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The flexible correction model: Using naive theories of bias to correct assessments of targets

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The Ohio State University, 1994
THE FLEXIBLE CORRECTION MODEL: USING NAIVE THEORIES OF BIAS

TO CORRECT ASSESSMENTS OF TARGETS

DISSERTATION

Presented in Partial Fulfillment of the Requirements for the Degree

Doctor of Philosophy in the Graduate School of

The Ohio State University

By

Duane Theodore Wegener, A.B., M.A.

* * * * *

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1994

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To My Parents

Merlen and Nancy Wegener
ACKNOWLEDGMENTS

I express my sincere thanks to Richard E. Petty, who has been an outstanding advisor and colleague throughout my graduate career. I also express my gratitude to dissertation committee members Robert Arkin, Gifford Weary, and Curtis Haugtvedt, and to the faculty and students of the Ohio State Social Psychology Area. Your comments on this and other research have been most helpful. To my wife, Laura, I offer heartfelt thanks for your support and love.

The research reported in this document was supported by a National Science Foundation research assistantship (BNS 9021647), a National Institute of Mental Health predoctoral traineeship (T32 MH19728), an Ohio State University Graduate Student Alumni Research Award, a Herbert Toops Dissertation Research Award, and an American Psychological Association Dissertation Research Award.
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CHAPTER I

INTRODUCTION

Overview of the Dissertation

This dissertation concerns a situation that is often faced in everyday life -- the situation in which it is important to assess the "true" qualities of a person or object, but in which some factor(s) might have affected one's initial perceptions. Consider the following situations.

1. Jurors in the recent Reginald Denny beating case following the 1993 Los Angeles riots were asked to determine the guilt or innocence of two African American defendants. At the same time, jurors might have been likely to realize that many of the portrayals of African Americans in this culture have been violent in nature. Yet, these jurors (and our justice system) ideally would not want those portrayals to influence perceptions of the particular defendants in this case.

2. At certain points in their lives, people attempt to evaluate important others or events. If at that time one realizes that he or she is in a bad mood, however, he or she would not want temporary feelings that are irrelevant to the assessments at hand to influence perceptions and decisions concerning important actions or people.

3. Consider an elected official making a wide-reaching policy decision. That official might want to take the course of action that most benefits his or her constituency, but also might realize that the people representing one side of the issue are friends. This person might want to be sure that his or her support for the policy is not because of wanting to agree with the friends who are presenting the policy.

In each case, an unwanted potentially biasing factor is present. As these examples illustrate, potential biases can have a variety of sources. These sources include
situational influences such as media, social norms, or general culture, and personal influences such as transient mood states, motives (e.g., to manage impressions or agree with liked others), or salient beliefs. Across the varied sources of potential biases, the processes by which attempts to debias take place might be fundamentally similar. Thus, in this dissertation, I develop (and begin to test) a general model of correction in which the attempts at debiasing in these varied contexts can be organized and studied.

In brief, I propose that corrections (i.e., attempts at debiasing perceptions of targets) are the result of people consulting their naive theories of how potentially biasing factors might influence their perception of the judgment target. This view differs from currently dominant views of bias correction. The primary difference is that a view of corrections based on perceivers' naive theories of bias presents a more flexible set of corrections than those proposed by dominant models of bias removal.

Corrective processes have been noted in a variety of research areas including attribution, effects of target-irrelevant contexts (e.g., priming episodes) on impression formation and social judgment, and use versus disuse of information about judgment targets in impression formation and courtroom judgment. In the sections to follow, I review the discussions of correction processes that exist in these literatures. Most of the empirical work on the concept of bias correction has focused on the effects of target-irrelevant contexts on impression formation and social judgment. Thus, I focus on this literature and on the models that have been developed therein. Following my review of correction discussions in the literature, I present the Flexible Correction
Model and empirical tests of the theory-based flexible correction framework. The initial tests of the flexible correction model reported here are conducted within a context effect/social judgment paradigm. Consistent with the generality of the model, however, the discussion presents a variety of new directions generated by applying the flexible correction model to the numerous areas in which corrections for potential biases might take place (e.g., attribution, stereotyping, use of courtroom evidence, attitude change and persuasion, and non-social biases).

Discussions of Correction for Bias: The Literature

People continually make assessments of the qualities of other people, of places, and of objects in their environment. It is clear, however, that people attempting to assess the true qualities of some target object face a rather complex task. This is because their perceptions of the object potentially can be "contaminated" by any of a large number of personal and contextual factors present in the judgment situation (Wilson & Brekke, in press). For example, activities immediately preceding the judgment might have primed concepts that influence the judge's perceptions of the target (e.g., Higgins, Rholes, & Jones, 1977; Martin, 1986; Srull & Wyer, 1980). Alternatively, the judge might have based initial perceptions of the target on information that is later found to be incorrect, somehow inappropriate, or incomplete (e.g., Gilbert & Osborne, 1989; Golding, Fowler, Long, & Latta, 1990; Thompson, Fong, & Rosenhan, 1981; Wyer & Budesheim, 1987). Even conditions residing in the judge can unduly influence his or her assessments of the target. For instance, the
judge's current emotional state might bias judgments of a target to be more positive if
the person feels good or more negative if the person feels bad than the judgments
should be based on the merits of the target alone (e.g., Berkowitz & Troccoli, 1990;
Forgas & Bower, 1987; Petty, Schumann, Richman, & Strathman, 1993; Schwarz &
Clore, 1983). Because of these potential biasing agents and others, accurate
assessments of the target would often require some adjustment or correction in
judgments of the target that counteract the biasing factor or factors.¹

General Discussions of Correction: Attribution, Use and Disuse of Information about
Targets in Impression Formation and Courtroom Judgment

Attribution

Correction processes have long been a part of observation and theorizing in the
area of causal attribution. Across a variety of judgments, augmenting or discounting
of initial causal attributions take place when additional causal factors become salient.
That is, when one is considering a particular explanation for a person's behavior,
one's initial perceptions of the role of a given causal factor will be changed in order
to take into account the role of an additional salient causal factor (see Kelley, 1972,
1973). Adjustments of attributions as a result of salient contextual factors have been
shown for judgments ranging from the causes of a person's behavior (e.g.,
Himmelfarb & Anderson, 1975; see also Kelley, 1972, 1973) to assessments of a
person's internal reaction to various events (e.g., Fazio, Zanna, & Cooper, 1977;
Zillmann, 1983). Although some perspectives on attribution have dealt with nearly the whole of attribution as an effortful process (e.g., Kelley, 1967), some more recent accounts assign greater cognitive effort to processes that have been either explicitly labeled as attributional corrections (e.g., Gilbert, Pelham, & Krull, 1988) or could be considered as such (e.g., Quattrone, 1982; Trope, 1986). I present each of these perspectives as they chronologically developed in the field.

Quattrone's (1982) perspective represented attribution as an anchoring and adjustment process. This view is perhaps best understood in relation to the attitude attribution paradigm (the paradigm within which the model was developed; e.g., see Jones & Harris, 1967). In studies of attitude attribution, research participants generally read an essay that either supports or opposes a position on some issue. Later, participants are told either that the essay writer freely chose which position to support or that the writer was assigned which position to support. Under free-choice conditions, assessments of the essay writer's true attitude on the issue are generally consistent with the essay position. More importantly, no-choice conditions fail to completely remove this bias. That is, under no-choice conditions, assessments of the writer's true attitude are still somewhat consistent with the essay position (although less so than in the free-choice conditions; e.g., see Jones & Harris, 1967; Himmelfarb & Anderson, 1975; Fein, Hilton, & Miller, 1990).

Quattrone (1982) used Tversky and Kahneman's (1974) discussion of anchoring and adjustment to explain these results. Within this view, social perceivers use the direction and extremity of the essay as an anchor or starting point for the
attributional inference. This anchor is basically where judgments remain when judges are told that the essay position was freely chosen by the writer. When the essay position was assigned to the writer (i.e., the writer had no choice in which position to support), however, judges adjust their attributions away from the anchor in light of the situational constraint on the behavior (because the behavior is no longer diagnostic of the writer's true attitude). Yet, these adjustments are insufficient in that they remain biased in the direction of the essay position (with writers of "pro" essays given a more pro attitude rating than writers of "anti" essays), even though the writer had no choice in which position to support. The anchor-and-adjust model of attribution might be considered a view of attributions that includes a correction component. That is, adjustments serve to correct initial anchoring biases, albeit insufficiently.²

Trope (1986) also discussed attribution as consisting of two steps: identification and inference. Within Trope's view, identification of the behavior as fitting a disposition-relevant category takes place in a relatively spontaneous manner. That is, the behavior is quickly (almost effortlessly) categorized in terms of which trait it implies. Especially when behavior is ambiguous with respect to the most applicable trait category, the social perceiver might use information about the situation or expectancies about the person in order to categorize the behavior. Thus, when behavior is ambiguous, situational information can make the identification of the behavior more like the situation. Thus, if no inference stage were to take place, disposition of the actor would seem more like the situation than would normally be
the case. After the trait implications of the behavior have been identified, however, situational information is used to make inferences of the true disposition of the actor. If the situation would generally tend to inhibit the identified behavior, the diagnosticity of the identified behavior is augmented (i.e., the person's true disposition is viewed as even more like the behavior-implied trait), but if the situation would encourage the identified behavior, the diagnosticity of the identified behavior is reduced (i.e., the person's true disposition is viewed as less like the behavior-implied trait).

Thus, when the behavior identification has been affected by situational information (i.e., in the case of ambiguous behavior), the subtraction of situational information moves perceptions of the disposition of the target person back to a point where dispositional ratings are relatively unaffected by the situational information. When the behavioral identification has not been affected by situational information (i.e., in the case of unambiguous behavior), the subtraction of situational information moves perceptions of the disposition of the target person to be more like the behavior-implied trait if the situation discourages the behavior but less like the behavior-implied trait if the situation encourages the behavior.

Within this model, Trope and his colleagues (Trope, 1986; Trope, Cohen, & Maoz, 1988) have found evidence for situational information affecting behavior identification for ambiguous but not unambiguous behavior. In addition, presumably because of subtraction at the inference stage, ratings of dispositions of targets have been affected by situational information for unambiguous but not ambiguous behavior.
That is, if dispositional inferences begin with the traits implied by the behavior identifications and subtract situational implications from there, subtraction of the situational information that created the differences in behavior identification for the ambiguous behaviors results in no effect of the situational information on ratings of target disposition. Subtraction of situational implications from behavior identifications that were not affected by situational implications (i.e., for unambiguous behaviors), however, result in dispositional ratings that are affected by the situational information (with situations consistent with the behavior leading to disposition being perceived as less like the behavior identification, but situations inconsistent with the behavior leading to disposition being perceived as more like the behavior identification).

For example, Trope et al. (1988; Experiment 2) showed research participants emotional reactions of target people that were either unambiguously happy, unambiguously angry, or ambiguous with respect to anger or happiness. These reactions were said to be either within a happy or within an anger-provoking situation (in another set, fearful reactions and situations were used instead of angry reactions and situations). Consistent with Trope's (1986) two-stage model, when the reaction was ambiguous, the reaction was viewed as happy in the happy situation and as angry in the anger-provoking situation. In this case, then, initial perceptions of the behavior of the actor were made more like the situation. When the reaction was unambiguous, however, qualities of the situation did not affect ratings of the emotional quality of the reaction (i.e., behavioral identification was unaffected). Results on ratings of target dispositions were consistent with subtraction of situational
implications from the differing behavior identifications across ambiguous and unambiguous behaviors. That is, the resultant dispositional ratings of targets were not affected by situational information when behavior was ambiguous but were affected by situational information when behavior was unambiguous (see also Trope, Cohen, & Alfieri, 1991). Thus, like Quattrone (1982), Trope's (1986) model of attribution also includes an inferential stage in which initial perceptions of the disposition of the actor can be adjusted (corrected) in light of situational information.

Gilbert and his colleagues (e.g., Gilbert et al., 1988) expanded on this view by treating the attribution process as consisting of three steps 1) categorizing the behavior (i.e., what is the actor doing?), 2) characterizing the actor (i.e., what trait does the action imply?), and 3) correcting the attribution (i.e., what situational constraints may have caused the action). Importantly, Gilbert et al. (1988) noted that "attributions are a product of dispositional inferences that are followed by situational adjustments" (pg. 738; see also Gilbert & Osborne, 1989; Osborne & Gilbert, 1992). Thus, Gilbert and his colleagues assume that dispositional inferences are the default outcome of categorizing the behavior and characterizing the actor. The impact of situational information is through relatively effortful corrections of the initial dispositional inference.

In order to test this view, Gilbert et al. (1988) presented research participants with silent video clips of a person acting anxiously. The topic of the supposed conversation in each clip was presented at the bottom of the screen and was either anxiety-provoking (e.g., public humiliation, personal failure) or relaxing (e.g.,
favorite hobbies, ideal vacations). Participants either judged the personality of the actor in each clip as their only task or both judged the person's personality and tried to recall the topics of conversation. When participants were distracted from the personality judging task (i.e., by trying to remember the topics of the conversations), judgments of the personality of actors varied little between actors who were reacting to anxious versus relaxing topics. When participants were not distracted, however, there was a greater difference in judged personality between actors reacting to anxious and relaxing topics (with the actor viewed as more anxious when acting anxious in response to relaxing topics; see also Gilbert & Osborne, 1989; Osborne & Gilbert, 1992).

Gilbert and his colleagues cite this evidence as supporting the notion that "correction is a species of reasoning (a higher order process), whereas characterization is a species of perception....If this is so, then the correspondence bias can be seen as the failure to apply an inferential correction to the initial dispositional perceptions that perceivers cannot help but have," (Gilbert et al., 1988; p. 738).

Use and Disuse of Information About the Judgment Target: Impression Formation and Use of Courtroom Evidence

Although no models of correction per se have been developed in this area, correction-like phenomena have been discussed by researchers investigating the impact of instructions to disregard information about the judgment target when forming impressions of the target. For example, in the impression formation area, Golding et
al. (1990) provided research participants with information about a target person. Specifically, participants were provided with lists of honest, neutral, and unkind behaviors supposedly performed by the target person (e.g., one honest behavior was "Told a cashier she had given him too much change."). Later, some of the information was identified as inappropriate for use in judgments of the target person either because the experimenter had presented information that was supposed to be confidential, or because the information was actually about a person other than the target. Golding et al. (1990) found that incorrect information did not have any influence on judgments of the target, but found that the same information had a biasing effect when labeled as confidential. That is, participants actually made target judgments that were consistent with the confidential information (for related paradigms and results, see Thompson et al., 1981; Wyer & Budesheim, 1987).

Given that people encounter information about the target with the goal of forming an impression of the person, it is likely that the implications of the information are integrated into the overall impression in a relatively "on-line" fashion (e.g., see Hastie & Park, 1986). Thus, it could be that the information has a relatively immediate impact on the impression of the target that must be corrected when the information about the target has been discredited. If this is the case, it appears that such correction only takes place when information is deemed incorrect. If information is labeled confidential, the same impact of the information is observed as when the information is not deemed inappropriate in any way. Of course, it could also be that information only has an impact after the information is labeled.
confidential or is not labeled, in which case there is no correction necessary to account for the lack of impact in the incorrect conditions.

Similar issues have been examined in the area of courtroom judgments. In particular, corrections have been discussed in studies of the effects of inadmissible evidence on jury verdicts. The concept of a fair trial in our judicial system is based at least in part on the assumption that prejudicial, unreliable, or illegal evidence will not be allowed to influence jury verdicts. What happens when inadmissible evidence is presented in court? A judge can either declare a mistrial (a rather costly alternative) or can instruct the jury to ignore the evidence. Once a jury has heard the inadmissible evidence, however, instructed avoidance of the effects of the evidence constitutes an important instance of correction of a potential bias. Unfortunately, much of the treatment of corrections in this literature consists of researchers lamenting the fact that evidence ruled inadmissible often affects juries’ ratings of defendant guilt (e.g., Carretta & Moreland, 1983; Sue, Smith, & Caldwell, 1973; Thompson et al., 1981). That is, in many cases, jurors are either unable or unwilling to correct their impressions of defendants when evidence is deemed inadmissible (cf., Wolf & Montgomery, 1977).

For example, Thompson et al. (1981) presented research participants with videotapes of a simulated trial. One third of the research participants viewed a trial that included inadmissible evidence supporting the defense; one third viewed a trial that included inadmissible evidence supporting the prosecution, and one third viewed no inadmissible evidence. Results showed that inadmissible evidence only had an
impact if it supported the defense. That is, corrections occurred when inadmissible evidence supported the prosecution, but not when it supported the defense. Of course, as in the case of the Golding et al. (1990) results reviewed earlier, it is also possible that evidence only had an impact later in the process. That is, it is possible that no corrections occurred and evidence had an impact only because jurors believed that it was useful in the defense condition.

As will be noted later in the introduction, a variety of speculations have been raised by researchers in this area. Yet, no model of corrections for inadmissible evidence has been developed or tested. Therefore, any general model of correction that has the capability to explain use or disuse of information about judgment targets has the potential to provide advances in the study of jury judgments.

**Summary of General Discussions of Correction**

Although some explicit discussions of correction exist (especially in the attribution literature), the notion of correction has not been developed in great detail. The basic premise of the general discussions of bias is that some kind of unavoidable default process creates a bias that can be overcome if more effortful correction processes are activated. This basic characterization of default bias and effortful correction is consistent with the more formal models of bias correction that have developed in the literature on effects of irrelevant contexts on judgments of targets. Within that literature, however, more specific processes have been discussed as mechanisms through which bias removal takes place.
In the following section, I review these more specific discussions of bias correction. Following that presentation, I note the commonalities across the general and specific discussions of corrections, and I present an alternative model of corrections called the Flexible Correction Model.

**Specific Discussions of Correction Processes: Use and Disuse of Reactions Activated by a Target-Irrelevant Context in Impression Formation and Social Judgment**

Recently, correction processes have received considerable attention in the area of context effects on impression formation and social judgment. Many kinds of factors should be objectively irrelevant to the qualities of targets (e.g., unrelated information that serves to activate concepts in memory, mood state of the social perceiver, judgments of other targets along a dimension of judgment relevant to the target, etc.), but have been found to influence ratings of targets under at least some conditions. In this literature, effects of irrelevant contexts are discussed as either assimilation (i.e., making judgments of targets more like qualities of the context) or contrast (i.e., making judgments of targets less like qualities of the context).

One factor that is frequently considered in explanations of assimilation and contrast effects is the distribution of contextual stimuli (e.g., Helson, 1964; Parducci, 1965). For example, in ratings of ambiguous targets, a very extreme context is likely to lead to contrast, whereas a moderate context is more likely to lead to assimilation (Herr, Sherman, & Fazio, 1983; Sherif & Hovland, 1961).
Interestingly, recent researchers have found evidence of assimilation and contrast effects even when the distribution of contextual stimuli has been held constant. For example, Strack, Schwarz, Bless, Kubler, and Wanke (1993) had research participants engage in a priming task that activated either positive (i.e., friendly/helpful) or negative (i.e., dishonorable) trait dimensions before they were asked to form an impression of an ambiguous target person later in the experimental session (with a distraction task between the two activities). In addition, Strack et al. (1993) either reminded participants of the priming task before the impression formation task or did not. Strack et al. found contrast of target impressions away from the primes when participants were reminded of the priming task, but found assimilation of impressions to the primes when participants were not reminded of the priming task (for similar results using priming and impression formation tasks or using prior survey questions as primes, see Lombardi, Higgins, & Bargh, 1987; Newman & Uleman, 1990; Schwarz, Strack, & Mai, 1991).

Similarly, Martin (1986, Experiment 1) had research participants categorize a series of phrases in terms of two traits. For some participants, various phrases (e.g., "volunteered for espionage duty while in the Navy") were judged in terms of two positive traits -- adventurous and self-confident. For other participants, different phrases (e.g., "smokes cigarettes near an open can of gasoline") were judged in terms of two negative traits -- reckless and egotistical. Although all research participants were stopped after categorizing eight phrases, some were led to believe that they would have to categorize twelve phrases rather than eight. Thus, participants who
had been asked to categorize eight phrases believed that they were finished with the priming task, whereas participants who had been asked to categorize twelve believed that they were not finished. Participants were then asked to form an impression of a target person described in terms that were ambiguous regarding the traits adventurous and reckless. Participants showed relative assimilation of their impressions of the target to the primed concepts when they believed that the priming task had been interrupted (i.e., they rated the target more positively after the positive than the negative priming task), but they showed relative contrast when they believed that the priming task had been finished (i.e., they rated the target more positively after the negative than the positive priming task).

Additional contexts and prompts to consider the context have shown similar results. For instance, Schwarz and Clore (1983) found that happy research participants rated their overall life satisfaction higher than sad participants when no attention was drawn to the source of the mood state. When attention was directed toward a potential cause of mood that was irrelevant to life satisfaction (e.g., the weather), however, happy and sad participants rated their life satisfaction equally high. That is, when mood was made salient, and was made to appear irrelevant to the question at hand, participants adjusted their ratings of life satisfaction away from the context (i.e., away from assimilation to mood).³
The Set/Reset Model

Martin (1986; Martin, Seta, & Crelia, 1990) has explained such assimilation and contrast results in terms of his set/reset model. According to this model, one's representation of the target might include some positive and some negative elements (see top panel of Figure 1). When a context primes a set of thoughts (elements), some of the reactions to this context might overlap with the representation of the target making the target seem more like the context (referred to as setting; see middle panel of Figure 1). When people realize that they are thinking particular thoughts (positive or negative) because they were reactions to the contextual stimuli, however, they avoid using these thoughts in forming their impression of the target in an attempt to be accurate. In doing so, people attempt to "partial out" (or subtract) the primed thoughts (referred to as resetting). When this happens, people might subtract out some of the elements of their true reaction to the target. Because of this, contrast away from the contextual stimuli can result (see bottom panel of Figure 1; see also Martin & Achee, 1992). Although contrast is not the inevitable outcome of resetting, the correction is always in a direction away from the primed reaction to the contextual stimuli. For instance, whereas setting leads to assimilation to the primed reaction, resetting might lead to less assimilation, to no assimilation or contrast, or to contrast depending on the extent of correction (see Martin & Achee, 1992). Importantly, the corrections that lead to these various outcomes are all in the same direction -- away from reactions to the context.
Reactions to the Target: Might be mixed — with some positive and some negative

"Setting": Confusion of reactions to the context as reactions to the target — makes target seem more like the context than would normally be the case

"Resetting": Partialling (subtraction) of contextually activated reactions — makes target seem less like the context than when setting occurs

Figure 1: Venn Diagram of "Setting" and "Resetting"

(figure adapted from Martin et al., 1990)
A number of Martin's studies have found similar results using varied contextual stimuli and manipulations of reset likelihood. For instance, Martin (1986, Experiment 3) found assimilation in task-interrupted conditions and found contrast in task-completed conditions when the priming task was the writing of self-referent statements indicative of positive or negative moods. In the Martin (1986) studies, a variation in the thought processes involved in task-completed versus task-interrupted conditions was the key manipulation of reset likelihood. People have been shown to be more likely to continue thinking about tasks they have not completed than about tasks they have completed (Marrow, 1938; Martin & Tesser, 1989; Zeigarnik, 1927/1938). Because of this, Martin (1986; Martin et al., 1990) reasoned that research participants in the task-interrupted conditions should be more likely to perseverate about the priming task than those in the task-completed conditions. As a result, participants in the task-interrupted conditions would find it difficult to avoid the primed thoughts in forming their impressions. Participants in the task-completed conditions, on the other hand, would be able to "partial out" the primed thoughts from the completed task.

Because resetting (correcting) constitutes an additional step beyond setting (i.e., resetting includes subtraction of elements primed by the context), Martin et al. (1990) reasoned that reset contrast effects would require more cognitive effort than assimilation effects. Using the same self-referent statement priming task as Martin (1986; Experiment 3), Martin et al. (1990) in three separate studies found assimilation when research participants were distracted during the impression-formation task, when
participants' responses were not supposed to be identifiable, and when participants were low in need for cognition. Contrast was found when participants were not distracted, when their responses were individually identifiable, and when they were high in need for cognition. That is, when participants were unable (due to distraction; cf., Petty, Wells, & Brock, 1976) or unmotivated (due to group responsibility, Petty, Harkins, & Williams, 1979; or low need for cognition, Cacioppo, Petty, & Morris, 1983) to put forth effort in forming impressions of the target, assimilation resulted. When participants were motivated and able to put forth cognitive effort, however, and presumably engage in correction processes, contrast resulted.

The Inclusion/Exclusion Model

Schwarz and Bless (1992) have also proposed a model that might account for such findings. The general tenets of this model can be summarized in a few brief statements: (a) contextual information that is clearly irrelevant to the task is ignored and does not influence judgment (i.e., an "early exit" from the model occurs in which case no assimilation or correction for assimilation takes place), (b) the default is to include potentially relevant contextual information in the representation of the target resulting in assimilation if no correction takes place, (c) features of the judgment task or communicative setting might trigger exclusion of potentially relevant contextual information -- excluding information from the representation of the target makes the target seem less like the contextual information and might be used to set up an
extreme judgmental standard with which the target can be compared, both of which lead to contrast effects, and (d) the emergence of contrast effects requires more processing steps, and more effort, than the emergence of assimilation effects.

Thus, similar to the set/reset model, the inclusion/exclusion model posits that the default (i.e., no-correction) bias associated with a context is assimilation (because of including activated contextual information or reactions in the representation of the target). The inclusion/exclusion formulation is also in accord with the set/reset model when it posits that correction-producing factors in the judgment setting prompt exclusion (i.e., subtraction) of contextually-activated information from the representation of the target. Thus, within both of these models, effortful corrections (i.e., resetting or exclusion) lead to target judgments less like the context than in no-correction settings.4

Common Assumptions Across Discussions of Correction

There are a number of similarities between the assumptions made by scholars who have discussed correction in general as opposed to specific terms. For example, discussions of bias and correction in the attribution, target-relevant information, and jury judgment literatures have all assumed that initial default biases are consistent with what the perceiver observes. That is, biases in these areas are assumed to be consistent with the disposition evidenced by the behavior of a target, consistent with the information about the target, and consistent with evidence presented about the defendant. These assumptions regarding the direction of default biases are analogous
to assumptions in the context effect literature that the default effects of contexts are assimilation bias (e.g., because of setting or inclusion of reactions to the context in representations of the target).

In addition, perhaps because of assumptions regarding the direction of default effects, general corrective processes have been assumed to work in a direction opposite to the hypothesized default (i.e., to make assessments of the target less like the biasing factor -- the trait implied by the behavior, the information about the target, or the inadmissible evidence). These assumptions are analogous to assuming that corrections for contexts make assessments of the target less like reactions activated by the context (e.g., because of resetting or subtraction/exclusion of the reactions to the context). Thus, although the models of correction introduced in the context effect literature have proposed more specific processes by which these corrections might take place (e.g., through "subtraction" of contextual reactions that overlap with target reactions), many of the basic tenets of the discussions in the other research areas are parallel in their assumptions and predictions.

Theory-Based Corrections: The Flexible Correction Model

An alternative way to organize the various correction phenomena is to propose a more flexible set of correction processes driven by respondents' naive theories of how any given contextual factor has influenced their perceptions of the target. That is, the dominant models of context correction have focused on aspects such as the overlap between reactions to the context and target (Martin, 1986; Schwarz & Bless,
1992) or changes in meaning of the scale anchors when the context is used to define those anchors (Schwarz & Bless, 1992). An alternative approach, however, is to organize past correction work by focusing on the theories that respondents have about how the context might have influenced (i.e., biased) their perceptions of the target and on the necessary steps for corrections to occur that are based on these naive theories of bias.

Succinctly put, the Flexible Correction Model (FCM) holds that corrections are aimed at removing the bias that social perceivers believe are associated with the factor at hand. If the perceiver believes there is a large bias, he or she attempts to adjust assessments of the true qualities of the target more than if he or she believes that there is a small bias. If the perceiver believes that the bias is to make the target seem higher on a dimension of judgment than would normally be the case, the perceiver attempts to adjust assessments of the target to be lower than his or her initial reaction toward the target; if the perceiver believes that the bias is to make the target seem lower on a dimension of judgment than would normally be the case, the perceiver attempts to adjust assessments of the target to be higher than his or her initial reaction toward the target.

Work on theory-based correction follows directly from the notion that avoiding the influence of a stimulus would require awareness of the influence of the stimulus rather than awareness of the stimulus itself (e.g., see Bargh, 1992; Higgins & Bargh, 1992; Jacoby & Kelly, 1990). For some time, researchers have noted that people are likely to possess or generate theories about how various contextual factors might
influence their perceptions of target objects (e.g., Nisbett & Wilson, 1977; Wilson, Laser, & Stone, 1982). For example, Nisbett and Wilson (1977) documented that people might believe that a factor influenced their perceptions (e.g., noise in an adjacent room) even if the factor had little demonstrable effect. As in this example, however, much of the attention given these theories has focused on the overall accuracy or inaccuracy of the theories (e.g., Nisbett & Wilson, 1977; Wilson et al., 1982) rather than on how those naive theories of bias might be used in attempts to remove biases from assessments of targets.

**Basic Tenets of the Flexible Correction Model**

According to the flexible correction model, in some situations, social judges have an initial reaction to a judgment target that might or might not have been influenced by a potentially biasing factor(s). If the perceiver is unmotivated or unable to search for potential sources of bias, then his or her assessment of the qualities of the target will reflect his or her initial reaction to the target. If the social perceiver is motivated and able to search for potential sources of bias, however, the perceiver will evaluate the likely biasing effect(s) of salient factors in the judgment situation (including factors external and internal to the social perceiver). This is accomplished through accessing and/or generating naive theories of the biases associated with the salient factors. These perceptions of bias are naive theories in that a given perceiver is not likely to have direct access to the effect of the factor(s), nor is he or she likely to have the evidence necessary to definitively know the normative influence of the
factor. Thus, the person's naive perception or theory of the effect of the potentially biasing factor is the person's best estimate of the effect of the factor, regardless of whether the perception is in any way accurate or not.

If the person believes that no bias is operating, then the person's assessment of the qualities of the target will reflect his or her initial reaction to the target. If, however, the perceiver believes that a bias is operating (regardless of whether this is incorrect or correct), and if the perceiver is motivated and able to correct (i.e., to attempt to "debias") assessments of the target, then the perceiver engages in a correction guided by the theory of bias. That is, the person adjusts assessments of the target in a direction opposite to the perceived bias and in a magnitude commensurate with the magnitude of the perceived bias.5

Within this model, no assumptions are made concerning the direction of the default effect of potentially biasing factors. That is, a factor might make initial reactions toward the target more like reactions to the biasing factor, make initial reactions less like reactions to the biasing factor, or have no effect at all. Regardless of the default (i.e., no-correction) effect, corrections are driven by the perceptions of the bias. That is, corrections are aimed at removing perceived bias rather than actual bias. Although there might be some cases in which perceived and actual bias coincide, the two elements are conceptually distinct. That is, a person might believe that a particular bias exists (and might attempt to remove that perceived bias) when no bias exists or even when a bias in the opposite direction is objectively present.6
A schematic representation of the Flexible Correction Model (FCM) is presented in Figure 2 below. A schematic representation of the Flexible Correction Model (FCM) is presented in Figure 2 below.7

Figure 2: Schematic Representation of the Flexible Correction Model
This is not the first time that the possibility of theory-based corrections has been noted. Some researchers have speculated that respondents might use their naive perceptions of how a biasing factor has influenced them in order to adjust target ratings to compensate for the undue influence of the biasing factor (e.g., see Strack, 1992a; Thompson et al., 1981; Wilson & Brekke, in press; Wyer & Budesheim, 1987). Unfortunately, these researchers have never provided explicit empirical evidence for theory-based correction processes.\(^5\)

Some researchers have used the theory-based correction notion in conjunction with assumptions about theories judges might hold in order to account for empirical outcomes not explained by some other judgment model. For example, theory-based correction processes have been used to attempt to explain why adjustments in target ratings have generally been larger for negative or convicting information as compared with positive or vindicating information (e.g., see Thompson et al., 1981; Wyer & Budesheim, 1987). That is, because people might begin with relatively positive expectations of new people, positive information might be seen as less biasing than negative information, and thus be less likely to induce correction processes. Unfortunately, no empirical tests exist of whether the corrections noted by Thompson et al. or Wyer and Budesheim are driven by naive theories of bias.\(^9\)
The Flexible Correction Model and the Existing Literature

Relation to the Existing Data

Is the flexible correction view that corrections are driven by naive theories of bias compatible with the existing literature? One interesting characteristic of the studies explicitly investigating correction processes is that corrections that have occurred have moved judgments away from reactions to the biasing factor. That is, corrections have made target ratings less like the content of priming episodes (e.g., Martin et al., 1990; Strack et al., 1993), less like inadmissible evidence (e.g., Thompson et al., 1981), and less like the dispositional implications of behaviors (e.g., Gilbert et al., 1988; Osborne & Gilbert, 1992). Within the context effect literature, all of the studies have used fairly moderate contextual stimuli that would normally be expected to lead to assimilation effects (e.g., Herr et al., 1983; Sherif & Hovland, 1961) when no correction processes are activated. Thus, to the extent that social perceivers are likely to believe that such factors produce biases in a direction consistent with reactions to the biasing factor, a theory-based correction would be entirely consistent with these results.

For example, consider the finding that presence of blatant primes (Martin, 1986; Martin et al., 1990) or of primes that have been made salient through reminding participants of their presence (Strack et al., 1993) can lead to contrast rather than assimilation (i.e., under conditions when corrections are hypothesized to occur). Rather than such effects being the result of a partialling or subtraction
process, it could be that people in those studies believed that assimilation was the likely effect of the priming contexts on uncorrected perceptions of the targets and that corrections driven by these perceptions of bias were responsible for the observed effects. To the extent that people are found to believe that priming episodes create assimilative biases, then, past findings guided by partialling models of corrections might actually have been due corrections based on perceivers' naive theories of bias.

**How does the Theory-Based Perspective Differ from the Dominant Models?**

In addition to providing a potential explanation of past correction effects, a model of corrections as driven by the naive theories of bias held by perceivers makes a number of important predictions that differ from the currently dominant models. I focus this section on the differences between the Flexible Correction Model and the dominant social judgment models of correction (i.e., the set/reset and inclusion/exclusion models). In the discussion section of this document, I return to the areas in which general discussions of corrections have appeared (i.e., attribution, use of target-relevant information, and jury decisions). At that point, I discuss research directions in those and other areas that are generated by the FCM.

The first way in which the FCM differs from the context-effect models regards assumptions about the direction of default (i.e., no-correction) processes. Whereas the set/reset and inclusion/exclusion models assume that default processes make reactions toward targets more like reactions toward the biasing factor (termed assimilation in that literature), the FCM assumes that default (uncorrected) processes
can make initial reactions toward the target either more or less like reactions toward the biasing factor. That is, using the context-effect terminology, default effects can be either assimilation or contrast (or no effect). Regardless of the actual default effect, however, perceivers can believe that the bias is to make reactions to the target too much like reactions to the context (i.e., assimilation) or too little like the context (i.e., contrast). Perceivers can also believe that no bias occurred. Corrections are driven by these naive theories of how perceptions of the target have been affected.

This leads to a second major difference between the models. That is, because theories of bias can be of either direction (toward or away from the biasing factor) corrections can flexibly go in either direction (as they are guided by the theory of bias). An important implication of this view for the context effect literature is that there may be multiple ways to arrive at relative assimilation and contrast effects. Whereas the set/reset and inclusion/exclusion models posit that assimilation is the default and contrast is the result of effortful correction, the flexible correction perspective suggests that either effect could be the default or the result of corrections.

Relative contrast effects might be the result of correction processes or the result of a lack of correction processes. Similarly, relative assimilation effects might be the result of correction or of lack of correction. To the extent that correction processes require effort (Gilbert, McNulty, Giuliano, & Benson, 1992; Martin et al., 1990; Schwarz & Bless, 1992), correction-based contrast might require more effort than default (no-correction) assimilation; and correction-based assimilation might require more effort than default (no-correction) contrast.
The case of corrections driven by a theory of default contrast is a crucial case that distinguishes between the flexible correction and context-effect models. For example, a reset-based correction (in which contextually activated reactions are suppressed or "partialled out" of reactions to the target, e.g., Martin, 1986) cannot account for a correction that results in target ratings becoming more similar to reactions to the context. This is because the term set refers to "the use of a contextually activated response during formation of the target impression," and "when the contextual response is brought to bear [in forming the target impression], the evaluation of the target is assimilated toward the implications of the contextual stimuli." In addition, the term reset "refers to the suppressed use of the contextually activated response and the generation of a context-distinct response for the target." In resetting, "when the contextual response is not brought to bear [in forming the target impression], and the individual generates a context-distinct response, the evaluation of the target is contrasted with the implications of the contextual stimuli" (Martin, 1986, p. 495). Thus, because people "cannot use their reaction to the priming stimuli if their objective is to give their reaction to the target" (Martin & Achee, 1992, p. 210), reset-based corrections must result in reactions to the target being less like reactions to the context than when setting occurs (see Figure 1 on page 18).

Importantly, the full flexibility of theory-based corrections has yet to be fully developed and demonstrated in social judgment. The following experiments constitute the initial empirical tests of the flexible correction framework. Across this set of studies, a variety of hypotheses are tested that cannot be derived from the currently
dominant models. The empirical studies are presented in three chapters, each with a set of research goals related to the flexibility of the theory-based correction perspective.
CHAPTER II
TESTS OF THE FLEXIBLE CORRECTION MODEL: CORRECTIONS FOR CONTEXT-INDUCED CONTRAST

The research in this chapter examines the notion that contrast can sometimes be the default outcome in studies of social judgment, and that effortful correction processes might move judgments closer to the context rather than further away from it (i.e., if perceivers believe that contrast was the default bias). Corrections for contrast constitute a critical test of the Flexible Correction Model in that accepted models (e.g., the set/reset and inclusion/exclusion models) predict only corrections that move ratings of targets away from the context. According to the FCM, if one could find contextual stimuli for which contrast is viewed by people as a likely consequence of uncorrected exposure, then correction processes should adjust ratings of targets toward the context.

The research in this chapter addresses three questions related to the flexibility of correction processes: 1) can people believe that either contrast or assimilation can be the result of uncorrected exposure to contexts? 2) if people believe that contrast is the default bias, do they correct assessments of targets by adjusting ratings to be more like the context than in "uncorrected" settings, and 3) can even subtle cues to differences between contexts and targets prompt correction for perceived contrast?
Perceptions of Assimilation and Contrast as Potential Default Biases:

Theory-Identification Study 1

Are people aware of contextual configurations that elicit contrast effects, or do people tend only to hold naive theories of assimilation for the effects of contextual stimuli? If one could identify contexts for which people believe contrast effects are likely, such contexts could be used to determine the extent to which people are capable of correcting by adjusting ratings of targets toward rather than away from assessments of the context. In addition, by showing that contexts such as those used in past studies of assimilation and contrast effects are seen by participants as likely to lead to assimilation effects, it becomes possible that past results are a special case of more general correction processes. In order to examine this, I described various contexts and judgments to research participants and asked them what the natural effect of these contexts would be on people's target ratings.

Method

Subjects and Procedure

Twenty-three undergraduate psychology students at Ohio State University participated in partial fulfillment of a class requirement. All research participants received a questionnaire describing five contexts and judgments to be made. Instructions explained that contexts can sometimes create biases in people's judgments and that the experimenters wanted to find out what people thought about how some
specific contexts might affect their ratings. Respondents were asked to decide what effect they thought that each context would tend to have on people's perceptions — whether it would make people see the target as more favorable or less favorable.

Two of the items described contexts that would be expected to bring about assimilation effects if no correction processes were activated. These contexts included the effects of the priming of a trait on judgments of a person engaging in ambiguous behavior (Martin, 1986, Martin et al., 1990) and the effects of positive mood on judgments of the pleasantness of everyday activities (Schwarz & Clore, 1983). Two other items described extreme contexts that would be expected to bring about contrast effects if no correction processes were activated (Herr et al., 1983; Sherif & Hovland, 1961). If people ever believe that contrast is the default effect of a context, such beliefs might be most likely to be associated with contexts that have actually created contrast effects in past research (although people could also believe that contrast effects are created by contexts that do not actually bring about the effect). Therefore, this section of the questionnaire included contexts and targets that have been used to create contrast effects in past research: imagining being in the location of one's dream vacation (Dermer, Cohen, Jacobsen, & Anderson, 1979) before judging average locations, and seeing a group of very attractive people before judging average-looking people (Kenrick & Gutierres, 1980). Whereas these four items were adapted from contexts that have produced assimilation or contrast in previous research, the remaining item was a filler item assessing the effects of a room with red paint on the walls on judgments of a target person's consideration.
Ratings of the likely effects of such contexts were tailored to the individual context item. Participants' perceptions of the judgmental effects of being in the location of one's dream vacation were measured by asking whether being in that place would make one's perceptions of an ordinary location seem "less pleasant than when not in the fantastic place" (-4 on a nine point scale) as opposed to "more pleasant than when not in the fantastic place" (+4). Perceptions of effects of the blatant priming of hostility were assessed by asking whether an ambiguous target person would then be viewed as more hostile (-4) versus less hostile (+4). The perceived effects of being in a red room were assessed by asking whether the room would make a person seem less considerate (-4) as opposed to more considerate (+4). The effects of being in a good mood were measured by asking if the mood would make a normal day's events seem less pleasant (-4) or more pleasant (+4). Finally, perceptions of the effects of seeing a group of incredibly attractive people were assessed by asking whether an average-looking target person would seem less attractive (-4) as opposed to more attractive (+4). The order of presentation of contexts was the same as described above for all respondents (for a copy of the materials, see Appendix A).

Results and Discussion

Ratings of the perceived judgmental effects of each context were analyzed by testing the difference between the average rating for each context against the zero-point of each scale (i.e., no perceived influence of the context) using the Student's t statistic. Although no effects were predicted for the filler item, respondents rated the
likely effect of being in a bright red room as making people seem somewhat less considerate ($M = -0.74; t = 2.04, p < .054$).

Of greater interest, the stimuli used in past studies of context-effect correction processes were expected to lead to perceptions of default assimilation. Consistent with this expectation, the priming of hostility ($M = -1.22$) and good mood ($M = +2.43$) were both seen as encouraging ratings consistent with the respective contexts ($t = 2.95$ and $5.60$ respectively, $p < .007$ and $.0001$). That is, hostile primes were viewed as likely to make an ambiguous target seem more hostile, and good mood was viewed as making everyday activities seem better than would normally be the case.

Even more importantly, it appears that people do view at least some stimuli as likely to bring about contrast rather than assimilation effects. That is, respondents believed that both being in the location of one's dream vacation ($M = -1.57$; Student's $t = 2.98, p < .007$) and seeing a group of very attractive people ($M = -1.74; t = 3.83, p < .001$) would lead to significant contrast effects on judgments of average targets. That is, people rated the effect of these contexts as moving their judgments away from the context.

Thus, it seems possible to construct situations such that people perceive contrast effects to be the natural consequence of the context. That is, this research has demonstrated for the first time that individuals hold naive theories of both assimilation and contrast as the effects of contexts on target ratings. This implies that contrast might occur in the absence of correction processes, and more importantly that
corrections brought to bear on these judgments might be in a direction opposed to contrast rather than toward it. Of course, simply showing that participants believe that some contexts lead to contrast effects does not show that people know how to correct for such contextual effects.

Instead, it could be that all attempts to make corrections for contexts result in "subtracting out" primed elements of the context and one's reaction to it. If this set/reset approach is an accurate representation of the corrections for contexts that people actually make, then presenting people with one of the "contrast" contexts from the theory-identification study and inducing them to correct for this context should lead them to adjust target ratings away from the context thereby creating more pronounced contrast. It might be, however, that if people are aware that contrast might be the "uncorrected" effect of a context, they could correct their judgments by moving them back toward the context. Such corrections would provide evidence for a model of correction that is more flexible than the "subtraction of overlap" models.\(^\text{10}\)

I expected that people induced to correct for a context they believed would create a contrast effect would correct for that context by adjusting their ratings of the target toward the context. In order to show that people can correct toward the context rather than away from it, I explicitly asked research participants in some conditions of Correction Study 1 to attempt to keep contextual stimuli from influencing their judgments. Whereas past studies investigating correction processes have used stimuli that would be expected to produce assimilation in the absence of correction processes,
I used stimuli that would be expected to produce contrast in the absence of correction processes.

**Corrections when Contrast is the Perceived Default Bias: Correction Study 1**

In Correction Study 1, the context consisted of either five very popular and exciting vacation locations (i.e., the Extreme Positive context -- an operationalization of the dream vacation context described in the theory-identification study) or a set of neutral American cities (Neutral context). After rating the set of context locations, research participants either immediately rated two neutral target locations (No-correction or "default" condition) or were asked not to let their perceptions of the initial locations influence their perceptions of the targets (Correction condition). In accordance with past research, it was expected that an extreme positive context with no instruction to correct would lead to less positive ratings of the target location than would the neutral context (i.e., a contrast effect). Because respondents acknowledged that such contexts would lead to contrast effects in the theory-identification study, I expected that asking people to avoid being influenced by the context would lead to a decrease in the contrast effect when compared with the default no-instruction condition (i.e., participants would correct their judgments by adjusting their ratings toward the context). If, however, corrections for context always occur through processes in which judges subtract out their reactions to the context (e.g., Martin, 1986), then asking people who encounter an extreme context to avoid being influenced by their perceptions of the initial locations should either result in
adjustments in judgments away from the context (if any overlap is perceived between reactions to the context and reactions to the target) or in no adjustments (if no overlap is perceived).

Method

Subjects and Design

Eighty-six undergraduate psychology students at Ohio State University participated in the study in partial fulfillment of a class requirement. Participants were randomly assigned to the 2 (Context: Extremely Positive, Neutral) by 2 (Instruction: Correction, None) between-subjects design.

Procedure

Subjects participated in groups ranging from 2 to 8 people. The first page of a packet of experimental materials contained all the items for the present study. At the top of the page, a set of instructions informed participants that the experimenter was interested in people's perceptions of many locations. Participants were asked to imagine that they were given the opportunity to take a two-week vacation during the next fall, and were asked to rate how much they would like to spend the two weeks in each of the locations listed. Ratings were made on an 11-point scale (1 = "like very much" to 11 = "dislike very much"). After completing the experimental materials, participants were thanked, debriefed, and dismissed.
Independent Variables

Context manipulation and target locations. Research participants began by rating their liking for five locations that formed the context manipulation. These contexts were either very desirable and popular vacation spots (i.e., Hawaii, Paris, the Bahamas, San Francisco, and Jamaica -- the Extremely Positive condition) or relatively neutral American cities (i.e., Minneapolis, Houston, St. Louis, Pittsburgh, and Atlanta -- the Neutral condition). The two target locations that followed the contextual locations were also neutral American cities (i.e., Indianapolis and Kansas City).

Instruction manipulation. Participants either rated the five context locations and then the two target locations, or they rated the five context locations and then were asked to "please try to make sure your ratings of the following locations are not influenced by your perceptions of the locations you just rated." The two target items at the bottom of the page actually formed the end of the experimental materials for this study (for copies of the materials, see Appendix B).

Results and Discussion

Participants' ratings of context and target locations were reverse scored so that higher ratings corresponded to greater liking of the rated locations. Ratings of the five context locations were averaged to form a manipulation check on context. A 2 (Context) by 2 (Instruction) ANOVA showed that context was manipulated
successfully. The extreme positive context ($M = 9.69$) was seen more positively than the neutral context ($M = 6.69$), $F(1, 82) = 87.3, p < .0001$.

Ratings of the two target locations were averaged to form the primary dependent measure. On these ratings, there was only a significant Context X Instruction interaction, $F(1, 82) = 4.55, p < .04$ (see Figure 3). When no instruction was given, the targets were viewed more positively by research participants who received the neutral context ($M = 6.10$) than by participants who received the extreme positive context ($M = 4.85$), $F(1, 82) = 4.13, p < .05$ (a contrast effect). When participants were asked not to be influenced by perceptions of the contextual locations, however, there was no significant difference in ratings of the target between the neutral and positive context groups ($Ms = 5.87$ and 6.50 respectively). In fact, the difference in means was actually in the direction of an assimilation effect. Importantly, the presence of the correction instruction led participants who had received an extreme context to rate the target locations significantly more positively compared to those who were not so instructed, $F(1, 82) = 7.02, p < .01$. That is, people corrected by rating the targets as more similar to the extreme positive context. Participants who received the neutral context showed no correction ($F < 1$).
Figure 3: Correction Study 1 -- Liking of Targets as a Function of Context and Correction Instruction
The results of this study indicate that people do not always make corrections by moving their judgments away from their reactions to the context. Whereas past studies of context effects have shown corrections leading to judgments of targets as less similar to the context (e.g., Martin, 1986; Martin et al., 1990; Schwarz & Clore, 1983), the current study shows correction processes leading to judgments of targets as more similar to the context. Presumably, if participants in the current study had believed that holding positive views of the extreme contextual locations would bias them toward too positive a view of the target locations, their corrections would have been in the direction of further contrast. Instead, asking participants to correct for any influence of the contextual stimuli actually decreased (and non-significantly reversed) the contrast effect observed in the no-instruction conditions.

One might argue, however, that the contrast and correction effects observed in Correction Study 1 might be effects of response language rather than contrast and correction per se. That is, if participants used the extremely positive contextual items (e.g., Hawaii) to define the endpoint of the response scale (i.e., "like very much"), the meaning of this endpoint might have been more positive than in the neutral context conditions. If the scale was expanded in a positive direction when the context was very positive, then ratings of the target stimuli might be lower than in neutral conditions because of the expanded range of possible responses considered by respondents (see Ostrom & Upshaw, 1968). When correction instructions were given, however, participants might have taken such instructions to mean that the contextual stimuli should not be used in defining the scale endpoints. Thus,
participants might have reverted to their "default" notions of what the scales meant yielding the "corrected" ratings of the target cities. If this explanation were true, then participants did not correct their perceptions of the target cities, but simply adjusted the end anchors of the rating scale.

There are a number of reasons to believe that the results of Correction Study 1 are not due to changes in scale definition, however. For instance, this explanation assumes that respondents' "default" conceptions of positive vacation locations does not include locations as desirable as Hawaii, San Francisco, or the Bahamas or that the positive context conditions led participants to consider even more extremely positive destinations. It seems unlikely that locations as desirable as Hawaii or San Francisco would not come to mind within the category of "desirable vacation spots" when the response language explanation calls for "default" conceptions of positive vacation locations to define the end anchor. Furthermore, given the high desirability of the positive locations employed, it seems unlikely that participants would generate even more positive locations to anchor the scale.

In addition, if such locations are not brought to participants' minds as positive vacation locations, those locations that do come to mind must be significantly less positive than the positive locations we used in the present experiment. If not, then the shifts in ratings between the "no correction" and "correction" conditions would not take place. In addition, if respondents in the positive context condition are redefining the scale under the correction conditions, they must do so such that any items similar in extremity to those they just rated could not fit on the scale. That is, if any more
locations appear that are as positive as those they just rated, these locations are more positive than any point on the scale as they have redefined it. Because respondents could not tell that the two target items were the end of the experimental materials (i.e., additional pages of unrelated materials followed the target ratings), redefinition of the scale in this way seems unlikely.

Despite its implausibility, the possibility exists that the effects observed in Correction Study 1 are at least partially due to redefinitions of the positive response scale endpoint. A second correction study directly addresses this possibility. If the contrast effects and corrections in Correction Study 1 were due to changes in the meaning of response scale endpoints, then asking people not to be influenced by perceptions of initial locations should produce little or no difference in target ratings if the response scale endpoints were not redefined. That is, if scale endpoints include a specific referent that does not change across conditions, then corrections due to changes in scale meaning should be minimized. Past attempts at distinguishing between response language and actual perceptual changes have generally attempted to use scales that are less likely to be redefined because of the existence of an external reference point -- such as measuring distance in inches (Krantz & Campbell, 1961) or weight in ounces (Harvey & Campbell, 1963) rather than using the more subjective terms of "short/long" or "light/heavy" (see also Manis, Biernat, & Nelson, 1991). Because liking has no "concrete" external counterpart to physical measures, I used a different means to achieve a similar conceptual purpose. Rather than relying on an objective reference point to remain relatively constant across conditions, I employed
an explicitly defined subjective reference point that remained constant across conditions. That is, in some conditions of the following experiment, the response scale endpoints were labeled as representing participants' perception of a specific pair of extreme exemplars on the dimension of judgment.

Testing the Response Language Alternative: Correction Study 2

Proponents of a response language interpretation of Correction Study 1 would contend that, in the extreme positive context conditions, the label "like very much" was redefined as less positive in the correction than in the no correction conditions. If the scale endpoint is defined by direct reference to perceptions of a location or pair of locations, however, and if those locations remain constant even when correction instructions are given, then little or no redefinition of the scale should take place.

In Correction Study 2, all participants received the positive contextual items from Correction Study 1. The scale anchors were either the same anchors used in the first correction study (Abstract condition) or included reference to perceptions of a pair of specific locations (Specific condition). Respondents either rated the target locations immediately following the contextual locations or received the correction instructions from Correction Study 1 before rating the targets. Thus, research participants were randomly assigned to a 2 (Instruction: None, Correction) by 2 (Scale Anchor: Abstract, Specific) between-subjects design.

The response language alternative predicts that the correction observed in Correction Study 1 would be replicated in the Abstract condition of the present study.
In the Specific condition, however, either no effect or a lessened effect of the correction factor would be expected. Thus, the response language alternative predicts an interaction of the Instruction and Scale Anchor factors. Because I believed that the results of Correction Study 1 were not due to scale redefinition, I predicted that the effect of the correction instructions observed in Correction Study 1 would be replicated in both the Abstract and Specific conditions. This would lead to a main effect of the Instruction factor, with no Instruction X Scale Anchor interaction.

**Method**

**Subjects and Design**

Eighty undergraduate psychology students at Ohio State University participated in the study in partial fulfillment of a class requirement. Research participants were randomly assigned to the 2 (Instruction: Correction, None) by 2 (Scale Anchor: Abstract, Specific) between-subjects design.

**Procedure and Independent Variables**

Subjects participated in groups ranging from 2 to 5 people. The procedure, correction instructions, and locations to be rated were identical to those used in Correction Study 1. The only difference was in the labeling of the scale anchors of the response scale. In the Abstract condition, the scale anchors were identical to those in Correction Study 1. In the Specific condition, however, participants rated
each location on a scale anchored at 1 = "like as much as staying in Hawaii or Paris for two weeks (like very much)" and 11 = "dislike as much as staying in Cambodia or Iran for two weeks (dislike very much)." This scale remained constant across the Instruction conditions. Thus, although correction instructions asked research participants not to let the context items influence their ratings of the targets, the meaning of the positive endpoint of the scale still explicitly referred to the level of liking associated with Hawaii and Paris, and the negative endpoint was similarly anchored in specific locations. After completing the experimental materials, participants were thanked, debriefed, and dismissed (for copies of the materials, see Appendix C).

Results and Discussion

Ratings of context and target locations were reverse scored so that higher ratings corresponded to greater liking of the rated locations. Ratings of the five context locations were averaged to form a check on perceptions of the context. A 2 (Instruction) by 2 (Scale Anchor) ANOVA showed that context was unaffected by these manipulations (all Es < 1). The contextual locations were liked to an extent similar to that in Correction Study 1 (M = 9.40).

Ratings of the two target locations were averaged to form the primary dependent measure. On these ratings, there was only a significant main effect of Instruction, F(1, 76) = 9.22, p < .003. That is, regardless of whether the scale endpoints included reference to particular locations, the target items were rated more
positively after correction instructions (M = 6.09) than when no instruction was given (M = 4.81). There was no Instruction X Scale Anchor interaction, F < 1. This replicates the correction effect of Correction Study 1 and shows that the same correction effect is obtained even if scale anchors are used that are unlikely to be redefined by participants. Thus, it appears that the correction effects in Correction Study 1 were not solely due to redefinitions of the response scale.11

Although response language effects do not appear to account for the corrections observed in Correction Studies 1 and 2, asking participants not to be influenced by their perceptions of the initial locations basically told them that the locations were capable of affecting their later ratings. It is possible that such explicit instructions could create some of the differences between the outcomes of the present studies and those of past context-effect correction research. Perhaps the blatant correction instructions activate processes that are not usually active or that are unlikely to occur with more natural instigations of correction processes. For instance, without the explicit instructions, respondents might not consider that perceptions of the initial locations could affect later ratings. If this is the case, research participants encountering the same judgment situation without such an explicit instruction to correct might not adjust their ratings at all, or might adjust their ratings in the direction found by past context-effect research -- in the direction of further contrast.

Past research has often used more subtle means of cuing correction processes than simply asking people to correct. For example, Schwarz and Clore (1983) merely asked respondents about the weather without telling them that the weather could have
influenced judgments of life satisfaction. In the Martin (1986) studies, making participants believe that they were finished with the contextual rating task brought about corrections. Similarly, asking target questions in a way that makes them appear to be asking for different information (Strack, Martin, & Schwarz, 1988) can bring about corrections in judgment. In Correction Study 3, a variant of these procedures was used to explore the ability of subtle manipulations to elicit correction for contrast. That is, in the following experiment, either no labeling of the target ratings was provided (no correction condition), or targets were labeled as the "next group" of ratings (without revealing any possible influence of the contextual ratings on the targets). This label informed participants that the first set of context ratings was finished and that the "second" set was now to be completed. If more subtle procedures are capable of bringing about corrections for contrast, then these very subtle cues that the target ratings are different from the context ratings might instigate corrections in the same direction as the explicit correction instructions used in Correction Studies 1 and 2.

Prompting Correction for Perceived Contrast using Subtle Means: Correction Study 3

The experimental materials and study design were identical to those used in Correction Study 1 with a few notable exceptions. First, because the focus of this study was on investigating the ability of very subtle cues to induce correction processes in this study, I attempted to increase the salience of the initial contextual
locations. This was accomplished by having respondents write the first characteristic of each location that came to mind on a line below the rating scale for that location. Second, in addition to the default condition where no cue or instruction was provided, there were two correction cue conditions in which some form of differentiation between target items and the contextual items was possible. Unlike Correction Studies 1 and 2, neither correction cue condition mentioned any potential influence of the contextual locations on perceptions of the target locations. Rather, some subtle or more blatant distinction between the contextual items and target items was made (see procedure below). In previous research (e.g., Martin, 1986) distinctions between context and target items have led research participants to correct for the context by displacing judgments away from the evaluative implications of the context. As noted above, however, previous studies have used contextual stimuli that ordinarily induce assimilation effects on judgments. The primary goal of the current experiment was to examine the nature of the correction induced when contextual stimuli that ordinarily induce contrast are employed along with subtle correction cues. Based on the results of the previous experiments and on the flexible correction model, it was expected that the correction cues would again lead to corrections in the direction toward rather than away from the context.
Method

Subjects and Design

One hundred seventy-two undergraduate psychology students at Ohio State University participated in the study in partial fulfillment of a class requirement. Participants were randomly assigned to a 2 (Context: Extremely Positive, Neutral) by 3 (Correction Cue: No Cue, Subtle Cue, Blatant Cue) between-subjects design.

Procedure

Subjects participated in groups ranging from 2 to 12 people. The same contextual locations, initial instructions, and rating scale (1 = "like very much" to 11 = "dislike very much") were used as in Correction Study 1. Experimental materials were presented on two pages, however. The contextual items were presented on the first page and the target items were presented on the next page. Upon completion of the experimental booklet, participants were debriefed, thanked, and dismissed.

Independent Variables

Context manipulation and target locations. As in Correction Study 1, in the extreme positive context conditions, participants rated five very desirable vacation destinations (e.g., Hawaii). In addition, after each rating, they listed the first characteristic that came to mind about that location. In the neutral context conditions,
they rated five neutral American cities (e.g., Minneapolis) and listed the first characteristic that came to mind.

In addition to the two targets used in Correction Study 1 (i.e., Indianapolis and Kansas City), the midwestern cities of Green Bay and Des Moines were included as targets. It was thought that using a larger number of target items would facilitate the perception that the second page contained a new and independent task in the correction conditions.12

Correction cue manipulation. In the No Correction Cue condition, the contextual ratings were followed immediately by four target locations on the following page. In this condition, it appeared that there was only one rating task consisting of nine items. In the Subtle Correction Cue condition, the top of the second page of ratings simply stated that for the "next group" of ratings there were "more vacation spots to consider." This vacuous instruction formed a sort of minimum baseline for correction in that the target locations were set aside as a "next group" but were a part of the same questionnaire from the same experimenter and were not labelled as different from the contextual locations. This was a very subtle way of "ending" the first task --a procedure found in past research to induce correction processes (see Martin, 1986). In the Blatant Correction Cue condition, the target locations again formed the "next group" of ratings but also were labelled as "a group of midwestern cities whose characteristics are quite different from the vacation spots just rated." Also, in this condition, the target ratings were numbered from 1 to 4 as though a new set of ratings was beginning (for copies of the materials, see Appendix D).
Results and Discussion

Ratings of the contextual and target locations were reverse scored so that higher ratings corresponded to greater liking of the rated locations. Ratings of the five context locations were averaged to form a manipulation check on context. A 2 (Context) by 3 (Correction Cue) ANOVA showed that context was manipulated successfully. The extreme positive context \((M = 9.52)\) was seen more positively than the neutral context \((M = 6.36)\), \(F(1, 166) = 198.0, p < .0001\). These means were very similar to those obtained in Correction Study 1. There was also a significant Context X Correction Cue interaction, \(F(1, 166) = 4.10, p < .02\). Thus, it appears that random assignment of participants to Correction Cue conditions was not successful in equating initial perceptions of the contextual locations. In order to statistically control for this, the data set was split into two groups (Neutral and Extreme Positive Context) and adjusted values of the target ratings were obtained from separate analyses of covariance (ANCOVAs) using ratings of the contextual locations as a covariate. These adjusted values were then submitted to the 2 (Context) X 3 (Correction Cue) ANOVA reported below.\(^{13}\)

Ratings of the four target locations were averaged to form an overall index of target liking. On this index, there was a main effect of Context, such that the target was seen more positively when preceded by a neutral context \((M = 5.51)\) than by an extreme positive context \((M = 4.39)\), \(F(1, 166) = 122, p < .0001\) -- a contrast effect in judgment; see Figure 4). In addition, there was a main effect of Correction Cue such that targets were viewed more positively in the subtle cue condition \((M = \)
5.18) than in either the blatant cue (M = 4.91; p < .03) or no cue (M = 4.77; p < .001) conditions. More importantly, the overall contrast effect was qualified by the expected Context X Correction Cue interaction, $F(2, 166) = 21.5, p < .0001$.

![Figure 4: Correction Study 3 -- Liking of Targets as a Function of Context and Correction Cue](image)
Separate 2 X 2 analyses were used to determine whether the subtle and blatant cues were each effective in bringing about corrections (as compared with the no correction cue conditions). When a subtle cue was given, a significant Context X Correction Cue interaction was obtained, $F(1, 111) = 13.2, p < .0004$. Whereas the subtle correction cue produced no changes in the ratings of targets following a neutral context ($p > .8$), the subtle cue produced a significant increase in the positivity of target ratings following the extreme positive context ($p < .0001$). That is, following the subtle cue, judgments of targets within an extreme context were significantly adjusted toward the context. This provides a conceptual replication of the results of Correction Studies 1 and 2.

When a blatant cue was given, the results are quite similar. Once again, a significant Context X Correction Cue interaction was observed, $F(1, 109) = 42.1, p < .0001$. The blatant cue produced a significant increase in the positivity of target ratings following the extreme context ($p < .0001$). That is, judgments of targets within an extreme positive context were significantly adjusted toward the context, again replicating Correction Studies 1 and 2. In addition, the blatant cue produced a significant decrease in the positivity of target ratings following the neutral context ($p < .0002$). This might have occurred because of the statement that the target locations were "quite different" from the contextual locations that had just been rated. Ratings of the target locations were slightly less positive than those of the neutral contextual locations in the No Cue conditions. It might be that the wording of the
blatant cue served to accentuate the initial differences between the target and neutral context locations.

In sum, this study showed that a significant correction toward the context is obtained even when cues to elicit such corrections are quite subtle. Because of this, it seems unlikely that the explicit nature of the requests for correction in Correction Studies 1 and 2 were activating processes that were unnatural or somehow unlike corrections instigated by the more subtle procedures used in prior studies. Rather, significant correction for contextual contrast effects seems to be triggered just as easily -- even by subtle cues -- as is the correction for assimilation effects observed in prior research (e.g., Martin, 1986; Martin et al., 1990).

Summary

The current research suggests that corrections for context effects are more flexible than accepted models propose. That is, perceptions of a target or group of targets might be adjusted to be either more or less like the context depending on whether the context is viewed as making assimilation or contrast more likely. Studies that have used contexts likely to create assimilation effects in "uncorrected" perceptions (e.g., Martin, 1986; Martin et al., 1990; Schwarz & Clore, 1983) have found correction processes to produce target ratings displaced away from the context (i.e., away from assimilation and toward contrast). In Theory-Identification Study 1, the notion was validated that people are aware that some pairings of contexts and targets naturally lead to assimilation bias, but other pairings naturally lead to contrast
bias. In Correction Studies 1, 2, and 3, a "contrastive" context was used and a contrast effect was produced when participants' judgments were "uncorrected." Importantly, both explicit instructions to correct for the context and more subtle correction cues led research participants to adjust their ratings back toward the context (i.e., away from contrast and toward assimilation). This direction of correction is not predicted by the dominant "overlap" models of bias correction.
CHAPTER III

TESTS OF THE FLEXIBLE CORRECTION MODEL: OPPOSITE CORRECTIONS FOR OPPOSITE THEORIES OF BIAS

To this point, no research has reported opposite corrections associated with perceivers' naive theories of bias. That is, it has not been demonstrated that for some tasks or individuals, theory-based corrections can result in judgments that are displaced away from the context, but for other tasks or individuals, opposite theories dispose corrections to result in displacements toward the context. This is important because, according to the Flexible Correction Model, corrections guided by judges' naive theories of bias go in opposite directions to the extent that the judges' theories of bias denote opposite biases. This would even occur if different people have different theories about the same context (e.g., if one person thinks that blatant primes make target judgments more like the prime, but another person thinks that the blatant prime makes judgments less like the prime). Opposite correction would also occur if a person has different theories about how a given context influences judgments for different targets (e.g., if a person believes that an extreme blatant prime makes judgments about one target less like the prime, but believes that the same prime makes judgments of another target more evaluatively consistent with the primed evaluation). Although some models of assimilation and contrast predict that
different effects on target judgment might occur for the same context (e.g., for some targets, the context might be "included" in the representation of the target which leads to assimilation, but the same context might be "excluded" from the representation of another target, which leads to contrast; Schwarz & Bless, 1992), only a theory of correction based on judges' naive theories of bias predicts different corrections (i.e., away from and closer to the context) when the same context is believed by judges to have different biasing effects. Opposite corrections for the effects of the same context on different targets would present a problem for models of correction based on partialling or subtraction. This is because contextually-activated reactions (that are subtracted in order to correct assessments of targets within those models) are the same for each set of targets.

In order to examine the viability of the critical opposite-correction outcome derived from the FCM, the first step was to identify contexts and judgments for which people possess opposite theories of how the same context influences judgments about different targets. This was done in Theory-Identification Study 2. Then, in Correction Studies 4 and 5, the FCM prediction that opposite theories of bias produce opposite corrections was tested. Opposite corrections should not only occur for perceived effects of the same context on different targets, however. Opposite theory-based corrections should also be possible if people believe that different contexts create opposite biases on the same target. Thus, a target was identified in Theory-Identification Study 3 for which different contexts were believed by respondents to
create different default effects. Correction Study 6 tested the hypothesis of opposite corrections.

**Opposite Theories of Bias for Effects of the Same Context on Different Targets:**

**Theory-Identification Study 2**

Do people possess theories that the same context can have differing influences (in this case, assimilation versus contrast) on ratings of different targets, or do people tend to believe that a given context will have basically the same influence on all judgments? People might believe that contexts generally have one effect on judgments (i.e., that there are "assimilation contexts" and "contrast contexts"). On the other hand, people could believe that a given context has one default (i.e., uncorrected) effect on judgments of target X, but has another default effect on judgments of target Y. If one could identify specific combinations of contexts and targets for which people believe that uncorrected contrast versus uncorrected assimilation effects are likely, then such combinations could be used to determine whether people flexibly correct for these influences. That is, one could determine whether people make corrections aimed at removing perceived biases according to the differing naive theories about the biasing effect the context has on the judgments. In order to identify possible contexts for which assimilation and contrast theories exist for different targets, I presented research participants with descriptions of various contexts and judgment targets and asked them what the natural (i.e., uncorrected) effect of these contexts would be on people’s target ratings.
Method

Subjects and Procedure

Two sets of respondents (each consisting of 31 undergraduate psychology students at Ohio State University) participated in partial fulfillment of a class requirement. The first set of participants received a questionnaire describing a context and judgment to be made. Then, the context was repeated with a second judgment. The second set of participants received a questionnaire describing two contexts, each paired with two different judgments. For both sets, instructions explained that contexts can sometimes create biases in people's judgments and that the experimenter wanted to find out what people thought about how some specific contexts might affect their ratings. Participants were asked to decide what effect they thought that each context would tend to have on people's initial perceptions -- whether it would make people see the target as more favorable or less favorable.

For the first set of participants, the context was imagining the weather in desirable vacation locations. The two judgments were created so that past research led me to expect that theories of contrast might be likely for one judgment (i.e., respondents might be likely to identify contrast as the likely default or "uncorrected" outcome), whereas theories of assimilation might be likely for the other judgment (i.e., respondents might be likely to identify assimilation as the likely default outcome). The contrastive target was adapted from Theory-Identification Study 1. This target rating was of how desirable the weather in midwestern cities such as
Indianapolis would seem. Thus, for this judgment, respondents might believe that thinking about the weather in desirable vacation spots would make the weather in midwestern cities seem worse than would normally be the case (i.e., contrast would be the perceived default outcome). Unlike Theory-Identification Study 1, a target was also designed for which perceptions of default assimilation might be likely. That is, respondents were asked how thinking about the weather in the vacation locations would influence perceptions of how satisfied people are with their jobs in places like Hawaii. Because weather has been associated with life satisfaction in past research (e.g., Schwarz & Clore, 1983), respondents might believe that thinking about the weather in desirable vacation spots would make people’s satisfaction with jobs in those locations seem higher than would normally be the case (i.e., assimilation might be the perceived default outcome).

For the second set of participants, one of the contexts was very similar to the context in set one -- imagining being in desirable vacation locations. The other context was imagining seeing very attractive actresses and models. As in set one, two judgments were created for each context. The two judgments were created so that naive theories of contrast might be likely for one target and naive theories of assimilation might be likely for the other target. The contrastive targets were taken directly from Theory-Identification Study 1 (i.e., ratings of how desirable midwestern cities such as Indianapolis would seem in the context of vacation locations, Dermer et al., 1979; and ratings of the attractiveness of an average-looking woman in the context of attractive models/actresses, c.f., Kenrick & Gutierres, 1980). As in set
one, a target for which respondents' perceptions of default assimilation were more likely was also designed. That is, for the vacation context, respondents were asked how thinking about the vacation qualities of the vacation locations would influence perceptions of how satisfied people are with their jobs in places like Hawaii. For the attractive model/actress context, respondents were asked how seeing the attractive women would influence one's perceptions of a product the women endorsed (c.f., Petty, Cacioppo, & Schumann, 1983).

Ratings of the likely effects of the contexts were tailored to the individual context and target. For the weather context (set 1), participants' perceptions of the hypothesized contrastive judgmental effects of rating the desirability of the weather in vacation spots like Jamaica, the Bahamas, or Hawaii were measured by asking how considering the weather in those places would influence one's perceptions of how desirable the weather would be in midwestern cities like Indianapolis. Responses were made on a scale anchored at "make weather in Indianapolis seem less desirable than if no vacation spots were considered" (-4 on a nine point scale) and "make weather in Indianapolis seem more desirable than if no vacation spots were considered" (+4). The hypothesized assimilative effects of thinking about the vacation weather were measured by asking how thinking about the weather in those vacation locations would influence one's perceptions of how satisfied people are with their jobs in places like Hawaii. Responses were made on a scale anchored at "make satisfaction with jobs seem lower than if weather weren't considered" (-4 on a nine
point scale) and "make satisfaction with jobs seem higher than if weather weren’t considered" (+4). The order of the two judgments in set 1 was counterbalanced.

The wording of the vacation context in set 2 varied only slightly from the vacation weather context in set 1. Respondents' perceptions of the hypothesized contrastive judgmental effects of rating the desirability of vacation spots like Paris, the Bahamas, or Hawaii were measured by asking how considering those places would influence one's perceptions of midwestern cities like Indianapolis. Responses were made on a scale anchored at "make Indianapolis seem less desirable than if no vacation spots were considered" (-4 on a nine point scale) and "make Indianapolis seem more desirable than if no vacation spots were considered" (+4). The hypothesized assimilative effects of thinking about the vacation contexts were measured by asking how thinking about the vacation qualities of those vacation locations would influence one's perceptions of how satisfied people are with their jobs in places like Hawaii. Responses were made on a scale anchored at "make satisfaction with jobs seem lower than if vacation qualities weren’t considered" (-4 on a nine point scale) and "make satisfaction with jobs seem higher than if vacation qualities weren’t considered" (+4).

Perceptions of the hypothesized contrastive effects of seeing a number of actresses and models that are generally rated as very attractive (i.e., Christy Brinkley, Michelle Pfeiffer, and Kim Bassinger) were assessed by asking how seeing the attractive women would influence one's perceptions of an average-looking woman. Responses were made on a scale from "average woman would seem less attractive
than if the attractive women weren't there" (-4) to "average woman would seem more attractive than if the attractive women weren't there" (+4). The possible assimilative effects of seeing a number of actresses and models that are very attractive and then learning that these people endorse a product were assessed by asking how seeing the attractive women would influence one's perceptions of how desirable the product would be. Responses were made on a scale from "make the product seem less desirable than if the women were not attractive" (-4) to "make the product seem more desirable than if the women were not attractive" (+4). In set 2, order of presentation of contexts and targets was contrastive targets for the vacation and attractiveness contexts, and then assimilative targets for the vacation and attractiveness targets for all respondents (for copies of the materials, see Appendix E).

Results and Discussion

Ratings of the perceived judgmental effects of each context were analyzed by testing the difference between the average rating for each context and the zero-point of each scale (i.e., no perceived influence of the context) using the Student's t statistic (each with df = 30). Across both sets, the context-target combinations that were expected to lead to contrastive theories of bias did just that. That is, participants believed that rating the weather in vacation spots like Jamaica, the Bahamas, or Hawaii would make the weather in midwestern cities like Indianapolis seem less desirable (M = -1.55; Student's t = 3.45, p < .002). Also, participants believed that being in locations like Paris, the Bahamas, or Hawaii would make midwestern
cities like Indianapolis seem less desirable ($M = -0.935$; Student's $t = 2.17$, $p < 0.038$) and believed that seeing a group of very attractive actresses/models would make an average-looking person seem less attractive ($M = -1.03; t = 2.96$, $p < 0.006$).

Importantly, the same contexts led to assimilative theories of bias when they were paired with different target judgments. That is, participants believed that thinking about the weather in vacation locations would make people's satisfaction with jobs in locations like Hawaii seem higher ($M = +1.13; \text{Student's } t = 2.68$, $p < 0.012$). Participants also believed that thinking about the vacation qualities of locations like Paris, the Bahamas, or Hawaii would make people's satisfaction with jobs in locations like Hawaii seem higher than if vacation qualities were not considered ($M = +1.13; \text{Student's } t = 3.20$, $p < .003$) and believed that seeing a group of very attractive actresses/models would make a product endorsed by the actresses/models seem more desirable ($M = +0.710; t = 2.06$, $p < .048$).

Thus, it seems possible to construct situations such that people perceive the same context as having a positive effect on some judgment and a negative effect on others. That is, people might perceive contrast and assimilation effects to be the natural consequence of the same context on different respective judgment targets. If the Flexible Correction Model is correct, this implies that different corrections can occur in response to different combinations of the same context with different target items. Flexible corrections that demonstrate this bi-directional flexibility are not derivable from models of correction processes that are not based on the theories of bias possessed by judges. Of course, simply showing that research participants
believe that some context-target combinations lead to contrast effects whereas others lead to assimilation does not ensure that people flexibly correct for such varied contextual effects.

The FCM predicts that people induced to correct for a context they believe would create a contrast effect will correct for that context by adjusting their ratings of the target back toward the context. On the other hand, people induced to correct for a context they believe would create an assimilation effect will correct for that context by adjusting their ratings of the target away from the context. This should occur even though the context is the same context in both cases. In order to examine the hypothesis that people flexibly correct toward or away from the same context depending on the theory of bias associated with the context/target combination, participants in some conditions of Correction Studies 4 and 5 were explicitly asked to attempt to keep contextual stimuli from influencing their judgments of targets.

Opposite Corrections for Opposite Perceived Biases of the Same Context on Different Targets -- Three Initial Tests: Correction Study 4

Correction Study 4 used instantiations of the contexts and targets from Theory-Identification Study 2. By using these context/target combinations, the bi-directional flexibility of corrections was assessed. Correction Study 4 included three sets of flexible correction tests. In each set, research participants judged one of the three contexts from Theory-Identification Study 2. These context ratings were followed by targets that participants in Theory Identification Study 2 believed to be either
assimilated or contrasted to the context. These context and target judgments either took place with no prompt for respondents to consider the context’s potential effects on target judgments, or with a prompt for respondents to try not to let the context influence their ratings of targets (without alerting respondents to what that influence might have been).

Method

Participants and Design

Correction Study 4 included three independent sets of participants. Each set of participants was composed of undergraduate psychology students at Ohio State University participating in the experiment in partial fulfillment of a class requirement, and each set received one of the contexts from the second theory-identification study. Forty-nine participants received the vacation weather context, 63 received the vacation desirability context, and 54 received the attractiveness context. Within each of these groups, participants were randomly assigned to the 2 (Theory of default influence: contrast, assimilation) by 2 (Correction: instruction, none) between-subjects design.

Procedure

Set one subjects participated in groups of 3 to 8 people; subjects in sets two and three participated in classroom sessions of approximately 30 people each. For all participants, the first page of a packet of experimental materials contained all the
items for the experiment (the packets continued by presenting a number of additional
tasks for other unrelated experiments). At the top of the page, a set of instructions
informed participants that the experimenter was "interested in people's perceptions of
a number of things." Participants were asked to "read each of the judgment items
carefully and to respond on the scale following each statement by circling the number
that best represents your perception of the item." The page included three context
items and two target items. After completing the entire experimental packet,
participants were thanked, debriefed, and dismissed.

Independent Variables

Theory of default influence. Research participants began by rating three
statements that formed the context for subsequent judgments. Within each of the
three sets of participants, the same context was used for everyone in the set. For set
one, the context was the desirability of the weather in each of three very desirable
vacation locations (i.e., Jamaica, Hawaii, and the Bahamas). People were asked to
rate the desirability of the weather in Jamaica, Hawaii, and the Bahamas on a scale
anchored at 1 = "not at all desirable" and 9 = "very desirable." Following the three
context items, participants encountered two target items. These items matched the
category of targets believed by participants in the theory-identification study to be
either naturally assimilated or contrasted to the given context. That is, for set one,
the targets corresponding to a contrastive theory of bias were ratings of the
desirability of the weather in neutral midwestern cities (i.e., Indianapolis and Kansas
The target items that corresponded to contrastive theories were rated on the same 1 = "not at all desirable" to 9 = "very desirable" scale. The targets corresponding to an assimilative theory of bias were ratings of how satisfied people in Hawaii and the Bahamas are with their jobs. Ratings of projected satisfaction were made on scales anchored at 1 = "not at all satisfied" and 9 = "very satisfied." For set two, the context was staying two weeks in very desirable vacation spots (i.e., Hawaii, Paris, and the Bahamas). The vacation locations were rated on a scale anchored at 1 = "dislike as much as staying in Cambodia or Iran (dislike very much)" and 9 = "like as much as staying in Hawaii or Paris (like very much)." This "specific" scale was also used for ratings of the target items believed to be naturally contrasted to the context so that changes in meaning of the response scale do not easily account for the adjustments in target ratings across correction conditions (see Correction Study 2). The targets corresponding to a contrastive theory of bias were ratings of how much people would like to stay in neutral midwestern cities (i.e., Indianapolis and Kansas City). The targets corresponding to an assimilative theory of bias were ratings of how satisfied people in Hawaii and the Bahamas are with their jobs. Ratings of projected satisfaction were made on scales anchored at 1 = "not at all satisfied" and 9 = "very satisfied."

For set three, the context was rating the attractiveness of very attractive actresses and models (i.e., Christy Brinkley, Michelle Pfeiffer, and Kim Bassinger), each as identified by previous pre-test respondents. The attractiveness items were rated on a scale anchored at 1 = "as unattractive as Phyllis Diller or Rosanne Arnold
(not at all attractive)" and 9 = "as attractive as Michelle Pfeiffer or Kim Bassinger (very attractive)." For the attractiveness context, the targets believed to be naturally contrasted to the context were two people rated by pre-test participants as rather average in attractiveness (i.e., Hillary Clinton and Tipper Gore). The targets believed to be naturally assimilated to the context were ratings of how desirable two products were likely to be that were endorsed by Michelle Pfeiffer and Kim Bassinger, respectively. Ratings of perceived product quality were made on scales anchored at 1 = "not at all desirable" and 9 = "very desirable."

Correction manipulation. Research participants in all three sets either rated the three context items and then the two targets [no instruction], or they rated the three context items and then were asked to "please try to make sure that your perceptions of the <blank1> do not influence your ratings of <blank2>." Blank 1 was replaced by "weather in the vacation spots above" for set one, by "vacation qualities of those places" for set two, and by "attractiveness of these people" for set three. Blank 2 was also tailored to the context and targets involved. For set one, blank 2 was replaced by "the weather in the following locations" (in contrastive theory conditions) OR "how satisfied people are with their jobs in those locations" (in assimilative theory conditions). For set two, blank 2 was replaced by "the following places" (in contrastive theory conditions) OR "how satisfied people are with their jobs in those locations" (in assimilative theory conditions). For set three, blank 2 became "the attractiveness of the following people" (in contrastive theory conditions) OR "how desirable a product might be if it is endorsed by these people" (in assimilative
Based on the preliminary theory-identification study, participants were expected to believe that rating contexts that were extremely positive objects on the same dimension of judgment as the targets (e.g., rating weather in Hawaii before rating weather in Indianapolis) would bias their default reactions to be less positive than would normally be the case (i.e., would lead to contrast). On the other hand, participants were expected to believe that rating these same context items would bias their default reactions of the targets on different but related dimensions of judgment to be more positive than would normally be the case (i.e., would lead to assimilation). Because of this, for each set of respondents, a Theory X Correction interaction was expected such that correction prompts would lead to less positive target ratings when participants believed context ratings would lead to assimilation, but more positive ratings when participants believed context ratings would lead to contrast in "uncorrected" settings.

Results

For each set, ratings of the two targets were averaged to form the primary dependent measure. These ratings were submitted to a 2 (Theory of default influence: contrast, assimilation) x 2 (Correction: instruction, none) between-subjects ANOVA. As explicated below, within each set of participants (each of whom received a
of contexts and targets), the expected Theory X Correction interaction was obtained.

**Set one: vacation weather context.** Results showed only a significant Theory X Correction interaction, $F(1, 45) = 4.35, p < .043$. Participants' corrected judgments were closer to the context ($M = 5.12$) than when no correction instruction was given ($M = 4.29$) for targets believed to be naturally contrasted; but participants' corrected judgments were farther away from the context ($M = 5.08$) than when no correction instruction was given ($M = 5.71$) for targets believed to be naturally assimilated. Neither of these simple effects reached conventional levels of significance. Ratings of the context were not affected by any of the manipulated factors (all $Fs < 1$).

**Set two: vacation desirability context.** Once again, results showed only the predicted Theory X Correction interaction, $F(1, 59) = 4.12, p < .047$. Participants' corrected judgments were closer to the context ($M = 4.65$) than when no correction instruction was given ($M = 3.76$) for targets believed to be naturally contrasted; but participants' corrected judgments were farther away from the context ($M = 4.26$) than when no correction instruction was given ($M = 5.18$) for targets believed to be naturally assimilated. Neither of these simple effects reached conventional levels of significance. Ratings of the context were not affected by any of the manipulated factors (all $Fs < 1$).

**Set three: attractiveness context.** In this set, results showed that targets believed by participants in the preliminary study to be naturally assimilated to the
positive context were rated more positively ($M = 5.62$) than targets believed to be naturally contrasted to the positive context ($M = 4.28$); $F(1, 50) = 8.38$, $p < .006$. More importantly, there was also a significant Theory X Correction interaction, $F(1, 50) = 6.89$, $p < .012$. Participants' corrected judgments were closer to the context ($M = 5.07$) than when no correction instruction was given ($M = 3.5$) for targets believed to be naturally contrasted; but participants' corrected judgments were farther away from the context ($M = 5.19$) than when no correction instruction was given ($M = 6.07$) for targets believed to be naturally assimilated. Only the correction under the contrastive context was significant ($p < .03$). Ratings of the context were not affected by any of the manipulated factors (all Fs < 1).

Summary of Corrections in Correction Study 4

Across three sets of participants, corrections for the perceived effects of a judgmental context were consistently in a direction opposite to the rated direction of "uncorrected" influence identified by participants in the second theory-identification study. Table 1 displays the directions, Z-scores, directional probabilities (using only the respondents in the conditions associated with the test), and sample size for each of the corrections evident in each set of participants from Correction Study 4. When the corrections for targets identified as naturally assimilated to the context presented (i.e., tests 1, 3, and 5) are combined using the Mullen (1989) basic meta-analysis program, the Z associated with the overall correction for perceived assimilation is -2.20, $p <$
As the sign of the Z-score denotes, the direction of correction is away from the positive context (as predicted). The overall effect sizes for this correction are $r = -0.244$ and $d = -0.502$ (see Rosenthal, 1991). When the corrections for targets identified as naturally contrasted to the context presented (i.e., tests 2, 4, and 6) are combined, the Z associated with the overall correction for perceived contrast is 3.14, $p < .0008$. As the sign of the Z-score denotes, the direction of correction is toward the positive context (as predicted). Overall effect sizes for this correction are $r = 0.367$ and $d = 0.750$. A contrast of the difference in corrections for judgments believed to be assimilated versus contrasted (based on significance levels of the tests) yields a Z of 3.85, $p < .0001$. A contrast of the difference in corrections based on the effect sizes of the corrections yields a Z of 3.78, $p < .0001$ (see Rosenthal, 1991). Although participants were not randomly assigned across the contexts, tests of homogeneity within theory conditions show that participants across the three sets did not act differently from one another. Thus, the three groups of participants in Correction Study 4 show consistent support for the hypothesized pattern of results.
Table 1: Summary of Corrections in Correction Study 4

<table>
<thead>
<tr>
<th>Test (Set, Condition)</th>
<th>Correction Direction</th>
<th>Z for Correction</th>
<th>Directional Probability</th>
<th>Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 (Set 1, Assim. Theory)</td>
<td>Away from context</td>
<td>-1.04</td>
<td>.1497</td>
<td>24</td>
</tr>
<tr>
<td>2 (Set 1, Contr. Theory)</td>
<td>Toward context</td>
<td>2.04</td>
<td>.0206</td>
<td>25</td>
</tr>
<tr>
<td>3 (Set 2, Assim. Theory)</td>
<td>Away from context</td>
<td>-1.41</td>
<td>.0811</td>
<td>29</td>
</tr>
<tr>
<td>4 (Set 2, Contr. Theory)</td>
<td>Toward context</td>
<td>1.41</td>
<td>.0791</td>
<td>34</td>
</tr>
<tr>
<td>5 (Set 3, Assim. Theory)</td>
<td>Away from context</td>
<td>-1.33</td>
<td>.0925</td>
<td>28</td>
</tr>
<tr>
<td>6 (Set 3, Contr. Theory)</td>
<td>Toward context</td>
<td>2.19</td>
<td>.0143</td>
<td>26</td>
</tr>
</tbody>
</table>

Summary of Correction Study 4 results:

- Combined Correction for Assimilation (Tests 1, 3, & 5) - Away from context -2.20 .014
- Combined Correction for Contrast (Tests 2, 4, & 6) - Toward context 3.14 .0008
Discussion

Correction Study 4 provides initial support for the existence of opposite corrections for the same context that correspond to measured theories of how the context would influence target perceptions. That is, when confronted with a context and target for which contrast was the perceived uncorrected impact of the context, prompts to consider the possible impact of the context led to adjustments that moved target ratings closer to the context than when no prompt was present. On the other hand, when confronted with a context and target for which assimilation was the perceived uncorrected impact of the context, prompts to consider the possible impact of the context led to adjustments that moved target ratings farther away from the context than when no prompt was present. These adjustments led to the significant Theory X Correction interactions observed.

The corrections were all in the direction predicted by the Flexible Correction Model, and the corrections toward and away from contrastive and assimilative contexts were significant when combined meta-analytically. Yet, one could gain further confidence in the theory-based correction framework if stronger corrections toward and away from the context were found in one set of research participants randomly assigned to conditions. Given the small number of people in each cell of the previous experiment, it might be that theories of assimilation and contrast were not strong enough to significantly drive corrections for such a small sample of people. Thus, in order to enhance power over the three small sets of people in Correction Study 4, an additional experiment was run. In Correction Study 5, a measure of
participants' initial ratings of the targets (prior to the context induction) was also taken so that there would be a baseline against which to compare the effects of context and correction.

Opposite Corrections for Opposite Perceived Biases of the Same Context on Different Targets -- A Stronger Test: Correction Study 5

Method

Subjects and Design

One hundred eighty-eight undergraduate psychology students at Ohio State University participated in the experiment in partial fulfillment of a class requirement. Participants received experimental packets that were randomly assigned to a 2 (Theory of default influence: contrast, assimilation) by 2 (Correction: instruction, none) by 2 (Context: vacation locations, attractive actresses/models) mixed design with Theory and Correction as between-subject factors and Context as a within-subject factor.

Procedure

Subjects participated in one of four large classroom sessions consisting of approximately 40-50 people per session. Procedures were similar to those used in Correction Study 4, with two exceptions. First, at the beginning of the experimental packet, the same target items as presented in the experimental context were presented
with no context items so that participants' perceptions of the targets could be assessed outside the experimental judgment context (and could thus be used as a baseline against which to compare the effects of the experimental context and participants' corrections for the perceived context effects).

Thus, during the experimental session, participants first completed the target items that they would later complete within a related context. Next, participants completed filler ratings of unrelated targets. The filler ratings took approximately five minutes. Finally, participants rated the context and target items from the vacation context and then from the attractiveness context (the within-subject manipulation of context).

The instructions, context and target items, and measures were identical to those used in the vacation desirability and attractiveness sets from Correction Study 4, with the exceptions noted above (that context was manipulated within-subjects and participants responded to initial target ratings outside the judgmental context, followed by filler items). All of the materials for this study were contained in the first portion of a larger experimental packet. When participants completed the entire packet, they were thanked, debriefed, and dismissed (for copies of the materials, see Appendix G).

Results

Ratings of the two targets that followed the context items were summed, as were the ratings of the same target ratings completed at the beginning of the packet before any judgmental context was introduced. The ratings of the targets presented
outside the judgment context were subtracted from the ratings of the targets inside the judgment context to form the primary dependent measure. Thus, the primary dependent measure indexes the magnitude of the shift in ratings induced by the context and by correction processes. This measure (constructed within each of the contexts) was submitted to a 2 (Theory of default influence: contrast, assimilation) by 2 (Correction: instruction, none) by 2 (Context: vacation, attractiveness) mixed-design analysis of variance (ANOVA) with Theory and Correction as between-subjects factors and Context as a within-subject factor.\(^6\)

Results on the shift-in-target-ratings measure showed the expected Theory \(X\) Correction interaction, \(F(1, 184) = 10.48, p < .0014\) (see Figure 5). For participants who received targets believed to be assimilated, the difference between ratings of context-embedded targets and context-independent targets was less positive when a correction instruction was given (\(M = -.84\)) than when no correction instruction was given (\(M = .37\)); \(p < .039\), one-tailed. However, for participants who received targets believed to be contrasted, the difference between ratings of context-imbedded targets and context-independent targets was more positive when a correction instruction was given (\(M = 1.71\)) than when no correction instruction was given (\(M = -.13\)); \(p < .003\), one-tailed. This interaction was the same for both the vacation and attractiveness contexts (\(F < 1\) for the 3-way interaction). There was also an overall main effect of Theory such that targets believed to be contrasted created more positive shift scores than targets believed to be assimilated.
Figure 5: Correction Study 5 -- Shift in Target Ratings as a Function of Theory of Default Influence and Correction Instruction
Discussion

Correction Study 5 provides consistent evidence supporting the flexible correction notion that people correct in opposite ways for the same context so long as people hold opposite theories about how the context affected their judgments. Correction Study 5 also showed for the first time that these corrections can result in "overcorrection" of targets believed to have been naturally contrasted -- leading to "corrected" assimilation of the targets. That is, shifts in target ratings when correction instructions were present led to shifts in target ratings that became more positive than ratings of the targets outside any context (i.e., the shift score under correction conditions for targets believed to have been contrasted was significantly higher than zero or "accurate correction;" $p < .001$). Perhaps this overcorrection occurred in this case because the contexts alone (i.e., no correction conditions) did not markedly shift target perceptions away from the pre-context ratings participants provided earlier in the session. This might have been due to rating the same targets twice within the experimental setting, although the presence of two ratings did not keep participants from shifting far enough to be captured under correction conditions. It is also possible that the contexts would have had a greater impact on "uncorrected" ratings if a larger number of instantiations of the context had been used (e.g., rating 5 context locations rather than 3).

The results of this study also nicely illustrate that corrections are made for the expected or perceived bias rather than for the actual bias present in the situation. That is, although participants significantly corrected in directions consistent with the
shared theories of bias identified in the second theory-identification study, they did so in a situation where the actual bias created by the contexts was negligible. Especially because of the "overcorrection" and because of the use of "specific" endpoints in target ratings that followed the same dimension as context ratings, the current correction results are not easily accounted for by changes in response language or by models that rely on "ignoring" of contexts in our correction conditions (e.g., Schwarz & Bless, 1992).

In sum, the current results constitute strong evidence of the flexibility of theory-based correction processes that can operate in social judgment settings. The current experiments documented opposite corrections that followed opposing normative theories of how the context influences perceptions of the targets. In addition, people can flexibly hold opposite theories of bias for the same context, and these opposite theories then correspond to the corrections for the context. In Correction Studies 4 and 5, these flexible corrections were consistent across four groups of participants, and across three different contexts.

Although corrections in Correction Studies 4 and 5 presumably represent corrections according to the opposite theories of bias associated with the context/target pairs (as indexed in the theory-identification study), it is possible that the differing corrections were due to the differing targets rather than the differing theories per se. Because target and theory both changed across conditions in Correction Studies 4 and 5, one cannot absolutely conclude that differential corrections are associated with differential theories of bias. Further evidence could be gained for the necessity of
differing theories of bias and for the flexibility of theory-based correction by demonstrating opposite corrections for the effects of different contexts on the same target. That is, if different contexts can be identified that are associated with different theories of bias for the same target, and if opposite corrections are observed consistent with those theories, then differential corrections cannot be the result of different targets rather than different theories.

Opposite Theories of Bias for Effects of Different Contexts on the Same Target:

Theory-Identification Study 3

Although there might be some targets for which one type of theory of bias (and one type of correction) is most likely, there should also be targets for which different contexts are associated with different theories of bias. Theory-Identification Study 3 was designed to test this possibility for a context not yet used in studies of theory-based correction -- ratings of violent as opposed to passive people before violence ratings of ambiguous targets.

Method

Subjects and Procedure

Twelve undergraduate psychology students at Ohio State University participated in partial fulfillment of a class requirement. The participants received a questionnaire describing a context and judgment to be made, and provided their
perception of how the context would affect the judgment. Then, a second context was presented, and perceptions of how that context would affect perceptions of the same target were provided. Instructions explained that a number of kinds of situations have been found to reliably influence people's judgments, but that little work had investigated the extent to which people are aware of the biases that situations create. Participants were asked to provide their best estimate of how each situation would direct people's perceptions of the targets discussed.

For the first estimate of bias, participants responded to the following question:

If you were asked to rate how violent people like George Foreman or Arnold Schwarzenaeger are, how would rating a number of extremely violent people (like Adolf Hitler or Josef Stalin) affect perceptions of George or Arnold?

Responses were made to the root "Would make George and Arnold seem:" on a scale anchored at "less violent than if no violent people were considered" (-4 on a nine point scale) and "more violent than if no violent people were considered" (+4). The second estimate of bias was for a different context but the same ratings of the same targets. That is, participants responded to the following question:

If you were asked to rate how violent people like George Foreman or Arnold Schwarzenaeger are, how would rating a number of extremely non-violent people (like Ghandi or Jesus Christ) affect perceptions of George or Arnold?

Responses were made to the root "Would make George and Arnold seem:" on a scale anchored at "less violent than if non-violent people weren't considered" (-4 on a nine point scale) and "more violent than if non-violent people weren't considered" (+4). The order of these questions was the same for all respondents (for a copy of the materials, see Appendix H).
Results and Discussion

Ratings of the perceived judgmental effects of each context were analyzed by testing the difference between the average rating for each context and the zero-point of the scale (i.e., no perceived influence of the context) using the Student's *t* statistic (each with *df* = 11). Participants believed that rating extremely violent people before rating George Foreman and Arnold Schwarzenaeger would make George and Arnold seem less violent than usual (*M* = -1.92; Student's *t* = -2.82, *p* < .017). Also, participants believed that rating extremely non-violent people before rating George Foreman and Arnold Schwarzenaeger would make George and Arnold seem more violent than usual (*M* = +1.67; Student's *t* = 3.86, *p* < .0027).

Thus, it seems that people can believe that different contexts have different influences on initial perceptions of the same target. It should be possible, therefore, to find opposite corrections of target judgments based on the opposite theories of bias associated with the different judgment contexts. If this is found, then the best explanation for corrections found across the six correction studies would seem to be the theories of bias associated with the corrections. That is, theories of bias would be the only factor associated with corrections in each of the correction studies. Correction Study 6 was designed to test whether opposite corrections take place when opposite theories of bias relate to the same target.
Opposite Corrections for Opposite Perceived Biases of Different Contexts on the
Same Target: Correction Study 6

Method

Subjects and Design

Ninety-four undergraduate psychology students at Ohio State University participated in the experiment in partial fulfillment of a class requirement. Participants received experimental packets that were randomly assigned to a 2 (Theory of default influence: more violent than usual, less violent than usual) by 2 (Correction: instruction, none) between-subjects design.

Procedure

Subjects participated in groups of 2 to 10 people per session. Procedures were similar to those used in Correction Studies 1 and 4. Research participants were told that the following ratings concerned people's perceptions of violence, and that for the following people, the question to be answered was "how violent do you think this person is?" Participants first rated either three extremely violent people (i.e., Adolf Hitler, Josef Stalin, and Saddam Hussein -- a context expected by participants in the theory-identification study to make perceptions of targets less violent than usual) or three extremely non-violent people (i.e., the Pope, Jesus Christ, and Ghandi -- a context
expected by participants in the theory-identification study to make perceptions of targets more violent than usual) on a scale anchored at 1 = "not at all violent" and 10 = "very violent." Then, research participants either immediately rated two target people (i.e., Arnold Schwarzenaeger and George Foreman) on the same scale (No Correction condition), or were first asked not to let perceptions of the next two people be influenced by perceptions of the people they had just rated (Correction Instruction condition). When participants completed the materials, they were thanked, debriefed, and dismissed (for copies of the materials, see Appendix I).

Results

Ratings of the two targets that followed the context items were averaged. This measure was submitted to a 2 (Theory of default influence: more violent than usual, less violent than usual) by 2 (Correction: instruction, none) ANOVA with Theory and Correction as between-subjects factors. Results showed only the expected Theory X Correction interaction, $F(1, 90) = 11.81, p < .0009$ (see Figure 6). For participants who rated the targets in the extremely violent context (and expected that perceptions of targets would be biased toward less violence than usual), target ratings were more violent when a correction instruction was given ($M = 4.98$) than when no correction instruction was given ($M = 3.58$); $p < .027$, one-tailed. However, for participants who rated the targets in the extremely non-violent context (and expected that perceptions of targets would be biased toward more violence than usual), target
ratings were less violent when a correction instruction was given ($M = 3.87$) than when no correction instruction was given ($M = 5.99$); $p < .003$, one-tailed.\textsuperscript{1}8

Figure 6: Correction Study 6 -- Violence of Targets as a Function of Context and Correction Instruction
Correction Study 6 provides consistent evidence supporting the flexible correction view. Across studies, opposite corrections for perceived effects of the same context on different targets (Correction Studies 4 and 5) have now been shown, and opposite corrections for perceived effects of different contexts on the same target (Correction Study 6) have also been found. Thus, theories of bias provide a complete account of the observed corrections whereas assuming that corrections are tied to contexts per se or targets per se cannot account for the corrections.

Correction Study 6 also provides convergent evidence that corrections for perceived contrast can result in "overcorrection" of targets -- leading to "corrected" assimilation of the targets. That is, target ratings were lower than context-independent ratings when correction instructions were present following a low-violence context that was believed to make target ratings more violent than usual (see footnote 18). As in Correction Study 5, this overcorrection occurred when the context had little biasing effect on "uncorrected" ratings of the target. Thus, the results of Correction Study 6 also illustrate that corrections are made for the expected or perceived bias rather than for the actual bias present in the situation.

In sum, the current results constitute strong evidence of the flexibility of theory-based correction processes that can operate. Correction Study 6 documented opposite corrections that followed opposing normative theories of how different contexts influence perceptions of the same targets. In addition, these opposite
corrections were found for a context that had not been used previously in investigations of corrective processes.

Summary

The results in this chapter demonstrate the crucial opposite correction flexibility of the Flexible Correction Model using four different types of contexts. The theory-identification studies show that people can hold opposite theories of bias associated with the effects of the same context on different targets (Theory-Identification Study 2) or associated with the effects of different targets on the same context (Theory Identification Study 3). Correction Studies 4 and 5 show the opposite corrections predicted by theories about effects of the same context on different targets, and Correction Study 6 shows the opposite corrections predicted by theories about effects of different contexts on the same target. In addition, Correction Studies 5 and 6 demonstrate for the first time that corrections for perceived contrast can lead to assimilation of target ratings toward the context.
CHAPTER IV

IDIOGRAPHIC CORRECTIONS PREDICTED BY INDIVIDUALS’ THEORIES OF BIAS

A critic might argue that the crucial idiographic role of theories of bias has not yet been demonstrated. That is, although it is a reasonable assumption, there is no evidence that the participants in the correction studies held the same theories of bias as participants in the theory-identification studies. Therefore, I have not shown that an individual’s theory of how a context has affected his or her perceptions of the target drives corrections for that context. In addition, consideration of an individual’s theory of the biasing effect of a context allows for prediction of the magnitude as well as the direction of a correction. For example, a person who thinks that attractive endorsers of a product have a large biasing impact on judgments of the product should show a larger correction for the attractive endorsers than should a person who thinks that attractive endorsers have a small biasing impact. Because of this, in Correction Study 7, participants’ unique theories of bias were measured, and participants were later exposed to target judgments within conditions encouraging correction of target ratings for perceived context-induced bias. Within this procedure, one could examine whether participants corrected for the magnitude and direction of their own theories of how the context influences target perceptions. If individuals’ theories of bias drive
corrections, then regressing participants' corrected target judgments on their theories of bias should yield a significant negative relationship. That is, the more negative (or less positive) a person's theory of how the context might bias his or her perceptions of the target, the more positive (or less negative) the person's shift in target ratings should be when attempting to correct for the perceived bias. Thus, negative theories of bias should lead to more positive corrections of target ratings than should positive theories of bias (opposite directions of correction as in Correction Studies 4-6).

Furthermore, within valence of theory (e.g., within negative theories) more extreme theories should lead to larger corrections (i.e., adjustment for the perceived magnitude of bias).

Individuals' Corrections Predicted by Individuals' Theories of Bias:

Correction Study 7

Method

Subjects

Forty-four undergraduate psychology students at Ohio State University participated in the study in partial fulfillment of a class requirement. Participants were recruited from a pool of people who had completed pretesting materials 4 to 7 weeks prior to the primary session. During this pretesting, potential participants
completed all of the target items used in the correction portion of the study with no context preceding the target ratings (as in Correction Study 5).

Procedure

Correction Study 7 used a multiple-experiment format in which separate experimenters (one female, one male) administered each portion of the session under the guise of the session containing 3 separate studies. For the "first study," participants received the same measurement of theories of bias as used in the second set of Theory-Identification Study 2 (i.e., the vacation desirability and attractiveness contexts). For example, participants were asked to estimate how thinking about desirable vacation locations (e.g., Paris, the Bahamas, or Hawaii) would influence their perceptions of midwestern cities like Indianapolis. The one-sheet assessment of participants' theories of bias was followed by an additional sheet of assessments of perceived biases unrelated to the theories of bias on the first page. For example, one of these questions asked participants how they thought static (i.e., white noise) on an audiotaped message would affect their view of the message. After participants completed this packet, the female experimenter collected the packets and left the laboratory.

Research participants next engaged in a filler task that was introduced by a new experimenter who entered the room as the first experimenter departed. The filler task was reading and scrutinizing a counterattitudinal persuasive message on the topic of instituting senior comprehensive exams at the participants' university. After
reading the message, participants reported their attitude on the topic, and also reported their perceptions of the desirability of each of the consequences of instituting senior comprehensive exams noted in the arguments as well as the likelihood that each consequence would occur if the exams were implemented. The persuasion task took approximately 10 minutes to complete. In order to enhance participant' perceptions that the new experiment was separate from the first, the print font used in the materials for the filler task was quite different from that used in the theory measurement task.

Finally, when research participants had completed the filler task, the second experimenter gave them one last sheet for a "different study." This sheet contained ratings of one of the context/target combinations used in Correction Studies 1-5. That is, participants received the vacation desirability context with ratings of the desirability of midwestern cities. All of the ratings used the same response scales as in Correction Studies 4 and 5, and were completed with the same correction instructions as used in those studies. The print font used for the correction packet was the same as that for the filler task (which was different than that used for the measure of theories).

When participants had completed the correction sheet, the second experimenter announced that one of the factors that can influence people's ratings on these kinds of tasks is what each person believes is being studied by those materials. The experimenter continued by asking participants to turn over their sheets and to write on the back what they believed was being studied by each of the two tasks he had given
them. When participants completed these activities, they were thanked, debriefed, and dismissed (for copies of the materials, see Appendix J).

Prior to analysis, participants' free responses were coded for suspicion of connections between the theory measurement task and the correction judgment task that used one of the contexts described in the theory measurement task. None of the forty-four research participants noted any relationship between the earlier theory measurement task and the correction judgment task. That is, although a number of people generated some possible connection between the persuasive message (i.e., the "second" study) and the correction judgment task (e.g., looking at persuasion through presentation of external information versus persuasion through a person's own perceptions), no one mentioned any role of the materials or questions presented by the first experimenter in the correction judgment task. In fact, no participants even noted that correction or perceptions of bias had anything to do with the judgment task. Many of the participants simply speculated that the correction judgment task was looking at how average objects are viewed when presented together with desirable objects.

Results and Discussion

As in Correction Study 5, the difference between ratings of the pair of targets following the context and the same ratings completed outside the context (i.e., in the prescreening session several weeks earlier) was computed as an index of each participant's shift in target ratings. Regression analyses were performed to test
whether idiographic theories of bias reported by research participants predict the corrections in which those participants engage when conditions encourage corrections. For this analysis, the shift index was regressed on participants' theories of bias for the context. The regression coefficient for participants' theories indicates the prediction of shifts in target ratings from theories of bias (with the shift index controlling for participants' perceptions of the targets outside the experimental context). If the Flexible Correction Model is correct, then the more a person believed that the context would exert a negative impact on judgments, the more the shift from prescreening to post-context judgment should be positive when attempting to correct for the bias.

Results showed that theories of bias significantly predicted shifts in target ratings ($B = -.592$, $T = -3.57$, $p < .0009$). As predicted, the regression coefficient was negative, indicating that as theories of bias became more negative, shifts in target ratings became more positive. Within this overall analysis, there is evidence of correction for both direction and magnitude of the perceived bias. That is, if the Theory predictor is replaced by a dichotomous variable denoting direction of perceived bias (positive or negative), this variable accounts for significant variance in the positivity of shifts in target ratings ($B = -.752$, $T = -2.77$, $p < .0085$). That is, negative theories of bias lead to more positive shifts in target ratings than do positive theories of bias.

In addition, results showed evidence of participants correcting to a greater extent as theories of bias become more extreme, controlling for the direction of bias. This was tested by "folding the regression line" at the zero point along the theory
variable. That is, for people who reported positive theories of bias (which differed from the normative theory of bias reported by participants in each of the first two theory-identification studies; n = 10), the value of the reported theory was reverse-scored. In addition, the difference between the shift score for each person and the shift score predicted at the intercept of the regression line identified in the analysis reported above (i.e., the value of the shift score predicted by the regression line at a Theory value of zero; intercept = .807) was added to the intercept value.

So, for example, if a person reporting a theory of +1 had a shift value of -1 (i.e., 1.807 below the intercept), then the shift value for the magnitude analysis was .807 + 1.807 or 2.614. Therefore, shift values for participants reporting positive theories of bias were recoded to take on the same difference between the intercept and their original value, but were now on the opposite side of the intercept value. The magnitude analysis of these data included the recoded Theory variable (now representing theory extremity, ranging from 0 to -4), a Direction variable denoting whether the theory was originally positive or negative (in two separate analyses, this variable included 0 theory values in either the positive or negative category), and the interaction between Theory and Direction. Thus, if participants corrected for the perceived magnitude of the bias, this would be evidenced by a negative regression weight for the Theory variable (denoting that as theories become more extreme -- coded as negative -- shifts in ratings become more extremely positive).

Analyses including the "zero" theories in either the positive or negative direction category both support the correction of target ratings for the perceived
magnitude of the bias. That is, the regression weight for the Theory variable is significant and negative in both analyses (βs = -.777 and -.805, respectively, one-tail ps = .02 and .015, respectively). In both analyses, there was no difference in the regression weight for positive as opposed to negative theories (Direction X Theory Extremity interaction Es = 0.0 and 0.01, ps = .98 and .92, respectively). Deleting the "zero" theories also does not significantly change the results above.20

Correction Study 7 provides the first evidence linking individuals’ idiosyncratic theories of bias to those individuals’ corrections for the contexts associated with those perceived biases. These results are consistent with the findings of Correction Studies 1-6 in that direction of the perceived bias accounts for significant variance in corrections (with more negative theories leading to more positive shifts in target ratings). Thus, if one assumes that participants in the previous correction studies possessed theories of bias that were of a similar distribution to those reported by participants in the theory-identification studies, then the results of the correction studies reflect the same idiographic corrections based on theories of bias as shown in the current study. In addition, Correction Study 7 provides the first evidence of idiographic corrections varying in magnitude according to how much people think that a context would bias perceptions of the target.
CHAPTER V
DISCUSSION

Summary of Results

The current set of experiments provides evidence for a variety of flexibilities in corrections of social judgments. The theory-identification studies showed for the first time that people can believe that either assimilation or contrast can be the default impact of contexts (Theory-Identification Study 1), and even showed that people flexibly can possess opposite theories of bias for the same contextual factor influencing different judgmental targets (Theory-Identification Study 2). In addition, Theory-Identification Study 3 showed that people can believe that different contexts can have opposite uncorrected effects on the same judgment targets.

The correction studies contained in this dissertation provide the first empirical evidence of corrections based on judges' naive theories of bias. Across a variety of contexts (i.e., vacation locations, attractive people, desirable weather, and violent/non-violent people), shared theories of bias found in the theory-identification studies predicted corrections when explicit or subtle prompts encouraged corrections of target ratings. In each of six correction studies, corrections occurred in a direction opposite to that predicted by dominant theories of bias correction (i.e., corrections led target ratings toward rather than away from the evaluative implications of the
context). In addition, Correction Studies 5 and 6 provided the first evidence for assimilation effects resulting from theory-based corrections (i.e., "overcorrections") for perceived contrast. Theories of bias also predicted opposite corrections for perceived effects of the same context across different targets (in Correction Studies 4 and 5) and for perceived effects of different contexts on the same target (in Correction Study 6). Finally, Correction Study 7 provided the first evidence of the idiographic nature of theory-based correction processes. That is, in Correction Study 7, the direction and magnitude of participants’ own reported theories of bias predicted their shifts in target ratings. None of these predictions or results were derivable from the currently dominant views of bias correction (i.e., the set/reset and inclusion/exclusion models).²¹

Additional Directions for Research Guided by the Flexible Correction Model

Research guided by the principles of theory-based correction has only just begun. In addition to the flexibilities of correction tested and supported in this dissertation, there remain a variety of features of the flexible correction perspective that await empirical tests. Also, many aspects of the model suggest important new research directions across the numerous areas in which corrections for bias might take place. In the following sections, I discuss the future directions that are suggested by the intricacies of the model and by applications of the model across domains of potential applicability.
Additional Implications of the Model

Although the research reported in this dissertation provides the first evidence of a number of important flexibilities in corrections of social judgments, there are a variety of implications of the Flexible Correction Model that await future research. For example, consider the notion that motivation and ability to identify potential biases constitute conditions separate from motivation and ability to correct. In many cases, factors that impact motivation and ability to identify bias probably also impact motivation and ability to correct. In the current research, for example, when correction instructions were used, the instructions directed people toward a factor that might have influenced target assessments and likely motivated people to remove any biases that were perceived. Likewise, when subtle correction cues were used, those cues likely prompted people to consider the "first group" of ratings as a potentially biasing factor and prompted people to remove any perceived influence. There are a variety of variables that might similarly impact both stages (e.g., both motivation to identify bias and motivation to correct perceived biases). For instance, situations that induce feelings of accountability (Tetlock, 1985), personal responsibility (Martin et al., 1990) or fear of invalidity (Kruglanski & Freund, 1983) might all increase the likelihood that perceivers will attempt to identify potential biases and correct for them. Similarly, individual differences in factors such as need for cognition or fear of invalidity might create differences in the likelihood that people will both identify and correct for perceived biases (c.f., Martin et al., 1990; Thompson et al., 1994). In fact, future research utilizing manipulations or measures of such constructs would
prove useful in more fully understanding the situations in which more naturally occurring events instigate correction processes.

One of the potentially important aspects of the Flexible Correction Model, however, is that motivation and ability to identify sources of potential bias might be quite distinct from motivation and ability to correct for perceived biases. That is, although many variables might influence both stages, there might be a class of variables that has effects at one stage rather than the other. One such factor is the perceived legitimacy of the bias. That is, even if a bias is detected, there might be some instances or some people for which the bias seems legitimate in its influence.

Consider, for example, the results of the Golding et al. (1990) experiment discussed earlier. In that experiment, information about a target person had no impact on impressions of the person when the information was later labelled as incorrect, but it had an impact when it was later labelled as confidential. It is possible that research participants believed that implications of confidential information for judgment were legitimate because they were valid and relevant to making accurate judgments of the target person (even though participants were asked not to use the information). In the case of false information, however, any implications of that information were not legitimately attributed to the target person, and because of this, judges were motivated to correct their assessments of the target away from the implications of the false information. This reasoning also accounts for cases in which mock jurors continue to use evidence (such as past convictions for a
similar charge) that appears relevant to judgments of probable guilt even though they are instructed to disregard the inadmissible evidence (e.g., Thompson et al., 1981).

One cannot check the legitimacy of a bias unless the potential bias is first identified. Therefore, any factor that influences the perceived legitimacy of a bias can only do so given that people identify the potential bias. Factors that influence perceptions of legitimacy of bias should not create differences if the source of bias is not identified. Thus, perceived legitimacy of bias should have its effects primarily at the correction stage. The concept of legitimacy of bias presents some exciting new directions for future research (e.g., see later sections on stereotyping and courtroom judgment).

Factors might also impact ability to correct without necessarily affecting ability to identify biases. Consider Martin's (1986) manipulations of completion of the priming task. If, as Martin (1986) reasoned, interruption of a task instigates rumination about the task, then the priming task is likely to be at least as salient to people in interrupted as opposed to completed conditions. Thus, ability to identify the priming task as a source of potential bias should be at least as high in interrupted as in completed conditions. According to Martin (1986), however, rumination might make removal of the influence of the primes difficult (perhaps because of the high accessibility of the activated concepts coloring perceptions of the target information to a greater extent). Thus, ability to correct for the bias introduced by the priming task might be affected more by rumination than would ability to identify the source of potential bias.
Another of the directions for future research on theory-based correction is to delineate the various processes by which theory-based corrections might occur. Sometimes correction might be a relatively simple post-judgment adjustment. At times, however, corrections directed by theories of bias might lead a person to seek out information about the target (either stored in his or her memory or in the judgment environment) that supports a judgment opposite to the person's initial "biased" reaction. In such cases, the "magnitude" of the search for additional information might be tied to the perceived magnitude of the bias at work. In fact, a technique of having people "consider the opposite" (Lord, Lepper, & Preston, 1984) or explain how the opposite might have occurred (Anderson, 1982) has been used to decrease biases associated with perseverance of erroneous beliefs. In other circumstances, however, theory-based corrections might proceed through reinterpretation of the information present at the time of the person's initial reaction (i.e., reinterpretation in light of the "biased" nature of the initial outcome). Also, to the extent that a potential bias is noted before target information is encountered, the theory of bias might guide initial scrutiny and information gathering regarding the target (or might guide strategic attempts to avoid biasing factors). Thus, within the class of corrective processes, some corrections might be relatively more effortful or integrative with existing knowledge structures than would others. Such differences might have important implications for the persistence of "corrected" assessments of targets and for the ease with which future attempts at changing the perceptions of targets might be successful. That is, to the extent that corrections involve effortful,
integrative elaboration of the qualities of targets, those corrected perceptions might be more likely to persist over time and resist future attempts at change (see Petty, Priester, & Wegener, 1994; Petty, Haugtvedt, & Smith, in press).

The processes by which various attempts at correction might take place are also relevant to which factors might influence ability to correct as opposed to ability to identify bias. There are certainly some factors (e.g., existence of varied knowledge about the judgment target) that would be necessary for certain corrections to occur, but would be potentially unrelated to whether or not a source of bias can be identified.

Adoption of a theory-based correction perspective also makes issues of theory formation and change particularly important. Some biases and theories about them might be especially stable and long-lived (e.g., biases based on stereotypes of social groups). In the current research, however, measured theories of how a given judgment context might affect target perceptions is likely to be less stable and potentially short-lived, especially as people gain further experience with that type of judgment setting. Therefore, further work in the area of bias-correction is likely to profit from research investigating the factors that influence the generation and subsequent perseverance of theories of bias (see Anderson, 1982; Anderson & Sechler, 1986).
Application of the Flexible Correction Perspective Across the Varied Domains in which Corrections for Perceived Bias Might Take Place

One important asset of the flexible correction perspective is that it goes far beyond the social judgment paradigm used in the present experiments. That is, theories of bias likely exist for many factors that do not fit easily into the judgment paradigm used in much past research on correction processes. When any perceived biasing factor is noted and the true qualities of a target are sought, the correction process driven by theories of bias might proceed in a similar manner even if no rating of the biasing factor takes place (unlike the current experiments in which ratings of the biasing context occurred before ratings of the targets). For example, one factor that at least some people believe can bias their perceptions of a target is noise in the environment when the target is encountered (e.g., see Nisbett & Wilson, 1977). To the extent that this notion becomes salient (i.e., is accessible), people should correct their ratings of the target in a direction opposite to the perceived bias associated with the environmental noise. This should occur even though people's perceptions of the effect of such a factor might be quite inaccurate (see Nisbett & Wilson, 1977). The theory-based flexible correction framework also has potentially important implications for integrating other traditional areas of social psychology that include corrective processes.
Attribution

Just as past tests of context correction effects have used contexts for which assimilation is the natural effect, tests of attributional correction have generally used scenarios for which trait inferences were more natural than situational considerations. As a result, theories of attribution have assumed that dispositional inferences are the default and that corrections lead away from dispositional inferences to take situational constraints into account. This does not preclude, however, that stimuli exist for which a situational attribution would come to mind before any consideration of trait qualities (see Anderson, 1983 for a discussion of differing situations activating differing causal alternatives). Thus, applying the notion of flexible corrections to attribution leads to the differing hypothesis that either situational or dispositional attributions can be the default outcomes, and either situational or dispositional attributions can be the result of effortful corrective processes.

Such possibilities have important implications for data recently reported by Morris (1993). Morris found that Chinese attributors weighted dispositional causes as less important and situational causes as more important than American attributors, and also found that a situational bias extended to attributions for murder in Chinese newspapers whereas a dispositional bias extended to attributions for murder in American newspapers (for similar results using Hindu respondents, see Miller, 1984). Within the view of attribution espoused by Gilbert et al. (1988), this could be because of effortful correction generally taking place for Chinese but not American attributors. According to the Flexible Correction Model, this could be the case; but an alternative
view also comes out of the FCM. That is, according to the FCM, either dispositional or situational attribution could be the default outcome, and either dispositional or situational attribution could be the result of effortful correction processes. Thus, in addition to the view of Chinese attributors as chronically active correctors -- generated from the Gilbert et al. (1988) model, the flexible correction view also suggests that something common to Chinese attributors (e.g., the Chinese culture) might have made situational attributions the default (i.e., "no-correction") outcome that can subsequently be corrected for dispositional influences. This notion should be addressed in future research.

In addition, it is likely that situational, rather than personal, factors could make situational attributions the default. That is, even with American attributors, some settings might encourage situational attributions for behavior, with information about the person only having an impact when attributors are able to effortfully consider the implications of the person’s character. Take, for instance, a target person that is wearing fatigues and a helmet as he runs across a battlefield firing a machine gun. Although it is possible that social perceivers would first infer trait hostility before taking into account the situational constraints of being in a war, it seems more likely that situational explanations might be the first causal alternatives to come to mind, and that these alternatives could then be adjusted in light of subsequent dispositional factors that are considered.

Evidence for such corrections have recently been found by Wegener and Petty (1994). This experiment was designed as the mirror image of the evidence for
attribution corrections presented by Gilbert et al. (1988). That is, in this experiment, research participants heard a verbal description of the violent actions taken by a soldier on a battlefield. Before receiving the description, participants were either told that the person had chosen to disobey an order to cease fire or had obeyed an order to attack. During presentation of the battle description, participants were either asked only to assess the qualities of the situation in which the target had been placed or were asked to assess the qualities of the situation and try to remember as many three-syllable words from the passage as they could. Asking participants to remember the three-syllable words or not varied the cognitive load of the participants. Following the passage, participants were asked to rate the qualities of the situation in which the soldier had been placed on three 9-point scales anchored at 1 = "not at all dangerous, not at all violent, and not at all threatening" and 9 = "very dangerous, very violent, and very threatening," respectively. Ratings were summed to create a composite index of perceived situational violence. Results showed that participants who were distracted by trying to remember words from the passage rated the violence of the situation in which the soldier had been placed as quite violent regardless of whether the person had obeyed or disobeyed the respective order (Ms = 26.10 and 25.87) whereas participants who were not distracted rated the violence of the situation as higher when the person obeyed the order to attack (M = 25.29) than when the person disobeyed the order to cease fire (M = 16.30). The interaction between Distraction and Choice to Obey Orders was highly significant, F (1, 30) = 12.32, p < .0014. Thus, it appears that at least some situations exist in which assessments of situational
qualities are adjusted in light of personal information only when sufficient cognitive resources are available. This evidence is consistent with data presented recently by Krull (1993).

In Krull's (1993) study, all participants watched anxious non-verbal behavior performed by a target person. Replicating past work on corrections for dispositional attributions, when participants were asked to focus on the extent to which the target person was anxious, distracted participants rated the person as more anxious than non-distracted participants and rated the situation as less anxious than non-distracted participants. When participants were asked to focus on the extent to which the situation surrounding the target person was anxious, however, distracted participants rated the situation as more anxious than non-distracted participants and rated the person as less anxious than non-distracted participants. Thus, in the latter conditions, higher levels of cognitive ability were associated with less dispositional attributions of behavior. Because of this, although participants in the Krull (1993) study did not receive any particular dispositional information on which to base their corrections, corrections of perceived default situational attributions might have been responsible for the observed effects.

Additional work in the area of attribution might also benefit from application of the FCM. For example, when people find out that statements presented in the attitude attribution paradigm were elicited under conditions of low choice (i.e., that the target person was assigned which side of the issue to support; e.g., Jones & Harris, 1967), they might engage in corrections that are directed by theories of how
the statements might influence their perceptions of the target's true attitude. When statements are found to be assigned rather than chosen, this might undermine the legitimate use of the statements as a basis for inferring the person's attitude. Unfortunately, people might not realize the extent to which the statements have influenced their perceptions of the person, so corrections for the information might often be incomplete. The role of theories of bias in attitude attribution should receive attention in future research.

Courtroom Judgment

Investigation of the role of theory-based correction in courtroom judgments might proceed in many of the same ways as it has in social judgment. That is, one might identify different types of courtroom evidence for which people hold different theories of how the evidence would influence their perceptions of the defendant. People might even hold different theories about evidence for different kinds of crimes or concerning different classes of defendants. In addition, different people might believe that the same evidence has affected their views of the defendant in different ways. If theory-based correction takes place in such settings, one should find that the differing theories of bias predict different corrections when the evidence is discredited. When evidence is simply ruled inadmissible, one might find that perceived legitimacy of the evidence for making a determination of guilt moderates the presence of theory-based correction. When evidence is viewed as legitimate or acceptable in determining probable guilt of the defendant, theory-based corrections
should be less likely than when the effect of the evidence is viewed as illegitimate or unacceptable.

**Stereotyping**

Perceived legitimacy of bias might also play a crucial role in corrections for biases based on stereotypes of social groups. For example, people who score high versus low on measures of prejudice or racism might be equally aware of the bias contained in the stereotype of a social group (e.g., Devine, 1989), but high scorers might view the bias in the stereotype as more legitimate than low scorers. Because of this, high scoring judges might be unmotivated to correct their judgments away from the implications of stereotypic information even though they know that the information will make particular perceptions of the target more likely than if the information were not presented (i.e., that the information is "biasing").

**Persuasion**

As noted in the examples at the beginning of this dissertation, biases might also be perceived in persuasion situations. These perceived biases might be associated with factors irrelevant to the content of a persuasive appeal (e.g., noise that distracts people from message content, Petty et al., 1976; or mood of the message recipient, Petty et al., 1993) or might be associated with factors related to the message (e.g., characteristics of the source of the message, Petty & Cacioppo, 1986). To the extent
that such biases are perceived, the same kinds of theory-based corrections noted in other areas of research might also take place in the persuasion domain.

To date, no treatments of corrections for perceived biases have appeared in the persuasion literature. In fact, some discussions have included predictions that might run counter to the concept of bias corrections (at least in some instances). For example, Eagly and Chaiken (1993) noted that heuristics influence persuasion only to the extent that they are available and accessible in memory and that "factors that affect the accessibility of heuristics should exert a corresponding effect on the judgmental impact of heuristic cues" (p. 330). That is, heuristics should have a greater impact on attitudes to the extent that the heuristics are accessible to the message recipient. When heuristics are made salient, however, there are at least two possibilities for what will happen. People might use the heuristics more than when the heuristic is not made salient (as Eagly and Chaiken predict). It might be, however, that people would perceive at least some heuristics as introducing unwanted biases into the persuasion setting and thus would attempt to remove the influence of the heuristics. For example, if people are reminded that the source of persuasive information is attractive, this should activate knowledge structures related to attractiveness including the "agree with attractive people" heuristic. I suspect that people might not agree more with attractive sources when such characteristics are made salient, however. Instead, message recipients might attempt to remove any perceived biasing impact of the attractiveness of the source (as long as such impact is
viewed as inappropriate by the message recipient; c.f., Petty, 1994). Such possibilities should be addressed in future research.21

Theory-based corrections might also occur for perceived biases that are not related to judgment heuristics. For example, if people perceive that a factor in the persuasion environment is affecting their reactions to the persuasive appeal (e.g., if environmental noise is viewed as affecting perceptions of the target, Nisbett & Wilson, 1977), they might attempt to correct assessments of the target based on their perceptions of the biasing effect of the environmental factor.

Non-social Biases

Although the examples and discussions in this dissertation have been largely social in nature, the same basic principles of correction might also apply to biases that do not involve the real or imagined presence of others. For example, in some of the early empirical work to support adaptation-level explanations of perceptual contrast, research participants placed their hands in a bucket of cold water followed by a bucket of warm water. Ratings of the temperature of the water in the second bucket showed that the water was perceived as hotter than the actual temperature (see Helson, 1964). If, as in the present experiments, research participants were asked not to allow their estimates of the temperature of the second bucket of water to be influenced by the temperature of the first bucket, then corrections in assessments of the second bucket might be according to theories of how the water in the first bucket might influence perceptions of the water in the second bucket.
Similar processes might also take place in corrections for more cognitive biases. For example, when people make judgments of quantities of which they are uncertain, they are often influenced by recent numbers (i.e., anchors) that they have encountered (e.g., see Tversky & Kahneman, 1974). In such cases, although people generally know that the real judgment is either higher than a low anchor or lower than a high anchor, they might not realize the extent to which exposure to these anchors affects their judgments of the true quantity. Thus, although theory-based adjustments in quantity judgments might take place, the end bias might be at least in part the result of theories of bias that are not sufficiently extreme.

Conclusion

In this dissertation, a view of corrections as guided by perceivers' naive theories of bias (i.e., the Flexible Correction Model) was developed and empirically tested. Across a variety of settings and judgments, predictions made by the FCM (but not derivable from the dominant "overlap" models of correction) were given empirical support. In addition, a variety of new directions for research are generated by more fully investigating aspects of the FCM and by applying FCM principles across the various domains in which corrections for perceived bias might occur. It is my hope that research and theory based on flexible correction notions will help to build a comprehensive and unifying framework within which correction processes in many areas of psychology can be investigated and explained.
APPENDIX A

MATERIALS FOR THEORY-IDENTIFICATION STUDY 1
When people are asked to judge the qualities of an object or person, they often do so in relation to other people or objects that they have recently considered. So, for instance, if someone were asked his or her opinion of a class at OSU, his or her judgments of that class may depend on what other classes he or she has recently been thinking about.

Contexts may sometimes create biases in peoples' judgments such that people rate items differently depending on the context. What we want to find out is what people think about how a context can affect them.

For each context below, decide what effect you think that context would tend to have on peoples' perceptions—that is, would it make people see the target objects as more favorable or less favorable. Please circle the number that best represents how you think the context would affect people's judgments.

1. Imagine being in the location of your dream vacation (a really terrific place). How would being in that fantastic place influence one's perceptions of an ordinary city or location?
   make it seem less pleasant than more pleasant than when not in a fantastic place when not in a fantastic place

2. Imagine being in a good mood because something pleasant just happened or because it is a sunny day. How would being in that pleasant mood influence perceptions of a normal day's events?
   make them seem less pleasant than more pleasant than when not feeling good when not feeling good

3. Imagine being in a room with bright red walls. How would being in that room influence perceptions of a person one just met in that room?
   make the person seem less considerate seem more considerate than not being in the red room than not being in the red room

4. Imagine having just unscrambled a number of sentences that describe hostile actions, and then you read a description of a person who acts in ways that may or may not be hostile. How would unscrambling the hostile sentences influence one's perceptions of the target person?
   make the target seem more hostile seem less hostile than if no sentences were unscrambled than if no sentences were unscrambled

5. Imagine seeing a number of people that are incredibly attractive. How would seeing these attractive people influence one's perceptions of an average-looking person?
   make the person seem less attractive seem more attractive than not seeing the attractive people than not seeing the attractive people
APPENDIX B

MATERIALS FOR CORRECTION STUDY 1
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were Hawaii, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were Paris, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were the Bahamas, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were San Francisco, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were Jamaica, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were Indianapolis, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |

If the location were Kansas City, I would:

| like very much to stay | 1 2 3 4 5 6 7 8 9 10 11 |
| dislike very much to stay | 2 weeks |
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were **Hawaii**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

If the location were **Paris**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

If the location were the **Bahamas**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

If the location were **San Francisco**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

If the location were **Jamaica**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

You have been rating a series of very popular, exciting places. Please try to make sure your ratings of the following places are not influenced by your perceptions of the locations you just rated.

If the location were **Indianapolis**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks

If the location were **Kansas City**, I would:

like very much to stay 1 2 3 4 5 6 7 8 9 10 11
dislike very much to stay two weeks
We are interested in people’s perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were Minneapolis, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Houston, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>

If the location were the St. Louis, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
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<td>two weeks</td>
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</tbody>
</table>

If the location were Pittsburgh, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Atlanta, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Indianapolis, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Kansas City, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1 2 3 4 5 6 7 8 9 10 11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
<tr>
<td>two weeks</td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

<table>
<thead>
<tr>
<th>Location</th>
<th>Like very much to stay</th>
<th>Dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minneapolis</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Houston</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>St. Louis</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Pittsburgh</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Atlanta</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Indianapolis</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Kansas City</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

You have been rating a series of fairly average places. Please try to make sure your ratings of the following places are not influenced by your perceptions of the locations you just rated.

<table>
<thead>
<tr>
<th>Location</th>
<th>Like very much to stay</th>
<th>Dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indianapolis</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
<tr>
<td>Kansas City</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX C

MATERIALS FOR CORRECTION STUDY 2
We are interested in people’s perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were **Hawaii**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were **Paris**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were the **Bahamas**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were **San Francisco**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were **Jamaica**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were **Indianapolis**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*

If the location were **Kansas City**, I would:

*like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks*
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Paris, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

If the location were San Francisco, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Jamaica, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

You have been rating a series of very popular, exciting places. Please try to make sure your ratings of the following places are not influenced by your perceptions of the locations you just rated.

If the location were Indianapolis, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

If the location were Kansas City, I would:

<table>
<thead>
<tr>
<th>Like very much to stay two weeks</th>
<th>Dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

If the location were Hawaii, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were Paris, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were the Bahamas, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were San Francisco, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were Jamaica, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were Indianapolis, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)

If the location were Kansas City, I would:

*like as much* as staying in 1 2 3 4 5 6 7 8 9 10 Hawaii or Paris for two weeks (like very much)
We are interested in people's perceptions of many locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall. For each of the following possible locations, how much would you like to spend the two weeks in that location?

<table>
<thead>
<tr>
<th>Location</th>
<th>Like as much</th>
<th>Dislike as much</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hawaii</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>Paris</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>Bahamas</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>San Francisco</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>Jamaica</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>Indianapolis</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
<tr>
<td>Kansas City</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>11 as staying in Cambodia or Iran for two weeks</td>
</tr>
</tbody>
</table>

You have been rating a series of very popular, exciting places. Please try to make sure your ratings of the following places are not influenced by your perceptions of the locations you just rated.
APPENDIX D

MATERIALS FOR CORRECTION STUDY 3
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 9 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

2. If the location were Paris, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

3. If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

4. If the location were San Francisco, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

5. If the location were Jamaica, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>
6. If the location were **Indianapolis**, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>2 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. If the location were **Kansas City**, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>2 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. If the location were **Green Bay**, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>2 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. If the location were **Des Moines**, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay</td>
<td>2 weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 5 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Minneapolis, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were Pittsburgh, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were St. Louis, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

4. If the location were Milwaukee, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

5. If the location were Houston, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
6. If the location were **Indianapolis**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7. If the location were **Kansas City**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

8. If the location were **Green Bay**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

9. If the location were **Des Moines**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 5 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Minneapolis, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were Pittsburgh, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were St. Louis, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

4. If the location were Milwaukee, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

5. If the location were Houston, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
For the next group of ratings, we have more vacation spots for you to consider.
Continue to rate how much you would like to spend two weeks in the location, and write the first characteristic of that location that comes to mind.

6. If the location were **Indianapolis**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

7. If the location were **Kansas City**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

8. If the location were **Green Bay**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

9. If the location were **Des Moines**, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 9 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Hawaii, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

2. If the location were Paris, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

3. If the location were the Bahamas, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

4. If the location were San Francisco, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

5. If the location were Jamaica, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks
For the next group of ratings, we have more vacation spots for you to consider.
Continue to rate how much you would like to spend two weeks in the location, and write the first characteristic of that location that comes to mind.

6. If the location were Indianapolis, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

7. If the location were Kansas City, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

8. If the location were Green Bay, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>

9. If the location were Des Moines, I would:

<table>
<thead>
<tr>
<th>like very much to stay</th>
<th>dislike very much to stay</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 5 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were Paris, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

4. If the location were San Francisco, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

5. If the location were Jamaica, I would:

<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
</tr>
</thead>
<tbody>
<tr>
<td>dislike very much to stay two weeks</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Now, for the next set of locations, we have a group of midwestern cities whose characteristics are quite different from the vacation spots you just rated.

For this new set of 4 locations, rate how much you would like to spend two weeks in the location, and write the first characteristic of that location that comes to mind.

1. If the location were Indianapolis, I would:

   | like very much to stay two weeks | dislike very much to stay two weeks |
   | 1 2 3 4 5 6 7 8 9 10 11 |

2. If the location were Kansas City, I would:

   | like very much to stay two weeks | dislike very much to stay two weeks |
   | 1 2 3 4 5 6 7 8 9 10 11 |

3. If the location were Green Bay, I would:

   | like very much to stay two weeks | dislike very much to stay two weeks |
   | 1 2 3 4 5 6 7 8 9 10 11 |

4. If the location were Des Moines, I would:

   | like very much to stay two weeks | dislike very much to stay two weeks |
   | 1 2 3 4 5 6 7 8 9 10 11 |
We are interested in people's perceptions of locations. Imagine that you are given the opportunity to take a vacation for two weeks during next fall.

For each of the following 5 possible locations, how much would you like to spend the two weeks in that location? After rating how much you would like to go there, please write the first characteristic of that location that comes to mind.

1. If the location were Minneapolis, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

2. If the location were Pittsburgh, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

3. If the location were St. Louis, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

4. If the location were Milwaukee, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks

5. If the location were Houston, I would:

   like very much to stay 1 2 3 4 5 6 7 8 9 10 11 dislike very much to stay two weeks
Now, for the next set of locations, we have a group of midwestern cities whose characteristics are quite different from the vacation spots you just rated.

For this new set of 4 locations, rate how much you would like to spend two weeks in the location, and write the first characteristic of that location that comes to mind.

1. If the location were **Indianapolis**, I would:
   
<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were **Kansas City**, I would:
   
<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were **Green Bay**, I would:
   
<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>

4. If the location were **Des Moines**, I would:
   
<table>
<thead>
<tr>
<th>like very much to stay two weeks</th>
<th>dislike very much to stay two weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9 10 11</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX E

MATERIALS FOR THEORY-IDENTIFICATION STUDY 2
When people are asked to judge the qualities of an object or person, they often do so in relation to other people or objects that they have recently considered. So, for instance, if someone were asked his or her opinion of a class at OSU, his or her judgments of that class may depend on what other classes he or she has recently been thinking about.

Contexts may sometimes create biases in peoples’ judgments such that people rate items differently depending on the context. What we want to find out is what people think about how a context can affect them.

For each context below, decide what effect you think that context would tend to have on peoples’ perceptions—that is, would it make people see the target objects as more favorable or less favorable. Please circle the number that best represents how you think the context would affect people’s judgments.

1. Imagine the weather in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the weather in these places influence one’s perceptions of how the weather is in midwestern cities like Indianapolis?

make weather in Indianapolis seem less desirable than if no vacation spots were considered

2. Imagine the weather in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the weather in these places influence one’s perceptions of how satisfied people would be with their jobs in places like Hawaii?

make satisfaction with jobs seem lower than if weather weren’t considered
When people are asked to judge the qualities of an object or person, they often do so in relation to other people or objects that they have recently considered. So, for instance, if someone were asked his or her opinion of a class at OSU, his or her judgments of that class may depend on what other classes he or she has recently been thinking about.

Contexts may sometimes create biases in peoples' judgments such that people rate items differently depending on the context. What we want to find out is what people think about how a context can affect them.

For each context below, decide what effect you think that context would tend to have on peoples' perceptions—that is, would it make people see the target objects as more favorable or less favorable. Please circle the number that best represents how you think the context would affect people's judgments.

1. Imagine the weather in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the weather in these places influence one's perceptions of how satisfied people would be with their jobs in places like Hawaii?

make satisfaction with jobs seem lower than if weather weren't considered

2. Imagine the weather in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the weather in these places influence one's perceptions of how the weather is in midwestern cities like Indianapolis?

make weather in Indianapolis seem less desirable than if no vacation spots were considered
When people are asked to judge the qualities of an object or person, they often do so in relation to other people or objects that they have recently considered. So, for instance, if someone were asked his or her opinion of a class at OSU, his or her judgments of that class may depend on what other classes he or she has recently been thinking about.

Contexts may sometimes create biases in peoples’ judgments such that people rate items differently depending on the context. What we want to find out is what people think about how a context can affect them.

For each context below, decide what effect you think that context would tend to have on peoples’ perceptions—that is, would it make people see the target objects as more favorable or less favorable. Please circle the number that best represents how you think the context would affect people’s judgments.

1. Imagine being in vacation spots like Jamaica, the Bahamas, or Hawaii. How would being in these places influence one’s perceptions of how it would be to go to midwestern cities like Indianapolis?

   make Indianapolis seem less desirable than if no vacation spots were considered
   -4 -3 -2 -1 0 +1 +2 +3 +4

2. Imagine seeing a number of actresses and models that are very attractive. How would seeing these attractive women influence one’s perceptions of an average-looking woman?

   average woman would seem less attractive than if the attractive women weren’t there
   -4 -3 -2 -1 0 +1 +2 +3 +4

3. Imagine being in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the vacation qualities of being in these places influence one’s perceptions of how satisfied people would be with their jobs in places like Hawaii?

   make satisfaction with jobs seem lower than if vacation qualities weren’t considered
   -4 -3 -2 -1 0 +1 +2 +3 +4

4. Imagine seeing the same group of very attractive actresses and models, and then imagine learning that they all endorse a certain product. How would seeing these attractive women influence one’s perceptions of how desirable the product would be?

   make the product seem less desirable than if the women were not attractive
   -4 -3 -2 -1 0 +1 +2 +3 +4
APPENDIX F

MATERIALS FOR CORRECTION STUDY 4
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How would you rate the desirability of the weather in each of the following locations?

1. If the location were Jamaica, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. If the location were Hawaii, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

3. If the location were the Bahamas, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

4. If the location were Indianapolis, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

5. If the location were Kansas City, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How would you rate the desirability of the weather in each of the following locations?

1. If the location were Jamaica, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. If the location were Hawaii, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

3. If the location were the Bahamas, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

Please try to make sure that your perceptions of the weather in the vacation spots above do not influence your ratings of the weather in following locations.

1. If the location were Indianapolis, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. If the location were Kansas City, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How would you rate the desirability of the weather in each of the following locations?

1. If the location were Jamaica, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. If the location were Hawaii, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

3. If the location were the Bahamas, I would rate the weather as:

   not at all 1 2 3 4 5 6 7 8 9 very desirable

4. For people who live in Hawaii, how satisfied are they with their jobs?

   not at all 1 2 3 4 5 6 7 8 9 very satisfied

5. For people who live in the Bahamas, how satisfied are they with their jobs?

   not at all 1 2 3 4 5 6 7 8 9 very satisfied
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How would you rate the desirability of the weather in each of the following locations?

1. If the location were Jamaica, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. If the location were Hawaii, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

3. If the location were the Bahamas, I would rate the weather as:
   not at all 1 2 3 4 5 6 7 8 9 very desirable

Please try to make sure that your perceptions of the weather in the vacation spots above do not influence your ratings of how satisfied people are with their jobs in those locations.

1. For people who live in Hawaii, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied

2. For people who live in the Bahamas, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were **Hawaii**, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran</th>
<th>like as much as staying in Hawaii or Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were **Paris**, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran</th>
<th>like as much as staying in Hawaii or Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were **Bahamas**, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran</th>
<th>like as much as staying in Hawaii or Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

4. If the location were **Indianapolis**, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran</th>
<th>like as much as staying in Hawaii or Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

5. If the location were **Kansas City**, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran</th>
<th>like as much as staying in Hawaii or Paris</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

2. If the location were Paris, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

3. If the location were the Bahamas, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

You have just rated a number of popular, exciting places. Please try to make sure that your perceptions of the vacation qualities of those places do not influence your ratings of the following locations.

1. If the location were Indianapolis, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

2. If the location were Kansas City, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)  like as much as staying in Hawaii or Paris (like very much)

2. If the location were Paris, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)  like as much as staying in Hawaii or Paris (like very much)

3. If the location were the Bahamas, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)  like as much as staying in Hawaii or Paris (like very much)

4. For people who live in Hawaii, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied

5. For people who live in the Bahamas, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>dislike as</th>
<th>like as</th>
</tr>
</thead>
<tbody>
<tr>
<td>much as staying</td>
<td>much as staying</td>
</tr>
<tr>
<td>in Cambodia or</td>
<td>in Hawaii or</td>
</tr>
<tr>
<td>Iran (dislike</td>
<td>Paris (like</td>
</tr>
<tr>
<td>very much)</td>
<td>very much)</td>
</tr>
</tbody>
</table>

2. If the location were Paris, I would:

<table>
<thead>
<tr>
<th>dislike as</th>
<th>like as</th>
</tr>
</thead>
<tbody>
<tr>
<td>much as staying</td>
<td>much as staying</td>
</tr>
<tr>
<td>in Cambodia or</td>
<td>in Hawaii or</td>
</tr>
<tr>
<td>Iran (dislike</td>
<td>Paris (like</td>
</tr>
<tr>
<td>very much)</td>
<td>very much)</td>
</tr>
</tbody>
</table>

3. If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>dislike as</th>
<th>like as</th>
</tr>
</thead>
<tbody>
<tr>
<td>much as staying</td>
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</tr>
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<td>in Hawaii or</td>
</tr>
<tr>
<td>Iran (dislike</td>
<td>Paris (like</td>
</tr>
<tr>
<td>very much)</td>
<td>very much)</td>
</tr>
</tbody>
</table>

You have just rated a number of popular, exciting places. Please try to make sure that your perceptions of the vacation qualities of those places do not influence your ratings of how satisfied people are with their jobs in those locations.

1. For people who live in Hawaii, how satisfied are they with their jobs?

<table>
<thead>
<tr>
<th>not at all</th>
<th>very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>satisfied</td>
</tr>
</tbody>
</table>

2. For people who live in the Bahamas, how satisfied are they with their jobs?

<table>
<thead>
<tr>
<th>not at all</th>
<th>very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>satisfied</td>
</tr>
</tbody>
</table>
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. **Christy Brinkley** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)
   as Michelle Pfeiffer
   or Kim Bassinger
   (very attractive)

2. **Michelle Pfeiffer** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)
   as Michelle Pfeiffer
   or Kim Bassinger
   (very attractive)

3. **Kim Bassinger** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)
   as Michelle Pfeiffer
   or Kim Bassinger
   (very attractive)

4. **Hillary Clinton** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)
   as Michelle Pfeiffer
   or Kim Bassinger
   (very attractive)

5. **Tipper Gore** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)
   as Michelle Pfeiffer
   or Kim Bassinger
   (very attractive)
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. **Christy Brinkley** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

2. **Michelle Pfeiffer** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

3. **Kim Bassinger** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

You have just rated a number of people that are generally very attractive. Please try to make sure that your perceptions of the attractiveness of these people do not influence your ratings of the attractiveness of the following people.

4. **Hillary Clinton** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

5. **Tipper Gore** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)
1. **Christy Brinkley** is:

   | as unattractive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | as attractive |
   | Phyllis Diller  |   |   |   |   |   |   |   |   |   | Michelle Pfeiffer |
   | Rosanne Arnold  |   |   |   |   |   |   |   |   |   | Kim Bassinger     |
   | (not at all attractive) |   |   |   |   |   |   |   |   |   | (very attractive) |

2. **Michelle Pfeiffer** is:

   | as unattractive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | as attractive |
   | Phyllis Diller  |   |   |   |   |   |   |   |   |   | Michelle Pfeiffer |
   | Rosanne Arnold  |   |   |   |   |   |   |   |   |   | Kim Bassinger     |
   | (not at all attractive) |   |   |   |   |   |   |   |   |   | (very attractive) |

3. **Kim Bassinger** is:

   | as unattractive | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | as attractive |
   | Phyllis Diller  |   |   |   |   |   |   |   |   |   | Michelle Pfeiffer |
   | Rosanne Arnold  |   |   |   |   |   |   |   |   |   | Kim Bassinger     |
   | (not at all attractive) |   |   |   |   |   |   |   |   |   | (very attractive) |

4. Product X recently ran a commercial in which Michelle Pfeiffer endorsed the product. How desirable do you think the product is likely to be?

   | not at all desirable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | very desirable |

5. Product Y recently ran a commercial in which Kim Bassinger endorsed the product. How desirable do you think the product is likely to be?

   | not at all desirable | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | very desirable |
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. Christy Brinkley is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)

2. Michelle Pfeiffer is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)

3. Kim Bassinger is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller
   or Rosanne Arnold
   (not at all attractive)

You have just rated a number of people that are generally very attractive. Please try to make sure that your perceptions of the attractiveness of these people do not influence your ratings of how desirable a product might be if it is endorsed by these people.

1. Product X recently ran a commercial in which Michelle Pfeiffer endorsed the product. How desirable do you think the product is likely to be?

   not at all 1 2 3 4 5 6 7 8 9 very desirable

2. Product Y recently ran a commercial in which Kim Bassinger endorsed the product. How desirable do you think the product is likely to be?

   not at all 1 2 3 4 5 6 7 8 9 very desirable
APPENDIX G

MATERIALS FOR CORRECTION STUDY 5
Please list your perceptions of the following items on the scales following each item.

If you could spend two weeks somewhere, how would you perceive the following locations?

1. If the location were Indianapolis, I would:
   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Paris (like very much)

   Iran (dislike very much)

2. If the location were Kansas City, I would:
   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Paris (like very much)

   Iran (dislike very much)

1. For people who live in Hawaii, how satisfied are they with their jobs?

   not at all 1 2 3 4 5 6 7 8 9 very satisfied

2. For people who live in the Bahamas, how satisfied are they with their jobs?

   not at all 1 2 3 4 5 6 7 8 9 very satisfied
Please list your perceptions of the following items on the scales following each item.

1. **Hillary Clinton** is:
   
as unattractive 1 2 3 4 5 6 7 8 9  
as attractive
   
as Phyllis Diller
   
or Rosanne Arnold
   
   (not at all attractive)

2. **Tipper Gore** is:
   
as unattractive 1 2 3 4 5 6 7 8 9  
as attractive
   
as Phyllis Diller
   
or Rosanne Arnold
   
   (not at all attractive)

---

1. Product X recently ran a commercial in which Michelle Pfeiffer endorsed the product. How desirable do you think the product is likely to be?

   not at all 1 2 3 4 5 6 7 8 9  very desirable

2. Product Y recently ran a commercial in which Kim Bassinger endorsed the product. How desirable do you think the product is likely to be?

   not at all 1 2 3 4 5 6 7 8 9  very desirable
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much) 1 2 3 4 5 6 7 8 9 like as much as staying in Hawaii or Paris (like very much)

2. If the location were Paris, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much) 1 2 3 4 5 6 7 8 9 like as much as staying in Hawaii or Paris (like very much)

3. If the location were the Bahamas, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much) 1 2 3 4 5 6 7 8 9 like as much as staying in Hawaii or Paris (like very much)

4. If the location were Indianapolis, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much) 1 2 3 4 5 6 7 8 9 like as much as staying in Hawaii or Paris (like very much)

5. If the location were Kansas City, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much) 1 2 3 4 5 6 7 8 9 like as much as staying in Hawaii or Paris (like very much)
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were Paris, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

3. If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

You have just rated a number of popular, exciting places. Please try to make sure that your perceptions of the vacation qualities of those places do not influence your ratings of the following locations.

1. If the location were Indianapolis, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>

2. If the location were Kansas City, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td></td>
</tr>
</tbody>
</table>
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

2. If the location were Paris, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

3. If the location were the Bahamas, I would:

<table>
<thead>
<tr>
<th>dislike as much as staying in Cambodia or Iran (dislike very much)</th>
<th>like as much as staying in Hawaii or Paris (like very much)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 2 3 4 5 6 7 8 9</td>
<td>1 2 3 4 5 6 7 8 9</td>
</tr>
</tbody>
</table>

4. For people who live in Hawaii, how satisfied are they with their jobs?

<table>
<thead>
<tr>
<th>not at all satisfied</th>
<th>1 2 3 4 5 6 7 8 9 very satisfied</th>
</tr>
</thead>
</table>

5. For people who live in the Bahamas, how satisfied are they with their jobs?

<table>
<thead>
<tr>
<th>not at all satisfied</th>
<th>1 2 3 4 5 6 7 8 9 very satisfied</th>
</tr>
</thead>
</table>
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)
   like as much as staying in Hawaii or Paris (like very much)

2. If the location were Paris, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)
   like as much as staying in Hawaii or Paris (like very much)

3. If the location were the Bahamas, I would:
   dislike as much as staying in Cambodia or Iran (dislike very much)
   like as much as staying in Hawaii or Paris (like very much)

You have just rated a number of popular, exciting places. Please try to make sure that your perceptions of the vacation qualities of those places do not influence your ratings of how satisfied people are with their jobs in those locations.

1. For people who live in Hawaii, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied

2. For people who live in the Bahamas, how satisfied are they with their jobs?
   not at all 1 2 3 4 5 6 7 8 9 very satisfied
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. **Christy Brinkley** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

2. **Michelle Pfeiffer** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

3. **Kim Bassinger** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

4. **Hillary Clinton** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

5. **Tipper Gore** is:

   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. Christy Brinkley is:
   
   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

2. Michelle Pfeiffer is:
   
   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

3. Kim Bassinger is:
   
   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

You have just rated a number of people that are generally very attractive. Please try to make sure that your perceptions of the attractiveness of these people do not influence your ratings of the attractiveness of the following people.

4. Hillary Clinton is:
   
   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)

5. Tipper Gore is:
   
   as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   as Phyllis Diller or Rosanne Arnold (not at all attractive)
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. **Christy Brinkley** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold
   - (not at all attractive)

2. **Michelle Pfeiffer** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold
   - (not at all attractive)

3. **Kim Bassinger** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold
   - (not at all attractive)

4. Product X recently ran a commercial in which Michelle Pfeiffer endorsed the product. How desirable do you think the product is likely to be?

   - not at all desirable 1 2 3 4 5 6 7 8 9 very desirable

5. Product Y recently ran a commercial in which Kim Bassinger endorsed the product. How desirable do you think the product is likely to be?

   - not at all desirable 1 2 3 4 5 6 7 8 9 very desirable
We are interested in people's perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception.

1. **Christy Brinkley** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold (not at all attractive)

2. **Michelle Pfeiffer** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold (not at all attractive)

3. **Kim Bassinger** is:

   - as unattractive 1 2 3 4 5 6 7 8 9 as attractive
   - as Phyllis Diller or Rosanne Arnold (not at all attractive)

You have just rated a number of people that are generally very attractive. Please try to make sure that your perceptions of the attractiveness of these people do not influence your ratings of how desirable a product might be if it is endorsed by these people.

1. Product X recently ran a commercial in which Michelle Pfeiffer endorsed the product. How desirable do you think the product is likely to be?

   - not at all 1 2 3 4 5 6 7 8 9 very desirable

2. Product Y recently ran a commercial in which Kim Bassinger endorsed the product. How desirable do you think the product is likely to be?

   - not at all 1 2 3 4 5 6 7 8 9 very desirable
APPENDIX H

MATERIALS FOR THEORY-IDENTIFICATION STUDY 3
Hello. Research in psychology has found that a number of kinds of situations reliably influence people's judgments of other people, places, and things. One aspect of these situations that has received little attention, however, is how much people are aware of the biases that these situations create. The following descriptions and questions present some of the situations that have been found to consistently bias people's perceptions.

For each of the situations, please provide your best estimate of how the situation would direct people's perceptions of the targets discussed.

1. If you were to asked to rate how violent people like George Foreman or Arnold Schwarzenegger are, how would rating a number of extremely violent people (like Adolf Hitler or Joseph Stalin) affect perceptions of George or Arnold?

Would make George and Arnold seem:

<table>
<thead>
<tr>
<th>less violent than</th>
<th>-4</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 more violent than</th>
</tr>
</thead>
<tbody>
<tr>
<td>if no violent people were considered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>if no violent people were considered</td>
</tr>
</tbody>
</table>

2. If you were to asked to rate how violent people like George Foreman or Arnold Schwarzenegger are, how would rating a number of extremely non-violent people (like Ghandi or Jesus Christ) affect perceptions of George or Arnold?

Would make George and Arnold seem:

<table>
<thead>
<tr>
<th>less violent than</th>
<th>-4</th>
<th>-3</th>
<th>-2</th>
<th>-1</th>
<th>0</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4 more violent than</th>
</tr>
</thead>
<tbody>
<tr>
<td>if non-violent people weren't considered</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>if non-violent people weren't considered</td>
</tr>
</tbody>
</table>
APPENDIX I

MATERIALS FOR CORRECTION STUDY 6
We are also interested in people's perceptions of violence. So, for each of the following people, the question to be answered is: "how violent do you think this person is?"

The first person is: Adolf Hitler

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>not at all violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>very violent</strong></td>
<td></td>
<td></td>
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<td></td>
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</table>

The next person is: Josef Stalin

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<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>not at all violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>very violent</strong></td>
<td></td>
<td></td>
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</table>

Saddam Hussein

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>not at all violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>very violent</strong></td>
<td></td>
<td></td>
<td></td>
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<td></td>
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</tbody>
</table>

You have been rating a series of extremely violent people. Please try to make sure your ratings of the next two people are not influenced by your perceptions of the people you just rated.

Arnold Schwarzenegger

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>not at all violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>very violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

George Foreman

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>not at all violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>very violent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
We are also interested in people's perceptions of violence. So, for each of the following people, the question to be answered is: "how violent do you think this person is?"

The first person is: The Pope

<table>
<thead>
<tr>
<th>not at all violent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>very violent</th>
</tr>
</thead>
</table>

The next person is: Jesus Christ

<table>
<thead>
<tr>
<th>not at all violent</th>
<th>1</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
<th>very violent</th>
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Ghandi

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<tr>
<th>not at all violent</th>
<th>1</th>
<th>2</th>
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<th>9</th>
<th>10</th>
<th>very violent</th>
</tr>
</thead>
</table>

You have been rating a series of extremely violent people. Please try to make sure your ratings of the next two people are not influenced by your perceptions of the people you just rated.

Arnold Schwarzenegger

<table>
<thead>
<tr>
<th>not at all violent</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
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<th>very violent</th>
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George Foreman

<table>
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<tr>
<th>not at all violent</th>
<th>1</th>
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<th>very violent</th>
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</table>
We are also interested in people's perceptions of violence. So, for each of the following people, the question to be answered is: "how violent do you think this person is?"

<table>
<thead>
<tr>
<th>Person</th>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Very Violent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adolf Hitler</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>7</td>
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<td>9</td>
<td>10</td>
<td>Violent</td>
</tr>
<tr>
<td>Josef Stalin</td>
<td></td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
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<td>10</td>
<td>Violent</td>
</tr>
<tr>
<td>Saddam Hussein</td>
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<td>1</td>
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<td>4</td>
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<td>10</td>
<td>Violent</td>
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<tr>
<td>Arnold Schwarzenegger</td>
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<tr>
<td>George Foreman</td>
<td></td>
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</tr>
</tbody>
</table>
We are also interested in people's perceptions of violence. So, for each of the following people, the question to be answered is: "how violent do you think this person is?"

The first person is: Arnold Schwarzenaeoer

<table>
<thead>
<tr>
<th>not at all violent</th>
<th>1 2 3 4 5 6 7 8 9 10</th>
<th>very violent</th>
</tr>
</thead>
</table>

The next person is: George Foreman

<table>
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<tr>
<th>not at all violent</th>
<th>1 2 3 4 5 6 7 8 9 10</th>
<th>very violent</th>
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Adolf Hitler

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Saddam Hussein

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</tr>
</thead>
</table>
We are also interested in people's perceptions of violence. So, for each of the following people, the question to be answered is: "how violent do you think this person is?"

The first person is: The Pope

<table>
<thead>
<tr>
<th>not at all violent</th>
<th>1</th>
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The next person is: Jesus Christ

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Arnold Schwarzenegger

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APPENDIX J

MATERIALS FOR CORRECTION STUDY 7
When people are asked to judge the qualities of an object or person, they often do so in relation to other people or objects that they have recently considered. So, for instance, if someone were asked his or her opinion of a class at OSU, his or her judgments of that class may depend on what other classes he or she has recently been thinking about.

Contexts may sometimes create biases in peoples' judgments such that people rate items differently depending on the context. What we want to find out is what people think about how a context can affect them.

For each context below, decide what effect you think that context would tend to have on peoples' perceptions—that is, would it make people see the target objects as more favorable or less favorable. Please circle the number that best represents how you think the context would affect people's judgments.

1. Imagine seeing a number of actresses and models that are very attractive. How would seeing these attractive women influence one's perceptions of an average-looking woman?

average woman would seem less attractive than if the attractive women weren't there

2. Imagine seeing the same group of very attractive actresses and models, and then imagine learning that they all endorse a certain product. How would seeing these attractive women influence one's perceptions of how desirable the product would be?

make the product seem less desirable than if the women were not attractive

3. Imagine being in vacation spots like Jamaica, the Bahamas, or Hawaii. How would being in these places influence one's perceptions of how it would be to go to midwestern cities like Indianapolis?

make Indianapolis seem less desirable than if no vacation spots were considered

4. Imagine being in vacation spots like Jamaica, the Bahamas, or Hawaii. How would thinking about the vacation qualities of being in these places influence one's perceptions of how satisfied people would be with their jobs in places like Hawaii?

make satisfaction with jobs seem lower than if vacation qualities weren't considered
We are interested in people’s perceptions of a number of things. For each of the items that follow, please read the statement carefully and respond on the scale following the statement by circling the number that best represents your perception of the item.

How much would you like to spend two weeks in the following locations?

1. If the location were Hawaii, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

2. If the location were Paris, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

3. If the location were the Bahamas, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

---------------------------------------------------------------------

You have just rated a number of popular, exciting places. Please try to make sure that your perceptions of the vacation qualities of those places do not influence your ratings of the following locations.

1. If the location were Indianapolis, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)

2. If the location were Kansas City, I would:

   dislike as much as staying 1 2 3 4 5 6 7 8 9 like as much as staying
   in Cambodia or Iran (dislike very much) in Hawaii or Paris (like very much)
LIST OF REFERENCES


1. Of course, corrections in assessments of targets do not necessarily render the assessments more accurate. That is, people might "overcorrect" (i.e., adjust judgments of the target farther than the biasing agent or agents had influenced assessments without the correction) leading to a bias in judgment opposite to the uncorrected bias. People might even correct for a perceived bias that does not exist.

2. An alternative information-integration view of the attitude attribution effects was raised by Himmelfarb and Anderson (1975). That is, Himmelfarb and Anderson viewed low as opposed to high choice conditions as affecting the weighting of attitude statements when the statements are integrated to form a view of the writer's attitude (rather than instigating adjustment processes). Of course, it might also be that changing weights associated with differing pieces of information about the target is a mechanism through which corrections occur, rather than an alternative to corrective processes.

3. Although Schwarz and his colleagues prefer to view mood as an answer to a "How do I feel about it heuristic?" the effects of the Schwarz and Clore (1983) studies can also be explained through consideration of mood as a potentially biasing context for judgment. That is, in the Schwarz and Clore studies, there were
assimilative effects of mood when mood was a subtle contextual cue. When mood was made salient (similar to the blatant primes used in the Martin studies), however, correction processes might have taken place that adjusted life satisfaction ratings away from judges' reactions attributed to the contextual mood state (Eiser, 1990). Because mood state has been found to elicit contrast effects (e.g., Dermer, Cohen, Jacobson, & Anderson, 1979; Gleicher, Baker, & Petty, 1989, discussed in Petty & Wegener, 1991) in addition to the assimilative effects predicted by the "How do I feel about it?" heuristic, it seems reasonable to view mood as a context for judgment.

4. Some researchers have also attempted to account for the social judgment findings without invoking the concept of corrective processes per se. For example, Lombardi et al. (1987) found assimilation to primes when participants could not recall any of the priming episode, but contrast to primes when participants could recall at least one of the primes. In a second study, Lombardi et al. found that recall of any of the primes was still associated with assimilation if participants believed that the priming task had been interrupted (see also Martin, 1986). According to Lombardi et al. (1987), these results suggested that participants conscious of the priming events were capable of adopting differing processing strategies, depending on whether the priming task had been interrupted or not. Higgins (1989) explicated this view by noting that primes which provide a clear instantiation of a given trait might form a relatively extreme standard of comparison against which ambiguous target behavior is compared and thus contrasted when judges can recall the prime(s). Thus, according to this view, contrast is due to primes acting as a standard of comparison rather than due to
attempts to remove the influence of the primes from judgments of the target (c.f., Martin, 1986; Schwarz & Bless, 1992). However, it is not clear why the same prime(s) would be viewed as less extreme or why participants would choose to use the prime(s) differently in judging the target when participants believe that the priming event is incomplete (see Martin & Achee, 1992, for further discussion of the Higgins, 1989, and Lombardi et al., 1987, perspective). Within more correction-based models such as Martin's set/reset theory, assimilation when the priming task is incomplete is taken as support for the notion that thought perseverance elicited by an incomplete priming task makes it more difficult to remove the influence of primes on target ratings (e.g., see Martin, 1986; Martin & Achee, 1992).

Another way that researchers have explained the attenuation of priming effects is to hypothesize that features of a context might prime a dimension of judgment, and judges might especially scrutinize information about the target along that dimension of judgment (e.g., Skowronski, Carlston, & Isham, 1993; or might "reprocess" information, leading to multiple interpretations of information about the target that might or might not match implications of the priming stimuli, Ford & Kruglanski, in press; Thompson, Roman, Moskowitz, Chaiken, & Bargh, 1994).

5. This is not to suggest that flexible theory-based corrections only occur after an initial reaction. More generally, I assume that corrective processes ensue when people become aware of a potential bias. This awareness can occur before, during, or after operation of a judgment process. Accordingly, corrections for bias need not occur only following initial reactions to the target, but people might also attempt to avoid an anticipated bias by changing how information about the judgment target is
gathered, how the information is scrutinized, or by avoiding the biasing factor if possible.

6. Some of these notions are similar to the views of Jacoby and his colleagues on conscious attempts to subvert influences on memory and other subjective experience (e.g., Jacoby & Kelley, 1987, 1990). For example, Jacoby and Kelley (1987) reported a study in which participants were asked to judge how difficult other people would find the solution of various anagrams. In one condition, the solution of the anagram was presented along with the anagram so that participants could not rely on their subjective experience of difficulty by first solving the anagram themselves before judging difficulty for others. In this condition, Jacoby and Kelley noted, participants could only replace subjective experience by a theory of what makes anagrams difficult. Jacoby and Kelley (1987) went on to note that "To fully escape unconscious influences [by past events on current judgments] requires a theory that is sufficiently exact to satisfactorily replace subjective experience as a basis for judgment" (p. 333; emphasis added). This is similar to the notion that an initial reaction to the target is not necessary for theory-based correction to occur. According to the FCM, however, that subjective experience and theory of influence can also be combined rather than discarding one's initial perception of the target and replacing it with a theory-based substitute. That is, versions of either process can occur. In the remainder of this dissertation, I deal explicitly with situations in which people might use a subjective reaction to a target, but adjust that initial reaction in light of a theory of how that initial reaction might have been influenced by a contextual factor when that influence is made salient.
7. Initial descriptions of this model are contained in Petty and Wegener (1993) and Wegener and Petty (in press). These presentations include both application of the model to the context-effect literature and future directions for research generated by application of the model to research areas such as attribution and stereotyping. Petty and Wegener (1993) also present the data in Chapter II of this dissertation whereas Wegener and Petty (in press) present the data in Theory-Identification Studies 2 and 3, and in Correction Studies 4, 5, and 7 (from Chapters III and IV).

8. Some researchers have noted the possibility of theory-based corrections for contexts, but have included assumptions seemingly inconsistent with the flexible nature of theory-based correction. For example, Strack (1992a) noted that "a correction...may be based solely on a theory-guided assumption that a potentially distorting influence may be operating" (p. 258), but also states that "representativeness is the default option...." and "Representative information or experiences will influence the judgment in the direction of their semantic or affective implications and lead to an assimilation effect" (p. 261). Strack (1992a) also notes that if information is deemed "nonrepresentative," judges can attempt to ignore the activated content (producing no bias in judgment), can engage in theory-based correction, or can use the activated information in forming a standard of comparison (each of which leads to less assimilation and can yield a contrast effect). Also, Strack (1992b) notes that influences of previous questions in a questionnaire can be understood in the following way. When respondents are not aware of the previous question, the result is an assimilation effect (due to activation of information by the previous question). When respondents are aware of the previous question and Gricean Maxims do not apply, the effect of the question is contrast (due to correcting
for the presence of the previous question; see pp. 33-34). Thus, although Strack’s (1992a) general statements about theory-based correction are largely consistent with the Flexible Correction Model, his assumptions regarding the assimilation/contrast literature are not. This is because Strack discusses assimilation and contrast by making the same effort and correction assumptions as the Martin et al. (1990) set/reset model and the Schwarz and Bless (1992) inclusion/exclusion model -- that assimilation is the default (low-effort) outcome and contrast requires additional corrective effort.

9. In a recent development, Wilson and Brekke (in press) also note that naive theories of bias might play a pivotal role in corrections. In addition, consistent with presentations of the Flexible Correction Model in Petty and Wegener (1993) and Wegener and Petty (in press), Wilson and Brekke note that people must be motivated to correct assessments of targets, must know the direction and magnitude of any bias at work, and must be able to adjust responses if successful debiasing is to occur. As in Nisbett and Wilson (1977) and Wilson et al. (1982), however, the focus of the Wilson and Brekke discussion is on the relative inability of people to accurately know which factors create biases (rather than providing evidence of any particular means by which people attempt to correct assessments of targets). Thus, it is not surprising that Wilson and Brekke (in press) also fail to provide any empirical tests of whether corrections are predicted by resarch participants’ naive theories of bias.

10. It is important to note that strictly speaking, reset correction involves subtraction of one’s reaction to the context rather than the context per se (see Martin & Achee,
My assumption in this research is that people's reactions to the context are congruent with the valence of the presented context (i.e., considering a fantastic vacation location induces positive thoughts and reactions).

11. In order to make sure that the main effect of the Correction factor was not driven primarily by ratings in the Abstract anchor condition, target ratings in the Specific anchor condition were analyzed separately. When the scale anchors were specific, the targets were rated more positively after correction instructions (\(M = 6.50\)) than when no instruction was given (\(M = 5.05\)), \(F(1, 38) = 5.46, p < .026\). Thus, significant correction took place even when the referent locations in the scale anchors were held constant across the correction conditions. Although there was no hint of an interaction between the correction and anchor factors, the difference in target ratings created by the correction instructions was actually slightly larger in the specific than in the abstract anchor conditions (opposite to the response language predictions).

12. The results are the same, however, if only the first two target cities are analyzed.

13. Analysis of target ratings using the unadjusted means does not significantly affect the conclusions reached. That is, the same Context X Correction Cue interaction reported is significant and in the expected direction using either set of analyses (though using the adjusted means seems to be the more justifiable method).

14. As noted earlier, because weather in these desirable vacation locations is an
extreme exemplar of desirable weather, empirical contrast effects on judgments of average weather might be likely (Herr et al., 1983; Sherif & Hovland, 1961). If people are ever likely to share the belief that contrast is the default impact of a context, contexts that are likely to generally produce contrast would seem to be the first place to look (though importantly, the flexible correction view does not require in any way that theories of bias reflect the actual biases associated with contexts).

15. As noted earlier, one possible cause of shifts in ratings does not depend on the operation of theories of bias. This cause of rating adjustments is shifts in perspective or response language associated with the response scale (see Ostrom & Upshaw, 1968; Schwarz & Bless, 1992). There are a number of reasons to believe that such shifts in response language are not responsible for all corrections in target ratings along contextual dimensions of judgment (see Correction Study 2 above along with the discussion of this alternative). In the current study, I used "specific" anchors like those from Correction Study 2 to anchor response scales used for context ratings and ratings of "contrastive" targets in sets two and three. "Specific" endpoints were not used for ratings along dimensions that differed from the contextual dimension of judgment (i.e., the "assimilative" targets) because such shifts in judgment dimension would not be expected to lead to expanded perspective along the new dimension of target rating (see Martin, 1986; Upshaw & Ostrom, 1984).

16. The same ANOVA was also run on the baseline measures (i.e., the pre-experimental measures of target perceptions). Not unexpectedly, there was a main effect of Theory, $F(1, 184) = 108.01, p < .0001$, such that targets to be assimilated to the context were originally viewed more positively ($M = 12.24$) than targets to be contrasted to the context ($M = 8.70$). In addition, there was a Context X Theory
interaction, $F(1, 184) = 15.29, p < .0001$, such that the baseline ratings of targets within the attractiveness context differed more from one another ($M_s = 12.82$ and $8.18$ for the targets to be assimilated and contrasted respectively) than the baseline ratings of targets within the vacation context ($M_s = 11.68$ and $9.23$ for the targets to be assimilated and contrasted respectively). Thus, to the extent that the primary dependent measure (which controls for individuals' baselines) shows similar results across the within-subject context variable, the correction results can be interpreted as robust with respect to differential extremity of the baseline measures.

17. One possible alternative explanation for these results stems from the fact that the baseline values of the two sets of targets (i.e., the targets participants believed would be assimilated versus contrasted to the context) differed from one another. Thus, it might be possible that measuring the perceptions of targets twice might have led to polarization of the perceptions (Tesser, 1978) in the no correction instruction condition, and that this polarization (rather than perceived effects of the context) was moderated in the correction instruction conditions. There are a number of reasons not to favor this interpretation. First, this explanation does not account for obtaining the same pattern of data in Correction Study 4 even though only one measure of the targets took place.

In addition, the correction-for-polarization alternative does not fully account for the pattern of data in Correction Study 5. In order to empirically test this alternative, respondents were classified within the perceived contrast conditions according to whether their average baseline responses (combined across the midwestern city and average-attractiveness targets) were above or below the midpoint of the rating scale (because none of the combined baseline measures for targets in the perceived assimilation conditions fell below the midpoint, the following analysis was
impossible for that condition). According to the correction-for-polarization alternative, the effects of the correction instruction should differ for these two groups -- with corrections for polarization being consistent with the FCM hypothesis in the negative baseline group, but corrections for polarization being in the opposite direction to the FCM hypothesis in the positive baseline group. According to the FCM, however, both groups should correct by moving target ratings toward the context (because both groups are correcting for perceived contrast).

In fact, when shift scores for these respondents are submitted to a 2(Correction: instruction, none) by 2(Baseline positivity: positive, negative) ANOVA, the results strongly support the FCM. There was a strong main effect of Correction, \(F(1, 95) = 8.44, p < .005\), with no Correction by Baseline interaction, \(p > .17\). That is, for both targets with positive and negative baseline ratings, correction instructions led to more positive target shifts than lack of correction instructions. In fact, the non-significant interaction is actually in the direction of correction instructions leading to greater positive shifts for targets with positive baseline ratings than for targets with negative baseline ratings (which is opposite to the correction-for-polarization alternative).

18. Thirteen additional people also participated in the study who received the target ratings before receiving any ratings of context items. Thus, responses in this control condition could be used to determine when biases were actually operating and when corrected ratings were moved toward or away from context-independent ratings. Responses in this control condition (\(M = 5.575\)) showed that bias was only present under no-correction conditions when targets were rated after the extremely violent people (\(p < .02\)). When targets were rated after the extremely non-violent people,
ratings did not differ from context-independent ratings ($p > .62$). Thus, corrections away from initial perceptions of targets following the non-violent context represents another case in which participants corrected according to a theory of bias even though no demonstrable bias was operating. In addition, corrections in the non-violent context condition led target ratings to be marginally lower than context-independent ratings ($p < .06$).

Thus, the results of Correction Study 6 cannot be easily accounted for by response language effects (see discussion between Correction Studies 1 and 2). That is, a response-language account of correction for contrast requires that contrast occur when extreme exemplars are used to define the response scale, and that this contrast diminishes or disappears as participants' "usual" conceptions of the response scale are used under correction conditions. The response language perspective cannot account for a correction that occurs when no observable bias is present under "no-correction" conditions and the corrected assessments of targets differ from the no-context ratings of the target (as in the low-violence context of the present study).

19. The same effects are found if magnitude of shift is simply indexed by the absolute value of the shift measure.

20. Testing the simple effects within the non-significant interaction of theory extremity and theory direction, one finds that the regression weight is similar for negative theories (i.e., theories ranging from 0 to -4), $B = -.805$, and positive theories (i.e., theories ranging from 0 to +4), $B = -.434$. Perhaps not unexpectedly, only the weight for negative theories ($n = 34$) is significant, $p < .023$, one-tailed.
Given the small sample size, the weight for positive theories (n = 13) is not significant, \( p < .18 \), one-tailed.

21. One might claim that although our results are incompatible with a set/reset contrast effect (see Martin et al., 1990, Figure 1), our results might be compatible with the schematic representation of the set/reset model (see Martin et al., 1990, Figure 2). In this representation, no particular default outcome is specified. That is, the default portion of the model is not labeled as "assimilate target judgments." In fact, in such presentations of the set/reset model, the term "set" does not even appear, although the possibility of other default outcomes has not been given particular attention. If other default processes routinely operate, it is puzzling why the name of the model reflects only the "set" process. Also, in the schematic representation of the model, the correction step is labeled as "Partial out bias -- Reset." The correction step is not explicitly labeled as contrastive. Yet, discussions of what resetting constitutes convey resetting as leading to target ratings as less like one's reactions to the context (see earlier description of the setting and resetting processes; pp. 17-20). To the extent that this is the case, accounting for the present results would require the set/reset model to postulate that corrections other than resetting (e.g., theory-based correction) can occur. If this were done, then, a person using the revised set/reset model would at times attempt to account for data without setting or resetting taking place. In this event, it would also be necessary to note when resetting (rather than other corrections) would be most likely.
Alternatively, proponents of the set/reset model might propose that different kinds of resetting might occur, with only one type of resetting being given attention in the literature thus far. That is, although "partialling reset" has been discussed at length (and would lead to corrections away from reactions to the context), perhaps "theory-based resetting" is also accommodated but has not yet received much conceptual or empirical attention. That is, although the processes discussed in the past as "setting" and "resetting" do not account for the present results, the set/reset model might be construed as allowing for the current theory-based corrections (although it might require the set/reset model to account for the results using processes that are neither "setting" nor "resetting" as they have been discussed in past work). In any case, although some might construe the set/reset model as capable of including theory-based corrections, discussions to date on the nature of setting and resetting processes have not presented processes that would predict the findings in the current experiments.

22. It should also be noted that lack of impact of heuristics or other cues in persuasion settings is not necessarily due to corrections. For example, although situations of high personal relevance might lead people to actively dismiss inferences based on peripheral aspects of a message, it is also possible (and likely) that message recipients in such situations are motivated to gather and scrutinize extensive information about the attitude object. Thus, decreased impact of the peripheral aspects of the persuasive appeal might be due to increased attention to aspects central to the merits of the attitude object rather than corrections per se.
Of course, effortful search for and scrutiny of information central to the merits of the attitude object might be the means by which people attempt to avoid bias. Thus, in order to identify those cases in which corrections occur, means other than simply indexing the impact of the peripheral cues would have to be employed (e.g., if resultant attitudes differ from no-cue control group attitudes, this would suggest that corrections occurred rather than simple processing of central merits with little or no attention to peripheral cues).

The same general point applies to many of the areas in which corrections might take place. For example, corrections might be responsible for lack of impact of false information (e.g., Golding et al., 1990) or for conscious overriding of stereotypic responses (e.g., Devine, 1989). It is also possible, however, that effortful processes such as searching for and scrutinizing more diagnostic, individuating information overrides the biases (see Fiske & Neuberg, 1990) without necessarily involving corrections of perceived biases. Thus, one goal for future research will be to investigate which settings involve corrections for perceived bias and which do not.