The Actor–Observer Effect Revisited: Effects of Individual Differences and Repeated Social Interactions on Actor and Observer Attributions

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This research examined several factors hypothesized to influence the actor–observer effect (AOE). Participants engaged in 3 successive dyadic interactions; after each interaction, they rated the importance of 4 causal factors in influencing their behavior and that of their partner. The AOE held for 1 external factor, interaction partner, and 1 internal factor, personality, but not for situation or mood. Actor and observer attributions changed in predicted ways across the 3 interactions: Actors increasingly emphasized the importance of their partner, whereas observers increasingly emphasized personality; both actors and observers substantially lowered their attributions to the situation. We found consistent individual differences in attributional tendencies that allowed us to predict who showed the AOE. Together, the findings demonstrate that A–O differences depend on: (a) the specific causal factor invoked, (b) the individual's history in the situation, and (c) individual differences among attributors. Discussion focuses on the limited generality of the AOE and the need for a more complex formulation of A–O differences in attribution.

The notion that people's explanations for their own behavior differ from their explanations for the behavior of others is a cornerstone of research on causal attributions and is widely accepted as a scientific fact. The actor–observer effect, as this difference has been labeled, states that attributions differ as a function of the perspective of the attributor: Actors attribute their own behavior to situational causes (e.g., "I was quiet because I was at a funeral"), whereas observers attribute the behavior of others to person causes (e.g., "He was quiet because he is introverted"). Heider (1958) offered an elegant and simple story about why the attribution process should differ for actors and observers. Building on ideas from Gestalt psychology, Heider argued that people invoke as causal those factors that engulf their perceptual field. The actor–observer effect reflects the fact that the situation engulfs the field of the actor, whereas the person engulfs the field of the observer.

Early research on the actor–observer effect provided confirmatory evidence for the basic hypothesis (Jones & Nisbett, 1972). Jones (1976) concluded that the effect "holds under a surprising range of conditions...[and] seems to be robust and quite general" (p. 304). Judging from the typical presentation of the actor–observer effect in the contemporary social and personality literature, it is a conclusion that remains widely accepted. However, research accumulating over the past two decades argues for a more complex formulation than the simple notion that actors focus on causal factors external to them whereas observers focus on causal factors internal to the actor. First, it is now generally recognized that both actors and observers attribute more causal force to dispositional causes than to situational causes (referred to by Ross, 1977, as the fundamental attribution error). Correspondingly, actors and observers do not consistently differ in their attributions to dispositional causes; rather, they typically differ only in their situational attributions (Watson, 1982). Second, the actor–observer effect can be eliminated or even reversed by a variety of factors, including salience (e.g., Storms, 1973; Taylor & Fiske, 1975), the desirability of the behavior or outcome being explained (e.g., Chen, Yates, & McGinnies, 1988), whether attributions are made for past or present behavior (e.g., Moore, Sherrod, Liu, & Underwood, 1979), and whether the observer is actively interacting with or passively observing the actor (e.g., D. T. Miller & Norman, 1975). Third, the magnitude of the effect, when found, is often relatively small (Goldberg, 1981).

In addition to these empirical complexities, the conceptual distinction between internal and external causes, on which so much of the relevant research has been based, is problematic (Buss, 1978; Gilbert & Malone, 1995; Kruglanski, 1975; Lewis, 1995; Malle, 1995; F. D. Miller, Smith, & Uleman, 1981; Monson & Snyder, 1977; Watson, 1982; White, 1991). For example, it is often difficult to distinguish an internal attribution ("I bought the car because I like red cars") from an external one ("I bought the car because it is red"). Moreover, the categories

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The writing of this article was supported by a Chancellor's Dissertation Fellowship (University of California, Berkeley), a National Science Foundation Fellowship, and National Institute of Mental Health Grant MH49255. We thank Jeffrie Jackson for helping us design and conduct the study. We thank Jack Block, Lewis Goldberg, Samuel Gosling, Oliver John, Joachim Krueger, Kevin Lanning, Bertram Malle, and Jeffrey Sherman for their comments on an earlier draft of this article.

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"internal" and "external" are overly broad, combining a diversity of causes that differ importantly; F. D. Miller et al. (1981) commented that the categories are "so broad that a single measure of dispositional or situational causes may be meaningless" (p. 82). Similarly, in many attribution studies the internal and external categories are defined in a vague or ambiguous manner. Some studies do not specify the content of the categories (e.g., Smith, 1984, referred to "something about you [the person]" and "something about the situation"), whereas others define the categories using a long list of causes (e.g., Storms, 1973, defined the internal category as "personality, traits, character, personality style, attitudes, mood"). In either case, it is not clear to which causal factor participants are attributing the behavior. Given these conceptual and definitional ambiguities, it is not surprising that the reliability and validity of many measures of internal and external attributions have been questioned. As Watson (1982, p. 693) noted, "there are serious problems with the procedures that have been used to test the Jones-Nisbett hypothesis" (see also Goldberg, 1978, 1981; Krueger, Ham, & Linford, 1996; F. D. Miller et al., 1981).

Research on the actor-observer effect has also been criticized for lacking ecological validity. Many studies have examined attributions to hypothetical behavior in an abstract or decontextualized setting. Taylor and Koivumaki (1976), for example, asked participants to make attributions for why a generic target individual (e.g., "friend") engaged in hypothetical behaviors such as "being rude to someone" or "having fun." Some researchers have even argued that the actor-observer effect is a construct of the experimental conditions typical in attribution research; that is, the experimental conditions make actor attributions to external factors and observer attributions to internal factors more likely to occur (Monson & Snyder, 1977, pp. 101-102). Gilbert and Malone (1995) noted that psychology experiments ... are among the poorest vehicles for obtaining actuarial information about attributions. Because no effort is made to select representative situations or subjects, such experiments cannot reveal the kinds of attributions people usually, normally, routinely, generally, or typically make (p. 28).

Thus, in naturalistic settings, or experimental settings that more closely approximate such settings, the actor-observer effect may not always occur (Lewis, 1995; Monson, Tanke, & Lund, 1980).

Together these various qualifications raise issues about the generalizability and robustness of the actor-observer effect. Perhaps these qualifications should be interpreted as boundary conditions, but if so, the boundaries within which the effect holds seem to be quite narrow. As Monson and Snyder (1977) noted almost 20 years ago, "It is clear that the attributions of actors and observer differ, but not always in the direction suggested by Jones and Nisbett" (p. 93). Similarly, Funder and Van Ness (1983) commented that "the actor-observer difference may be less general than was once thought" (pp. 31-32) and, more recently, Lewis (1995) argued that the actor-observer effect is "not as ubiquitous as previously thought" (p. 102).

Watson (1982) concluded his comprehensive review of the actor-observer literature with a call to action: Future research should "clarify the factors that enhance, eliminate, or reverse" the basic effect. He suggested several avenues for future research, including (a) clarification of the degree to which the effect holds for internal and external causal factors and for stable versus unstable internal factors; (b) the role of psychological processes, such as salience and information level, presumed to produce the effect; (c) individual differences in actor and observer attributions and their link with personality variables; and (d) interactions among the various relevant factors and processes (e.g., are certain types of causal attributions differentially affected by salience?). For the most part, these suggestions have not been pursued by attribution researchers. Instead, the actor-observer effect has proved to be somewhat Teflon-coated; despite the empirical and conceptual problems summarized above, it has become an entrenched part of scientific psychology, appearing ubiquitously in the literature. However, we believe there is an unfinished agenda. It is time to reexamine the basic actor-observer effect and explore the avenues of research suggested by Watson and others more than a decade ago.

The present study seeks to further our understanding of the conditions under which actors and observers differ in their causal attributions. We investigated three factors hypothesized to influence the nature of actor-observer differences. First, we addressed concerns about the grossness of the internal and external categories by examining actor and observer attributions to four specific causes: two internal (personality and mood) and two external (interaction partner and situation). This design allowed us to test questions such as: Does the expected pattern of actor-observer differences hold for both internal causes and both external causes, as the general formulation of the effect would suggest? Or, do actors and observers differ only in their attributions to the two external causes, as Watson's (1982) review would suggest? Second, we examined the effects of interacting repeatedly in the same situation with different interaction partners. Specifically, we asked the question: How do attributions by actors and observers change across successive interactions? This context reflects the way attributions are often formed in everyday life and simulates the multiple-observation scenario described by Kelley (1973). Third, we examined the degree to which there are systematic individual differences in the tendency to show the actor-observer effect and whether such individual differences relate to stable personality characteristics. These issues were explored using a quasinaaturalistic experimental design in which participants interacted in dyads and made causal attributions for their behavior and that of their partner.

**Causal Factors**

The causal attribution domain was initially conceptualized by Heider (1958) as a bipolar dimension contrasting internal and external causes. This conceptualization reflects Heider's assumption that causal attributions are hydraulic; that is, greater attribution to internal causes entails less attribution to external causes and vice versa. However, subsequent research showed that internal and external attributions are not highly negatively correlated (Solomon, 1978; Taylor & Koivumaki, 1976), and therefore the two causal categories are more appropriately conceptualized as two unipolar dimensions. As a result, most studies of the actor-observer effect have examined attributions to internal and external causes separately. This refinement was...
useful but still permitted quite varied causes to be included under a single rubric. In Storms’s (1973) well-known study, for example, participants made attributions to: (a) “personal characteristics,” which included “personality, traits, character, personality style, attitudes, mood,” and (b) “characteristics of the situation,” which included “being in an experiment, the ‘getting acquainted’ situation, the topic of conversation, the way the other participant behaved.” The implicit assumption that what is true for one cause in a category is equally true of any other cause within that category has not been adequately tested with regard to actor–observer differences.

The present study was designed to permit comparisons both between and within the internal and external categories. The two internal causes we selected, personality and mood, reflect the distinction between stable and unstable causes (e.g., Weiner, 1986) and the distinction between traits and states (Chaplin, John, & Goldberg, 1988): Personality represents stable internal traits, and mood represents unstable internal states. Although some formulations of the actor–observer effect include only stable dispositions (i.e., traits) in the internal category (e.g., Jones & Nisbett, 1972), much of the research on which the effect is based includes (or does not explicitly exclude) transient internal factors such as mood (e.g., Regan & Totten, 1975; Smith, 1984; Storms, 1973).

The question of whether the actor–observer effect holds only for stable dispositions or for all internal factors, including transient ones such as mood, has been examined in only a few studies. Goldberg (1981) found that the predicted actor–observer difference was “most consistently elicited by terms describing temporary states, activities, or moods” (p. 535). In contrast, White and Younger (1988) argued that the actor–observer asymmetry should not hold for transient internal factors, because such factors are more accessible to the self than to others (i.e., people experience their own feelings directly, but observers must infer others’ feelings from their behavior). Consistent with this prediction, they found that participants reported “it depends on my [the person’s] mood” more frequently when ascribing traits to self than to others. Finally, Liu, Karasawa, and Weiner (1992) examined attributions about the causes of emotional states experienced by self and other in hypothetical vignettes (e.g., “You are [Tom is] extremely happy. You [Tom] found $100.” To what extent did your [his] mood “cause or contribute to your [his] emotional reaction?”). They did not find a significant difference between self- and other attributions to mood. Thus, the research to date is inconclusive on whether the actor–observer effect holds for mood.

We also distinguished two types of external causes: (a) the general circumstances of the situation, a stable factor that did not change throughout the experiment, and (b) one’s conversation partner, an unstable factor that changed after each successive conversation. In most attribution experiments, participants make attributions to the “situation,” which encompasses all aspects of the external environment. We believe, however, that it is important to distinguish between general situational factors, such as role demands, and the more immediate and concrete behavior of the person with whom one interacts. Consider, for example, the attribution of an aggressive act to climactic conditions (hot and humid) versus an insult by another person—both are external attributions, but their implications are very different. The distinction between these two types of attributions raises the question: Does the actor–observer effect reflect an emphasis by the self on situational forces in the external environment, as is typically implied, or an emphasis on the people with whom one interacts directly?

The general formulation of the actor–observer effect suggests that all four causal factors will show actor–observer differences consistent with the effect. That is, observers should rate the two internal causes (personality and mood) as more important than actors, whereas actors should rate the two external causes (conversation partner and situation) as more important than observers. However, a more complex set of hypotheses, which differentiates between causes within a category, is suggested by the perceptual salience account of the actor–observer effect (e.g., Nisbett & Ross, 1980; Ross & Nisbett, 1991; Storms, 1973). Specifically, causal factors that are most salient to actors (e.g., those that engulf their perceptual field), whether internal or external, should elicit the highest level of attribution from them; similarly, causal factors that are most salient from the observer perspective should elicit the highest level of attribution from observers.

In the dyadic “getting acquainted” task used in the present study, one’s interaction partner should be perceptually salient for both actors and observers. Actors, then, should focus on their partner as a cause of their own behavior (e.g., “I talked a lot because of the way my partner acted”), whereas observers should focus on their partner’s personality as a cause of his or her behavior (e.g., “He talked a lot because of his personality”). In contrast, other aspects of the situation (e.g., the physical setting, experimental instructions, etc.) are relatively pallid—the situation does not engulf the actor’s visual field. As a result, we did not expect actors to ascribe more causal force to the situation than observers. We also did not expect to find the predicted actor–observer difference for mood attributions; White and Younger (1988) argued that mood is a less salient factor than personality for observers, and previous research has failed to show a consistent actor–observer difference in mood attributions. In summary, we expected that the actor–observer difference would hold for personality and partner but not for mood and situation.

Hypothesis 1a: Observer attributions to personality would be higher than actor attributions.

1 Watson (1982) pointed out that the actor–observer effect reflects an interaction between attributor (actor vs. observer) and causal factor (internal vs. external) and thus includes four specific predictions: (a) actor attributions are higher than observer attributions for external causes, (b) observer attributions are higher than actor attributions for internal causes, (c) actor attributions to external causes are higher than actor attributions to internal causes, and (d) observer attributions to internal causes are higher than observer attributions to internal causes. Contrasts (a) and (b) focus on differences between actors and observers within cause, whereas contrasts (c) and (d) focus on differences between causes within attributor. Because in the present study we examine four different causes, rather than only internal and external causes, testing these possible contrasts becomes considerably more complicated. Consequently, our analyses focused on what we believe are the critical contrasts: differences between actors and observers for each cause (i.e., [a] and [b]). (Note that this approach involves four contrasts—one for each cause—rather than two.)
Hypothesis 1b: Actor attributions to conversation partner would be higher than observer attributions.

Repeated Social Interactions: Kelley’s (1973) Multiple-Observation Scenario

Causal attributions are made in a variety of settings in everyday life. Sometimes people interact with a specific person in a single situation (e.g., having lunch with a stranger), sometimes they interact with the same person in different situations (e.g., spending the day with a friend), and sometimes they interact with different people in the same situation (e.g., meeting people at a party). The attribution process is likely to differ in these various contexts. For example, imagine that you have a series of conversations with different people. Suppose your first conversation partner is very talkative. In this case, you may attribute your partner’s talkativeness to his or her personality. If your second conversation partner barely talks at all, you would be even more inclined to believe that your two partners behaved the way they did because they have different personalities rather than because of the situation, which, after all, did not change.

This example illustrates how attributions may be influenced by the information one acquires across multiple occasions and after interacting with multiple partners. Similarly, Kelley (1973) distinguished two cases in which attributions are formed. In the single-observation case, the attributor has information about the behavior of a single actor on a single occasion. In the multiple-observation case, the attributor has information about the behavior of multiple actors or the same actor on multiple occasions. The attribution process differs in these two cases. In the single-observation case, the attributor applies causal schemas and the discounting and augmenting principles. In the multiple-observation case, the attributor applies the covariation principle, which states that causal force is attributed to those factors which covary with the behavior (i.e., the behavior occurs in the presence of the causal factor but fails to occur in its absence).

In most experimental research on attribution, participants do not infer covariation as they would in the real world, that is, on the basis of observations of behavior over multiple occasions or across multiple individuals. Instead, they are typically provided with covariation information directly. For example, participants are given summary statements such as “Almost everyone who hears the comedian laughs at him” or “John laughs at almost every other comedian” (McArthur, 1972).

In contrast, in the present study we recreated Kelley’s (1973) multiple-observation scenario using a repeated-measures design. Attributions to self and others were examined in three successive social interactions; participants engaged in “getting acquainted” conversations with three different interaction partners. These repeated interactions provided participants with covariation information relevant to forming attributions about their own and their partners’ behavior. Specifically, over the course of the three conversations, participants learned (a) how they acted with different partners (distinctiveness information for self-attributions) and (b) how different partners acted with them (consensus information for observer attributions). Thus, by the third conversation, participants responding to the basic attribution question “Why did I (my partner) act talkative?”

could draw on additional information about how they acted with previous partners and how their previous partners acted with them. This design creates, in effect, a history for the participants within the experimental context. This history includes knowledge about the self’s previous behavior and knowledge of how previous partners acted. In some sense, the repeated-interaction design creates a microcosm of real life, where we often interact in the same situation with different people.

The Gestalt idea of figure-ground processes suggests that stimuli that change or move relative to a stable background will become more salient (i.e., figural; e.g., Hillstrom & Yantis, 1994; McArthur & Post, 1977). In the present study, participants’ conversation partners changed while the situation remained the same. Thus, the repeated-interactions design of the study should make partner a more salient and the situation a less salient causal factor. If the maxim “what you attend to is what you attribute to” (Ross & Nisbett, 1991, p. 140) is correct, we would expect that these changes in salience will lead to changes in attribution. In addition, Kelley’s (e.g., 1973) covariation principle suggests that causes that do not vary across the conversations will be perceived as less relevant because they do not (and cannot) covary with behavior.

When participants explain their own behavior (actor attributions), their partners will become a more salient cause because each partner will act somewhat differently toward them (i.e., “I acted differently because my partners acted differently”). When participants explain the behavior of their partners (observer attributions), personality will become a more salient cause because the differences in their partners’ behavior will be assumed to reflect dispositional differences. (i.e., “My partners acted differently because they have different personalities”). Together these changes should accentuate the predicted actor–observer asymmetry: Actors will increase their emphasis on an external factor—partner—and observers will increase their emphasis on an internal factor—personality.

The constancy of the situation will make it less salient and less likely to be invoked to account for the differences participants see in their own behavior and that of their partners. As a result, attributions to the situation should decrease for both actors and observers. We do not have any a priori reason to believe attributions to mood will increase or decrease, because it is not clear whether mood changes across the conversations; actors may or may not perceive their own mood as changing, and observers may or may not attribute differences among their partners to differences in mood. In summary, we hypothesized three patterns of change over the course of the conversations.

Hypothesis 2a: Attributions to personality would increase for observers.

Hypothesis 2b: Attributions to partner would increase for actors.

Hypothesis 2c: Attributions to situation would decrease for both actors and observers.

Individual Differences: Personality Correlates of Actor and Observer Attributions

Do individuals differ in the way they explain their behavior and that of others? Are actor and observer attributions, and the disparity between them, stable across situations and predictable
from broad personality traits? There has been relatively little research on these questions. Snyder (1976) found that high self-monitors were particularly likely to perceive cross-situational variability in their behavior; he concluded that high self-monitors are more inclined to attribute their behavior to situational factors and therefore to show the predicted actor–observer effect. Goldberg (1978, 1981) examined personality correlates of the tendency to check "it depends on the situation" when ascribing traits to the self and found that low-self-esteem individuals were more inclined to use the situational response option. Funder (1980) showed that individuals differ systematically in the number of traits they ascribe to themselves and others and found that individuals who ascribe many traits are more anxious and poorly adjusted. Finally, a number of scales have been developed to measure individual differences in attributional style; these scales use hypothetical scenarios to measure a general tendency for self-attributions to be internal versus external, stable versus unstable, and global versus specific (e.g., Peterson et al., 1982; Lefcourt, von Baeyer, Ware, & Cox, 1979). Researchers using these scales have shown that certain attributional tendencies are linked to particular personality characteristics; for example, depressives tend to attribute negative outcomes to internal, stable, and global causes (Peterson & Seligman, 1984).

These studies suggest that individuals differ systematically in the types of causal attributions they make and provide some evidence that these individual differences are linked to personality characteristics. Our approach differs from previous research in three respects. First, we derived our measure of individual differences from the attributions participants made to explain their naturally occurring behavior in a specific situation, rather than from global trait ratings or responses to hypothetical scenarios. Second, we examined the consistency of these attributions across three repeated social interactions. Third, we tested predictions about the relation between attributions and personality characteristics based on the specific domain of behavior participants were explaining; that is, we based our predictions on the correspondence between the content domain of the personality trait (e.g., extraversion) and the content domain of the behavior being explained (e.g., talkativeness).

If the actor–observer asymmetry reflects a fundamental difference between the attributional processes governing actor and observer attributions, then we would expect that most individuals would show the expected effect. In contrast, if the actor–observer asymmetry reflects a particular cognitive or motivational orientation characterizing some participants, then we would expect the effect to hold only for a subset of individuals. To address this issue, we examined the percentage of participants who showed the predicted actor–observer difference; that is, for what proportion of the participants were differences between actor and observer attributions in the predicted direction?

Even if we find individual differences in who shows the actor–observer effect, these differences could reflect random error. However, if some cognitive or motivational orientation underlies these attributional tendencies, we would expect them to be systematic and predictable. To test this, we examined the consistency of actor and observer attributions across the three conversations: Do participants who attribute their behavior in the first conversation to the situation also attribute their behavior in the third conversation to the situation? We expected that both actor and observer attributions would show some degree of consistency across the conversations but that actor attributions would be more consistent because the target of attribution (the self) is stable, whereas for observer attributions the target (the partner) changes.

We also tested hypotheses about the correlates of individual differences in attributions and examined their link to broad personality dimensions. For example, do extraverts make different attributions for their behavior than introverts do? We expected that the relation between personality and attributions would be content specific; that is, extraversion would relate to attributions for talkativeness, agreeableness would relate to attributions for warmth, and neuroticism would relate to attributions for nervousness. Specifically, we predicted that individuals high in these traits would be more inclined to attribute their behavior in the corresponding domain to their personality; for example, that extraverts would believe their talkativeness is due to their extraversion. Moreover, if individuals high in each of the traits readily attribute their behavior in the corresponding domain to personality, then Kelley’s discounting principle suggests that they will be less inclined to attribute their behavior in that domain to the two external causal factors (e.g., extraverts will not attribute their talkativeness to the situation or to the way their partner acted). All predictions are specific to actor attributions, and we did not expect to find similar relations for observer attributions. Thus, we made the following predictions for actor attributions.

Hypothesis 3a: Extraversion would be positively related to personality attributions for talkativeness but negatively related to situation and partner attributions for talkativeness.

Hypothesis 3b: Agreeableness would be positively related to personality attributions for warmth but negatively related to situation and partner attributions for talkativeness.

Hypothesis 3c: Neuroticism would be positively related to personality attributions for nervousness but negatively related to situation and partner attributions for nervousness.

Method

Overview

Experimental sessions were conducted in groups of 4 participants. A round-robin design (Kenny & La Voie, 1984) was used in which each participant engaged in a "getting acquainted" conversation with each of the other 3 participants. After each conversation participants rated their behavior and their partner's behavior on three dimensions. Participants also rated, separately for each dimension, the importance of four possible causes of their own and their partner's behavior during the conversation.

Participants

120 undergraduate students (67 of whom were women) participated to fulfill a course requirement; they ranged in age from 17 to 28 years, with a median age of 19. Participants were recruited in groups of 4. Sign-up sheets for the experiment specified that people volunteering for the same session should not be acquainted with one another.
Procedure

When participants arrived for the experiment they were seated and instructed not to speak to each other until the study began. After all 4 participants had arrived, they were randomly divided into 2 pairs, and each pair was taken to a separate room. A videocamera and two chairs were located in each room. The experimenter seated the participants and then turned on the videocamera. Participants were told that they had 5 min to get acquainted and that they could talk about anything they liked. The experimenter returned exactly 5 min later and told the participants to end their conversation and complete their ratings. Participants then repeated this procedure with a second and then a third partner, thus completing the round-robin design.

Measures

Behavior ratings. Participants rated their behavior and their partner's behavior on three dimensions: talkative, warm, and nervous. Ratings were made on a 9-point scale, ranging from 1 (not at all [talkative]) to 9 (extremely [talkative]). We selected these three dimensions because they are relevant to interpersonal contexts such as the “getting acquainted” situation and because they represent the same content domain as three of the Big Five personality factors: Talkative, warm, and nervous are among the best marker items for the Extraversion, Agreeableness, and Neuroticism domains, respectively (John, 1990, Table 3.2).

Causal attributions. For each behavioral dimension, participants rated how important each of the following 4 factors was in causing their behavior on that dimension: (a) mood (“the mood you were in during the conversation”), (b) personality (“your personality”), (c) partner (“the way your partner acted”), and (d) situation (“the situation you were in [e.g., being in an experiment, meeting someone for the first time, the presence of videocameras, etc.]”). We counterbalanced the order in which the causes were rated across participants using a Latin square design; subsequent analyses indicated that there were no significant order effects.

Participants made causal attributions for their own behavior (actor attributions) and then for their partner’s behavior (observer attributions). The four causal factors were modified appropriately for the observer attributions. For example, “the way your partner acted” was changed to “the way you acted.” Attribution ratings were made on a 9-point scale ranging from 1 (not at all) to 9 (extremely important). Participants completed the same set of ratings after all three conversations.

Personality dimensions. We assessed the Big Five personality dimensions with the 54-item version of the Big Five Inventory (BFI; John, Donahue, & Kentle, 1991), which shows convergent validity with other self-report measures of the Big Five and with peer ratings. The present analyses focus on the Extraversion (8 items; \( \alpha = .86 \)), Agreeableness (9 items; \( \alpha = .77 \)), and Neuroticism (8 items; \( \alpha = .84 \)) scales.

Results and Discussion

The overall design of the experiment was a 3 × 4 design: \( (\text{behavioral dimension: talkative, warm, nervous}) \times 4 (\text{cause: mood, personality, partner, situation}) \times 2 (\text{attributor: actor, observer}) \times 3 \) (conversation), with all four factors as repeated measures.

<table>
<thead>
<tr>
<th>Causal factor</th>
<th>Actor</th>
<th>Observer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Personality</td>
<td>M=6.45, SD=1.36</td>
<td>M=6.74, SD=1.40</td>
</tr>
<tr>
<td>Mood</td>
<td>M=4.95, SD=1.88</td>
<td>M=4.74, SD=1.73</td>
</tr>
<tr>
<td>External</td>
<td>M=6.40, SD=1.37</td>
<td>M=5.92, SD=1.56</td>
</tr>
<tr>
<td>Situation</td>
<td>M=6.16, SD=1.75</td>
<td>M=6.06, SD=1.75</td>
</tr>
</tbody>
</table>

Note. \( N=120 \).

However, because Hypotheses 1 and 2 did not involve differences among behavioral dimensions, analyses for these hypotheses were conducted on mean attribution ratings, averaged across the three behavior ratings (cf. Storms, 1973). When sex was included as a factor in a four-way multivariate analysis of variance (MANOVA), it did not have a main effect or any interactions except for a single three-way interaction (Sex × Cause × Conversation), which reflected a sex difference in the magnitude rather than the direction of an effect. Thus, men and women generally showed the same pattern of attributions. Therefore, all results are reported for the total sample.

Effect of Causal Factor on Actor–Observer Differences in the First Conversation

Hypotheses 1a and 1b were tested in the first conversation because it resembles the experimental context of a typical attribution study in which participants make attributions about their behavior in a single situation. A two-factor MANOVA with cause and attributor as repeated measures showed a main effect of cause, \( F(2, 238) = 60.3, p < .01 \) (\( \eta^2 = 33.6\% \)), and a Cause × Attributor interaction, \( F(3, 357) = 32.5, p < .01 \) (\( \eta^2 = 21.5\% \)). The main effect primarily reflects less attribution to mood (\( M = 4.85, SD = 1.62 \)) than to personality (\( M = 6.60, SD = 1.14 \)), partner (\( M = 6.16, SD = 1.20 \)), or situation (\( M = 6.11, SD = 1.54 \)). The Cause × Attributor interaction indicates that actors and observers differed in their pattern of attributions to the four causes. Are these differences consistent with the actor–observer effect?

Table 1 shows mean attribution ratings in Conversation 1 for each of the four causal factors, separately for actors and observers. Confirming Hypothesis 1a and consistent with the actor–observer effect, observers rated personality as a more important causal factor than did actors, \( F(1, 119) = 4.1, p < .05 \) (\( \eta^2 = 3.3\% \)). For example, observers were more likely to believe their...
partner's talkativeness reflected his or her personality than they were to believe their own talkativeness reflected their personality. Actors and observers did not differ in their attributions to mood, and the trend was opposite to that predicted by the actor–observer effect for internal causes, \( F(1, 119) = 2.1, p = .15 \) (\( \eta^2 = 1.7\% \)). The absence of an actor–observer difference for mood is consistent with previous research by Liu et al. (1992) and Lewis (1995).

Consistent with Hypothesis 1b, the actor–observer difference held for attributions to partner: Actors rated conversation partner as a more important cause of behavior than did observers, \( F(1, 119) = 9.5, p < .01 \) (\( \eta^2 = 7.4\% \)). For example, actors were more likely to attribute their warmth to something about the way their partner acted than they were to attribute their partner’s warmth to the way they acted. As expected, we did not find a significant actor–observer difference for attributions to the situation (\( F < 1 \)).

Does the actor–observer effect replicate when the data are analyzed at the more general level of internal and external causes? To test this, we conducted a two-factor MANOVA with cause (internal, external) and attributor (actor, observer) as repeated measures; mood and personality attributions were collapsed into the broader internal category, and partner and situation attributions were collapsed into the broader external category. We found the predicted crossover interaction between cause and attributor, \( F(1, 119) = 6.0, p < .05 \) (\( \eta^2 = 4.8\% \)). Observer attributions were more internal and less external than actor attributions. However, the actor–observer difference was significant only for external attributions, \( F(1, 119) = 7.9, p < .01 \) (\( \eta^2 = 6.2\% \)). This finding is consistent with previous research showing that the actor–observer effect is primarily a function of differences in attributions to external causes (Watson, 1982).

In summary, the results replicate the basic actor–observer effect at the level of internal versus external causes. However, in the present study at least, the actor–observer effect seems to be a function of differences between actors and observers in their attributions to a particular external factor (the conversation partner) and one particular internal factor (personality). Specifically, the pattern of attributions predicted by the actor–observer effect replicated only for attributions to personality and partner but not for attributions to mood or the situation. Relative to observers, actors tended to focus more on their partners as a determinant of their behavior and less on their own personality. Thus, conclusions about differences between actors and observers in their attributions to internal and external causes may obscure important distinctions at the level of more specific causes. For example, studies that include or do not explicitly account for mood from the internal category may find the expected asymmetry only because participants show the effect for personality. Similarly, studies that examine actor–observer differences in attributions to external causes (or to “the situation”) may find the predicted effect only when participants focus on the other participants in the situation rather than on the general circumstances of the interaction.

**Changes in Causal Attributions Across the Three Conversations**

To examine changes in attribution across the conversations, we tested for linear trends by coding the conversation variable using orthogonal polynomial contrasts (see Keppel & Zedeck, 1989, pp. 353–355). A three-factor MANOVA with cause (mood, personality, partner, and situation), attributor (actor, observer), and conversation (1, 2, 3) showed a significant three-way interaction, \( F(6, 714) = 4.7, p < .01 \) (\( \eta^2 = 3.8\% \)). To understand this interaction and to explore how actor and observer attributions changed over the course of the three conversations, we conducted 4 two-factor MANOVAs to examine the simple interactions between attributor and conversation within each cause. All four analyses showed a significant interaction (\( ps < .05 \)), indicating that the specific trends in actor and observer attributions differed for all four causes.

Figure 1 shows changes in actor and observer attributions across the three conversations, separately for each cause. Overall, attributions to personality increased, \( F(1, 119) = 6.2, p < .05 \) (\( \eta^2 = 5.0\% \)), as did attributions to partner, \( F(1, 119) = 4.3, p < .05 \) (\( \eta^2 = 3.5\% \)). However, as predicted by Hypotheses 2a and 2b, actors and observers showed different, but complementary, trends. Specifically, actors’ attributions to partner increased, \( F(1, 119) = 11.5, p < .01 \), whereas observer attributions did not change (\( F < 1 \)). Conversely, observers’ attributions to personality increased, \( F(1, 119) = 10.0, p < .01 \), whereas actor attributions did not change (\( F < 1 \)). Thus, over the course of the conversations, when making attributions about their own behavior (i.e., actor attributions), participants increasingly emphasized the importance of their partner as a cause of their own behavior but emphasized the importance of personality as a cause of their partner’s behavior. For example, participants in the third conversation tended to believe they acted warmly because of their partner, whereas they believed their partner acted warmly because of his or her personality. These changes, which are consistent with the actor–observer effect, accentuated differences between actors and observers in the third conversation relative to the first.

As predicted by Hypothesis 2c, attributions to the situation decreased substantially for both actors and observers. This effect was stronger for actor attributions than for observer attributions. Actor attributions dropped by almost three forths of a standard deviation, \( F(1, 119) = 44.8, p < .01 \), whereas observer attributions dropped by about one fourth of a standard deviation, \( F(1, 119) = 5.6, p < .05 \). Thus, situational factors (such as the constraints of the “getting acquainted” conversation, the general experimental context, the videocameras, etc.) became less important over the course of the three conversations. The difference between actors and observers in the magnitude of this drop produced an interesting trend. Although the actor–observer difference was in the predicted direction in the first conversation, by the second conversation this difference had reversed and actors rated the situation as less important than observers, \( F(1, 119) = 8.5, p < .01 \); by the third conversation this reversal grew even stronger, producing a strong effect in the opposite direction (nearly a full scale point), \( F(1, 119) = 25.8, p < .01 \). Thus, in the third conversation actors paid less attention to situational factors than observers did, which is directly contrary to the actor–observer effect.

Attributions to mood neither increased nor decreased for actors (\( F < 1 \)) and increased slightly for observers, \( F(1, 119) = 4.4, p < .05 \). As a result of the increase in observer attributions to mood, by the third conversation the predicted actor–observer
effect emerged: Observers rated mood as more important than did actors, $F(1, 119) = 4.1, p < .05$.

When the four dimensions were collapsed into the internal and external categories, the crossover interaction representing the actor–observer effect replicated in the second and third conversations ($p < .01, \eta^2 = 5.9\%$ and $8.5\%$ in Conversations 2 and 3, respectively). However, the exact shape of the effect varied across the conversations. Specifically, whereas in Conversation 1 the effect primarily reflected differences between actors and observers in their attributions to external causes, in Conversations 2 and 3 the effect reflected differences in attributions to internal causes. This occurred because observer attributions became more internal and less external in Conversation 3, reflecting an increase in personality and mood attributions and a drop in situational attributions.

In summary, the effect of interacting in three successive conversations produced predictable effects on actor and observer attributions. First, and most noticeably, situational attributions dropped considerably, presumably because the situational context did not change. The greater drop for actor attributions may reflect the fact that actors directly experienced the constancy of the situational context for themselves, whereas they had to assume that their partner had just been in a similar context. Second, actor attributions to partner increased, whereas observer attributions to personality increased; both trends are consistent with a stronger actor–observer effect. Ap-
parently, actors noticed how their own behavior changed across the conversations and attributed more causal force to the only factor that also changed, namely, their conversation partner. In contrast, observers noticed how each conversation partner behaved differently with them and assumed that the variability in their partners' behavior must be due to differences in personality. In addition, we found an unpredicted increase in observer attributions to mood. This may reflect the same mechanism as the increase in personality attributions, namely that observers noticed differences among their conversation partners and attributed those differences to their partner's mood.

These changes in attributions affected the nature of the actor–observer effect. Whereas there was no actor–observer difference for mood in the first conversation, the increase in observer attributions to mood is consistent with the actor–observer effect and produced a significant difference by the third conversation. In addition, the complementary increases in actor attributions to partner and observer attributions to personality accentuated the actor–observer difference for these causes. Both cases reflect a greater emphasis on the partner as a causal agent: What caused the self's behavior is the partner, and what caused the partner's behavior is the partner's personality. This same mechanism may be what leads actors and observers to emphasize partner and personality, respectively, as causes; in general, it is salient to actors how others act with them and it is salient to observers how people differ in personality. Finally, we found a reversal of the expected actor–observer effect for situational attributions. This occurred because actors dramatically lowered their attributions to this factor, presumably because the situation did not change and decreased in salience.

Individual Differences in Actor and Observer Attributions

Are there individual differences in who shows the actor–observer effect? To test this, we examined the percentage of participants who showed (a) an actor–observer difference consistent with the basic effect (note that almost 50% should show this by chance), (b) no difference, and (c) an actor–observer difference in the opposite direction. To get a general picture of these differences, we conducted the analyses on attribution ratings averaged across the three conversations. For personality, 65% of the participants showed the effect (observer attributions greater than actor attributions), 7% showed no difference, and 28% showed the opposite tendency. For mood, only 46% showed the effect, 10% showed no difference, and 44% showed the opposite tendency. With regard to the external causes, for partner 72% showed the effect (actor attributions greater than observer attributions), 7% showed no difference, and 22% showed the opposite tendency. For situation, 36% showed the effect for situation, 5% showed no difference, and 59% showed the opposite tendency. The findings for mood and situation are not surprising given that there was no actor–observer main effect for these causes. It is surprising, however, that for personality and partner, which did show significant main effects, the predicted actor–observer effect does not hold for about one third of the participants. Of course these individual differences could simply reflect random error rather than systematic psychological differences. If these differences are systematic, then we would expect individuals to show consistent tendencies in their attributions that are stable across the conversations and predictable from broad measures of personality.

To examine the stability of actor and observer attributions, we correlated the attributions in Conversation 1 with those in Conversations 2 and 3, separately for each of the four causes. These correlations are shown in Table 2. In general, the correlations were high (typically in the .30s to .60s), indicating considerable stability in the types of attributions people tend to make. Actor attributions (mean \( r = .53 \)) tended to be more stable than observer attributions (mean \( r = .40 \)). Stability correlations were consistently higher between Conversations 2 and 3 (mean \( r = .66 \) for actors and .53 for observers) than between Conversations 1 and 2 (mean \( r = .47 \) for actors and .34 for observers) or 1 and 3 (mean \( r = .43 \) for actors and .34 for observers). For both actors and observers, mood was the most stable cause, followed by personality, partner, and then situation.

Together the findings show that actor and observer attributions are relatively stable across repeated social interactions. For example, participants who attributed their behavior in the first conversation to their personality were also likely to attribute their behavior in the second and third conversations to their personality. Similarly, participants who attributed their first partner's behavior to his or her mood were also likely to do so for their second and third partners. This stability exists despite changes in participants' conversation partners and despite changes in the behaviors exhibited by both self and partner across the conversations.

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3 The stability correlations were very similar for attributions to talkative, warm, and nervous, and the results are presented for mean attribution ratings averaged across these three dimensions.

4 It is possible that these stability correlations were inflated by individual differences in response style (i.e., scale usage). To eliminate these individual differences, we ipsatized attributions to the four causes within each participant. The stability correlations for these ipsatized ratings were slightly lower than for the raw attribution ratings but still averaged in the .30s to .50s. The findings reported in Table 3 also do not differ substantially for the ipsatized ratings, except that neuroticism does not correlate significantly with attributions to any of the four causes.

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<table>
<thead>
<tr>
<th>Table 2 Stability of Actor and Observer Attributions: Correlations Across Conversations 1, 2, and 3</th>
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<tbody>
<tr>
<td><strong>Actor attributions</strong></td>
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<tr>
<td><strong>Causal factor</strong></td>
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<tr>
<td>Personality</td>
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<tr>
<td>Mood</td>
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<td>Partner</td>
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<td>Situation</td>
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<tr>
<td><strong>Mean r</strong></td>
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</tbody>
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*Note. Values in the table are correlations between mean attribution ratings (averaged across talkative, warm, and nervous). Correlations were transformed with Fisher's r-to-z formula before averaging. *p < .05. **p < .01.*
Can we predict these stable individual differences from general personality characteristics? Table 3 shows personality correlates of attributions to each of the four causes, separately for actor attributions, observer attributions, and the simple difference between actors and observers (keyed in the direction predicted by the actor-observer effect). We predicted that individual differences in extraversion, agreeableness, and neuroticism would predict the types of attributions actors made for their talkativeness, warmth, and nervousness, respectively. As predicted by Hypothesis 3a, extraversion was positively related to personality attributions for talkativeness but negatively related to partner and situation attributions for talkativeness. As predicted by Hypothesis 3b, agreeableness was positively related to personality attributions for warmth but negatively related to partner and situation attributions for warmth. Contrary to Hypothesis 3c, neuroticism was unrelated to personality attributions for nervousness and positively related to personality attributions for warmth. As expected, the personality dimensions did not correlate with observer attributions. Thus, correlations with the actor-observer difference score reflect correlations with actor attributions. The personality dimensions did not correlate significantly with attributions to mood, except for a single correlation between agreeableness and actor attributions to warmth, indicating that agreeable individuals tend to attribute their warmth in part to their mood.

It is possible that these relations between personality traits and causal attributions are mediated by the person’s behavior in the conversation. Specifically, personality traits may predict causal attributions because they are related to the way a person acts in social interactions; for example, extraverts may talk more than introverts, and people who talk more may be inclined to attribute their behavior to their disposition. To test this, we conducted a series of multiple regression analyses predicting actor attributions from broad personality traits and actors’ ratings of their behavior. In all cases, the effect of personality on attributions was independent of the behavior ratings. Thus, the influence of personality on causal attributions was not mediated by behavior in the conversations.

It also is possible that behavior in the conversation moderates the relation between personality traits and causal attributions. Specifically, when a person acts in a way that is consistent with his or her personality (e.g., when an extravert acts talkative), that person should be particularly likely to account for his or her behavior in dispositional terms (e.g., “I talked a lot because I am the type of person who acts talkative”). To test this, we conducted three hierarchical multiple regression analyses in which the personality trait (extraversion, agreeableness, or neuroticism) and the actor’s behavior rating (talkative, warm, and nervous) were entered in Step 1 and the standardized product of these two variables was entered in Step 2. The moderator effect was significant for the Extraversion X Talkativeness interaction term ($R^2_{change} = 7.3\%, p < .01$). Follow-up analyses showed that extraverted individuals who talked a lot during the conversation were particularly likely to make personality attributions for their behavior and differed substantially (by about 1 SD) from introverts ($p < .01$); when they were relatively non-talkative they were considerably less likely to make personality attributions and did not differ significantly from introverts ($t < 1$). The moderator effects for agreeableness and Neuroticism were nonsignificant (Agreeableness X Warm interaction, $R^2_{change} = 4\%, ns$; Neuroticism X Nervous interaction, $R^2_{change} = 1\%, ns$) but in the same direction as that for Extraversion. Thus, the findings provide partial support for the supposition that the personality of the attributor exerts a stronger effect on causal attributions when the attributor’s behavior is consistent with his or her disposition. This suggests that behavior that is normative for the individual will lead him or her to make dispositional attributions, just as non-normative behavior has been shown to lead observers to make dispositional attributions.

Why was the hypothesis linking neuroticism to attributions for nervousness not confirmed? One possibility is that individuals high in neuroticism tend to be more other-directed and more concerned with the expectations of others (Briggs, Cheek, & Buss, 1980), which may lead to greater attribution to external causes such as partner and the situation. Another possibility is that a self-serving attributional tendency was operating against the predicted effect; specifically, unlike being talkative and warm, being nervous is undesirable, and participants may not want to admit that their nervousness is dispositionally caused. However, we do not believe the effects for extraversion and agreeableness reflect self-serving attributions for a number of reasons. First, the complete pattern of correlations between personality traits and causal attributions (for all behavioral dimensions) suggests that more than just a self-serving tendency

<table>
<thead>
<tr>
<th>Causal factor</th>
<th>BFI extraversion</th>
<th>BFI agreeableness</th>
<th>BFI neuroticism</th>
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<tbody>
<tr>
<td></td>
<td>Actor</td>
<td>Observer</td>
<td>Actor</td>
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<tr>
<td>Personality</td>
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<td>.36**</td>
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<td>Partner</td>
<td>-.20*</td>
<td>-.15</td>
<td>.09</td>
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<tr>
<td>Situation</td>
<td>-.22*</td>
<td>-.24**</td>
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</table>

**Note.** For personality and mood (internal causes), A - O = observer attribution minus actor attribution; for partner and situation (external causes), A - O = actor attribution minus observer attribution. Values are correlations between the three Big Five Inventory (BFI) personality scales and attributions to the behavioral rating that corresponds in content (i.e., Extraversion was correlated with attributions to talkativeness; Agreeableness was correlated with attributions to warmth; Neuroticism was correlated with attributions to nervousness).

* $p < .05$. ** $p < .01$. 

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was operating; for example, extraverts were less likely to make situational attributions for their nervousness. Second, controlling for self-esteem (which is related to the self-serving attributional tendency) does not eliminate any of the correlations between personality traits and attributions reported in Table 3. Third, ipsatizing the attribution ratings eliminates the negative correlations between neuroticism and attributions to partner and situation, suggesting that response style tendencies contributed to these initial correlations.

In summary, the findings showed that personality differences among attributors influenced the causal attributions they made to explain their behavior in the conversations. These relations have implications for the types of individuals who showed the actor–observer effect. Extraverted and agreeable individuals were less inclined to show the predicted actor–observer asymmetry; for example, extraverted individuals tended to make personality attributions for their talkativeness (e.g., "I talked a lot because I am an extraverted person") rather than external attributions (e.g., "I talked a lot because of the situation/my partner"). In contrast, neurotic individuals showed an even stronger actor–observer effect; they tended to attribute their nervousness to the situation or to their partner rather than to their neurotic personality. Thus, personality characteristics sometimes work in the same direction as the predicted effect, serving to accentuate the actor–observer asymmetry; and sometimes they work in the opposite direction, serving to attenuate the actor–observer asymmetry.

General Discussion and Conclusions

The present study examined causal attributions by actors and observers in three successive conversations. Our findings show that the nature of actor–observer differences depends on: (a) the specific causal factor invoked, (b) the individual's history in the situation, and (c) individual differences among attributors.

Differences Among Causal Factors: Beyond the Internal–External Distinction

Three sets of results emerged in our analyses of differences among causal factors, each pointing to problems with the traditional internal–external distinction. First, although the basic actor–observer effect replicated when the causal factors were grouped into the internal versus external categories, more detailed analyses of the four individual causes showed that the effect was a function of one particular external factor (the conversation partner) and one particular internal factor (personality). This pattern of attributions is consistent with a perceptual salience interpretation. Whether in the actor or observer role, participants emphasized causal factors associated with their partner, who engulfs the perceptual field in a dyadic interaction. Specifically, participants believed their own behavior was shaped by their partner ("My partner made me act that way") but that their partner's behavior was shaped by his or her personality ("My partner's personality made him/her act that way"). In both cases, it is the person with whom one interacts who is perceived as the primary cause of behavior, not some general feature of the situation such as social norms. This is consistent with Heider's (1944) belief that there is a "tendency to perceive persons as causal origins" (p. 361) and Nisbett's (1987) observation that Western conceptions of causation "emphasize the causal role of the actors" (p. 110). However, rather than supporting a dispositional bias, the present findings imply a more general belief in persons (not necessarily dispositions) as causes of the behavior of both self and other. It is, of course, the person who is salient, not the disposition (Gilbert & Malone, 1995). Thus, salience may draw people's attention toward a particular causal locus—in this case the interaction partner—rather than to a particular causal factor within that locus.

Second, actors and observers did not differ consistently in their attributions to mood. Together with previous research, this finding suggests that the actor–observer effect does not hold for mood. Although some formulations of the actor–observer effect do not include transient internal causal factors (e.g., Jones & Nisbett, 1972), an ambiguity exists concerning the internal causal category, and future discussions of the actor–observer effect should specify that the effect may not apply to transient internal causal factors.

Third, the actor–observer effect also did not hold for attributions to the situation. In fact, by the second and third conversations, actors were even less inclined than observers to see their behavior as controlled by the situation. Why did the actor–observer effect fail to replicate for attributions to the situation—probably the most widely studied external cause? We have argued that the situation was not perceptually salient to the actor because the actor's attention was focused on the partner rather than on the general circumstances of the interaction. Another reason the situation may not have been salient is that the getting-acquainted task is a "weak" situation—it is relatively unstructured, and there are no explicit norms or serious consequences for transgressions of appropriate behavior (Snyder & Ickes, 1985). Thus, the situation was not perceived as a powerful determinant of behavior, and the actor–observer effect no longer emerged. By disentangling the general situational context from the interaction partner we were able to specify more precisely the source of actor–observer differences in external attributions. This raises the possibility that some previous studies showing an actor–observer difference for situation did so because interaction partner was included, explicitly or implicitly, within the broadly defined situation category.

Together, the findings support the criticism that the broad internal and external categories obscure meaningful differences among causal factors. Neither the two internal causes nor the two external causes showed the same pattern of actor and observer attributions. Thus, the assertion that observers attribute their behavior to internal factors whereas actors attribute their behavior to external factors is not meaningful without specifying which internal factors and which external factors. Although contemporary theory and research on causal attributions distinguishes among more specific causal factors (e.g., Weiner, 1986), descriptions of the actor–observer effect often fail to take these distinctions into account. Indeed, there is an ambiguity in the way the actor–observer effect is described conceptually and tested empirically: What are the causal dimensions on which actor and observer attributions differ: internal versus external? Dispositional versus situational? Stable versus unstable? Intentional versus unintentional? The extant research does not provide a clear answer to these questions.
Change in Attributions Across Repeated Social Interactions: Effects of Creating a “History” in the Situation

Over the course of the three interactions, participants showed a different pattern of attributions depending on whether they were serving as actors or observers: When explaining their own behavior, participants increasingly emphasized the importance of their partner in shaping their behavior, whereas when explaining the behavior of others, participants increasingly emphasized the importance of personality. In contrast, both actors and observers gave less weight to the situation in each successive conversation: Whereas participants considered the situation an important cause of behavior in the first conversation, by the third conversation they dramatically decreased their attributions to the situation. These findings are consistent with a salience account of attributional processes. Causes that changed received more attention, and causes that did not received less attention. This accounts for both the general drop in situational attributions and the increase in actor attributions to personality and observer attributions to partner. Thus, the present findings provide evidence for a second form of salience (in addition to perceptual salience): Dynamic factors—causal factors that change across successive interactions—become figural against a stable situational background and grab the attention of the attributor.5

It also is possible that the situation’s actual effect on behavior decreased; that is, participants may have become habituated to the situational forces operating in the getting-acquainted context. As a result, their behavior was in fact less under the control of these forces, and participants appropriately decreased their attributions to the situation. If the situation did become less influential, we would expect to see some changes in behavior across the conversations. Consistent with this, participants on average became less nervous from Conversation 1 to Conversation 3. \( r(119) = 2.2, p < .05 \). More important, participants whose nervousness decreased were more inclined to lower their self-attributions to the situation than those who did not become less nervous or who increased in nervousness. Specifically, participants who decreased in nervousness lowered their attributions to the situation by almost 3 scale points (-2.86), whereas participants who remained the same (-0.89) or increased (-0.34) did not show as substantial a drop; in correlational terms, change in self-reported nervousness correlated .35 \((p < .01)\) with change in situational attributions. This same relation held when change in observer ratings of nervousness were correlated with change in observer attributions to the situation \( r = .59, p < .01 \); mean change in situational attributions = -2.25, -0.36, and 1.56 for decreasers, no change, and increasers, respectively. These findings suggest that the drop in situational attributions reflects, at least in part, a response to a decrease in the actual effect of the situation on behavior. However, the present study does not allow us to disentangle this habituation account from the salience account, which assumes that the situational forces influenced behavior to the same extent in all three conversations, but participants simply became less aware of them by the third conversation. It is possible that both salience and habituation effects were operating, but this possibility requires further examination.

The findings are also consistent with Kelley’s (1973) covariation principle and highlight the importance of examining causal attributions in a multiple-occasion context. In the present study, participants paid more attention to causal factors that changed over the course of the conversations (e.g., partner), presumably because those causal factors could covary with changes in behavior across the conversations. In contrast, causal factors that did not change (e.g., situation) could not have covared with changes in behavior and thus received less weight. This raises an important point for research on causal attributions: Participants cannot perceive covariation between behavior and a causal factor unless they are provided with the opportunity to develop a “history” in the experimental setting. This history can be developed only through repeated interactions, either with multiple people in the same situation (as in the present study) or with a single person in multiple situations. This raises an interesting question: What would happen if participants were to interact with the same person in multiple situations? In this case, changes in the participants’ behavior could covary with changes in the situation but not with changes in the partner. Therefore, situational attributions should increase, whereas partner attributions should decrease.

McGilPs (1989) discussion of context effects raises a related interpretation of the changes in attributions across the conversations. McGilPs argued that actors interpret their behavior in the context of the way they act in other situations (or the way they act in general), whereas observers interpret the behavior of a particular person in the context of the way others act in the same situation. More generally, Hilton (1990), building on Grice’s (1975) analysis of conversational rules and norms, argued that people form causal accounts of behavior by comparing the behavior in question to a relevant counterfactual. Thus, in the first conversation, participants were likely to have compared their behavior to their general behavior outside the experimental context: “Why did I talk so little with my first conversation partner when I am usually very talkative?” The situation (e.g., being in an experiment) provides a plausible answer to this question. In the second and third conversations, participants were likely to have compared their behavior to that in the previous conversation(s): “Why did I talk so much in the third conversation when I didn’t talk that much in the first (or second)?” In this context, the situation no longer provides a plausible explanation. Instead, this question requires attention to those causal factors that covaried with behavior across the

5 In a recent review, Gilbert and Malone (1995) concluded that there is “precious little support” for the salience account of causal attribution, which they referred to as “The Salience Bugaboo” (p. 30). However, Gilbert and Malone’s critique focused on the correspondence bias and therefore was limited to the effects of salience on dispositional attributions by observers. They noted that the literature supports the effect of salience on situational attributions—making the actor more salient “prevents subjects from possessing or using information about the actor’s situation” (p. 32). Gilbert and Malone also questioned the primacy of salience in the attribution process and suggested that it is not independent of two processes that they see as more basic: lack of awareness of situational factors and incomplete corrections of dispositional inferences. The salience effects discussed in the present study may exert their influence through such mediating processes, and the exact mechanisms involved remain to be identified.
conversations; thus, only differences in the conversation partners could explain why a person talked more in the second (or third) conversation than in a previous one.

Together, the findings show that interacting in three successive social interactions affects the nature of actor–observer differences. The disappearance, or reversal, of differences evident in the first conversation raises questions about the stability of the effects found in studies that used a single-occasion scenario. If the multiple-occasion scenario reflects the way attributions are often made in everyday life, then the pattern of actor–observer differences found in the third conversation may be typical of most real-world contexts. In general, the findings show that the attribution process depends on the type of history the attributor has in the situation.

**Individual Differences: People Differ in the Causal Attributions They Make**

The present study examined several questions concerning individual differences in causal attributions. First, how generalizable is the actor–observer effect across people? We found that the predicted actor–observer asymmetry held for only a minority of the participants for mood and situation and for about two thirds of the participants for personality and partner. Thus, the actor–observer effect was not very robust across people.

Second, do people exhibit a consistent tendency to make certain types of causal attributions, and does this tendency generalize across repeated social interactions? We found that both actor and observer attributions showed relatively high correlations across the three repeated interactions; individuals who attributed their behavior in the first conversation to their personality were also likely to do so in the last conversation. This finding builds on previous research showing consistency in attributional style as measured by responses to hypothetical scenarios (e.g., Peterson, 1991), personal accounts of general life events (Burns & Seligman, 1989), and global trait ratings (e.g., Goldberg, 1981). The present study provides particularly compelling support for individual differences in causal attribution because it demonstrates consistency in the explanations people give for behavior in actual interactions (cf. Cutrona, Russell, & Jones, 1984).

Third, can these individual differences in attributional tendencies be predicted by broad personality characteristics? We found support for our hypotheses linking extraversion and agreeableness to actor attributions for talkativeness and warmth. Specifically, relatively extraverted individuals attributed their talkativeness to their personality, whereas relatively introverted individuals attributed their talkativeness to their partner or to the situation. Similarly, relatively agreeable individuals attributed their warmth to their personality, whereas less agreeable individuals attributed their warmth to their partner or to the situation. Thus, individuals who reported possessing certain stable characteristics believe those same stable characteristics are causing their behavior in specific situations. In a sense, this finding supports the accuracy of participants’ attributions: If an extraverted individual acts talkative, this is in fact more likely to be due to his or her personality than when an introverted individual acts talkative. However, there are numerous complexities involved in evaluating the accuracy of any such judgment (cf. Robins & John, in press), let alone a causal attribution. And, as Gilbert and Malone (1995) pointed out, “psychology experiments are particularly incapable of determining whether dispositional inferences are warranted” (p. 33). Future research should examine the accuracy of causal attributions in realistic settings using acceptable accuracy criteria.

Finally, the linkages between personality and causal attribution have implications for predicting who showed the actor–observer effect. Specifically, relatively extraverted and agreeable individuals were less likely to show an actor–observer effect in their causal attributions for talkativeness and warmth. Thus, personality differences among individuals help us explain why some individuals do not show the predicted actor–observer effect.

**Implications for the Actor–Observer Effect: Is There a General Effect?**

In the present study we have emphasized actor–observer differences and our analytic strategy entailed a search through various conditions for evidence of the actor–observer effect. What if we had analyzed the data without considering the actor–observer effect? Would we have reached the conclusion that actor attributions are more external and less internal than observer attributions? Probably not. We certainly would not have concluded that actors pay more attention to general situational forces than observers; in fact, the opposite was true in the second and third conversations. It also is unlikely that we would have concluded that observers pay more attention to internal causal factors; instead we would have noted that both actors and observers consider personality an important cause of behavior and mood a relatively unimportant cause. Moreover, the changes in attribution that occurred over the course of the repeated social interactions would have drawn our attention away from actor–observer differences, which were weak in magnitude by comparison to the drop in situational attributions. Finally, we would have noted that people differ considerably in the attributions they make for themselves and others—although some people show the predicted actor–observer asymmetry, many do not. Most likely the present study would have led us to conclude that the attribution process depends on a variety of factors, including the salience of the cause, the individual’s history in the situation, and the personality of the attributor.

What are the implications of these findings? One could argue that the findings as a whole could be taken as further evidence for the basic actor–observer effect: Certainly there are personal and situational factors that influence the nature of the effect, but this is to be expected and no different than saying, for example, that people want others to like them and that this is particularly true in some circumstances and for some people. One could, however, take a more critical stance toward the actor–observer effect and argue that: (a) the effect holds only under a highly circumscribed set of conditions, and these conditions may not be the most ecologically valid; (b) under some circumstances the effect not only does not hold, but actors’ attributions are in the opposite direction; and (c) the lack of robustness of the effect raises issues about whether there even is...
a general effect. We believe the present findings, together with previous research, point toward the latter position.

This position suggests a simple conclusion: The widely discussed actor–observer difference is not a general effect. Almost any pattern of actor–observer differences can be (and has been) found in certain circumstances and for certain individuals. Although the actor–observer effect holds in some conditions, it is not entailed by any fundamental difference between actors and observers. Rather, actors and observers sometimes reach different conclusions about the causes of behavior because they often have different information available, different contexts for construing behavior, different histories in the situation, different goals, different perceptual orientations, and so on. However, the process through which they form their attributions may be similar; in most cases the same rules of causal reasoning and the same factors apply for both actors and observers. This returns us to Heider’s basic formulation: Heider was concerned with understanding how people explain behavior, not with the distinction between actors and observers.

An early emphasis on the actor–observer effect generated interest in causal attributions and encouraged researchers to investigate differences between people’s explanations for their own behavior and their explanations for the behavior of others. The actor–observer hypothesis was originally meant as an “actuarial proposition” (Harvey & Weary, 1984, p. 431)—a generalization about how actors and observers explain behavior. However, it now appears that actor–observer differences in attribution are more complex than the original formulation implies. Moreover, an emphasis on the actor–observer distinction obscures the critical issue: What are the principles that govern the formation of attributions by actors and by observers, and which specific processes underlie actor and observer attributions? These processes include perceptual factors such as salience; informational factors such as perceptions of covariation and use of consensus, distinctiveness, and consistency information; contrast effects; counterfactual reasoning; individual difference factors such as personality; motivational factors related to self-serving attributions; and so on.

Belief in a general actor–observer effect has persisted in the literature for more than two decades. We are now convinced by the accumulated evidence that the time has come to set this idea aside.

References


Received August 2, 1995
Revision received November 20, 1995
Accepted December 15, 1995