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Abstract

This special issue of *Social Psychology* commemorates the 50<sup>th</sup> anniversary of Fritz Heider's (1958) book *The psychology of interpersonal relations*. The contributions to the special issue address the history and current state of attribution research, or illustrate contemporary research in the field. The historical articles document that Heider's analysis of causal attribution and of common-sense psychology has been significantly influenced by his academic teachers Alexius Meinong and Ernst Cassirer. We distinguish between the mainstream reception of Heider's book, which has given rise to an extensive empirical research program, and a minority reception by authors who emphasized aspects of Heider's thinking not represented in mainstream psychology. Currently, there are indications of a "back to Heider" movement in social psychology. This new phase of attribution research is inspired by a fresh reading of Heider's book, and is marked by an interdisciplinary orientation. The articles illustrating current attribution research address both classic and novel topics: The implicit causality in language, the role of causal attribution in hindsight bias, the justification of actions, and the attribution of mistakes in organizational contexts.

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In the same way one talks about a naive physics which consists of the unformulated ways we take account of simple mechanical laws in our adapted actions, one can talk about a “naive psychology” which gives us the principles we use to build up our picture of the social environment and which guides our reactions to it. An explanation of this behavior, therefore, must deal with common-sense psychology regardless of whether its assumptions and principles prove valid. (Heider, 1958, p. 5)

### The Discovery of Common-Sense Psychology

1958 saw the publication of Fritz Heider’s groundbreaking book *The psychology of interpersonal relations (PIR)*, which played a pivotal role in the origination and definition of one of social psychology’s most productive research programs (Lakatos, 1978): the study of attribution. As conceptualized by Lakatos, research programs are temporally extended collections of theoretical notions that share a common idea. In the case of attribution research, this common idea can be formulated as follows: *People are folk psychologists, and explaining their behavior requires firm acknowledgment of this fact.*<sup>1</sup> Inasmuch as Heider is usually referred to as “the founder of attribution research”, one can thus say that common-sense psychology was discovered as a field of study in 1958.

The discovery of common-sense psychology had a profound impact on social psychology. To quote but one of many similar appraisals of Heider’s influence, Augoustinos and Walker (1995) name Fritz Heider side by side with Kurt Lewin, stating that these two psychologists “have probably had a more significant and long-lasting influence on the development of modern social psychology – especially in North America – than any other figure in [the 20<sup>th</sup>] century” (p. 61). Moreover, Heider’s ideas have influenced many other areas of psychology, especially general, developmental, clinical, educational, and organizational psychology, as well as other disciplines such as linguistics and cognitive science. Heider’s enormous influence is all the more remarkable in view of the fact that it is

largely based on a single, non-empirical publication—*PIR*—that has been received in a fairly selective fashion (see below and **Malle**).<sup>2</sup>

The present special issue of *Social Psychology* commemorates the 50<sup>th</sup> anniversary of the discovery of common-sense psychology. The contributions to the special issue fall into two groups (with some articles claiming membership in both). The papers in the first group deal with the history of attribution research; they comprise the contributions by (1) **Schönplflug** and (2) **Reisenzein & Mchitarjan**, plus the “historical parts” of the articles by (3) **Weiner**, (4) **Smedslund**, and (5) **Malle**. The second group of articles consists of papers dealing with current issues in attribution research; it comprises the “present-day” parts of the latter articles, plus the articles by (6) **Rudolph** (7), **Nestler, Blank & Collani**, (8) **Gollan & Witte**, and (9) **Schyns & Hansbrough**.

#### On the History of Attribution Research

**Schönplflug** as well as **Reisenzein & Mchitarjan** deal with the prehistory of attribution research, that is, the influence of other thinkers on Fritz Heider and possible origins of some of his ideas. **Weiner**, **Smedslund**, and **Malle** address the history of attribution research proper, the developments following Heider’s (1958) landmark publication. Moreover, these authors speak to the current state of attribution research, and they voice their predictions or hopes for the future of the field.

#### *The Prehistory of Attribution Research*

The prehistory of attribution research has been largely neglected so far. Heider himself (see Heider, 1978; 1983; and an interview with Heider in Harvey, Ickes, & Kidd, 1976) provided some information about the origins of his ideas concerning causal attribution and common-sense psychology, mentioning in particular that his academic teacher Alexius Meinong had an important influence on his thinking. However, this information lacked detail. As a consequence, many of Heider’s (1958) readers probably assumed, as **Schönplflug** writes,

“that both theory and method in *The psychology of interpersonal relations* had in the main originated from the unprecedented endeavor of the author.” However, as Heider’s references in *PIR* attest, he was well informed about and made judicious use of previous analyses of psychological and social phenomena by philosophers (e.g., Aristotle, Baruch Spinoza, David Hume, Max Scheler, Adam Smith, Alexander Shand, Max Scheler) and psychologists (e.g., Solomon Asch, Gustav Ichheiser, Wolfgang Köhler, Kurt Koffka, Kurt Lewin, and Albert Michotte). The historical influences on Heider are illuminated further in the contributions of **Schönpflug** as well as **Reisenzein & Mchitarjan**.

**Schönpflug** investigates the roots of Heider’s attributional theory of social perception in the epistemological writings of his academic teachers Meinong and Cassirer. As Heider (Heider in Harvey et al., 1976; Heider, 1983) pointed out, his dissertation under Meinong’s supervision was devoted to the causal-representational theory of perception. This theory had become popular in late 19<sup>th</sup> century psychology following Helmholtz’s (1867) exposition. The central assumption of the causal theory of perception is that the objects of perception (e.g., a stone we see) are not directly perceived, but are inferred as the causes of the sensations they produce in us. Meinong (1906) raised several arguments against this theory, among them that it fails to explain why the causal inference process “stops short at a specific point between the very near and the very far” (p. 108; translation by the authors). For example, why do we see the stone rather than the sun that illuminates it, or the light rays that reach our eyes? Heider’s (1926) solution to Meinong’s puzzle—a puzzle that occupies philosophers and psychologists of perception to this day (e. g., Hommel, Müsseler, Aschersleben, & Prinz, 2001)—was a more sophisticated version of the causal theory of perception. A central assumption of Heider’s theory is that different parts of the environment, due to their physical constitution, differ in terms of their stability and causal potency. In particular, *things* (distal stimuli) and *media* (proximal stimuli informing us about

things) are distinguished: Things are relatively stable “centers of causality” that determine what happens in their neighborhood, whereas media are more variable parts of the environment influenced by things, but exerting only little influence on them (see also Heider, 1978b). Based on these “ecological” assumptions, Heider (1926) then proposed that thing perception is a complex causal inference process that reconstructs the relatively constant environmental “centers of causality” from sensations by filtering out the causal effects of the media. As it turns out, these assumptions correspond fairly well with recent perceptual theory (e. g., Kersten, Mamassian, & Yuille, 2004; Körding, Beierholm, Ma, Quartz, Tenenbaum, & Shams, 2007).

Heider’s early encounter with epistemology left him with the conviction that the causal-representational theory of perception was viable. Indeed, as **Schönpflug** notes, Heider’s analysis of social perception presented 18 years later (Heider, 1944) is “just a change in application, not in paradigm”. That is, Heider views the perception of other persons as but a special case of perceiving inanimate objects, and consequently applies his causal theory of thing perception to person perception (see also Heider, 1958, chapter 2; Malle, 2004; Weary, Rich, Harvey, & Ickes, 1980). Nevertheless, person perception is special in some respects. In particular, persons are much more active and more complex “centers of causality” than things: Persons are self-aware, goal-directed *agents* who show varied actions reflecting their intentions, which in turn are derived from their beliefs, desires and sentiments. Hence, perceiving an agent means to perceive the *mind* of that agent, that is, the beliefs, desires and sentiments (in particular the relatively stable ones) determining her actions. Accordingly, person perception is viewed as the reconstruction of the person’s mental “centers of causality” from observed behaviors by means of sophisticated inference processes. In fact, from the perspective of the causal theory of perception, there is no sharp distinction between the “observed behavior” and the “inferred mental states” of other agents:

The mental states of others are just a few steps farther removed from sensations in the chain of causal inferences (Heider, 1926). Furthermore, inferring another's state of mind is not based on sense data *only*; on the contrary, such an inference is generally impossible without a huge amount of additional (implicit) knowledge—namely, knowledge about the “inter workings” of the other person, or of people in general. In short, perceiving another person (as an agent) requires a folk theory of mind. This consideration brings us to the core of *PIR*, Heider's analysis of common-sense psychology.

It is primarily in this context that Heider (1958) went back to the psychological analyses of authors such as David Hume, Adam Smith, Baruch Spinoza, Alexander Shand and Gustav Ichheiser. In addition, **Reisenzein & Mchitarjan** argue, Heider also went back to the writings of his academic mentor Alexius Meinong. To document this claim, **Reisenzein & Mchitarjan** trace back several of Heider's (1958) analyses of aspects of common-sense psychology (i.e., his analyses of emotion, ought and value, and responsibility attribution) to Meinong's writings, particularly those on ethics (e.g., Meinong, 1894). In addition, both **Schönplflug** and **Reisenzein & Mchitarjan** argue that Heider essentially continued Meinong's method of psychological inquiry. Taken together, **Schönplflug's** and **Reisenzein & Mchitarjan's** articles provide strong reasons for regarding Heider as another heir of the influential Austrian tradition of philosophy and psychology founded by Franz Brentano (1874/1955; see Fabian & Simons, 1986; Jacquette, 2001). It can now be said that through Heider (1958), this tradition influenced modern social psychology as well as other fields of psychology.<sup>3</sup>

#### *The History of Attribution Research I: The Mainstream*

As **Schönplflug** points out, one would hardly have predicted the immense success of *PIR* from the behaviorist perspective of the 1950s. Retrospectively, however, it seems clear that the “cognitive revolution” of the 1960s, together with an at least latent cognitive

orientation of many social psychologists (see also Markus & Zajonc, 1985) were decisive factors for the positive reception of *PIR* and the ensuing launch of research on attribution. In what follows, we distinguish between two historical lines of the reception of *PIR*, and correspondingly two branches of attribution research: The mainstream reception (see **Weiner; Malle**), and a minority reception (see **Smedslund**).

The history of mainstream attribution research is summarized both from the perspective of a foundational figure of the movement (Bernard **Weiner**) and from a next-generation perspective (Bertram **Malle**). As these reviews reveal, attribution research (a) got seriously under way only about a decade after the publication of *PIR*, and (b) was not, as one might have thought, the systematic unfolding of *PIR* itself, but of *PIR* as (selectively) read and interpreted by several “introductory figures”—most notably Harold Kelley, Edward Jones, and Bernard Weiner. As **Weiner** notes, Kelley was both the “initial mail man, delivering both his and Heider’s thoughts to the scientific field” (in a review of *PIR* for *Contemporary Psychology*; Kelley, 1960), and the author of an influential book chapter (Kelley, 1967) that brought some core attribution ideas into mainstream social psychology. A previous chapter by Jones and Davis (1965), presenting their Heider-based theory of correspondent inferences, was also influential. However, as **Weiner** suggests, it was probably the book *Attribution: Perceiving the causes of behavior* (Jones, Kanouse, Kelley, Nisbett, Valins, & Weiner, 1972) that eventually made attribution a dominant research program in social psychology.

A flood of articles, book chapters and books followed (see also **Weiner, Malle**). For example, still in the 1970s, three volumes of *Advances in Attribution Research* (Harvey, Ickes, & Kidd, 1976, 1978, 1980) were published, containing nearly 50 chapters by prominent researchers in the field. In addition, several monographs dealing with special topics of attribution theory were published during this and the following decade (e.g., Nisbett



& Ross, 1980; Weiner, 1986; 1995), as were books dealing with applications of attribution theory to various fields (e.g., Carroll & Payne, 1976; Frieze, Bar-Tal & Carroll, 1979; Försterling, 1988). Many more books have followed since (e.g., Bierhoff, 1989; Harvey, Orbuch, & Weber, 1990, 1998; Zelen, 1998; Försterling, 2001; Försterling & Stiensmeier-Pelster, 1994; Keil & Wilson, 2000; Manusov & Harvey, 2001; Malle, 2004; Malle & Hodges, 2005; Weiner, 2006). For more recent overviews and critical analyses of the field, readers are in particular referred to Försterling (2001) and Malle (2004), respectively.

To obtain a quantitative impression of the reception history of Heider's book, we tabulated the frequency of citations of *PIR* from 1958 to the present according to the *Social Sciences Citation Index*. As can be seen from Figure 1, after an initial lag the citations of *PIR* increased to about 125 per year in the mid-1970s, and this citation rate has not since declined. Actually, 2006 and 2007 are the two years with the highest number of citations ever. To date, *PIR* has been cited almost 6000 times.

Insert Figures 1 and 2 about here

Lakatos (1978) proposed that research programs should be evaluated in terms of their long-range development. **Weiner** attempts such an evaluation by comparing the development of attribution research to that of other research programs in vogue in social psychology and beyond during the 1950s and 1960s, including research on social learning theory (Rotter), cognitive dissonance theory (Festinger), and achievement motivation (Atkinson). **Weiner's** conclusion is that attribution research, while no longer the dominant field of inquiry of social psychology that it once was (from about 1970-1985), fared considerably better than these other research programs, and continues to be a vital area of inquiry today.

This conclusion is supported by the "current research" articles contained in this special issue (introduced below in the section "A sample of current research"), which constitute but a tiny sample of the many articles on attribution that continue to appear every

year. As a rough estimate of that number, Figure 2 shows the frequency of publications per year containing “attribution\*” in the title or abstract according to the *Social Sciences Citation Index* (note that this search criterion underestimates the actual number of attribution-related publications). As can be seen, the number of publications related to attribution has steadily increased over the years to about 800 per year in 2007. Furthermore, as **Malle** notes, other subdisciplines of psychology such as developmental psychology, and neighboring disciplines ranging from linguistics and philosophy to cognitive science, have in the meantime discovered common-sense psychology as a field of research (predominantly under the labels of “theory of mind” or “folk psychology”). Hence, attribution as a field of research is very much alive, even if social psychology’s interest in it has declined. Finally, there are indications of a “return to Heider” movement within social psychology—a resurgence of interest in the issues addressed by Heider. This new phase of attribution research is inspired by a fresh reading of *PIR*, and is marked by an interdisciplinary orientation (see **Malle**; Malle & Hodges, 2005; Nadelhoffer & Nahmias, 2007).

Apart from the question of the success of the research program attribution, another question that one may reasonably ask at its 50<sup>th</sup> anniversary is to which this research program reflects the original intentions of its founder. As already hinted, attribution researchers have from the beginning taken a path that deviated in some respects from that envisaged by Heider in *PIR*. There is of course in principle nothing wrong with this, and it may even signal scientific progress. However, several commentators, among them **Malle** and **Smedslund**, see this development in a more critical light. According to **Malle**, attribution researchers are in fact guilty of an *exegetic attribution error* with respect to *PIR*, by “readily ascribing claims to Heider that he did not make while overlooking important claims he did make” (see also Malle, 2004). While **Malle** refers to the mainstream reception of Heider’s *substantive assumptions* about common-sense psychology, **Smedslund** (see also Smedslund, 1988b)

raises a parallel objection against the mainstream interpretation of Heider's *method*. Finally, it can be argued that attribution researchers have misunderstood Heider's *main goal* in *PIR*. Let us look at these issues in more detail.

*Heider's claims.* **Malle** suggests that several of Heider's claims about common-sense psychology have been misinterpreted. One particularly important example is the widespread assumption that Heider postulated a person-situation or internal-external dichotomy of causes as the core of people's understanding of behavior: Although Heider did propose the internal-external-distinction, his more important distinction was that between intentional action and non-intentional behaviors and occurrences. Due to this misunderstanding, **Malle** argues, social psychologists (with few exceptions, e.g., Locke & Pennington, 1982) have until recently neglected the explanation of actions by reasons (beliefs and desires).

We would like to suggest that this neglect is not only due to a misreading of Heider; it also reflects the lack of communication between disciplines and even within subdisciplines of psychology. Models of reason explanations have been developed by analytic philosophers at least since the 1960s (e.g., Churchland, 1970), and by psychologists since the 1970s (e.g., Laucken, 1974); furthermore, belief-desire (or expectancy-value) models of action have been extensively deployed in various areas of psychology since the 1950s (see Feather, 1982), including social psychology itself (e.g., Fishbein & Ajzen, 1975).

As **Malle** notes, there have not only been misinterpretations of *PIR*; there have also been important omissions. To use the words of **Gollan & Witte**, the theoretical richness of *PIR* has not been fully explored. Furthermore, only very few authors (e.g., Laucken, 1974; Smedslund, 1988) have followed Heider in his attempt to provide a somewhat *comprehensive* analysis of common-sense psychology.

*Heider's goal.* Mainstream attribution researchers typically depict Heider's goal in *PIR* as the analysis of common-sense psychology, as part of Heider's attempt to construct a

theory of social perception (e.g., Jones et al., 1972). Only few authors (e.g., **Malle**; Malle, 2004) have pointed out that, beyond this goal, Heider also wanted to design a conceptual framework or “scientific language” for social psychology. Even more important, this latter enterprise was clearly Heider’s *main* goal in *PIR*; the explication of common-sense psychology served only as a mean to this end (see **Reisenzein & Mchitarjan**). In other words, Heider intended his reconstruction of common-sense psychology as a blueprint for a scientific social psychology of the future, which was to “grow gradually and organically out of the matrix of implicit theory” (Heider, 1958, p. 295; see also Heider, 1988, § 177). In the light of the prehistory of attribution research summarized above, it can now be said that by 1958, Heider’s earlier goal to design a theory of social perception (Heider, 1944) had given way to the much grander goal of his teacher Meinong—to construct a scientific theory of the mind. Indeed one could say that, after reinterpreting Meinong’s method as the “explication of implicit folk psychology”, Heider in *PIR* simply continued Meinong’s work as a theoretical psychologist.

**Malle** suggests that while Heider succeeded establishing common-sense psychology as a field of research, his goal to develop a scientific language for social psychology has seen only limited success. We believe Heider might have drawn a more positive conclusion. First, many so-called “attributional” theories (theories of e.g. motivation or emotion, in which attributions have the status of intervening variables; see Kelley & Michela, 1980) are recognizably influenced by Heider. Most notable in this category is Weiner’s attributional model of social emotion and motivation (Weiner, 1986; 1995; 2006). Second, as **Smedslund** (see also, Smedslund 1988) emphasizes, many other theories of today’s psychology can be regarded as explications of common-sense psychology. These include theories of motivation and action (e.g., Ajzen, 1991; Bandura, 1997), cognitive emotion theories (e.g., Lazarus, 2001; Ortony, Clore, & Collins, 1988), and trait theories of personality (e.g., John &

Srivastava, 1999). More generally, any scientific psychological theory formulated on the “intentional level” of cognitive system analysis (Dennett, 1971)—the level of beliefs and desires—is a *prima facie* candidate for being an explication of folk psychology, although this relationship is sometimes difficult to recognize due to the use of a highly technical terminology (see Smedslund’s, 1978, critique of Bandura, 1977).

*Heider’s method.* In his *Notebooks*, Heider (1988, §189) commented that the main topics taken up from his book were “balance and attribution – but not the *method*: the explication of concepts, which is fundamentally opposed to an empirical start”. This quote might suggest that Heider regarded the study of common-sense psychology as a non-empirical project, and that from his perspective, its subsequent unfolding as an empirical research program was therefore just a big misunderstanding. Some authors, most notably **Smedslund** (see also, Smedslund, 1988) have interpreted Heider in this way. We will soon return to the question of whether this interpretation is correct; but either way, it is undeniable that mainstream attribution research has neglected Heider’s method of “conceptual explication” in favor of empirical research.

*The History of Attribution Research II: A Minority Reception of PIR*

The discussed selective reception and potential misunderstandings concerning Heider’s work apply to the mainstream of attribution research. There is a minority line of reception of *PIR* that resembles, or at least claims to resemble, Heider’s original intentions more closely. This minority branch of attribution research is most prominently represented by **Smedslund** (see also, Smedslund, 1988); related views have been proposed, for example, by Brandstädter (e.g., 1982, 1987), Laucken (e.g., 1995), Mees (e.g., 1991), and Shweder (1991). These theorists share Heider’s aspiration to provide, by means of the analysis of common-sense psychology, a conceptual framework for scientific psychology. They also share Heider’s high esteem for “conceptual explication” as a tool to reconstruct common-

sense psychology. However, the most distinctive assumption that sets these authors apart from mainstream attribution researchers is their view that the explication of common-sense psychology is an *aprioristic endeavour* that *uncovers analytic truths* (**Smedslund**). That is, they believe: (a) Common-sense psychology consists of a system of “meaning postulates” that connect the mentalistic terms of ordinary language (believe, want, do, intend, hope, fear etc.); and (b) these semantic relations, and hence the tenets of common-sense psychology, can be retrieved without recourse to empirical methods, solely by means of “conceptual analysis”. Furthermore, based on the assumption that many theories of scientific psychology are explications of common-sense psychology, they conclude that most of the empirical research carried out to test these theories is, in fact, *pseudo-empirical* (**Smedslund**). This diagnosis is followed by the call for an alternative, non-empirical or aprioristic psychology (e.g., **Smedslund’s** system of *psycho-logic*, Smedslund, 1988).

As may be expected, these claims have caused quite a stir. The present article is not the place to review the ensuing debate (for an overview and references, see **Smedslund**). However, it *is* an appropriate place to try to locate Heider’s position in this debate. Specifically, did Heider indeed see the explication of common-sense psychology as a fundamentally non-empirical research project? In contrast to **Smedslund**, we are not convinced he did. It is true that Heider, as **Smedslund** notes, designated several folk psychological assumptions as “analytic” (e.g., Heider, 1958, p. 297). However, this does not imply that Heider regarded all or even the majority of folk-psychological assumptions as analytically true. And Heider’s claim that conceptual explication “is fundamentally opposed to an *empirical start*” (Heider, 1988, §189, emphasis added) was not meant to imply that the conceptual analysis of common-sense is fundamentally opposed to its *empirical investigation*. Rather, Heider asked that experimentation should be used only after a thorough explication of our intuitive knowledge of the phenomenon under investigation. In Heider’s

(1988, §164) words, he was “not opposed to experimentation”, but pleaded for experimentation based upon “*thinking through* our naive assumptions” (emphasis added).<sup>4</sup>

When understood in this way, Heider’s (1958) argument for more “conceptual explication” in psychology seems irreproachable. It is in fact only one special version of the more general argument that within the enterprise of psychology, a larger role should be accorded to theoretical psychology (see Machado & Silva, 2007; Smedslund, 1988; Westmeyer, 1992). In this respect, the psychological investigators of common-sense psychology could learn as much from philosophers as the latter can learn from psychologists in terms of experimental methodology (see Nadelhoffer & Nahmias, 2007). For this reason (the strengthening of theoretical psychology) too, the recent cooperation between psychological and philosophical investigators of common-sense psychology to which **Malle** refers, would have been welcomed by Heider.

#### A Sample of Current Research On Attribution

The last four articles in this special issue illustrate the breath of current research in the field of attribution. They address either classic themes of attribution research, or explore novel applications and extensions of attributional ideas: Implicit verb causality (**Rudolph**), causal reasoning as a mechanism underlying hindsight bias (**Nestler, Blank & Collani**), the justification of actions (**Gollan & Witte**), and the attribution of mistakes in organizational contexts (**Schyns & Hansbrough**).

**Rudolph** reports new findings on a classic topic of attribution research, *implicit verb causality*. This is the well-documented phenomenon that minimal descriptions of interpersonal events by interpersonal verbs, such as “*p* surprises *o*”, “*p* admires *o*”, “*p* dominates *o*”, or “*p* helps *o*”, reliably elicit causal attributions of the described event to one of the two interaction partners. Seen from the perspective of *PIR*, research on implicit verb causality might be regarded as an empirical complement to Heider’s method of “word

analysis". In his contribution, **Rudolph** reports two empirical studies which (a) demonstrate that already three-year old children perceive the implicit causality in interpersonal verbs, and (b) support the hypothesis that the verb causality effect is mediated by implicit assumptions about covariation (consensus and distinctiveness) in Kelley's sense (e.g., Kelley, 1972; see also Rudolph & Försterling, 1998).

**Nestler, Blank & Collani** report about their recent attribution-based attempt to explain one form of hindsight bias, *creeping determinism*. This is the tendency to overestimate the perceived inevitability of event outcomes after they are known. According to **Nestler, Blank & Collani**, this phenomenon is due to processes of causal reasoning, as explicated in their *Causal Model Theory*. Two versions of this theory are distinguished according to the assumed form of the causal reasoning involved: Covariation analysis versus discovery of underlying mechanisms. Evidence from several studies summarized by the authors suggests that creeping determinism can be better explained if one assumes that responsible causal reasoning process aims to discover mechanisms. These conclusions seem to be directly opposite to those drawn by **Rudolph** for the case of implicit verb causality. However, it is quite possible that different forms of causal reasoning are used in different domains. In any case, we believe that a discussion between these two largely separate areas of attribution research might benefit both.

**Gollan & Witte** analyze the justifications people provide for their actions. Of particular note, their analysis was inspired by Heider's (1958) chapter *Ought and value* and takes up some of Heider's ideas that have received little attention so far. The authors propose that action justifications should be conceptualized as *prescriptive attributions*, a form of attribution they distinguish from both causal attributions (as e.g. posited in implicit verb causality and hindsight bias), and from reason explanations for actions (see **Malle**). Whereas action explanation aims to show why an action occurred, **Gollan & Witte** propose that action



justification, as one form of prescriptive attribution, aims to show that the action was the ethically right thing to do in the given situation. Several factors that influence the justification of an action, such as characteristics of the action and characteristics of the person (including both stable features and temporary motivational concerns) are identified, and the results of studies testing aspects of the theory are summarized.

Finally, **Schyns & Hansbrough** review applications of attribution theory to leadership research and then explore in detail the causal attribution of leaders' mistakes. In doing so, the authors propose that Heider's distinction between internal and external causal attributions is of crucial importance in this context; not last, we suggest, because the attribution of an outcome to internal versus external causes has implications for the ascription of responsibility for the outcome (see Heider, 1958). The authors identify a number of factors that influence the attribution of leader's mistakes, including leader images, implicit leadership theories, and the nature of the interpersonal relationships in leadership contexts.

Summing up, it may be said that each of the "current research" articles addresses an important aspect of attribution and common-sense psychology: The perceived causes of interpersonal events as represented in everyday language (**Rudolph**); inflated retrospective perceptions that outcomes (including interpersonal outcomes) were inevitable (**Nestler, Blank, & Collani**); justifications for actions that violate shared standards of social conduct ("ought requirements" in Heider's words; **Gollan & Witte**); and the perceived causes of mistakes of leaders (**Schyns & Hansbrough**). As said, these studies constitute but a tiny fragment of the current activities in attribution research. And even if the complete field of attribution research were considered, there are probably still "many phenomena that play a role in interpersonal relations" that to date "have been left out or treated only tangentially" (Heider, 1958; p. 295). For this reason, too, common-sense psychology is likely to engage

researchers for years to come. 50 years after the discovery of common-sense psychology, its scientific exploration is well under way, but still far from complete.

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conference. Berlin: Springer.

Footnotes

- 1 This is of course a very general notion that allows for different specifications. In fact, no single attribution theory exists to date; rather, the core idea of the research program has given rise to a variety of more specific attribution-based theories. In this sense, “attribution is better characterized as a field of study rather than a theory” (Weiner, this issue).
- 2 Apart from being the founder of attribution research, Heider also had an important influence on the development of consistency theories due to his Balance theory (Heider, 1946; 1958). Furthermore, his early work on the causal theory of perception (Heider, 1926; 1930) was the basis of Brunswik’s (1952) influential lens model (see Wolf, 2004). More recently, *Thing and medium* (Heider, 1926) has been rediscovered by communication and media scientists (Baecker, 2005).
- 3 A second, more indirect influence of the Brentano school on contemporary psychology—via the cognitive emotion theorist Magda B. Arnold—is documented in Reisenzein (2006).
- 4 Hence, Heider’s (1958, p. 7) assertion that “the ultimate evidence on which we base our theories should be gained by scientific methods” was not merely paying lip service to empirical psychology. It may be noted that Heider’s view of the role of experimentation was already present in the 1920s: “Whenever I begin to think about specific experiments that I might do, I am confronted with theoretical problems whose solution does not require experiments but which can be thought through on the basis of the ordinary experience of everyday life. Only when I have cleared up the basic concepts would I feel it proper to proceed to experiments” (Heider, 1983, p. 87).

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Figure 1. Number of citations of Fritz Heider's (1958) "The psychology of interpersonal relations" (Social Sciences Citations Index)

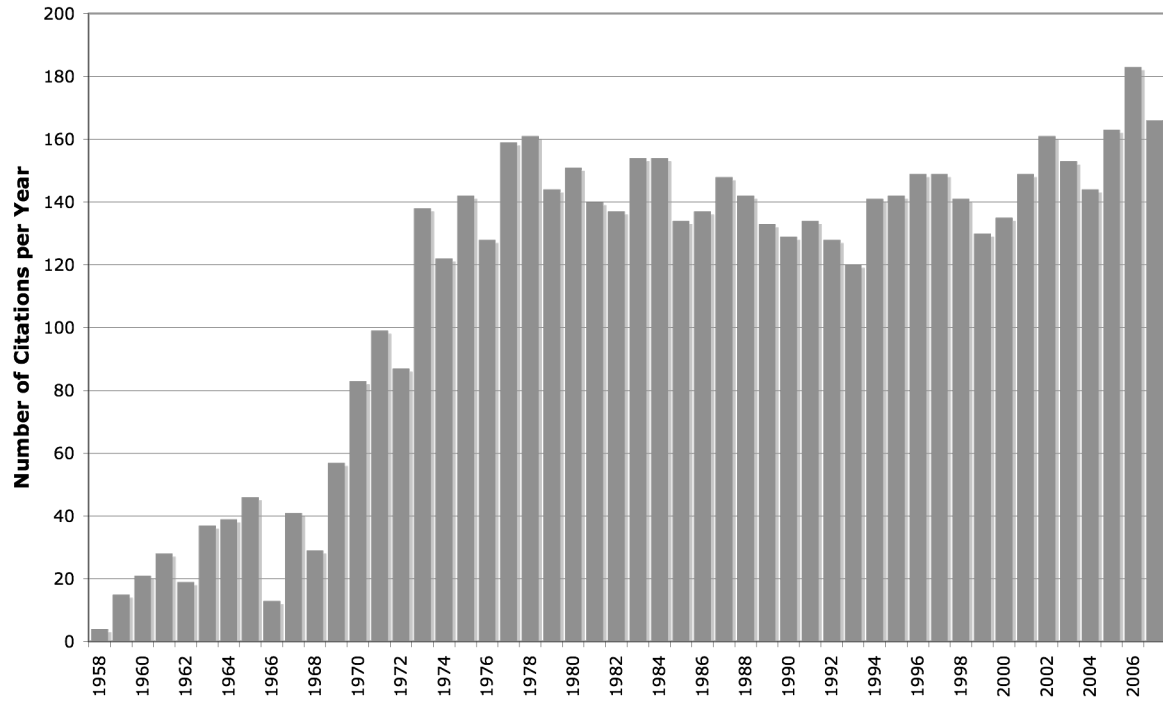


Figure 2. Number of publications containing the keyword “attribution” in the title or abstract (Social Sciences Citations Index).

