Fritz Heider: Philosopher and Psychologist

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> 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
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> (Heider, 1983, p. 87)

Fritz Heider was a wanderer, someone who liked to survey and take the measure of whatever he encountered. In his formative years, he was a wanderer in the geographical sense — hiking in his beloved Austrian mountains and traveling throughout much of Europe. In his professional years, he was a wanderer in the intellectual sense — taking daily walks for the purpose of analyzing a difficult concept or conducting a thought experiment. Because he was rarely in a hurry and would take the time to look more closely and deliberate more thoroughly than most of his peers, Heider was able to achieve profound insights about essential aspects of human behavior and experience.

There are few psychologists who have had more influence on their field than Fritz Heider. There are also few psychologists whose ideas have been so often underestimated and misrepresented. In this essay we follow the development of Heider's contributions to psychology along the lines of his own life path — from philosophy to psychology, from Europe to America. By tracing the development and interrelation of Heider's ideas we hope to emphasize their originality and scope and speak out against the sometimes narrow reading of Heider's work.

Graz

Heider was born in Vienna in 1896 but grew up in and around Graz, the second-largest Austrian city, which lies at the southeast end of the Alps. Heider's childhood was happy, carefree, and protected. During adolescence, the extraverted Heider became serious and quite shy, perhaps as the result of a serious eye injury he sustained at the age of 9 and some bewildering experiences that taught him about the harsher realities outside of family life.

Two of Heider's lifelong preoccupations were already evident: his interest in human perception (initially in the context of drawing), and his fascination with human relations, about which he wrote in small notebooks. After completing his Gymnasium years, Heider wanted to become a painter, but his father — a prosperous architect — suggested that he make a living through more traditional means and keep art as his hobby. Thus began a tortuous path for Heider toward finding such traditional means.

Because of his bad eye, Heider was not drafted into the military during World War I and, in 1914, he enrolled as an architecture student at the Technical University in Graz. Soon, however, Heider grew tired of the tedious reproductive exercises (for example, making copies of Greek temple blueprints) that were required of architecture students. So, in 1915, he once more expressed to his family the desire to become a painter. His father again discouraged the idea, this time persuading him to study law. Heider gave it a try but soon lost interest. He decided to admit frankly to his father that he was interested in learning for its own sake, not as a means to a particular profession. His

father, always more of a friend than an authority figure for Heider, offered him four years of intellectual luxury — auditing courses in all his areas of interest — if he agreed to study agriculture afterwards and raise pigs on a piece of land they owned.

Heider was happy to accept this offer, and his studies over the next years spanned the fields of premedical science, zoology, philosophy, and art history. He spent semesters in Innsbruck and in Munich, where he took his first course in psychology with Karl and Charlotte Bühler. Returning to Graz, Heider focused his studies increasingly on philosophy and, to the extent it was possible, on the fledgling field of psychology.

The major figure at the Graz Institute of Philosophy was Alexius Meinong, and Heider took many courses with him. Meinong's ontology and epistemology were heavily discussed by G. E. Moore and Bertrand Russell in the early years of analytical philosophy, and Meinong is still well-known in today's philosophical circles for his analysis of how we can know and refer to nonexisting objects (see Zalta, 1988). A philosopher at heart, Meinong was also a strong proponent of empirical psychology even though he did not conduct any experiments himself. Upon his initiative, the University of Graz offered a proseminar on psychological experiments as early as 1886 and funded an experimental laboratory in 1894. Christian von Ehrenfels, often identified as the founder of Gestalt psychology, was one of Meinong's students and a teacher of Max Wertheimer in Prague. During Heider's time at Graz, the most active empirical researcher was Vittorio Benussi, also a student of Meinong's. Often overlooked in histories of psychology, Benussi published the first experimental papers on Gestalt principles in perception (Benussi, 1906, 1914). His work made a strong impression on the emerging group around Wertheimer in Berlin (e.g., Koffka, 1915).

Much of the thinking and research at the Graz Institute focused on sensation and perception, a topic that enabled the philosophers to integrate the classic puzzles of epistemology with their nascent commitment to an empirical study of psychological processes. Heider became Meinong's last doctoral student, and he fit well into the Graz school's focus on perception even though his interest in perception was initially fueled more by drawing and painting than by philosophical puzzles. At first Heider merely audited seminars and lectures, but it eventually occurred to him that, like his fellow students, he too had the potential to write a doctoral thesis. He broached this idea to Meinong, who referred the young student to one of his books on epistemology, and Heider began to read, analyze, and expand on the core problem of Meinong's late thinking: the relation between sense qualities and real objects. Meinong and Heider asked how it is possible that we take sense qualities to be qualities of objects, given that sense qualities are "in here," in the mind, whereas object qualities are "out there," in the physical world. Heider's solution was one of the first causal theories of perception — a theory that describes the causal chain between properties of objects and properties of the perceptions to which they correspond (Heider, 1920).

At the heart of Heider's theory lies the distinction between *things* (physical objects) and the *media* through which things "reach" the perceiver (see also Heider, 1925). Things, according to Heider, are coherent units that have mutually dependent parts and are thus causally potent in shaping their surrounding forms and processes. Heider liked to use the example of a ticking watch that causes systematic air vibrations (sound), which in turn engage the eardrum and lead to perception. Heider argued that things shape media and not vice versa, so the perceptual apparatus must reconstruct things from their effects on media, and ultimately on the senses. Heider termed this reconstructive process in perception *attribution*, and he argued that it focuses, not on the specifics of the media, but on the dispositional qualities of things, for these qualities shape the media surrounding them. Thus, when we look at a house we say, "I see a house," not "I see sunlight," even though the sunlight is the necessary medium by which we are able to see the house.

Readers familiar with Heider's later thinking will recognize that several of its defining features are already present in his dissertation work: (a) the method of developing conceptual distinctions and relations from an analysis of linguistic use and familiar domains of knowledge, (b) the notion of

units, (c) the notion of *attribution* as a reconstructive process, and (d) the notion of *dispositions*. When Heider later applied these concepts to the domain of social perception, he expanded their meaning to fit the more complex social domain, but he also retained much of their core meaning. As a result, misunderstandings ensued because readers who were not familiar with the original core meaning mistook the expanded meaning (e.g., personality traits as one type of dispositions that social perceivers reconstruct) for the exclusive meaning (i.e., dispositions are always personality traits). We will return to these misunderstandings in a later section.

Despite the focus on object perception in his dissertation work, Heider's deepest concern was already with the topic of social perception — the perception of social "objects" such as people, conversations, or relationships. However, neither among his fellow students and mentors nor in the field of psychology as a whole did Heider find scholars who shared his interest in social perception, and he feared that the academic path might not allow him to study this topic most dear to him. So in spite of delivering a creative dissertation in an impressively short span of nine months, Heider did not, upon receiving his doctorate in 1920, enter the academic world.

Heider's four years of luxurious studies came to an end, and the arrangement with his father committed him to start reading about pigs and cows, in preparation for going to agricultural school and taking up farming. Luckily, however, Heider was offered a reprieve in the form of an applied psychology position with the provincial government — a position that required him to devise aptitude tests and provide vocational guidance for adolescents. After a year and a half in this occupation, Heider became restless and contemplated leaving Graz. World War I had degraded the culturally and intellectually rich Imperial Austria to a frail, destitute nation, and postwar inflation made educational positions such as Heider's acutely vulnerable to funding cuts. Moreover, with Meinong's death in 1920 and Benussi's move to Italy, the Graz school not only had lost its most active scholars but also surrendered to the Berlin school all control over the research agenda in Gestalt psychology. Intellectual life was indeed blossoming in Berlin, and because Heider's uncle (and friend) Karl Heider was a professor in Berlin, it seemed natural for him to move there.

Berlin

Soon after arriving in Berlin in the fall of 1921, Heider attended psychology courses offered by Max Wertheimer, Wolfgang Köhler, and Kurt Lewin, with whom he developed a lasting friendship. While earning a modest living through dozens of small jobs and enjoying the excitement and intoxication of big-city life, Heider continued to work on his theory of perception. In the spring of 1923, Lewin invited him to give a talk about this work at a gathering of the Philosophical Society in Erlangen, and the reception was positive. Among the speakers were Rudolf Carnap and Hans Reichenbach (major proponents of the emerging "Logical Empiricism" movement in philosophy), but Heider found himself unimpressed by Carnap's tangled attempt to explicate logically the simple statement "1 + 1 = 2." Heider strongly endorsed the use of conceptual explication as a scientific tool, but he deemed more appropriate for elucidating real-world social phenomena such as emotions, action, and conflict.

As Heider's thinking about social perception developed, it revealed its commonalities with Lewin's work on thought and action. Both theorists, for example, were interested in the subjective representation of reality. Lewin was concerned with explaining action as locomotion through a subjectively represented life space; Heider was concerned with explaining one person's subjective perception of another person's action. Moreover, Heider learned from Lewin (himself influenced by the philosopher Ernst Cassirer) the value of having a well-organized system of concepts when describing any — and, in particular, any psychological — phenomena. Lewin grounded his system of concepts in topology, perhaps influenced by the high status of mathematics in the rapidly growing philosophy of science community in Europe. Interpersonal phenomena, however, were not readily

explicable within Lewin's topological system, and Heider realized that he had to develop his own system of concepts (an endeavor that took over 30 years to complete).

Heider's exciting years in Berlin came to an end in 1924, when, strapped for money, he took a position at an orphanage in Northern Germany. He held out there for a summer but then returned to Austria, unsure what he should do with his life. A gift offered by a generous relative came in the form of a monthly allowance, which enabled Heider to live for the next two years without worrying about regular work. He spent much of this time painting, reading, and thinking about psychology, while traveling between Graz, Czechoslovakia, Florence, and Naples.

As his 30th birthday approached, however, Heider felt that his years of wandering were coming to an end. After considering his options and interests, he re-committed himself to an academic career in psychology. Through the years he had continued to keep notes on his psychological thinking about the problems of perception and interpersonal relations. He also enjoyed the support and encouragement of Kurt Lewin, who was instrumental in helping Heider publish *Ding und Medium* around that time (Heider, 1925). It therefore seemed natural for Heider to move back to Germany, where his chances of finding an assistantship appeared to be the greatest.

Hamburg

By 1927, Heider had three academic positions to choose from — in Graz, Vienna, and Hamburg. The Austrian positions promised familiarity and comfort, but they also signified a step back. Heider chose to go forward and became a lecturer in educational psychology at the Psychology Institute in Hamburg, which was chaired by William Stern.

Heider comfortably slid into the academic role. He enjoyed lecturing on educational psychology and exploring themes of interpersonal relations between students and teachers. With some disappointment, he noticed that there was no literature on this topic, so he began to collect free-response data on students' experiences that were formative for teacher-student relations. However, Heider was unable to find order in the richness of these data because, as he later confessed, "I lacked a network of clear concepts and a knowledge of their interrelations" (Heider, 1983, p. 86). He also thought a good deal about trait words and suspected that they might reveal something fundamental about interpersonal relations. He eventually concluded that the opposite was true: that the meaning of trait terms will become clearer if one first develops a theory of interpersonal behavior.

Even more than his teaching, Heider enjoyed the collegial interactions and intellectual exchanges at this high-powered university, which was then in its golden age. He had contact, among others, with Ernst Cassirer, the eminent philosopher; Heinz Werner, an influential psychologist; and Jakob von Uexküll, the well-known biologist. In collaboration with Werner he also organized a meeting in Rostock between the Hamburg and the Berlin psychologists, including Lewin, Wertheimer, and Köhler, who were joined by Albert Michotte from Belgium.

During his years at Hamburg, Heider did not publish any experimental work. Instead, he refined the concepts he had first developed in his dissertation, resulting in a lens model of perception (Heider, 1930) that inspired Egon Brunswik's well-known work (e.g., Brunswik, 1934). In 1929 Heider met Brunswik at a conference in Vienna (where he was an Assistant with Karl Bühler) and exchanged ideas with him, Bühler, and Else Frenkel. Bühler invited Heider to an informal evening discussion of psychoanalysts and empirical psychologists. At the time, there was little common ground between the two emerging traditions; it was Else Frenkel who later identified such common ground (e.g., Frenkel-Brunswik, 1940, 1954). Frenkel, perhaps one of the most broad-minded psychologists of her time, also had contacts with the emerging Vienna Circle (the groundbreaking group of philosophers of science led by Moritz Schlick and Otto Neurath), and she took Heider to one of their meetings.

This wide variety of intellectual connections was perhaps typical for that time, and it was certainly typical for Heider: "All my life, wherever I have been, I have tried to get people together for discussions" (Heider, 1983, p. 88). Heider interacted with philosophers, psychologists of all

denominations, biologists, writers, and artists. At one point he even became interested in astrology and graphology, more for their refined systems of describing personality, life tasks, and interpersonal relations than for their alleged connections to planets or handwriting. This breadth and open-mindedness is seldom found in today's academic psychology.

Heider's career might have stalled had he stayed in Hamburg without publishing. Or perhaps he might have returned to Vienna, where he was highly regarded, and eventually become a Full Professor there. In either case, he would not have helped revolutionize American social psychology. Fortune had it that Kurt Koffka, who had just begun a five-year visiting position at Smith College to develop a research department in psychology, was searching for an assistant to supervise some of the burgeoning research at Smith and at the neighboring Clarke School for the Deaf. Because Koffka could not find a suitable person in America, he asked Stern to recommend someone, and Stern recommended Heider. Without hesitation Heider accepted the position, expecting to return after a year. Apart from a few memorable visits, however, Heider was never to return to Europe.

Northhampton

In the fall of 1930, Heider began his research appointment at the Clarke School in Northhampton and his teaching position at Smith College, where he would stay for 17 years. Heider's time in America began well — he liked the little town of Northhampton and its surrounding hills, and he was welcomed warmly by the people there.

On arriving he met Grace Moore, who had graduated from Mount Holyoak College and was working on her Master's degree at Smith College. Moore had also an interest in strengthening the ties between the Clarke School (where her only sister, who was deaf, had been educated) and Smith College, so she volunteered to help Heider settle into his role as the head of research at the newly formed Clarke Research Department. Both were also members of Koffka's lab, and within a few weeks Grace and Fritz had fallen deeply in love. Because of both their differences (diverse cultural backgrounds and experiences) and their similarities (shared interests and knowledge, agreement on many issues, and common acquaintances), the two had much to talk about. It was quite natural for them to spend increasing amounts of time together, and they quickly became inseparable. They were married after three months.

In the summer of 1932, the Heiders embarked on extended travels to Europe, visiting many friends and colleagues, and attending conferences. It was less than a year before the Nazi Party, under Hitler's lead, would gain power in Germany. The international conference of psychology in Copenhagen, which the Heiders attended, was the last occasion to unite the elite of psychology in Europe. Then the massive exodus began. Lewin left in 1933. Stern was dismissed from his professorship in Hamburg, his books were burned, and he fled to America in 1935. Köhler, not Jewish himself, fought courageously for academic freedom for a while but eventually had to escape. Karl Duncker, Paul Lazarsfeld, Egon Brunswik, and Else Frenkel were among the others who left Europe after 1935, and many of them passed through Northhampton. Around that time, perhaps to strengthen the ties between the many exiles, Lewin initiated an annual meeting of "Topological Psychologists." The meeting grew in membership and eminence over the decades, hosting many outstanding psychologist (e.g., Gregory Bateson, Erik Erikson, Leon Festinger, James Gibson, George Herbert Mead, Henry Murray), until the meetings ended in the 1960s.

During the first years in Northhampton, Heider struggled with the challenges of expressing his thoughts in English (his second language) and finding sources of intellectual inspiration. To bridge this time of "ebb tides" (Heider, 1983, p. 112), he immersed himself in the study of statistics and taught a seminar on experimental psychology at Smith College. Working collaboratively with Grace, he also translated Lewin's *Principles of Topological Psychology* during the summer of 1935 and his own article *Thing and Medium* in 1936. His work on the latter translation led Heider to return briefly to issues of perception, but despite praise from such eminent thinkers as Kurt Lewin, Rudolf Carnap,

Hans Reichenbach, Karl Bühler, and Egon Brunswik, his work in this area found little reception or acknowledgement in the academic community.

Perhaps spurred by this lack of acknowledgment, and certainly because of their involvement with the Clarke School for the Deaf, the Heiders began a program of original research on aspects of language learning in deaf children — a program that led to two well-known publications in this field (Heider & Moore Heider, 1940, 1941). They found, for example, that lip reading ability is correlated, not with general intellectual aptitude, but with the ability to follow a rhythm (e.g., in dancing) and the ability to empathize with other people. Through observing the social detriments that can accompany deafness, Heider also gained a grater appreciation for the social function of language — the many ways in which it enables and advances interaction with others.

In the early 1940s, Heider returned to what he had come to recognize as his primary concern: describing the manifold of social relations in more general, theoretically coherent terms. In all his previous analyses of interpersonal behavior — from his early observations of quarreling relatives to his more recent studies of deaf children — Heider felt that he lacked a general framework of concepts with which to describe that behavior. He was convinced that a systematic psychological theory of social relations must start with a well-formed network of concepts applicable to that domain. The breakthrough came when Heider realized that there already existed such a powerful conceptual network — it was commonsense psychology, the system of concepts ordinary people use to describe and understand human behavior. Just as Lewin and Asch before him, Heider recognized that a psychology of social interaction must chart out the subjective concepts and perceptions of the social perceiver, "studying interpersonal relations at the level of their meaning for the participants" (Ickes & Harvey, 1978).

The significance of Heider's insight cannot be overstated. Today, the importance of commonsense psychology (typically labeled *theory of mind*) is widely accepted and enthusiastically discussed across disciplinary boundaries (e.g., Carruthers & Smith, 1996; Davis & Stone, 1995). Fifty years ago, however, its study was extremely unusual and suspect because of its own nonscientific status. Heider was one of the first theorists to recognize that the conceptual network of commonsense psychology has a fundamental influence on people's social perception and action — an influence comparable to that which the Kantian categories of space, time, and causality have on people's perception and action in the physical world.

There was, already at this early stage of Heider's ambitious project, a fundamental ambiguity that has plagued the interpretation of his opus ever since. On the one hand, Heider wanted to develop a *theory of social behavior* grounded in an organized network of scientific concepts and their relations. On the other hand, he wanted to reconstruct common-sense concepts and their relations as they are already used by ordinary people, summarized in a *theory of social perception* — a theory of how people *think* about social behavior. Heider reconciled these different goals in two ways (see Heider, 1958, p. 5). First, he asserted that a theory of social perception can predict a good deal of human behavior because people's social behavior is based to a large extent on their commonsense concepts of social perception. Second, he made the even bolder assertion that commonsense concepts provide a good starting point for a scientific theory of social behavior.

Researchers who followed Heider were less careful in reconciling, or even distinguishing, the two aspects of Heider's project (see Fletcher, 1995). For example, the two aspects are strikingly confounded in Smedslund's (1997) heroic attempt to build an axiomatic system of commonsense concepts (see Malle, 1998). In addition, most attribution researchers ignored Heider's advice that "scientific psychology has a good deal to learn from common-sense psychology" (Heider, 1958, p. 5). Instead, they compared people's thinking about social behavior to normative models that psychologists proposed (e.g., Kelley, 1967; Nisbett & Ross, 1980).

From 1943 on, Heider worked on this immense, initially amorphous project of laying out a conceptual network of interpersonal behavior. He read children's stories, fables, dramas, and novels,

trying to extract from them basic principles of how people perceive and relate to each other. In 1944 he published two papers (Heider, 1944; Heider & Simmel, 1944) based on the famous studies with Marianne Simmel, one of his students at Smith College. In these studies, subjects were presented with films of geometric figures that were animated as if moving around in relation to each other. Heider and Simmel found that the subjects almost invariably treated these figures as agents and interpreted their movements in terms of interpersonal relations such as love, hate, power, fights, and reunions.

These results are usually interpreted as evidence that people inevitably use social-perception concepts such as intention and emotion and project them even onto geometric shapes (e.g., Dittrich & Lea, 1994). A sentence in Heider's autobiography, however, suggests a slightly different interpretation: "As I planned the action of the film, I thought of the small triangle and the circle as a pair of lovers or friends and I thought of the big triangle as a bully who intruded on them" (Heider, 1983, p. 148). In this light, one realizes that the subjects did not freely project intentionality and emotion onto the geometric figures but instead were able to understand what Heider tried to communicate to them. The geometric shapes and their movements served as a kind of language in which Heider communicated a human interest story. How he translated this story into the language of moving geometric shapes is at least as intriguing as the fact that subjects were able to infer the story from the movements. Indeed, recent research in developmental psychology has begun to examine the features of objects and movements that compel people (and infants in particular) to perceive things as agents and ascribe intentions and other mental states to them (e.g., Baldwin & Baird, 1999; Gergely et al., 1995; Premack & Premack, 1995).

Despite the publication of two papers, Heider did not feel that he had made much progress toward his larger project of developing a systematic conceptual framework for describing interpersonal relations. His teaching load was heavy at Smith College (he had taken over for the late Koffka); no federal funding was available during wartime for work on conceptual projects; and few people appreciated, let alone understood, Heider's vision. Even after the publication of another groundbreaking paper, in which Heider first formulated his balance hypotheses (Heider, 1946), he was extremely discouraged by the apparent lack of interest in his ideas and fell victim to a series of anxiety attacks.

Symptomatic of his frustration during these years was an incident in 1946, which occurred during a conference at Harvard on social perception that Lewin organized. Heider gave a one-hour talk on his ideas about interpersonal relations, which appeared to rouse no one except Roger Barker and Lewin himself. The feeble response from the scientific community lasted for quite some time. Heider reported, for example, that Jerome Bruner, who was also at the Harvard conference, did not once refer to Heider's talk despite many subsequent conversations between the two. To some extent, Bruner may have been attempting to atone for this slight when, decades later, he emphasized the fundamental importance of folk psychology and acknowledged Heider's role in illuminating it (Bruner, 1990).

Heider's health, both physical and psychological, was of concern to his friends and supporters, and one of them practically forced him to take a summer vacation on Martha's Vineyard. There Heider found time to work on his ideas and build up some strength. His friends also encouraged him to apply for a Guggenheim fellowship, which would allow him to work uninterrupted for a whole year on his "book project." Shortly before Lewin's death in 1946, Heider had a last, long conversation with him about psychological theory, the topic of so many mutually inspiring discussions in the past. From Lewin and his supportive friends, Heider had regained hope and verve.

In fact, Heider received a Guggenheim fellowship in the academic year of 1947-1948 and was offered a new academic position. Barker (a former postdoctoral student of Lewin's at the University of Iowa) was about to take the chair in Psychology at the University of Kansas. Barker invited a few of his colleagues — people from the Lewin group, including Heider — to join him at Kansas. Heider cherished the prospect of working with graduate students and developing his ideas in the safety of a

permanent academic position. The Heiders accepted the offer swiftly and enthusiastically, relocating to Kansas in the summer of 1947.

Kansas

Their new environment was intellectually stimulating. The psychology department at Kansas benefited from the influx of a number of young and active researchers, and the Menninger clinic was just an hour away, giving Grace a base from which to conduct her own research. The Heiders quickly established friendships and were never at a loss for discussion partners. They also welcomed several visitors from Europe, New England, and other parts of the United States, many of them originating from the Gestalt psychology school or from Lewin's group of graduate and post-doctoral students at Iowa, Stanford, and MIT.

During his first years in Kansas, Heider found the time and freedom to work on his book project, a theoretical account of interpersonal relations. From 1948 on, rough drafts of his developing chapters were mimeographed and circulated among various colleagues in the field. As Robert Krauss (1983) recalled, "a graduate student thought to be deserving and (more importantly) neat would be permitted to borrow it overnight, one chapter at a time."

Although Heider felt that his thinking had become clearer and more orderly, he was working, characteristically, at a slow pace toward completing the book. It took another Guggenheim fellowship (1951-52), a Ford Foundation fellowship (1956-57), and nine additional years of work — toward the end, with the enormous help of Beatrice Wright, a former graduate student with Lewin at Iowa — until the book was sent off to publishers. After 15 years of work on this project and over 40 years of thinking about interpersonal relations, after numerous rejections, misunderstandings, and much indifference, Heider finally published what eventually would be recognized as a seminal contribution to psychology. His patience and persistence through decades of indifference are deeply admirable and inspiring.

The Psychology of Interpersonal Relations (1958)

By the time the book was published, Heider was known for his work on perception and primarily for his influential theoretical ideas on balance (Heider, 1946), which set in motion an enduring research program on cognitive consistency (see Abelson, 1968). Heider's balance theory applied the Gestalt principle of unit formation to the realm of sentiments (emotions and values) and predicted the conditions under which relations among people, and between people and entities, would be perceived as harmonious.

In *The Psychology of Interpersonal Relations*, Heider elaborated on his balance theory (chap. 7), but the truly novel aim of his book was to explore thoroughly the network of commonsense concepts that people use to describe human behavior (including such terms as *can*, *want*, *intend*, or *ought*). Heider's blend of empirical observation with conceptual and linguistic analysis was visionary and unlike anything psychology had seen before — resembling much more the tradition of ordinary language philosophy (Austin, 1962; Ryle, 1949; Searle, 1969) and anticipating contemporary cognitive linguistics by about 40 years (e.g., Jackendoff, 1990; Lakoff, 1987).

How was the book received? According to Krauss (1998), its initial reception was ambivalent and cautious, in good part because Heider's treatise lacked explicitly stated hypotheses and empirical support at a time when experimentation had great currency. Moreover, Heider's appreciation of the insights to be gleaned from commonsense psychology stood in direct opposition to the contemporary emphasis on the counterintuitive predictions of dissonance theory (Festinger, 1957) and other emerging cognitive theories (e.g., Miller, Galanter, & Pribram, 1960). These theories, depicting humans as complex biological machines guided by (often unconscious) cognitive processes, seemed to cater to many psychologists' desire to do actual science, not "just philosophy."

But for Heider, who had been trained as a philosopher, it seemed only natural to use conceptual analysis (a philosopher's tool) to reconstruct commonsense concepts in social perception and to depict people as what they perceive each other to be: intentional agents with motives and purposes, navigating planfully in a complex environment.

Even though Heider's book was at odds with the prevailing zeitgeist, it received a favorable review by Kelley (1960) and was followed by seminal papers on attribution processes that heavily drew on Heider's analysis (Jones & Davis, 1965; Kelley, 1967). *The Psychology of Interpersonal Relations* became a classic, and it is still widely read and cited today.

We propose that this continued popularity has been possible for reasons that perhaps are not too flattering either to Heider or to his interpreters. We suggest that *The Psychology of Interpersonal Relations* became a classic in part through the selective attention and resulting misunderstandings of its interpreters, facilitated by ambiguities in the work itself. In the spirit of examining closely Heider's work as well as his life, we invite the reader to engage briefly in a revisionary exegesis.

In his earlier work on the perception of physical objects, Heider used the concept of attribution to refer to the reconstruction of distal objects from features of perceptual experience. In *The Psychology of Interpersonal Relations*, he extended the concept of attribution to the perception of other persons and was then obliged to deal with the more complex structures in which person perception is embedded. For it was clear to Heider that persons are very different "objects of perception" than inanimate objects. Persons are "perceived as action centers and as such can do something to us. They can benefit or harm us intentionally, and we can benefit or harm them. Persons have abilities, wishes and sentiments; they can act purposefully, and can perceive or watch us" (Heider, 1958, p. 21). Note that twice in this short quote Heider refers to the *intentionality* or *purposefulness* of persons, which he considered to be a fundamental concept in commonsense psychology. Even so, most of the subsequent research on attribution downplayed this concept and thereby missed what is perhaps Heider's most significant contribution.

The tendency to downplay Heider's thinking about intentionality can best be illustrated with respect to the famous chapter 4 of *The Psychology of Interpersonal Relations*, in which Heider laid out in detail what he termed people's "naive analysis of action." The first two sections of this chapter, "Dispositional Properties" and "Forces of the Person and the Environment," provided the basis for subsequent attribution theory revolving around the person-situation dichotomy. In contrast, the next two sections, "Personal and Impersonal Causality" and "The Concept of Trying," which both focused on the social perception of intentionality, did not enter mainstream attribution research.

We suggest that this process of selective attention is associated with four related misunderstandings. First, researchers interpreted Heider's notion of *disposition* rather narrowly as stable personality traits or abilities. Although Heider (1958) did occasionally refer to traits and abilities when talking about dispositions (e.g., p. 30, p. 80), it is clear that he considered "motives, intentions, sentiments . . . the core processes which manifest themselves in overt behavior" (p. 34). They are "the psychological entities that bring consistency and meaning to the behavior" (p. 34). Similarly, when Heider characterized the inference of "invariances" as an essential component of perception, and therefore of social perception, his readers interpreted these invariances as stable, enduring factors (such as personality traits). Heider's notion of invariances, however, included "perceptions, intentions, desires, pleasures, abilities, and sentiments" (p. 26), which are all invariant relative to the stream of ongoing behavior. Among these factors, motives — not personality traits — occupied a special role: "The underlying causes of events, especially the motives of other persons, are the invariances of the environment that are relevant to [the perceiver]; they give meaning to what he experiences" (p. 81).

Second, Heider's readers have considered the distinction between person factors and environmental factors to be the centerpiece of his theorizing. However, for Heider this distinction was

only one of many within the conceptual network, and to him perhaps less important than the distinction between personal (i.e., intentional) and impersonal (i.e., unintentional) causality (see the later discussion). Worse yet, his readers were much too eager to equate person factors with traits. As a result, the study of people's commonsense analysis of behavior turned into requests for simplistic ratings about the extent to which "traits" versus "the situation" influenced a given behavior.

Third, Heider's distinction between personal and impersonal causality — the terms he used to characterize intentional versus unintentional behavior (Heider, 1958, pp. 100-101) — was falsely equated with the distinction between person causes (traits) and situation causes. As a result, attribution research applied the person-situation dichotomy to all behaviors alike, whether intentional or unintentional, and thereby eliminated (since Kelley, 1967) the central concepts of intention, purpose, and motive from later models of social perception.

Heider may have contributed to this misinterpretation by claiming that "in the case of impersonal causality, a wide range of environmental conditions will lead to a wide range of effects" (Heider, 1958, p. 102), as if suggesting that impersonal causality always involves environmental (situational) causes. However, he also identified "effects involving persons but not intentions . . . as cases of impersonal causality" (p. 101), thus acknowledging unintentional behaviors caused by person factors (e.g., sadness because of a thought about one's dead brother). Most important, he clearly stated that "personal causality refers to instances in which *p* causes *x* intentionally. That is to say, the action is purposive" (p. 100). Thus, at the heart of his analysis lies the distinction between intentional and unintentional behavior, not the distinction between person causes and situation causes.

Fourth, Heider's analysis of *trying* and the attribution of actions to motives have been forgotten because many readers subsumed them under the broad category of "person attributions." A careful reading of Heider's book reveals (and an interview by Ickes, 1976, confirms) that Heider clearly distinguished between (a) attributing outcomes to causal factors (i.e., providing answers to questions of the type, "Why did A succeed/fail?"), and (b) attributing actions to the actor's motivation (i.e., providing answers to questions of the type "Why did A do it?"). Heider felt that outcome attribution was well developed in Bernard Weiner's attributional model, but that motive attribution was inadequately treated by contemporary attribution work (Ickes, 1976, p. 14).

Part of the blame for this state of affairs may reside with Heider himself, as he never developed the attribution of motives in much detail. He primarily noted that intention refers to "*what* a person is trying to do . . . and not *why* he is trying to do it. The latter applies more particularly to the reasons behind the intention" (p. 110). Heider briefly analyzed reasons as desires and beliefs (pp. 125-128) but then seldom referred back to this crucial analysis. Forty years later, after several unsuccessful attempts to reintroduce the vocabulary of intentionality into theory about social perception (e.g., Buss, 1978), psychological researchers are only now beginning to take an active interest in the phenomenon of reason explanations (Kalish, 1998; Malle, 1999) and the ascription of motives (Fein, 1996; Vonk, 1998).

Finally, two general aspects of Heider's thinking remain to be fully appreciated. First, Heider adopted a truly interpersonal perspective. For him, social perception was a tool to be used instrumentally to accomplish one's goals in social interaction. In contemporary social cognition research, by contrast, the continuing focus on cognitive processes has not been adequately balanced by attention to the interpersonal processes and tasks that provide the functional context in which these cognitive processes operate (e.g., Ickes & Dugosh, in press; Ickes & Gonzalez, 1996). Second, Heider analyzed the concepts of commonsense psychology in their everyday conversational usage, much in line with philosophy of language and cognitive semantics. Despite the important precedent he established, however, contemporary American social psychology has, with rare exceptions, neither used this method nor extensively explored social regularities in naturally-occurring conversation.

Given the Heiders' intensive study of the challenges of deaf children, it is fitting that the research domain that has made the greatest progress in the exploration of commonsense psychology is the

developmental study of children's theory of mind. It is also encouraging that philosophers, anthropologists, and psychologists have recently engaged each other in interdisciplinary debates about these and related issues (see Carruthers & Boucher, 1998; Carruthers & Smith, 1996; Davis & Stone, 1995). Sadly, however, Fritz Heider's psychology of interpersonal relations is rarely cited in these areas of research, even though they address many of the same questions that Heider had considered. Even more disconcerting, perhaps, is the fact that current psychological research on social cognition largely ignores both contemporary work on theory of mind and Heider's classic study of commonsense psychology. An integration of these different strands of work is clearly needed.

Conclusion

Over the first 40 years of his professional career, Heider had made friends and colleagues throughout the United States and Europe. In the wake of publishing his 1958 book, Heider often traveled to visit these colleagues, give guest lectures, and he spent sabbatical years at the University of Oslo, Cornell, and Duke. By habit as well as by preference, he continued to write his thoughts in small notebooks that he always carried with him, and a large portion of the ideas that he compiled through this process are now available in print (Benesh-Weiner, 1987-1990). Heider also published a few more articles, mostly historical in nature (e.g., Heider, 1970). But his life's work had culminated in 1958, and he had 30 more years to see its repercussions unfold. Even in Heider's unusually modest autobiography, one senses his pride in having contributed something to the field of psychology that was finally well-received. The influence his work had on social psychology has been enormous, and if we are right that some of the best parts of it have been neglected, it is possible that a more enlightened re-discovery of Heider could result in another 40 years of influence on the field.

After the publication of his 1958 book, Heider finally enjoyed due recognition in the academic community. He received the Lewin Memorial Award in 1959, was designated as a University of Kansas Distinguished Professor in 1963, and received the APA Distinguished Scientific Contribution Award in 1965, some years before the first major wave of attribution research swept over the field of social psychology (e.g., Jones et a., 1972; Harvey, Ickes, & Kidd, 1976). Heider retired from teaching in 1966 and lived the remaining 22 years of his life doing what he liked most: being with Grace, taking daily walks and naps, drawing, reading, and thinking.

Heider was first and foremost a wanderer, a person who chose his own path and took his own time to see the sights. But he was also — in his own quiet way — a revolutionary figure in the history of psychology. It is a fitting irony, therefore, that the reverberations of the Heiderian revolution in psychological theory have been anything but quiet. They have, on the contrary, acquired an increasing force and resonance over time.

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