			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

The MANOVA results showed no significant effect for group differences in Sensitivity of hedonic associations or Sensitivity of functional associations.

Group differences in Sensitivity of symbolic associations, Sensitivity of attitudes, and Sensitivity of intentions were first subjected to separate ANOVAs, see Table 8.4.d. Again, no significant main effects are observed for any of the variables, lending no support for H4b. Since the Cochran's C statistic indicated that the variances of Sensitivity of intentions was not homogeneous across groups ( $C_{7,5}$ = .482, p=.03), we also submitted this variable to a Kruskal-Wallis test (no serious violations were observed for Sensitivity of symbolic associations and Sensitivity of attitudes). The results of this test confirmed the results of the ANOVA: no significant main effect for group differences was observed (Chi-square<sub>4.41</sub>= 6.00, p = .20).

Table 8.4.d.

UNIVARIATE TESTS FOR GROUP DIFFERENCES IN PERCEIVED
SENSITIVITY OF SYMBOLIC ASSOCIATIONS, ATTITUDES AND INTENTIONS

			Experimental groups (mean scores)					C -1 - CC		
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	Scheffe comparisons	Sign.	
Univariate tests, Sensitivity of:			*****					(no comparisons m	ade)	
Symbolic assoc.	1.22	.30	3.92	4.16	4.33	4.09	4.15			
Attitudes	.58	.78	3.50	1.67	3.75	1.57	2.86			
Intentions	.91	.47	3.00	2.00	2.00	3.65	3.78			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

In sum, no support is found in our data for the conjecture that self anonymity will elicit brand associations which are perceived as more sensitive to distortion than brand association elicited under conditions of no anonymity (H4b). Several of the tests performed here were, however, hampered by low statistical power. For example, the power for the MANOVA for Sensitivity of functional and hedonic associations was only .56 ( $\alpha$  =.05). Notably, the effect size was moderately high: = .07 (Cohen 1977). The statistical power for the tests of the other variables were even lower: .30 for Sensitivity of Symbolic associations, .15 for Sensitivity of attitudes, and .25 for Sensitivity of intentions. Moreover, the effects sizes were considerable for Sensitivity of attitudes (Eta-square= .14) and for Sensitivity of intentions (Eta-square= .12). On this account, further research on the relationship between anonymity-inducing techniques and the perceived sensitivity of associations seems warranted.

# 8.5. Anonymity-effects on the level of favourability of associations reported (H5)

One hypothesis was developed in Chapter 4 for the effect of our manipulation on the level of favourability of symbolic associations reported:

H5 The level of favourability of symbolic associations will be higherunder conditions of self anonymity than under non-anonymity conditions.

When testing this hypothesis for Favourability of symbolic associations, we included Favourability of hedonic associations and Favourability of functional associations and submitted the three variables to a MANOVA because these variables were shown to be significantly correlated in Chapter 7 (see Table 7.1.1.c.). No violations to the assumptions of MANOVA were found for any of these variables (see Tables 7.1.1.a. and 7.2.2). Results of the MANOVA are reported in Table 8.5.a.

Table 8.5.

MULTIVARIATE TEST FOR GROUP DIFFERENCES
IN THE FAVOURABILITY OF BENEFIT ASSOCIATIONS

	Experimental groups (mean scores)								
Variable	F-ratio	Sign.	CTRL	CONF	SAQ	3P	SAQ3P	<u> </u>	
Multivariate									
test (Wilk's)	1.29	.23						(no comparisons made)	
Favourability of	î:							٧	
Hedonic assoc.			5.86	5.95	6.60	5.35	6.62		
Functional ass	<b>.</b>		5.97	6.93	6.56	6.85	6.80		
Symb. assoc.			4.43	4.44	4.66	4.78	4.95		

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

The multivariate main effect for group differences in favourability for benefit associations was not significant. Though the pattern of mean scores for Favourability of symbolic associations is consistent with H5, we conclude that H5 is not supported by our data. The statistical power of the test was .63 ( $\alpha$ = .05). Thus, there is room for more powerful tests which could result in significant findings. Interestingly, the same pattern of mean scores are observed for all three benefit associations: the favourability of benefit associations tend to be higher for the groups in

which some kind of anonymity was induced than in the control group (though differences are not significant in this study).

No hypotheses were developed for Favourability of attitudes and Favourability of intentions. However, due to the exploratory nature of this study we still performed analyses of group differences for these variables. Favourability of attitudes had relatively sound distributional properties (no serious violations, see Table 6.1.1.a. and Table 6.2.1.) and was therefore subjected to an ANOVA. However, the results of this analysis must be interpreted with caution since Favourability of attitudes and Favourability of intentions were correlated with the favourability of benefit associations (MANOVA could not be performed due to empty cells). The results of the ANOVA for group differences in Favourability of attitudes showed a non-significant main effect  $(F_{4.77} = .48, p = .75)$ .

Favourability of intentions violated both the normality and the homogeneity assumption of ANOVA (see Table 7.1.1.a. and Table 7.2.1), and because cell sizes were unequal for this variable, it was tested by means of the Kruskal-Wallis non-parametric test. The Chi-square for this test was significant, indicating that the favourability of intentions significantly differed across groups (Chi-square<sub>4,155</sub> = 33.96, p = .00). This effect was due to considerably lower mean ranks in the two groups subjected to third-person questioning (Mean ranks for the five groups were: CTRL=88.71, CONF=88.55, SAQ=95.32, 3P=56.31, SAQ3P=61.11). As previously noted, this finding should be considered as preliminary because Favourability of intentions was correlated with the favourability of hedonic and symbolic associations (MANOVA could not be performed due to empty cells).

# 8.6. Anonymity-effects on the predictive ability of reported associations (H6a-c)

Predictive ability is defined in this thesis as the correspondence (correlation) between the ratings of associations to Mercedes and rated attitudes and intentions toward the same brand. The basic contention here was that the different anonymity-inducing techniques (i.e., the different experimental groups) would vary in their ability to elicit associations relevant to subjects' attitudes and intentions. Specifically, the following three hypotheses were presented:

H6a Associations elicited under conditions of self anonymity will be more predictive of attitudes than associations elicited under non-anonymity conditions.

- H6b Associations elicited under conditions of self anonymity will be more predictive of intentions than associations elicited under non-anonymity conditions.
- H6c The difference in predictive ability between associations elicited under self anonymity conditions and associations elicited under non-anonymity conditions will be larger for the most latent associations than for all associations reported.

Hypothesis 6a was tested by correlating the strength ratings of associations in each group with the self-report measures of attitudes and intentions. Group differences were tested by means of Fisher's Z-test for comparison of correlations (Battacharyya and Johnson 1977). Results are reported in Table 8.6.a.

Table 8.6.a

CORRELATIONS BETWEEN EVALUATIONS OF ASSOCIATIONS AND SELFREPORTED ATTITUDES AND INTENTIONS

		- Fisher's Z				
Variable	CTRL	CONF	SAQ	3P	SAQ3P	comparisons
Attitude	.323**	.472**	.540***	.591***	.318*	3P>CTRL** 3P>SAQ3P*
Purchase intention	.287*	.161	.005	.408***	.066	

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

The results in Table 8.6.a. partly support H6a. For attitudes, the predictive ability of the 3P group (r = .591) is significantly better than for the control group (r = .323). However, the correlation for the SAQ3P group (r = .318) is about equal to the correlation for the control group. Interestingly, correlations in the SAQ and CONF groups are higher than in the control group — though the differences are not large enough to be statistically significant in this study. For intentions, correlations are only significant for the 3P group (r = .408) and the control group (r = .287). The difference between the two is in the hypothesised direction, but is not statistically significant. Hence, H6b was not supported.

In sum, the pattern of findings in Table 8.6.a. seem to support our conjecture that anonymity-inducing techniques may improve the validity of associations reported in an elicitation interview.

<sup>\*\*\* = &</sup>lt;.01

<sup>\*\* = &</sup>lt;.05

<sup>\* = &</sup>lt;.10

Specifically, self anonymity was shown to elicit associations which were more predictive of people's self-reported attitudes than ordinary free (the control condition).

To test H6c, the five most latent associations were correlated with self-reported attitudes and intentions and groups compared by means of the Fisher Z-test. The results of this analysis are reported in Table 8.6.b. Also, the five most latent associations were regressed against the attitude and intention measures and R-squares reported to provide further detail. Regression results are reported in Table 8.6.c.

Table 8.6.b

CORRELATIONS BETWEEN EVALUATIONS OF FIVE MOST SALIENT ASSOCIATIONS AND SELF-REPORTED ATTITUDES AND INTENTIONS

	_ Fisher's Z					
Variable	CTRL	CONF	SAQ	3P	SAQ3P	comparisons
Attitude	.092	.509**	.387**	.604***	.344**	3P>SAQ3P** 3P>SAQ*
Purchase intentions	.193	.162	095	.349**	.038	

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

Table 8.6.c

REGRESSION RESULTS: THE FIVE MOST SALIENT ASSOCIATIONS
REGRESSED AGAINST SELF-REPORTED ATTITUDES AND INTENTIONS

	Experimental groups (explained variance)							
Variable	CTRL	CONF	SAQ	3P	SAQ3P			
Attitude	.02	.39***	.20ª	.45***	.14			
Purchase intentions	.14	.06	.06	.25 ª	.05			

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning.

<sup>\*\*\* = &</sup>lt;.01

**<sup>\*\*</sup>** = <.05

<sup>\* = &</sup>lt; 10

<sup>\*\*\* = &</sup>lt;.01

<sup>\*\* = &</sup>lt;.05

**<sup>\*</sup>** = <.10

a = <.15

The results of the correlational analyses in Table 8.7.b. and the results of the regressions in Table 8.7.c. show the same pattern of findings. Importantly, correlations with self-reported attitudes and R-square values from the regressions are significant for the 3P group but not significant for the control group. The correlation between associations and attitudes is also significant for the SAQ3P group, but the R-square value is not significant for this group.

For intentions, 3P is the only group with a significant correlation. The regression results reported in Table 8.6.c show that none of the groups obtained significant R-square values, though the 3P group was quite close (p = .115) and had a higher R-square value than the other groups.

In sum, H6c is supported by our data. The differences between the control group and the 3P group in abilities of elicited associations to predict self-reported attitudes and intentions are larger for the most latent associations than for whole sets of associations. This finding is consistent with our conjecture that respondents reporting associations under conditions of no anonymity may postpone reporting of some relevant (but socially undesirable) associations whereas respondents subjected to self-anonymity are not as concerned with this. Discussion of explantions of these findings are presented in Chapter 9.

### 8.7. Tests of interactions (H7a-b)

High self-monitors were expected to be more sensitive to manipulations of anonymity because they hold more sensitive associations and because they are more prone to actively manage impressions during interviews. Hence we hypothesised that:

H7a Any observed effects of anonymity manipulations on Number-, Latencies-, Favourability-, or Sensitivity of associations will be more accentuated for high self-monitors than for low self-monitors.

Regarding the predictive ability of associations reported under different experimental conditions, we expected that self-monitoring would be a negative moderator for the control group. In this group respondents are more motivated and more free to distort and, consequently, the greater tendency of high self-monitors to manage their responses come into play. This managing of responses lowers the predictive ability of associations reported. In the groups subjected to third-person questioning, however, little distortion should occur during elicitation interviews, and self-monitoring should therefore not be a significant moderator of the predictive ability of associations reported. The following hypothesis was suggested:

H7b Self-monitoring will be a negative moderator for the predictive ability of associations elicited under conditions of non-anonymity, but not for associations elicited under conditions of self anonymity.

8.7.1. Tests of interactions with Self-monitoring for Number of associations, Latencies of associations, Favourability of associations, and Sensitivity of associations (H7a)

Results of analyses of interactions for Number of associations, Latencies of associations, Favourability of associations, and Sensitivity of associations are reported in Table 8.7.1. Only significant interactions or interactions which are close to significant are reported. Based on the results of the confirmatory factor analysis of the Norwegian version of the Lennox and Wolfe (1986) self-monitoring scale (see measurement section of Chapter 6), and consistent with the theoretical foundation of the scale, we devided the scale in two subscales termed Acquisitive self-presentation and Protective self-presentation and analysed interactions separately. Notably, all

interactions reported here were included in the analyses of main effects in previous sections; no special analyses that included only interaction terms were performed.

Table 8.7.1.
SIGNIFICANT INTERACTIONS WITH SELF-MONITORING
FOR NUMBER OF ASSOCIATIONS, LATENCIES OF ASSOCIATIONS,
AND SENSITIVITY OF ASSOCIATIONS

	Metl	hod × Acqu	nisitive self-presentation	Method × Protective self-presentation			
Dependent variables	F Sig F		Scheffe comparison	F	Sig F	Scheffe comparison	
N of symbolic associations	4.03	.00	CONF>CTRL** 3P>CTRL*** SAQ3P>CTRL***	1.94	.10	CONF <ctrl** 3p<ctrl**<="" td=""></ctrl**>	
Latencies of Hedonic associations	2.39	.06	CONF>CTRL***				
Latencies of Functional assoc.	3.75	.01	CONF>CTRL*** SAQ3P>CTRL**				
Sensitivity of Hedonic associations				2.17	.08	SAQ3P>CTRL**	
Sensitivty of Symbolic associations	;			3.05	.02	3P>CTRL** SAQ3P>CTRL***	

NOTE: CTRL = control group, CONF = assurances of confidentiality, SAQ = self-administered questionnaire, 3P = third-person questioning, SAQ3P = self-administered questionnaire and third-person questioning. Interactions stem from analyses of main effects reported in previous sections

Several interesting findings emerge from Table 8.7.1. In support of H7a, five out of six significant interactions are positive. Thus, high self-monitors seem to be more prone to report certain types of associations - and report some associations earlier under conditions of anonymity than low self-monitors. Specifically, different findings are observed for the two subscales of Self-monitoring. There is a positive interaction between Acquisitive self-presentation and the anonymity manipulation for Latency of hedonic associations and Latency of functional associations, whereas no such interactions are observed for Protective self-presentation. Vice versa, there is a positive

<sup>\*\*\* = &</sup>lt;.01

<sup>\*\* = &</sup>lt;.05

**<sup>\*</sup>** = <.10

interaction between the manipulation and Protective self-presentation for Sensitivity of hedonic associations and Sensitivity of symbolic associations, but no significant interaction is observed for Acquisitive self-presentation. Moreover, significant interactions are observed for Number of symbolic associations for both subscales of Self-monitoring, but the nature of the two interactions are different: individuals high in Acquisitive self-presentation report *more* symbolic associations when anonymity is provided (positive interaction), whereas individuals high in Protective self-presentation report *less* symbolic associations under conditions of anonymity (negative interaction). These findings point to the usefulness of a two-dimensional approach in examinations of the relationship between effects of anonymity and self-monitoring in elicitation interviews.

### 8.7.2. Self-monitoring as a moderator of predictive ability (H7b)

Moderated Regression Analysis (MRA; Zedeck 1971; Sharma, Durand, Gur-Arie 1981) was used to test H8b. Separate analyses were performed for the control group (see Table 8.7.2.a.) and the group subjected to third-person questioning (Table 8.7.2.b.). Decisions regarding moderator-effects were framed on the taxonomy described by Sharma et al. (1981). Their decision rules are summarized as: (a) if the cross-product (in our case the cross-product of strength of associations and self-monitoring) is significant and the main effect is not significant, Self-monitoring is classified as a *pure moderator*, (b) if the cross-product coefficient is significant and the main effect coefficient is also significant, Self-monitoring is a *quasi-moderator* (that is, Self-monitoring is both a moderator and a predictor), and (c) if the cross-product is not significant and the main effect for Self-monitoring is significant, Self-monitoring acts as a *predictor*.

When a cross-product involving one or two independent variables are included in a regression, multicollienarity is often present. This is a problem to our analyses because we want to examine independent effects of each predictor coefficient. Moreover, the consequences of collinearity are more servere in situations with moderate or low levels of explained variance and with small sample sizes (Mason and Perreault 1991). On that account, we centered all variables involved (Marquardt 1980) and checked for the presence of multicollienarity by estimating variance inflation factors (VIF). VIF-values for all variables were between 1 and 2, well below the cut-off value of 10 suggested by Neter, Wasserman, and Kutner (1989, p.409). Thus, multicollinearity is not a threat to the substantive conclusions drawn from this analysis. Examinations of other assumptions for regression analysis, such as normal distribution of residuals, constant variance of Y(for different levels of Xs), and presence of outliers, revealed only moderate violations. Results of MRA for the control group is reported in Table 8.7.2.a. and for the third-person questioning group (3P) in Table 8.7.2.b.

TESTS OF HYPOTHESES 121

Table 8.7.2.a. MODERATED REGRESSION ANALYSIS (MRA) WITH STANDARDIZED COEFFICIENTS FOR THE CONTROL GROUP (N=40)

		<u> </u>		Independent varial	oles	
Dependent variable	Adjusted R-square	Strength of assoc.	ASP	Strength × ASP	PSP	Strength × PSP
Models with a	ill associations in	<u>icluded</u>				
Attitude						
1.	.081**	.323**				
2.	.074	.296*	.133			
3.	.164**	.294*	.043	336**		
4.	.088*	.279*			.182	
5.	.109*	.165			.218	234
Intention						
1.	.058**	.287*				
2.	.035	.277	.044			
3.	.010	.276	.060	.048		
4.	.061	.246			.170	
5.	.066	.339*			.141	.192
Models with f	îve most latent a	ssociations includ	<u>led</u>			
Attitude						
1.	018	.092				
2.	.008	.096	.224			
3.	.105*	.172	.103	370**		
4.	.013	.044			.241	
5.	.091*	053			.271*	325*
Intention						
1.	.012	.193				
2.	002	.195	.111			
3.	030	.193	.114	.010		
4.	.025	.154			.199	
5.	.006	.180			.191	.088

NOTE: ASP = Acquisitive Self-presentation, PSP = Protective Self-presentation.

<sup>\*\*\* =</sup> p<.01 \*\* = p<.05

<sup>\* =</sup> p < .10

Table 8.7.2.b.

# MODERATED REGRESSION ANALYSIS (MRA) WITH STANDARDIZED COEFFICIENTS FOR THE GROUP SUBJECTED TO SELF ANONYMITY (N=42)

		Independent variables								
Dependent	Adjusted	Strength		Strength ×		Strength ×				
variable	R-square	of assoc.	ASP	ASP	PSP	PSP				
Models with a	all associations in	cluded								
Attitude										
1.	.334***	.591***								
2.	.404***	.523***	.266**							
3.	.388***	.527***	.267**	.008						
4.	.387***	.549***			.176**					
5.	.374***	.566***			.282**	.058				
Intention										
1.	.145***	.408***								
2.	.139**	.367**	.131							
3.	.123**	.418**	.141	.099						
4.	.133**	.392**			.096					
5.	.145**	.454*			.166	.205				
Models with f	îve most latent a	ssociations includ	<u>led</u>							
Attitude										
1.	.349***	.604***								
2.	.418***	.535***	.267**							
3.	.402***	.535***	.267**	000						
4.	.398***	.560***			.255**					
5.	.383***	.567***			.265**	.028				
Intention										
1.	.100**	.349**								
2.	.099*	.302*	.155							
3.	.076	.323*	.160	.043						
4.	.088*	.331*			.103					
5.	.085*	.372*			.157	.157				

NOTE: ASP = Acquisitive Self-presentation, PSP = Protective Self-presentation.

The results in Tables 8.7.2.a and b partly support H8b. First, for the control group, no significant interactions are observed for the ability of associations to predict purchase intentions (Table

<sup>\*\*\* =</sup> p<.01

<sup>\*\* =</sup>  $\hat{p} < .05$ 

<sup>\* =</sup> p < .10

8.7.2.a.). However, several supportive findings are observed for prediction of attitudes. When all associations are included in the analyses, Acquisitive self-presentation (ASP) is found to be a negative and pure moderator of the effect of associations on brand attitudes (the standardized cross-product coefficient is -.336). ASP is a pure moderator because the cross-product coefficient is significant (model 3) whereas the main effect of ASP is not (model 2).

When only the five most salient associations are included, ASP is still a negative and pure moderator (the standardized cross-product coefficient is significant: -.370, see model 3, and the main effect of ASP is not significant, see model 2). Also, Protective self-presentation (PSP) was found to be a pure negative moderator of the effect of strength of associations on attitudes (model 5; standardized cross-product coefficient: -.325). Overall, MRAs for attitudes in the control group support H7b.

Results of MRAs for the third-person questioning group (3P) are reported in Table 8.7.2.b. Again the pattern of findings is consistent with our expectations (H7b). Cross-product coefficients are not significant for any of the four analyses. Hence, in this group Self-monitoring is not a moderator of the predictive ability of associations reported. However, both ASP and PSP are found to be positive independent predictors of attitudes (but not of intentions). This finding is observed when all associations are included as well as when analyses are based on only the five most latent associations.

The results reported here are largely consistent with our argument that Self-monitoring acts as a negative moderator of the predictive ability of elicited associations when no anonymity is provided. When self anonymity is induced by means of third-person questioning, the relationship of reported associations with brand attitudes is not affected by self-monitoring tendencies. In stead, Self-monitoring acts as a positive independent predictor of brand attitudes in this study -- probably because the brand in question evokes salient symbolic benefit associations such as success, status, and rich people (see Table 7.1.1.b.).

In the following chapter, we summarize the findings and dicuss potential explanations for the effects and non-effects observed in this study.

### CHAPTER 9

# **DISCUSSION**

This chapter opens with a summary of the findings (section 9.1). Explanations for the results are subsequently discussed in section 9.2. The contribution of the study in terms of theoretical advances and managerial implications is discussed next (9.3). In the final section, we address study limitations and directions for future research (9.4).

# 9.1. Summary of findings

The objectives of this study were articulated in two major research questions in the introductory chapter. The first addressed the concept of anonymity:

RQ 1 How should anonymity be defined in the context of elicitation of brand associations?

In particular we were interested in a definition that would be useful for the purpose of eliciting brand associations from consumers' memories. We attempted an answer to this question first by reviewing and synthesising different theories that could explain why people might want to distort or actively manage responses in an interview. Specifically, three different psychological mechanisms were identified.

Situational impression management (SIM) was defined as motivation to display a favourable image to some other person or group of persons. Private self-management (PSM) was the private or internally-directed version of SIM and referred to the need to develop or manitain self-esteem and a favourable identity. Finally, situational self-deception (SSD) was defined as pre-conscious censoring of self-threatening memory content. Furthermore, the reviews of the nature of brand associations and the task of eliciting brand associations provided further understanding pertinent to the development of a useful definition of anonymity.

Based on these reviews, anonymity was defined in Chapter 4. Because the effect of anonymity manipulations are decided by the psychological reactions of respondent and not manipulations as such, the respondent was chosen as denotation for the concept. Two different types of anonymity was developed. *Social anonymity* was defined as the perceived extent to which some other person or group of persons can reveal the identity of the respondent. This is the classic notion of anonymity (e.g., Sudman and Bradburn 1983; Aquilino 1990; 1994). Social anonymity was further devided into two sub-concepts: public anonymity and interviewer anonymity. The latter pertains to the perceived degree of anonymity toward the interviewer(s), whereas public anonymity refers to the level of felt anonymity toward *other persons* than the interviewers (peers, friends, the general public, etc.). Confirmatory factor analysis supported this conceptual model: Interviewer anonymity and public anonymity were found to be related, though separate constructs.

The other type of anonymity was developed from theories of self-awareness (Duval and Wicklund 1972) and projection (Holmes 1968; 1978) and was termed *self anonymity*. This is an internally-directed construct which denotes the state of not being focused on the self -- but instead on some similar in-group person during an interview (colleagues, fellow students, etc). This is also a

graded (not dichotomous) construct in the sense that respondents are not either constantly self-focused or other-focused during an interview -- which typically lasts for several minutes. Instead, respondents will likely switch their attention between others and self. The level of self-anonymity is represented by the degree of other-focus compared to the degree of self-focus. This type of anonymity complements the classic and socially-directed notion of anonymity since it has a potential of alleviating not only externally-directed motivations for distortion (SIM), but also the more intra-psychic motivations (PSM and SSD).

In the empirical study, it was shown that some anonymity-inducing techniques primarily evoke social anonymity, whereas others induced self-anonymity (results of the tests are reported in the upper part of Table 9.1). Specifically, self-administered questionnaires induced the highest levels of social anonymity and third-person questioning the highest levels of self anonymity. Furthermore, regarding the distinction between public- and interviewer anonymity, confidentiality assurances were shown to provide high levels of public anonymity only, whereas self-administered questionnaires were high on both types of social anonymity. In sum, the empirical findings support the idea of different types of anonymity and the proposition that different techniques are adequate for inducing specific kinds of anonymity.

The second research question addressed the effects of anonymity-inducing techniques (and thus different types of anonymity) on outcomes of an elicitation interview:

RQ2: Will manipulations of anonymity have an impact on elicitation outcomes? How will the results be affected?

To attempt some preliminary answers to these questions we conducted a randomized between-subject experiment with five experimental conditions corresponding to four different anonymity-inducing methods and a control group (no anonymity induced). Hypotheses were tested on a sample of 205 undergraduate students. From the discussion of motivations of distortions we expected that self anonymity would be much more effective in alleviating distortions than social anonymity because self anonymity affects all three kinds of motivations for distortions (SIM, PSM, and SSD), whereas social anonymity primarily influences only one: situational impression management (SIM). Therefore, we expected significant different oucomes for the groups subjected to self anonymity compared to the control group for a number of variables. Results of the tests of hypotheses are summarized in Table 9.1.

Table 9.1 SUMMARY OF TESTS OF HYPOTHESES

Variables		Hypotheses	Finding
Manipulation of anonymity			
Level of self anonymity Level of interviewer anonymity Level of public anonymity	Hla Hlb Hlc	3P, SAQ3P>CTRL SAQ, SAQ3P>CTRL CONF>CTRL	Supported Supported
Perceived sensitivity to distortion			
Perceived sensitivity to distortion Perceived sensitivity to distortion	H2a H2b	Symbolic>Functional, Hedonic Intentions>Attitudes	Supported Supported
Anonymity-effects on response latencies			
Latencies of sensitive brand assoc.	Н3	Self anonymity>CTRL	Supported for purchase intentions
Anonymity- effects on the amounts of associations reported  Number of sensitive associations	114	Calfan and San CTDI	Command for animals
Number of sensitive associations	H4	Self anonymity>CTRL	Supported for attitudes and purchase intentions
Anonymity-effects on the favourability of associations reported	***	C. IS CTTPA	
Level of favourability of symbolic associations	H5	Self anonymity>CTRL	Not supported
Anonymity-effects on the level of perceived sensitivity of associations Level of sensitivity of brand associations	Н6	Self anonymity>CTRL	Not supported
Anonymity-effects on the predictive ability			
of associations reported  Prediction of brand attitudes Prediction of intentions Relative degree of anonymity-	H7a H7b	Self anonymity>CTRL Self anonymity>CTRL	Supported Supported
effect for the five most latent- vs. all associations	Н7с	Five most latent>All associations	Supported
Interactions between self-monitoring and the anonymity manipulation			
Latencies-, number-, favoura- bility-, and sensitivity of associations	H8a	High self-monitors>Low self- monitors	Partly supported
Self-monitoring as a moderator of predictive ability	H8b	Negative moderator for CTRL, no moderating effect for 3P	Supported for prediction of attitudes

NOTE: CTRL = control group

## 9.2. Discussion of explanations

In this section, we discuss possible explanations for our findings. In line with previous research on anonymity, we focused on motivational mechanisms in developing a theoretical rationale for hypotheses to be tested (Chapters 2, 4, and 5). Based on our findings, however, we suggest that cognitive processes should also be considered.

### 9.2.1. Motivational explanations

In brief, we expected that third-person questioning (3P) would make a difference (compared to the control group) for a number of elicitation outcome variables. This argument was derived from a review of potential antecedent psychological mechanisms to distortions (see Chapter 2). In the review, we concluded that motivations for distortions may be intra-psychic (not aimed at other persons) and/or externally directed toward other people (as in the traditional view of social desirability). Compared to traditional techniques to induce anonymity, such as self-administered questionnaires (SAQ), which only guard against socially-directed distortions, 3P was expected to provide a different type of anonymity (termed self anonymity, see Chapter 4) affecting all three kinds of motivations for distortion. Indeed, the findings reported in Table 9.1. indicate that 3P made a difference. A larger number of intentions, higher latency-scores for intentions, and better predictions were obtained with this method. The question here is: why? For 3P to provide valid information, respondents must project their own associations onto other people -- in our case other business students. Two major types of projection are found in the literature (Holmes 1968; 1978; 1981; Lewis et al. 1994; Sherwood 1979; 1981).

Classical projection. According to Holmes (1981); "in classical projection people project onto others characteristics that are identical to those they possess but are not conscious of processing" (p. 460). Usually, it is believed that what is being projected is some negative characteristic or desire subjected to repression (Campbell, Miller, Lubetsky, and O'Connell 1964). In other words, the negative characteristic is denied and therefore subconscious. Projection serves a defensive function by putting a psychological distance between themselves and the characteristic and thus being spared the discomfort of admitting possession of the undesriable trait or emotion. In our context, this would mean that students projected onto other students associations they were not consciously aware of holding themselves. Notably, the notion of classical projection share resemblance with the concept of self-deception -- one of the intra-psychic motivational mechanisms for distortion discussed in this study (see Chapter 2). More precisely, self-deception does not necessarily imply projection, but the prerequisite of classical projection -- that needs, attitudes, or

beliefs are denied and repressed -- and is compatible with the definition of self-deception as a preconscious front-end processor preventing individuals from awareness of unconscious threatening self-knowledge (Greenwald 1988). On that account, the question of whether classical projection occured in our study implies another question of whether self-deception played a role (Dilman 1972). Sackeim (1988) presented a set of criteria for an empirical demonstration of self-deception:

- 1. The individual has two mental contents, which if expressed as propositions are contradictory (p and not-p)
- 2. These beliefs are held simultaneously
- 3. The individual is not aware of holding one of the mental contents (p or not-p)
- 4. The act that determines which belief is and which belief is not subject to awareness is a motivated act.

One of Sackheims examples involve Bill and Joe. Joe does unconsciously hate Bill, whereas consciously, he denies it. The reason why Joes hatred is unconscious is reasonably assumed to be motivated since it is not commonly accepteble to hate people. Also, criteria 1, 2, and 3 are met since Joe at the same time hates Bill (p) and holds the belief that he does not (not-p). This notion of self-deception is reminiscent of Dilman's viewpoint that self-deception and repression are equated and that the key feature of both is the avoidance of recognizing one's own feelings, desires, and motives (Dilman 1972, p.316). Now, could such mechanisms occur in relationships between consumers and brands? Are our findings compatible with the four criteria of Sackeim?

Our study was not designed to test alternative explanations. Still, some of our findings indicate that the processes of classical projection and self-deception were operating. When comparing the results of the control group (CTRL condition) and the group subjected to third-person questioning (3P), we find that a larger number of intentions were found when respondents were allowed to project their responses onto other students (3P condition). Importantly, intentions were perceived by respondents to be more sensitive to distortion than other associations (see Table 8.2). As previously noted, the sensitivity of intentions to buy a Mercedes are probably due to the salient symbolic associations for this brand (see Table 8.2). Hence, stating a positive intention might be seen as an indicator of need for social approval -- and using products to obtain social acceptance is generally regarded as undesirable (Fisher 1993; Rokeach and Ball-Rokeach 1989). As shown in Table 7.1.1.b, however, several positive symbolic associations highly relevant to our business students were reported, such as personal success and wealthy people. Thus, there is reason to believe that some respondents in our study would like to have a Mercedes. Still, because of the potentially negative consequences of admitting a desire for this brand to oneself and others, this positive motive was kept unconscious -- and even though it was activated during the elicitation interview, in the CTRL group the "front-end processor" described by Greenwald (1988) prevented

that respondents became aware of it. However, in the 3P group, this censoring mechanism was not evoked and consequently a larger number of intentions were reported. Also, the 3P group obtained better predictions of attitudes and intentions than the CTRL group. This finding implies that more relevant associations -- including a larger number of intentions -- were reported under the 3P condition. These findings and lines of reasoning support a motivational explanation consistent with the criteria of Sackheim (1988). However, better predictions and higher numbers of intentions for the 3P group cannot verify whether intentions were *subconsciously* censored in the CTRL group. If respondents were conscious of their desires for a Mercedes, other motivational mechanisms and another type of projection should be considered.

Attributive projection. Attributive projection denotes the projection of characteristics (or in our case: associations) in order to justify or relieve the tension of one's own acknowledged possession of the same characteristic (Holmes 1968; 1978; 1981). Thus, respondents engaged in attributive projection if the elicitation task made them aware of their intentions to buy a Mercedes, but they consciously chose to withold this information (members of the CTRL group). This explanation is consistent with the motivational mechanism of situational impression management (SIM) and private self-management (PSM, see Chapter 2): students in the CTRL group did not mentioned their intentions to buy a Mercedes due to the potentially negative effects of disclosing this information on their self-esteem and identity development (Leary and Kowalski 1990). However, in the 3P group, respondents were allowed to project their intentions onto fellow students and thereby justify their own desire for the brand.

The findings regarding the moderating role of self-monitoring (8.8.2.a and b) strongly support the explanation of attributive projection. The results of the moderated regression analyses showed that in the control group self-monitoring was a negative moderator of the predictive ability of reported associations (though only for prediction of brand attitudes). In other words, lower predictions were observed for high self-monitors than for low self-monitors in this group. Self-monitoring was, however, not a moderator of the predictive ability of associations in the 3P group. Because high self-monitors are more inclined than low self-monitors to strategically adjust their behavior to the shifting requirements of different social situations (Snyder 1974; Lennox and Wolfe 1986), the negative interaction with predictive ability in the CTRL condition -- and the absence of such an effect in the 3P condition -- suggests that respondents consciously distorted their response in the CTRL condition, but not in the 3P condition. Importantly, when looking at the moderating effects of each sub-construct of self-monitoring, we find two significant effects for aquisitive self-presentation and one for protective self-presentation. The finding of a significant interaction for aquisitive self-presentation provides further support for the mechanism of attributive projection. This is because aquisitive self-presentation is more parallel to the nature of impression management

than self-deception; self-deception is, as previously noted, considered as a defensive subconscious mechanism (Sackheim 1978; 1988). Overall, we conclude that the observed effects for the 3P group observed in this study are more in line with the process of attributive projection than with classical projection.

### 9.2.2. Cognitive explanations

Though the pattern of findings in this study can be reasonably explained by motivational theories, there are important non-findings that merit further consideration. First, the sensitivty of associations did not vary across experimental conditions (H6a and b). This could be due to low power of the tests for this variable our this study (see section 8.6) (notably, non-findings could also be due to low validity of the measure of sensitivity, see section 9.4). However, while awaiting further empirical results of more powerful tests, it seems warranted to challenge the motivational perspective on anonymity effects: when no effects of anonymity-inducing techniques are observed on the sensitivity of associations reported, but the predictive ability of associations elicited under different conditions is significantly affected; could this be explained by other non-motivational mechanisms?

The heart of the matter here is the higher level of prediction observed in the third-person questioning condition (3P) compared to the control group (CTRL). Indeed, support can be found for a cognitive explanation of this effect. Lewis et al. (1994) argued that responses to projective questions might reflect informed judgement based on actual experience with the group of persons targeted in the projective question rather than projected beliefs. In our case, this would mean that our subjects activated knowledge about the associations and opinions of fellow students rather than projecting their own associations. Higher predictive ability of associations observed in the 3P group would then be observed if the opinions of their fellow students were more influential on their attitudes and intentions than their personal associations. This scenario would be most likely for students who were not very familiar with Mercedes and therefore held few a priori beliefs and only weak attitudes toward the brand. When subjected to the third-person questioning technique, such students may have activated the knowledge that most of their fellow students believe that Mercedes is a very good car. This positive attitude may in turn have resulted in a positive haloeffect in which positive associations consistent with the attitude were activated from memory. Due to the lack of a strong personal attitude or intention, these respondents may have simply activated the knowledge of the positive attitudes of their fellow students when responding to the attitude and intention measures. Hence, self anonymity, induced by third-person questioning, would elicit more predictive associations than other conditions for respondents who were unfamiliar with Mercedes. Unfortunately, familiarity with Mercedes was not measured in this study.

#### 9.2.3. Reconciliation

Which is the correct explanation for our findings; the cognitive or the motivational explanation? We believe that both types of mechanisms are relevant. The cognitive explanation does not account for all the findings. To the contrary, the moderating role of self-monitoring strongly support the existence of motivational factors. On the other hand, the lack of an effect of anonymity on the level of sensitivity points to a consideration of non-motivational effects. Though the majority of findings seems to favour a motivational explanation, we deem it tenable at this point to keep both types of processes as potential explanations for observed effects of third-person questioning. In particular, we suggest that both mechanisms might occur for different subjects subjected -- and, possibly, also simultaneously within subjects. For example, students who were not at all familiar with Mercedes might have responded in a manner consistent with the cognitive explanation whereas more familiar students projected their associations as prescribed by the theory of attributive projection. Alternatively, some students may have taken the opportunity of third-person questioning to project sensitive associations, and subsequently, cued by the reference to fellow students, activated knowledge about the opinions of fellow students. In fact, this combination of motivated projection and cognitive activation of information about targets of projection seems very plausible for elicitation of brand associations because the sensitivity of associations for most brands probably vary to a large extent. For very sensitive brands, however, motivational mechanisms will probably dominate, whereas cognitive processes would be more central for brands with less sensitive associations.

### 9.3. Contribution

In this section we address the contribution of the present investigation. What has been learned from the findings made in this study? We first turn to the theoretical implications, and afterward to the managerial implications of our findings.

### 9.3.1. Contribution to theoretical research

To the best of our knowledge, this study is the first to systematically develop the concept and measurement of anonymity for an interview setting. Moreover, our conceptualization of anonymity is grounded in relevant psychological theories and accounts for different types of motivation for response distorton. Specifically, two different types of anonymity -- social anonymity and self anonymity -- were defined in order to account for both intra-psychic and socially directed motivations for distortion (see Chapter 4). This two-dimensional view of anonymity synthesizes

the traditional, socially directed notion of anonymity (e.g., Sudman and Bradburn 1983) with psychological research on projection (Holmes 1968; 1978; Sherwood 1981). Furthermore, social anonymity and self anonymity were both successfully measured and manipulated in this study: self-administered questionnaires were shown to induce the highest levels of social anonymity, and third-person questioning the highest levels of self-anonymity.

By means of experimental examination, expectations about the superior effect of self-anonymity in alleviating motivations for distortions were supported. More intentions were reported by subjects in the third-person questioning group, and intentions were reported earlier by this group. Associations elicited with third-person questioning were also more predictive of brand attitudes and intentions than associations elicited in a control group. Additionally, third-person questioning evoke associations that were more predictive of intentions than self-administered questionnaires. Thus, we have demonstrated that manipluation of anonymity does matter in a qualitative elicitation of brand associations. Notably, these effects were observed for a common and moderately sensitive brand (Mercedes) and with a common unstructured elicitation task (free elicitation) which is believed to provide reliable and valid information (Cramer 1968).

In this study we have also demonstrated the usefulness of including self-monitoring as a moderator variable. In fact, the negative interaction between self-monitoring and non-anonymity and the lack of such a significant interaction for self anonymity is a major indicator of distortion in this study. Moreover, the different effects for acquisitive and protective self-presentation support a two-dimensional view of self-monitoring.

Finally, our measure of self anonymity could prove helpful in studies examining other phenomena than distortion and effects on elicitation outcomes. For example, researchers doing empirical studies of self-awareness, in particular those concerned with the private versus public self distinction (Fenigstein et al. 1975; Tedeschi 1986), might find our measure of self-anonymity useful. Also, within research on false consensus effects (e.g., Ross, Greene and House 1977), means of measuring self-reference have been called for (Marks and Miller 1987, p.87). Our operationalization of self-anonymity could perhaps be adapted to this purpose.

### 9.3.2. Managerial implications

For brand managers responsible for design or purchase of elicitation of brand associations, our findings offer several implications. However, since the type of findings observed in this study are previously not reported in the literature, and our findings are based on associations for one brand only, guidelines derived from the empirical results should be regarded as preliminary.

Extant literature on measurement of brand associations present a number of techniques which could be used to elicit brand associations from consumers memories (e.g., Keller 1993; 1997; Malhotra 1995). One of the most common techniques for this purpose is the free elicitation technique used in our study (Keller 1997). The pervasiveness of this method is probably due to its strong position in psychological research (e.g., Cramer 1968; Osgood 1952). For example, Szalay and Deese (1978) stated that:

Because one-word associations are not encumbered by the constraints of organized language (e.g. self-censoring, rationalization, selectivity), they have been proposed as extremely strong and uncluttered representations of thoughts.

However, our findings question the validity of the free elicitation technique. Compared to conditions in which some kind of anonymity was induced, one-word associations elicited in the control group were less predictive of brand attitudes and intentions. In short, our findings suggest that respondents distorted their responses under this condition in terms of withholdning associations and reporting associations later than they were actually activated. Still, one-word associations could be a better technique than many others. Our findings merely indicate that even for this unstructured technique, consumers might distort their responses.

One practical implication of the findings is that anonymous conditions should be induced in elicitation interviews, even when free elicitation is being used. Specifically, our results indicate that for some brands, free elicitation tasks framed in the third person may evoke associations which are more predictive of brand attitudes and intentions. Our suggestion of using several anonymity-inducing techniques is consonant with the general recommendation of triangulation -- use of different complementary techniques -- in qualitative market research (Sampson 1986). Notably, we suggest that anonymity-inducing techniques are varied between and not within respondents. The superior performance of third-person questioning was not observed in the group subjected to both self-administered questionnaires and third-person questioning. Similar results were reported by Fisher (1993). This finding indicates that the use of other anonymity-inducing methods together with third-person questioning might weaken the positive effects of this technique.

DISCUSSION 135

### 9.4. Limitations and directions for future research

Several limitations of the study should be noted and considered in future research on this topic. First, associations for only one brand were elicited in this study. Other results might have been observed for different brands. Thus, the external validity of our findings is limited. Future research should use different kinds of brands in order to examine effects of anonymity for brands with differentially sensitive associations.

The main purpose of the empirical study was to examine potential effects of anonymity-inducing techniques in elicitation interviews -- not to investigate alternative explanations of such effects. Though we have argued that our findings are most consistent with a motivational explanation and particularly the mechanism of attributive projection, our findings are open to multiple interpretations. Future research comparing alternative explanations of anonymity-effects may include one brand with demonstrably few sensitive associations and one other brand with very sensitive associations. One would expect that cognitive effects of anonymity manipulations would dominate for the insensitive brand and motivational effects for the sensitive brand. Relatedly, the use of more sensitive brands than Mercedes, would possibly enable researchers to discover effects which were not found in this study due to lack of statistical power. In order to establish the presence of projection among respondents, measures of self-esteem should also be included in future studies of self anonymity. As projection is seen as a defensive mechanism, self-esteem could be used to indicate who do, and who do not project (Bramel 1962; Lewis et al. 1994).

Several new measures were presented in this study. Operationalizations of self- and social anonymity need to be validated on other samples and with other brands. Also, further development of measures of sensitivity is needed. In this study, sensitivity was mesured in terms of self-reported ratings of the probability that each association would be withheld and not reported (the question was asked in the third person as recommended by Sudman and Bradburn 1983). It is uncertain whether responses to such questions truly reflect respondents' own tendency to withhold associations, especially if respondents are partly unconscious of their distortions. Alternative measures of predictive ability should also be considered in future research. In particular, investigations of the ability of anonymity-inducing techniques to elicit associations which are predictive of future brand evaluations or choices would be useful.

Finally, effects of anonymity on elicitation outcomes for other techniques than free elicitation should be investigated in future resrearch. Since our study supports the contention that consumers may distort their responses even during free association tasks, it is very likely that other more structured techniques can be subjected to the same kind of distortion. In fact, we believe that motivational distortion should be considered in all kinds of interviews because, irrespective of the

136 DISCUSSION

specific techniques applied, people are asked to express themselves in some way or another. Thus, interviewers necessarily create a situation in which basic needs for avoidance of threatening self-knowledge, for self-esteem enhancement, and for identity development come into play.

DISCUSSION 137

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# Appendix 1: Questionnaire for elicitation interview variables

## Spørsmål om oppgaven

Vær vennlig å svar raskt, men nøyaktig på alle spørsmål. Følg førsteinntrykket.

### 1. <u>I hvilken grad hadde du personene nedenfor i tankene da du skrev ned tanker om merket?</u> Sett ring rundt ett tall <u>på hver linje.</u>

	I svært LITEN :	grad				I svært STOR grad		
En slags "typisk siviløkonomstudent"	1	2	3	4	5	6	7	
En eller flere studenter jeg kjenner	1	2	3	4	5	6	7	
Deg selv	1	2	3	4	5	6	7	

### 2. I hvilken grad er du enig eller uenig i disse utsagnene om oppgaven du var med på?

н	Helt	<b>ENIG</b>					
Jeg følte meg trygg på at <u>ingen uved-</u> <u>kommende</u> ville få greie på hva jeg skrev	1	2	3	4	5	6	7
Jeg følte meg helt trygg på at mine svar ville bli konfidensielt behandlet	1	2	3	4	5	6	7
Jeg hadde full tillit til at svarene jeg gav ville bli behandlet på en slik måte at ingen uvedkommende ville finne ut hva jeg skrev		2	3	4	5	6	7

### 3. I hvilken grad er du enig eller uenig i disse utsagnene om oppgaven du var med på?

	Helt <u>UE</u>	NIG				Не	lt <u>ENIG</u>	
Jeg følte at den måten jeg svarte på sikret at <u>ingen andre enn jeg selv</u> ville få greie på hva jeg hadde skrevet om dette merket	1	2	3	4	5	6	7	
Jeg var trygg på at <u>ingen, selv ikke</u> <u>intervjueren</u> , ville vite at det var jeg som skrev ned disse tankene	1	2	3	4	5	6	7	
Jeg følte meg sikker på at <u>ingen</u> ville kunne knytte mitt navn til de tankene jeg skrev ned	1	2	3	4	5	6	7	

4.	Nedenfor presenteres hver linje etter hvilke	s flere utsagn on en beskrivelse so	n oppga om pas	aven du ser best	var	med på. `	Vær ve	ennlig å	sett ett !	kryss på
	dde <u>ingen betydning</u> eg hva jeg svarte	<u>::_</u> :	:_	<u>::</u>	_:	Det hade for meg				
	r <u>ikke relevant</u> for va jeg svarte	::_:	:_	<u>:_:</u>	_:	Det var hva jeg			ieg	
Det va hva je	r <u>ikke viktig</u> for meg g svarte	::_:	;	<u>::</u>	_:	Det var hva jeg	<u>viktig</u> svarte	for meg	3	
	r <u>uinteressant</u> for va jeg svarte	:::	:_	_::_	_:	Det var meg hv			r	
Jeg va hva je	r <u>ikke engasjert</u> i g skulle svare	:::	:_	.:: <u>.</u>	:	Jeg var skulle	engas svare	<u>jert</u> i hva	a jeg	
5.	Sett en ring rundt ett oppgaven du var med	tall på hver linj d på.				nig du er	i påsta	andene i		
			Н	elt UEN	٧IG				Hel	t ENIG
	sjonen som ble gitt, gj hva jeg egentlig skulle			1	2	3	4	5	6	7
Jeg va mente	r svært <u>usikker</u> på hva da han forklarte hva je	intervjueren eg skulle gjøre		1	2	3	4	5	6	7
Jeg ha gjøre v	dde det <u>helt klart</u> for m under denne oppgaven	neg hva jeg skul	lle	1	2	3	4	5	6	7
6. Har	du møtt intervjueren f	før? JA	-	NEI_						
7. Hva	a tror du var formålet r	ned denne asso	siasjon	s-oppga	ven'	?				
		<u></u>								

4.

3.	Andre opply	sninger		
	A. Din alder	-:år		
	B. Kjønn:	Kvinne	Mann	Mann

TAKK FOR HJELPEN!

# Appendix 2: Questionnaire for stage two

### A. Vurderinger av bilmerker

Hvor enig eller uenig er du i påstandene nedenfor om de fire bilmerkene?

Benytt følgende skala:

Veld	lig			Veldig					
uenig		Uenig		eller			enig		
1	2	3	4	5	6	7	8	9	

Fyll ut alle rutene i tabellen nedenfor med tall fra 1-9 i henhold til skalaen.

### BILMERKER

	<i>D</i> 1	LIVIERNER	
BMW	AUDI	MERCEDES	VOLVO
	BMW	BMW AUDI	BMW AUDI MERCEDES

Nedenfor finner du en rekke tanker som kan være knyttet til bilmerker. I hvilken grad passer disse tankene til de fire bilmerkene? Benytt følgende skala: B.

Passe svært da		Passer ikke		Hverken eller		Passer		Passer svært godt
1	2	3	4	5	6	7	8	9

### **BILMERKER**

TANKER OM BILMERKER	BMW	AUDI	MERCEDES	VOLVO			
1.							
2.				-			
3.			<del> </del>				
4.							
5.							
6.							
7.							
8.							
9.							
10.							
11.							
12.							
13.							
14.							
15.							
16.							
17.							
18.		<del>                                     </del>					
19.							
20.							
21.							
22.							
23.							

## C. I hvilken grad oppfatter du tankene nedenfor som positive eller negative?

TANKER	Svær negati		Negativt		Hverken eller		Positivt		Svært positivt
1.	1	2	3	4	5	6	7	8	9
2.	1	2	3	4	5	6	7	8	9
3.	1	2	3	4	5	6	7	8	9
4.	1	2	3	4	5	6	7	8	9
5.	1	2	3	4	5	6	7	8	9
6.	1	2	3	4	5	6	7	8	9
7.	1	2	3	4	5	6	7	8	9
8.	1	2	3	4	5	6	7	8	9
9.	1	2	3	4	5	6	7	8	9
10.	1	2	3	4	5	6	7	8	9
11.	1	2	3	4	5	6	7	8	9
12.	1	2	3	4	5	6	7	8	9
13.	1	2	3	4	5	6	7	8	9
14.	1	2	3	4	5	6	7	8	9
15.	1	2	3	4	5	6	7	8	9
16.	1	2	3	4	5	6	7	8	9
17.	1	2	3	4	5	6	7	8	9
18.	1	2	3	4	5	6	7	8	9
19.	1	2	3	4	5	6	7	8	9
20.	1	2	3	4	5	6	7	8	9
21.	1	2	3	4	5	6	7	8	9
22.	1	2	3	4	5	6	7	8	9
23.	1	2	3	4	5	6	7	8	9

D. Tenk deg at en person ble spurt om å fortelle hvilke tanker han/hun hadde om bilmerket Mercedes og at tankene nedenfor dukket opp i hans/hennes hukommelse. Hvor sannsynlig tror du det vil være at han eller hun nevner disse tankene eller velger å holder dem tilbake?

	Han/hun vil <u>helt sikkert</u> <u>LA VÆRE</u> å nevne denne tanken									
1.	1	2	3	4	5	6	7	8	9	
2.	1	2	3	4	5	6	7	8	9	
3.	1	2	3	4	5	6	7	8	9	
4.	1	2	3	4	5	6	7	8	9	
5.	1	2	3	4	5	6	7	8	9	
6.	1	2	3	4	5	6	7	8	9	
7.	1	2	3	4	5	6	7	8	9	
8.	1	2	3	4	5	6	7	8	9	
9.	1	2	3	4	5	6	7	8	9	
10.	1	2	3	4	5	6	7	8	9	
11.	1	2	3	4	5	6	7	8	9	
12.	1	2	3	4	5	6	7	8	9	
13.	1	2	3	4	5	6	7	8	9	
14.	1	2	3	4	5	6	7	8	9	
15.	1	2	3	4	5	6	7	8	9	
16.	1	2	3	4	5	6	7	8	9	
17.	1	2	3	4	5	6	7	8	9	
18.	1	2	3	4	5	6	7	8	9	
19.	1	2	3	4	5	6	7	8	9	
20.	1	2	3	4	5	6	7	8	9	

### E. Nedenfor ber vi deg beskrive din kunnskap/erfaring med biler.

1. Vurder din kunnskap om personbiler i forhold til den gjennomsnittlige bilkunde:

En av de								En av de
minst	1	2	3	4	5	6	7	mest
kunnskapsrike								kunnskapsrike

2. Sett en ring rundt det tallet som beskriver din fortrolighet med personbiler:

Overhodet ikke fortrolig	1	2	3	4	5	6	7	Ekstremt fortrolig		
3. a. Hvor mange ganger har du kjøpt bil?							Antall ganger:			
b. С	b. Omtrent hvor mange km kjører du pr. år?						Antall km:			
c. Omtrent hvor mange ulike bilmerker har du <u>kjørt</u> ? Antall merker: (inklusive biler du har lånt/prøvekjørt)								Antall merker:		

e. Hvor mange forskjellige bilmerker har du eid? Antall merker:

F. Ditt forhold til biler. I hvilken grad er du enig i påstandene?

r. Diet formold in blief. I hvinken grad ef du eing i pa	Helt UENIG				Helt ENIG
1. Hvilken bil jeg velger er veldig viktig for meg	1	2	3	4	5
2. Jeg er svært interessert i biler	1	2	3	4	5
3. Jeg bryr meg ikke om biler i det hele tatt	1	2	3	4	5
4. Jeg liker (event. ville like) å kjøpe bil	1	2	3	4	5
5. Å kjøpe bil er som å gi meg selv en gave	1	2	3	4	5
6. Jeg har stor glede av biler	1	2	3	4	5
7. Du kan si mye om en person ut fra bilen han/hun kjøpe	er 1	2	3	4	5
8. Den bilen folk kjøper sier noe om hvem de er	1	2	3	4	5
9. Den bilen jeg kjøper gjenspeiler min personlighet	1	2	3	4	5
10. Det er ikke så farlig å velge feil bil	1	2	3	4	5
11. Jeg ville synes det var veldig ergerlig dersom jeg	1	2	3	4	5
fant ut at jeg hadde valgt en dårlig bil					
12. Det er veldig irriterende å velge feil bil	1	2	3	4	5
13. Jeg er usikker på hvilken bil jeg vil velge neste	1	2	3	4	5
gang jeg skal kjøpe bil					
14. Når en kjøper bil kan en aldri være helt sikker på om	1	2	3	4	5
en gjør det rette valget					
15. Det er vanskelig å velge bil	1	2	3	4	5
16. Det er lett å velge feil bil	1	2	3	4	5

# G. Nedenfor finner du en del personlighets-beskrivelser. I hvilken grad er beskrivelsene nedenfor riktige for din personlighet?

		Helt feil	Gene -relt feil	Delvis feil	Delvis riktig	Gene -relt riktig	Helt riktig
٨	Jeg har evnen til å endre adfred i sosiale situasjoner dersom jeg føler behov for det	0	1	2	3	4	5
	2. Jeg har evnen til å kontrollere hvordan jeg opptrer i møte med andre mennesker, avhengig av det inntrykket jeg ønsker å gi	0	1	2	3	4	5
•	3. Jeg kan lett endre adferd dersom jeg føler at jeg gjør et dårlig inntrykk	0	1	2	3	4	5
*	4. Jeg har problemer med å endre adferd for å tilpasse meg ulike mennesker og situasjoner	0	1	2	3	4	5
	5. Jeg har erfart at jeg kan tilpasse egen adferd til hvilken som helst situasjon	0	1	2	3	4	5
	6. Jeg har problemer med å sette opp en god fasade, selv når det er til min fordel	0	1	2	3	4	5
>	7. Når jeg ser hva situasjonen krever, er det enkelt for meg å tilpasse adferden	0	1	2	3	4	5
7	8. Jeg er ofte i stand til å «lese» folks virkelige følelser i øynene deres.	0	1	2	3	4	5
	9. Når jeg samtaler med noen, legger jeg merke til selv de minste endringer i ansikts- uttrykket til den jeg samtaler med	0	1	2	3	4	5
D	10. Min intuisjon er svært god når det gjelder å forstå andres følelser og motiver	0	1	2	3	4	5
	11. Jeg vil som regel legge merke til om noen synes en vits er smakløs, selv om de ler overbevisende av den	0	1	2	3	4	5
×	12. Dersom jeg har sagt noe upassende, vil jeg som regel kunne «lese» det i øynene til de som hører på	0	1	2	3	4	5
	13. Dersom noen lyver for meg, vil jeg som oftest se det på personen umiddelbart	0	1	2	3	4	5