

Chapter 2

A Brief History of Social Psychology

Harry T. Reis

She that from whom

We all were sea-swallow'd, though some cast again

(And by that destiny) to perform an act

Whereof what's past is prologue; what to come,

In yours and my discharge.

William Shakespeare, *The Tempest*

One of the first lessons I learned teaching introductory Social Psychology was, never start with history. History, I quickly realized, is more compelling to those who have lived with its consequences than those who are approaching the field for the first time. In other words, it is easier to appreciate the role of history in shaping a field when we know and appreciate its dominant traditions and themes than when we have no general sense of what the field is all about. In writing this chapter for an advanced social psychology textbook, I assume that the reader already has some reasonable conception of the field and its subject matter. My further hope is that the reader has some longer-term interest in social psychology. That way, she or he can take advantage of the goals of this chapter: to reveal how our past is prologue to the field's current character and, at the same time, to help set the stage for where the next generation of young social psychologists will take it.

Social psychologists sometimes find ideas in the field's history (e.g., see Jones, 1985). Contemporary trends, both in science and in the culture at large, are also influential. The social and political zeitgeist has often inspired the field's research and theory, as is evident in the emergence of broad themes across our history: individualism in the early part of the 20th century; group influence and obedience in the aftermath of World War II; and social inequality, stereotyping, and prejudice in the 1960s and 1970s and then again in the 2010s. Moreover, social psychologists are opportunistic, quickly taking advantage of new scientific approaches and tools, as seen, for example, in the rise of cognitive perspectives in the 1970s, biological approaches at the beginning of the 21st century, and, more recently, Internet-based methods of data collection (Maniaci & Rogge, 2014b). In these and other instances, the field's deep-seated interest in

understanding fundamental principles of human social behavior was galvanized by emerging theoretical perspectives, new methods, or dramatic events (e.g., the 1964 murder of Kitty Genovese, which spawned research on bystander intervention; Latané & Darley, 1970), and sometimes all three. It is impossible, in other words, to separate historical trends in social psychology from parallel developments in science and culture.

This tendency of social psychological research to be linked to the cultural, political, and scientific zeitgeist has led some commentators to conclude that social psychology is faddish and noncumulative, in the sense that certain topics or approaches become fashionable and active for a time and then dissipate, not so much because a comprehensive, accurate, and well-documented understanding has been achieved but rather because researchers simply tire of the subject. That interest in one or another research topic waxes and wanes seems indisputable. Jones (1998) wrote,

Many social psychologists feel that their field is uniquely or especially vulnerable to faddism. . . . Surely there are bandwagons upon which graduate students and more established scholars climb in all research fields. However, it may be that such labels as “fad” or “fashion” are more easily applied to the social sciences than to the natural sciences because developments in the social sciences tend to be less cumulative and each research concern is therefore more limited by time. In any event, any student of social psychology knows that particular theories or methods or paradigms gain favor, dominate segments of the literature for a period of time, and then recede from view. (p. 9)

Jones went on to attribute this waxing and waning to several factors. Among the former are the timely interests of innovating researchers, the explanatory power and potential for novel findings provided by new theories or tools, the leadership of prestigious researchers, and (as seems even more true today than in Jones’s era) the priorities of funding agencies. Factors responsible for the waning of research interests include progress in understanding a phenomenon, so that remaining questions provide incrementally smaller yields and are therefore less attractive to young scholars; theoretical or empirical “dead ends” (i.e., once-promising ideas or findings turn out to be mundane, untenable, or artifactual); and what might be called “benign neglect”—diminished interest in the familiar (for an intriguing collection in this regard, see Arkin, 2011).

If research interests wax and wane, what is the purpose of studying the history of social psychology? Several reasons stand out. First, although fads exist, certain topics do endure. For example, few researchers today study the authoritarian personality, the risky shift, or ingratiation, but bias in perceiving others, persuasion, and social self-regulation have remained persistently popular topics for more than a half-century. Better appreciation of why research and theory on certain ideas continue to evolve while others fade away may provide signposts for researchers considering what to study and how to study it. Also, highlighting broad themes and trends in social-psychological research is a useful way of identifying the contribution of social psychology to knowledge relative to other sciences and disciplines (Hinde, 1997).

Second, knowledge in any discipline grows both horizontally and vertically. That is, some advances occur when researchers build on earlier work, whereas other advances arise from entirely new directions (McGuire, 1973). Building, or what Mischel (2006) called becoming a more cumulative science, depends on knowing the history of a phenomenon or theory; new findings deepen, elaborate, or add complexity to what is already known. Discovering new directions also benefits from an awareness of history, because a direction is new only if it is not “old wine in a new bottle.”

Third, in social psychology, unlike many more technical fields, new scholars begin with “entry biases”—preconceived notions, based on “a lifetime of experience in observing and hypothesizing about human behavior” (Cacioppo, 2004, p. 115), and grounded in common sense, intuition, and personal theories.

Formal theorizing is one means of minimizing the harmful effects of these biases, while capitalizing on whatever novel insights they might suggest (Cacioppo, 2004; McGuire, 1997). A good sense of the field’s history is also helpful here.

For these reasons, this chapter subscribes to a remark widely attributed to Winston Churchill: “The farther backward you look, the farther forward you are likely to see.” I propose that future research is likely to be better informed if planned with an awareness of what came before and is also more likely to fill a useful niche within the broad network of theories that define social psychology. Research conducted without such awareness is more likely to yield isolated results, with ambiguous or even inconsistent links to other principles and theories.

An historical perspective is also conducive to interdisciplinary research, or what Van Lange (2006) described as building bridges between social psychology and other disciplines. Social psychologists have not always taken advantage of links to other disciplines, and scholars in other disciplines are sometimes unaware of social-psychological research that bears directly on their interests. If transdisciplinary research is the future of science, as most science administrators argue, then the long-term outlook for social psychology depends on our ability to make such bridges explicit and generative. Many such bridges already exist, as Van Lange (2006) illustrates. Awareness of historical trends in theories and research may help illuminate how and why some bridges led to sparsely inhabited territory while others opened the door to progress.

This chapter¹ is organized around seven historical periods, catalogued imprecisely according to major research trends and professional issues that defined the era and distinguished it from preceding periods. These developments reflect far more research and many more contributors than can be mentioned in a brief chapter such as this. For that reason, I emphasize contributions that played pivotal roles in the evolution of social-psychological research and theory. Readers interested in more detailed accounts will find Allport (1954), Goethals (2003), Jahoda (2007), Jones (1985), Kruglanski and Stroebe (2012), and Ross, Ward, and Lepper (2009) particularly informative.

Classical Roots

1908 is often cited as the starting line of social psychology because the first two textbooks bearing that name, one by the psychologist William McDougall and the other by the sociologist Edward Alsworth Ross, appeared in that year. This designation is misleading. McDougall and Ross had direct intellectual predecessors in the 18th and 19th centuries, and their writing featured concepts similar in scope, ideology, and method to the earlier work. Moreover, if social psychology is defined as “an attempt to understand and explain how the thought, feeling, and behavior of individuals are influenced by the actual, imagined, or implied presence of other human beings” (Allport, 1954, p. 5), then it is no overstatement to say that social-psychological theorizing dates back to at least the origins of recorded history. This is because *Homo sapiens* have tried to articulate systematic principles for understanding, predicting and controlling the ways in which people influence one another ever since cognitive evolution gave us the capacities for self-awareness, symbolic thought, and theory of mind.

For example, one of the oldest known legal codes, the ancient Babylonian Codex Hammurabi (ca. 1760 BCE), contains 282 laws defining properties of interdependence for living in social groups, how responsibilities and rights are linked to social positions, rules for distributive and procedural justice, and attributions for misdeeds. The principle of “an eye for an eye” (known today as the norm of reciprocity) first appears here. The Sanskrit Bhagavad Gita, considered the sacred scripture of Hinduism, offers numerous allegorical teachings describing the association between motivation and action, the

self, and social and divine influence. In the 6th century, Benedict of Nursia, the founder of western Christian monasticism, compiled 73 “rules” describing how a monastery ought to be run and how a spiritual life ought to be lived. The so-called Rule of Benedict includes many social-psychological ideas, for example, about regulating individual responsibility and interdependence in the monks’ activities. Innumerable social-psychological principles can be found in the Judeo-Christian Bible, encompassing issues such as free will, prosocial and antisocial behavior, self-centered and other-centered motives, the self in relation to others, causal attributions, the nature of human needs and motives (and how to deal with them in social living), forgiveness and guilt, self-regulation, social cognition, and justice motives. Several social-psychological effects are even named after biblical passages (e.g., the Good Samaritan experiment).

Some have argued that Aristotle was the first social psychologist (e.g., Taylor, 1998). Aristotle maintained that because humans are inherently social, it is necessary to understand how the social environment affects the individual. This general principle led him to numerous specific ideas, such as the role of goals in construing situations, rationality in social judgment and action, and reciprocity of affection as a basis for love and friendship. Nevertheless, Aristotle’s predecessors Plato and Socrates also established important wellsprings for the waters of later social-psychological thinking. For example, Plato described the utilitarian functions of groups, introducing constructs later to reemerge as the social contract, the group mind, obedience, conformity, social facilitation, and social loafing. Plato’s *Symposium* provides a seminal description of the varieties of love. As for Socrates, the conflict between Socratic rationality and Sophist rhetoric might be considered the first dual process model of persuasion. In short, it seems safe to conclude that there are ample examples of social-psychological theorizing, in character if not in name, throughout antiquity to the present day.

There is little doubt that the social philosophers and early scientists of the Age of Enlightenment set the stage for modern social psychology (Jahoda, 2007). Many ideas introduced during this period (broadly construed here to start in the latter part of the 17th century and end early in the 19th century) were instrumental in the later appearance of social psychological thinking during the latter half of the 19th century. Particularly influential examples include the following:

- Thomas Hobbes’s (1588–1679) account of power-seeking as a basic human motive;
- Rene Descartes’s (1596–1650) ideas about cognition and the mind/body problem;
- John Locke’s (1632–1704) insistence on observation as the basis of both personal and scientific knowledge;
- David Hume’s (1711–1776) attention to reason, as well as his suggestion that sympathy for others provides a foundation for social relations;
- Jean Jacques Rousseau’s (1712–1778) social contract, which explained how people cede certain rights to authorities to maintain well-functioning groups;
- Adam Smith (1723–1790), whose *Wealth of Nations* celebrated self-interest as a moral good and who proposed a theory of sympathy, in which the act of observing others fosters awareness of one’s own behavior and moral motives;
- Immanuel Kant’s (1724–1804) *Critique of Pure Reason*, which suggested that the properties of objects and the way that humans perceive those objects were not one and the same;
- Jeremy Bentham’s (1748–1832) *hedonic calculus*, which argued that humans act to obtain pleasure and avoid pain;
- Georg Hegel’s (1770–1831) account of the social (group) mind as an entity unto itself, which subsumes individual minds; and
- Charles Darwin (1809–1882), whose theory of evolution prominently features the role of social relations in reproduction and survival.

None of these scholars used the term *social psychology*, but their influence on what came later is clear. Insofar as their thinking contributed to a systematic understanding of how individuals function within social groups and society, with some even using scientific methods in that quest, they sowed the intellectual seeds that flowered into modern social psychology.

The Emergence of a Discipline: 1850–1930

As previously explained, assigning a start date to social psychology is an ambiguous enterprise. One reasonable line of demarcation is the first appearance of the term *social psychology* to denote a field of inquiry. Jahoda (2007) credits an obscure Italian philosopher, Carlo Cattaneo, with coining the term *psicologia sociale* in 1864, to describe the psychology of “associated minds”—how new ideas emerge from the interaction of individual minds. A more influential early user of the term was Gustav Lindner, an Austrian/Czech psychologist whose 1871 textbook discussed many matters of “deriving from the mutual effects . . . of individuals in society the phenomena and laws of social life” (Jahoda, 2007, p. 59). Lindner’s book included a section entitled “Fundamentals of Social Psychology,” and because the book was widely read, it is more likely to be the source of what followed than Cattaneo’s article.

Wilhelm Wundt was a substantial intellectual force in the early development of the field. Wundt’s 10-volume *Völkerpsychologie* (often loosely translated into English as social psychology, a translation to which Wundt objected because the term *social* at that time connoted culture, whereas Wundt had a more comprehensive intent; Greenwood, 2004), published between 1900 and 1920, was a tour de force of ideas about “those mental products which are created by a community of human life and are, therefore, inexplicable in terms merely of individual consciousness since they presuppose the reciprocal action of many” (Wundt, 1916, p. 2). Wundt is widely considered to be the father of modern experimental psychology, but perhaps curiously, he felt that the experimental approach was not conducive to his *Völkerpsychologie*, which may help explain why Wundtian concepts have not endured in contemporary experimental social psychology (e.g., he believed that measurement and statistics were useful only for studying elementary conscious processes; Fahrenberg, 2015). Nevertheless, because Wundt’s laboratory in Leipzig was one of the most influential hubs in early psychology, and because Wundt himself was not to be ignored, his writings undoubtedly popularized the study of the individual within group contexts.

Another early landmark was the first social-psychological laboratory experiment, conducted by Norman Triplett at Indiana University in 1897. Stimulated by his observation that bicycle racers rode faster when paced by another rider, Triplett reported results from a study of 40 children asked to wind silk cord onto fishing reels, alternately doing so alone and together (Triplett, 1898). Others picked up on Triplett’s use of experimentation to study social-psychological questions, but the experimental method did not become popular until the 1920s, when it was championed by Floyd Allport at Syracuse University. (Indeed, experimentation did not become the predominant method of research in social psychology until the 1950s and 1960s, following Kurt Lewin’s influence; McMartin & Winston, 2000.) Allport made two important contributions to the early development of social psychology. The first, already noted, was his conviction that controlled laboratory experimentation would provide the necessary rigor for advancing (social) psychology as a science. The second was his insistence that group phenomena had to be studied in individualist terms: “There is no psychology of groups which is not essentially and entirely a psychology of individuals. Social psychology . . . is a part of the psychology of the individual, whose behavior it studies in relation to that sector of his environment composed by his fellows” (F. Allport, 1924, p. 4; italics in the original). To the extent that social psychology in the 1980s was “largely a North American phenomenon,” as E. E. Jones (1985, p. 47) asserted, it was because of Allport’s legacy.

As Jahoda (2007) points out, contemporary social psychology more nearly resembles Allport's 1924 textbook than its 1908 predecessors, previously mentioned. Nevertheless, the two 1908 textbooks were influential in putting the term *social psychology* on the scholarly map and in introducing certain key concepts to the field. In one, Ross (1908) defined social psychology as being concerned with "uniformities due to social causes, i.e., to *mental contacts* or *mental interactions*. . . . It is *social* only insofar as it arises out of the interplay of minds" (1908, p. 3; italics in the original). What Ross called "uniformities" attributable to the "conditions of life"—features of the environment not subject to mental interplay between persons, such as the physical setting, visual cues, culture, or race—were explicitly excluded. Ross had been influenced by earlier sociologists such as Gustave Le Bon and Gabriel Tarde, who popularized concepts such as crowd psychology and the group mind, using suggestion and imitation as mechanisms. Ross sought to explain social influence and control and thus may be considered a bridge between early sociologists and later group-process researchers.

McDougall (1908) was somewhat less explicit in his charge, designating social psychology with the task of showing "how, given the native propensities and capacities of the individual human mind, all the complex mental life of societies is shaped by them and in turn reacts upon the course of their development and operation in the individual" (p. 18). As Allport later did, McDougall emphasized the individual, having been influenced by Darwin. He assigned a prominent role to instincts, which he believed underlie human sociality and more complex forms of social organization. In this emphasis, McDougall faced considerable opposition from followers of then-emerging behaviorism.

Two additional trends during this period played significant roles in social psychology, although these would not be evident until later. The first, psychoanalytic theory, was not particularly influential in early social psychology (with the possible exception of the idea of instincts; G. Allport, 1954). Nonetheless, constructs introduced by psychoanalytic theorists such as Sigmund Freud, Carl Jung, Alfred Adler, and Karen Horney are relevant to contemporary social psychology, not necessarily in their original forms but rather as they have been modernized. For example, ideas such as motivation outside of awareness, chronic accessibility, subliminal perception, the effects of ego defense on self-regulation, repression, the functional basis of attitudes, the importance of early-life relationships with caregivers, relational conceptions of self, terror management, transference, compensatory behaviors associated with low self-esteem, and the ideal self can all be traced, at least in rudimentary form, to psychoanalytic writings. (See, for example, the December 1994 special issue of the *Journal of Personality* on social cognition and psychoanalysis.) Erdelyi (1990) suggests that these concepts took hold in social psychology only after having been recast as processes and mechanisms amenable to modern cognitive theories and methods.

A second development that later bore fruit is the work of William James. James, ever the philosopher-psychologist, had a long and productive career at Harvard University, beginning in 1873 and ending with his death in 1910. James's influence, not particularly visible during this early period of social psychology, became influential later, when topics such as the self, emotion, and theory of mind became central to the discipline. In particular, James first proposed the "motivated tactician" model of social cognition—that thinking is for doing (Fiske, 1992)—and that the self could vary in response to social context (an idea elaborated by James Mark Baldwin and George Herbert Mead). In one sense, it is striking testimony to James's vision and generativity that although his work was somewhat tangential to social psychology during his time, the field eventually came to him.

To summarize, during the period from 1850 to 1930, social psychology was transformed from a relatively informal conglomeration of ideas about the relationship of individuals to the groups and societies in which they lived to a viable, self-identified discipline. One sign that the field had come of age was the decision by Morton Prince, then editor of the *Journal of Abnormal Psychology*, to rename that journal as

The Journal of Abnormal Psychology and Social Psychology, designating Floyd Allport as a co-editor. Their editorial statement nicely summarizes the field's progress:

At its inception, less than two decades ago, social psychology was variously defined according to different opinions as to its subject matter. The following classes of data were among those stressed in the various definitions: crowd action, the social bases of human nature, the psychological aspects of social formations and movements, and "planes and currents" of thought and action which arise by virtue of the association of human beings. Through the enterprise of the pioneers these formulations, supplemented by many incidental contributions from others, have grown into a science having as its field a unique set of natural phenomena, and a wide range of practical application. A distinct method also is emerging, though progress here is necessarily slow owing to the large scale and the intangibility of much of the data. Interest in the subject is rapidly growing, and there are many courses given in it in colleges throughout the country. . . . In view therefore both of the present need of an organ for social psychology and of the mutually helpful contacts between that science and abnormal psychology, The Journal is pleased to announce the extension of its scope to include the former, and cordially invites those who are interested in the advancement of social psychology to join the ranks of its readers and contributors. (Prince & Allport, 1921, pp. 1–5)

Maturation and Migration: 1930–1945

By 1930, social psychology had established itself as an important psychological subdiscipline. As the 1930s began, American social psychology was dominated by the Floyd Allport-inspired individualist emphasis whereas European social psychology still reflected earlier notions of a group mind (Franzoi, 2007). All this was to change shortly, for both intellectual and geopolitical reasons.

Notable landmarks in American social psychology in the 1930s included the following: (a) the frustration-aggression hypothesis (Dollard, Doob, Miller, Mowrer, & Sears, 1939), which, derived from stimulus-response concepts, remains social psychology's primary legacy from the behaviorist tradition, along with the later-appearing social learning theory (Bandura & Walters, 1963); (b) interest in the structure and function of attitude, following the growing importance of public opinion research in American society, Gordon Allport's (1935) seminal chapter in the *Handbook of Social Psychology*, Newcomb's (1943) longitudinal study of attitude change among Bennington College students (conducted from 1935 to 1939), and LaPiere's (1934) classic study demonstrating noncorrespondence between attitudes and action toward outgroup members; (c) Katz and Braley's (1933) study of ethnic stereotypes among Princeton University students, which opened the door to the abiding interest in prejudice and stereotyping in social psychology; and (d) Mead's (1934) theorizing about the role of internalized social experience in the self.

It also seems appropriate to cite Henry Murray's (1938) personality theory. Primarily a personality theorist, Murray presaged much of what was to follow by proposing that both situations (press) and dispositions (needs) influenced behavior. By allowing for the existence of numerous needs, in contrast to the more structured conceptions of earlier models, Murray's flexible approach became popular among social psychologists who wanted to study how one or another predisposition (broadly construed to include needs, goals, and motives) affected behavior in social situations. Murray, along with Lewin (see the following discussion), set the stage for contemporary interactionist approaches, which advocate for simultaneous consideration of the *interactive* effects of dispositional and situational influences. As Funder (2006) put it, "nowadays, everybody is an interactionist" (p. 22; see also Mischel & Shoda, 1995).

Significant as these advances were, they pale in comparison to other developments, born in Europe but coming of age in America. Kurt Lewin was a German social psychologist who, alarmed by the rise of Nazism in his native country, emigrated to the United States in 1933. Lewin formulated field theory (1951)² with the intent of describing the social environment in terms of relations between individuals who “‘locomoted’ through a field of bounded ‘regions’ impelled by ‘forces’ or drawn by ‘valences’ along power ‘vectors’” (Jones, 1985, p. 21). These forces were both interpersonal and intrapersonal, leading Lewin to propose that behavior was a function of the person and the environment, represented in his now-famous dictum, $B = f(P, E)$. Even if this dictum is often misconstrued—Lewin (1951) did not intend P and E to be separable, additive factors but rather “one constellation of interdependent factors” (p. 240; italics in the original; for elaboration of this point, see Reis, 2008)—it set the stage for examining social behavior in terms of motivational dynamics arising both within and outside the person. In this sense, Lewin’s approach may be seen as a hybrid of the American individualist and European group mind traditions that were popular at the time. Lewin’s goal plainly was to develop a set of quantifiable constructs, using the mathematics of topology, that could be used to formally test propositions about human social relations. Despite the fact these efforts were unsuccessful, Lewin’s general approach turned out to be extraordinarily influential.

Lewin’s lasting influence on social psychology went well beyond his theoretical vision. In 1945, he founded the Research Center for Group Dynamics (RCGD) at the Massachusetts Institute of Technology. Although Lewin died prematurely just two years later (in the midst of the RCGD’s move to the University of Michigan), the group of social psychologists who worked or trained there under Lewin’s far-sighted and inspiring spell were central players in the field’s rapid postwar expansion. These included Leon Festinger, Stanley Schachter, Kurt Back, Morton Deutsch, Dorwin Cartwright, Murray Horwitz, Albert Pepitone, John French, Ronald Lippitt, Alvin Zander, John Thibaut, and Harold Kelley. Almost all current social psychologists will find one or more of these figures in their scholarly genogram.

Another enduring impact was Lewin’s resolute belief in the value of applied research. In 1943, he asserted that “there is nothing so practical as a good theory” (Lewin, 1951, p. 169), and he backed this up with the conviction that social psychologists should test their theories in applied settings. Lewin was known for conducting bold “action-oriented” experiments in field settings (e.g., his studies during World War II using group pressure to induce American housewives to prepare family meals with more plentiful organ meats, because better quality meat was being used for the troops; Lewin, 1943). Lewin was instrumental in founding the Society for the Psychological Study of Social Issues, in 1936, an organization that continues to be a hub for social psychologists committed to social action.

Lewin’s decision to emigrate to the United States, then, turns out to be one of the most important milestones in the history of social psychology. Many other significant European scholars also emigrated to the United States in that era, including Muzafer Sherif (whose pioneering work on social norm development led to Asch’s famous conformity experiments involving the estimation of the length of lines) and Fritz Heider, which led Cartwright (1979) to name Adolf Hitler as the person who most influenced the development of social psychology. World War II had a further influence on the field’s progress in that many leading researchers of that or the next generation worked for US government research agencies involved in the war effort, including Lewin himself, Rensis Likert (who advanced survey research methods for the Department of Agriculture), Samuel Stouffer (whose army experience led to the concept of relative deprivation and its extension in social justice research), Murray (who conducted personality assessments for the Office of Special Services), and Carl Hovland (whose evaluations of military training films for the United States Army led to the Yale tradition of persuasion research). Thus, the impact of the zeitgeist on the development of social psychology is not solely a matter of stimulating research topics; it also involves the movement and activities of the people who do social psychology.

Full Steam Ahead! 1946–1969

The post–World War II era was a heady time for social psychology. The field was expanding rapidly, fueled by the growth of universities and research. The GI Bill, which funded undergraduate and graduate education for soldiers returning from the war effort, created an immediate need for faculty and facilities. Research funding also increased exponentially, particularly in psychology, reflecting greater government investment in science and the mental health needs of returning veterans and others affected by the war. Opportunities were therefore great for European émigrés and young American social psychologists alike. Social psychology was a relatively new science whose potential resonated with the national mood, and universities were quick to add programs and positions. It was not uncommon in the early postwar era for positions to be offered on the basis of a telephone conversation. Tenure could be achieved in a year or two, and research grants were plentiful.

All these opportunities fed on the ideas and enthusiasms of social psychologists, especially young social psychologists, and their accomplishments largely fulfilled their expectations. The theoretical and empirical achievements of this period were considerable. Researchers expanded on the grand theories of prior eras, adding and fleshing out theoretical models, extending the field’s reach to new phenomena, and building an empirical knowledge base to support theory. The laboratory experiment entered its golden age, as researchers found ways to manipulate complex concepts in clever, well-controlled, and highly involving scenarios (e.g., Asch’s [1956] conformity experiments or Latané and Darley’s [1970] bystander intervention experiments). It was a good time to be a social psychologist.

Early in this interval, the dominant theme was group dynamics, reflecting the influence of Lewin’s students and contemporaries, who fanned out across the country following his death. Much of this research used field-theory concepts and language, although this was usually more an approach than a set of theory-derived propositions. The Lewinian tradition was plainly evident in graduate curricula, embodied in a popular textbook of readings, *Group Dynamics: Theory and Research* (Cartwright & Zander, 1953, 1960, 1968). Among the more influential programs of group dynamics research among Lewin’s disciples were Festinger’s (1950) *Theory of Informal Social Communication*, which identified and described three sources of communication (“pressures toward uniformity”) within groups (to establish social reality through consensus, to move toward a goal, and to express emotional states), and Deutsch’s (1949) studies of cooperation and competition. Another example (albeit one that did not directly use field theory terminology) was Thibaut and Kelley’s *Interdependence Theory* (1959; Kelley & Thibaut, 1978), which provided an elegant theoretical model for explaining how interdependence with respect to outcomes influences individuals’ behavior.

By no means was the study of group processes limited to the Lewinians, however. As noted previously, Asch (1956) was busily conducting experiments on conformity. He had been struck by Sherif’s (1936) experiments showing the effects of social influence when subjects were confronted with ambiguous stimuli. Asch removed the ambiguity, by asking naïve subjects to judge which line among a set of lines was longest. Despite the fact that the correct answer was plainly visible, confederates would give the wrong response, creating a dilemma for subjects: Accept the group consensus or go it alone. Asch’s work is often cited for showing “blind conformity,” but this is a substantial misrepresentation of his thinking. Asch (1954) believed that disagreement in a group of your peers, each of whom has as much legitimacy as yourself in making a perceptual judgment, required considering the possibility that your own judgment might somehow be erroneous: “Not to take it [the group] into account, not to allow one’s self to be in any way affected by it, would be willful” (p. 484). This important point led to a distinction between private acceptance (informational conformity) and public compliance (normative conformity) as bases for conformity, which was to fuel subsequent research and theory (Deutsch & Gerard, 1955). Research identifying situational and dispositional bases for nonconformity also became important during this period (e.g., Allen, 1965).

Nevertheless, by the mid-1960s, American social psychologists were losing interest in group process research (Wittenbaum & Moreland, 2008). In part, this waning may have reflected the emphasis in American social psychology on the individual. European social psychology had been decimated by the war's destruction and the emigration of many important scholars to America. American social psychologists, including the European-trained scholars and their students who were interested in groups, moved away from studies of within-group processes and instead focused in a more conceptually limited way on how groups influence the individual, a topic that acquired the label "social influence." For example, research on the "risky shift"—the tendency of individuals to take more risk in group decisions than when deciding alone (Wallach, Kogan, & Bem, 1962)—was popular for a time.

Another such example was Stanley Milgram's (1963, 1965) obedience studies. Arguably, nothing has defined social psychology more sharply in the public mind, for better and for worse, than Milgram's research. Milgram's thinking derived from his penetrating synthesis of the group process and social influence studies that preceded him, as well as on his personal observations about the Holocaust (Milgram, 1974). In a series of dramatic experiments that remain controversial to this day (Burger, 2009), Milgram demonstrated how, under certain circumstances, ordinary adults could be induced to deliver lethal electric shocks. Identifying those circumstances, as well as the dispositional factors that interacted with them, became the centerpiece of his programmatic research and the research of others. In contrast, public and scholarly attention outside the field largely ignored these moderators, focusing instead on the striking and, to some, morally repugnant behaviors that Milgram's paradigm had elicited.

Social influence processes were pivotal in other phenomena that became central to the field in the late 1950s and 1960s. For example, at Yale University, Carl Hovland and his colleagues and students began the Yale Communication and Attitude Change Program, which blended Hovland's experience with propaganda during World War II, Hullian learning theory, and group dynamics. The basic premise of the Yale approach to persuasion was to ask, in a somewhat mechanistic way, "Who said what to whom?" This led to numerous studies concerning the factors that predict attitude change, many of which are still cited and applied today. Festinger's interests evolved in a similarly individual-centered direction, as reflected in his social comparison theory (Festinger, 1954). Social comparison theory argued that people develop a sense of social reality—that is, their beliefs about the world and where they stand in it—by comparing their personal abilities and opinions with the abilities and opinions of similar others. In this theory, we can clearly see the field's move from a discipline concerned with group dynamics to one examining the influence of others on the individual.

Social psychology's bandwidth was also widening during this expansionary era. Social psychological theorizing and methods were being applied to an ever-increasing range of phenomena. Person perception became a major topic, following two important developments: (a) Asch's (1946) work on trait-based impressions, in which he showed that a list of traits such as industrious, skillful, and practical would lead to a very different overall impression if paired with the adjective "warm" than if paired with the adjective "cold," and (b) the then-innovative "New Look" approach to perception research, which proposed that the act of perception (e.g., what we see) was influenced by motives and expectancies. These models fostered growing interest in understanding the relative contribution of perceivers and percepts in the act of person perception, including enduring questions about bias. Hastorf and Cantril's (1954) classic "They Saw a Game," in which Princeton and Dartmouth students provided strikingly different accounts of rough play in a football game between their two schools, dramatically illustrated principles being studied in several laboratories (Bruner & Tagiuri, 1954). Another, although very different, influence was Cronbach's (1955) seminal critique of simple trait ratings, in which he demonstrated that a single rating—for example, choosing a value of 5 to describe a friend's intellect on a 1–7 rating scale—was actually composed of several distinct components, which had to be sorted out statistically to make sense of the processes that contribute

to trait ratings. The complexities that he introduced to the study of accuracy in person perception remain vital today (Funder, 1987; Kenny, 1994; Wood & Furr, 2016).

In 1957, Festinger introduced the theory of cognitive dissonance, which some believe to be the single-most influential theory in the history of social psychology (Cooper, 2007). The basic premise of this theory exemplified Festinger's talent for simple yet elegant and generative theorizing: When two cognitions do not fit together, there is pressure to make them fit, which can be resolved through various cognitive or behavioral changes. In its emphasis on cognitive consistency, dissonance theory was not unlike other models popular at the time (e.g., balance theory; for a collection of theories and approaches, see Abelson et al., 1968), but dissonance theory took a more dynamic, self-regulatory approach. The original theory and experiments led to enthusiastic acceptance on some sides and extensive criticism on other sides, particularly among behaviorists (e.g., Rosenberg, 1965), whose reinforcement principles made very different predictions. It seems safe to say that over time, the cognitive dissonance position won out, but more important are the changes the theory went through and the various new theories it inspired. Over time, Festinger's propositions were transformed into a theory of behavior justification, postulating that behaviors inadequately explained by external rewards or constraints would engender a need for self-justifying attitude change. Other important work stimulated by the cognitive dissonance tradition includes Bem's model of self-perception (Bem, 1972), reactance theory (Brehm, 1966), self-affirmation theory (Steele, 1988), and cognitive evaluation theory (Deci, 1975).

Still other enduring theories and phenomena introduced during this fertile period include Schachter and Singer's (1962) two-factor theory of emotion, which popularized emotion as a topic for social-psychological inquiry and introduced influential ideas about the attribution and misattribution of arousal (Gendron & Barrett, 2009). Interest in interpersonal attraction and friendship formation grew, spurred by Newcomb's (1961) detailed study of the acquaintance process among new students at the University of Michigan, Byrne's (1971) studies of similarity and attraction, Altman and Taylor's (1973) studies of self-disclosure and social penetration, and, slightly later, Berscheid and Walster's (1974) physical attractiveness research (for a comprehensive review, see Reis, 2012). Also, George Homans (1950) proposed social exchange theory, which influenced interdependence theory (Thibaut & Kelley, 1959), equity theory (Adams, 1965), and later, social justice research.

Finally, 1968 was the year in which Walter Mischel proposed that the then-dominant stable-trait models of personality, which sought to identify cross-situational and cross-temporal consistencies in behavior, be replaced by contextually varying "if-then" models that sought to identify distinctive yet stable patterns of response to particular situations. Mischel's work was an influential reminder of Lewin's famous dictum, and was instrumental to the subsequent popularity of Person \times Situation interaction research. Moreover, Mischel's influence reminded the field that personality psychology and social psychology were most effective as a single discipline (a reminder still heeded more in principle than in practice).

Zeitgeist continued to play a significant role in the field's evolution, as social psychologists pursued research addressing important events of the day. One of the most compelling examples began in 1964, when Kitty Genovese was brutally stabbed to death outside her Kew Gardens (New York) apartment while 38 witnesses reportedly did nothing to intervene or call the police. Public outrage about urban apathy and callousness was intense. Bibb Latané and John Darley, two young social psychologists residing in the New York City area, proposed and began what became an extensive research program testing a more social-psychological interpretation of factors that determine bystander intervention and nonintervention. Two principles were key: diffusion of responsibility—that bystanders feel less personal responsibility to act when others are present—and situational ambiguity—that bystanders use situational cues, such as the nonresponse of others, to determine whether or not the event is truly an emergency. Even though later reports have questioned key details about this crime (Rosenberger, 2004), Latané and Darley's (1970)

research made bystander intervention an important part of the field's legacy. Perhaps more important, media coverage of their studies demonstrated to the public the value of social-psychological research.

Another historical event of the era, the civil rights movement, also dramatically affected the field's research agenda. Research on the causes and consequences of prejudice and discrimination grew in popularity, serving as a theoretical foundation for later interventions (e.g., the jigsaw classroom, first used in 1971; Aronson & Patnoe, 1997). *Brown vs. Board of Education of Topeka, Kansas*, the landmark 1954 decision in which the US Supreme Court ruled that racially segregated schools should not and could not be considered equal in their educational value also energized the field, largely because social science research, as summarized in Kenneth B. Clark's testimony, was cited as particularly influential in the court's decision. Student antiwar protests in the late 1960s also found a receptive audience in social psychology (e.g., Block, Haan, & Smith, 1969), perhaps because social psychologists were at least sympathetic to and often active in the cause.

As the presence of social psychology on American university campuses grew, so did the field's infrastructure. Division 8 (Social and Personality Psychology) of the American Psychological Association was formed in 1947, with Gordon Allport as the first chair. (In 1974, the independent Society for Personality and Social Psychology [SPSP] replaced Division 8 as the field's leading professional organization.) Table 2.1 presents a list of the presidents of Division 8 and SPSP since then. The Society of Experimental Social Psychology was founded in 1965, because, in the words of its first president, Edwin Hollander (1968), Division 8 had reached "intimidating dimensions" that made "personal contact and communication unwieldy" (p. 280). Hollander envisioned slow growth "to perhaps 100" members³ (p. 281). European social psychology began to rebuild, with significant input from the American-sponsored Committee on Transnational Social Psychology, leading to the formation in 1966 of the European Association of Experimental Social Psychology, with Serge Moscovici as President.⁴

Journals also expanded, reflecting the need to disseminate the new research generated by the growing field. The renamed *Journal of Abnormal and Social Psychology* split into two journals in 1965. Daniel Katz (1965), editor of the new *Journal of Personality and Social Psychology (JPSP)* remarked:

It is appropriate with the launching of a new journal to hail the dawn of a new day and to sound a call for revolutionary departures from traditions of the past. . . . Now that the field of social psychology and its sister discipline of personality have a journal all their own, we should take advantage of the fact by . . . dealing more adequately with variables appropriate to our own subject matter. . . . It is our conviction that social psychology is no longer divorced from the other behavioral sciences and that in the long run a journal of personality and social psychology can profitably take account of this rapprochement. (pp. 1–2)

Another primary journal formed during this expansionary period was the *Journal of Experimental Social Psychology*, founded in 1965. John Thibaut was the inaugural editor.

As the 1960s came to a close, two trends were apparent. The first concerned personnel. It is sometimes said that "social psychology is what social psychologists do," and to this point, the social psychologists were, with very few exceptions, white males. Academic institutions were starting to admit more women at all levels, and social psychology was no exception. Looking back on the period 1967 to 1992, Berscheid (1992) speculated that "the proportional increase of women into research positions in social psychology was greater than in any other subarea of psychology" (p. 527). Arguably more important than personnel statistics was the way in which the influx of women intrinsically changed the field, by creating "a single social psychology that has integrated, and has been enriched by, the different experiences and views that female social psychologists have brought to their work" (p. 527). Progress in integrating the perspectives of nonwhite individuals has been much slower.

TABLE 2.1 Past Presidents of Division 8 (American Psychological Association) and the Society for Personality and Social Psychology

| Division 8, American Psychological Association (Social and Social Psychology) | | Society for Personality Personality Psychology | |
|--|-----------------------|---|---------------------|
| 1947 | Gordon Allport | 1974 | Urie Bronfenbrenner |
| 1948 | Gardner Murphy | 1975 | Paul Secord |
| 1949 | Theodore Newcomb | 1976 | Marcia Guttentag |
| 1950 | Otto Klineberg | 1977 | Harry Triandis |
| 1951 | J. McVicker Hunt | 1978 | Bibb Latané |
| 1952 | Donald MacKinnon | 1979 | Irwin Altman |
| 1953 | O. Hobart Mowrer | 1980 | Lawrence Wrightsman |
| 1954 | Richard Crutchfield | 1981 | Alice Eagly |
| 1955 | Nevitt Sanford | 1982 | Jerome Singer |
| 1956 | Abraham Maslow | 1983 | Ellen Berscheid |
| 1957 | Solomon Asch | 1984 | Albert Pepitone |
| 1958 | Else Frenkel-Brunswik | 1985 | Walter Mischel |
| 1959 | Jerome Bruner | 1986 | Ladd Wheeler |
| 1960 | Ross Stagner | 1987 | Elliot Aronson |
| 1961 | Robert Sears | 1988 | Edward Jones |
| 1962 | Henry Murray | 1989 | John Darley |
| 1963 | Leon Festinger | 1990 | Marilynn Brewer |
| 1964 | Garnder Lindzey | 1991 | Kay Deaux |
| 1965 | Morton Deutsch | 1992 | Mark Snyder |
| 1966 | Roger Brown | 1993 | Nancy Cantor |
| 1967 | Harold Kelley | 1994 | Susan Fiske |
| 1968 | Silvan Tompkins | 1995 | John Cacioppo |
| 1969 | Donald Campbell | 1996 | Robert Cialdini |
| 1970 | Julian Rotter | 1997 | Mark Zanna |
| 1971 | Herbert Kelman | 1998 | Gifford Weary |
| 1972 | Leonard Berkowitz | 1999 | Shelley Taylor |
| 1973 | William McGuire | 2000 | Abraham Tesser |
| | | 2001 | Ed Diener |
| | | 2002 | Claude Steele |
| | | 2003 | James Blascovich |
| | | 2004 | Hazel Markus |
| | | 2005 | Margaret Clark |
| | | 2006 | Brenda Major |
| | | 2007 | Harry Reis |
| | | 2008 | John Dovidio |
| | | 2009 | Richard Petty |
| | | 2010 | Jennifer Crocker |
| | | 2011 | Todd Heatherton |
| | | 2012 | Patricia Devine |
| | | 2013 | David Funder |
| | | 2014 | Jamie Pennebaker |
| | | 2015 | Mark Leary |
| | | 2016 | Wendy Wood |
| | | 2017 | Diane Mackie |
| | | 2018 | M. Lynne Cooper |

The second indisputable trend was that the pace of the field's growth was slowing. Social psychology was young no more. Faculties and enrollments were no longer expanding at a rapid pace, and grant funding would become increasingly competitive. An impressive literature of theory and empirical findings had been established, but future advances would be more challenging.

The Ascent of Social Cognition: 1970–1990

With the benefit of hindsight, it seems only natural that the rapid expansion of social psychology after World War II would inevitably lead to soul-searching about the value of the field's work. In part, this may reflect the prevailing "question authority" attitude of the late 1960s. Perhaps more strikingly, as the growth in resources slowed, and as the field matured from vibrant adolescence into early adulthood, doubts were voiced about its accomplishments and goals, so much so that the early 1970s became the occasion of a "crisis of confidence" that was unmistakably visible in journals and at meetings. Many critiques appeared, ranging from concerns about methodology and the ethics of experimental manipulation (especially involving deception) to more fundamental questions about the value of social-psychological findings and theories.

Two critiques were particularly prominent. In one, Gergen (1973, 2001) argued that social psychology should be considered an historical rather than a scientific discipline, because the principles underlying social behavior vary as a function of time and culture. Gergen's position, which dovetailed with growing reservations (previously noted) about the dominance of North American white males in social psychology, led many to question the experimental methods and theoretical assumptions that were foundational at the time. The other critique, more evolutionary and ultimately more influential⁵ than Gergen's revolutionary charge, was offered by William McGuire. In "The Yin and Yang of Progress in Social Psychology: Seven Koan," McGuire (1973) proposed:

[T]he paradigm that has recently guided experimental social psychology—testing of theory driven hypotheses by means of laboratory manipulated experiments [is dissatisfying] . . . an adequate new paradigm will . . . [involve], on the creative side, deriving hypotheses from a systems theory of social and cognitive structures that takes into account multiple and bidirectional causality among social variables. (p. 446)

In other words, McGuire felt that social-psychological theorizing and research needed to become more elaborate, moving away from single-variable models to models of complex systems of variables, each of which influences, and is influenced by, the other variables in the system. Although his forecast has yet to be realized, it clearly did usher in a new generation of studies emphasizing process models and their basic mechanisms, as well as heightened interest in methodological diversity (addressed in the following discussion). More generally, as the crisis of confidence faded, researchers in the late 1970s and 1980s era redirected their energy from self-criticism to improved research.

McGuire's critique was prescient in calling attention to the cognitive structures underlying social behavior. The 1970s heralded the arrival of social cognition as a dominant area of social-psychological research. In large part, this movement reflected the so-called cognitive revolution, as psychology distanced itself from the antimentalist behaviorist tradition (which had only an irregular influence within social psychology) and instead whole-heartedly embraced the study of cognitive processes and their impact on behavior. To be sure, there had been earlier examples of social cognition within social psychology (e.g., person perception, attitude structure), but the new-found legitimacy of studying cognitive processes opened the door to a different level of analysis and to the discovery of many new phenomena.

The first of these new social-cognitive phenomena was causal attribution. Seminal groundwork had been laid in three earlier theoretical models. These were Heider's (1958) "common sense psychology," which examined how people make ordinary judgments about causation, in particular describing the constellation of factors that fosters environmental or personal causation; Jones and Davis's (1965) theory of correspondent inferences, which proposed that lay persons ascribe intentionality (and hence dispositional causation) to the extent that actions deviate from what the average person would and could do; and Kelley's (1967) covariation model, which proposed that causal inferences were based on comparative judgments about whether a given action was consistent over time, distinctive among related entities, and consensual across persons. Attribution research prospered for a time, and although interest subsequently waned, it set the stage for what followed.

In a broad perspective, the primary contribution of the new emphasis on social cognition was to situate the major mechanisms for social-psychological explanations of behavior squarely within the mind of the individual. Contemporary social psychology thus moved away from the interpersonal and group process models favored in earlier approaches, notably those popular in Europe and in sociological social psychology, and doubled down on the more individualistic approach introduced by Floyd Allport (which was also characteristic of the increasingly popular field of cognitive psychology). Social psychological phenomena were seen as being caused proximately by "what the individual makes of the situation" (Kelley et al., 2003, pp. 5–6) more so than by its distal causes, namely the situation itself. This idea was expressed famously in Ross and Nisbett's (1991) principle of construal: that causal analysis should focus on the personal and subjective meaning of the situation to the individual actor.

Between 1970 and 1990, social cognition research flourished. Some of the more influential and enduring work of this era includes research on judgment and decision-making (which contributed to the development of behavioral economics, now a thriving discipline in its own right), such as Nisbett and Ross's (1980) classic book on strategies and shortcomings in human inference and Kahneman and Tversky's (1973) research on heuristics; early studies of automaticity (e.g., Winter & Uleman, 1984); formal theories of attitude change, such as the elaboration likelihood model (Petty & Cacioppo, 1986; see Chapter 6), and of the attitude-behavior association, such as the theory of reasoned action (Ajzen & Fishbein, 1974); various models of social categorization and schema use, including models of person memory (Ostrom, 1989); dual-process models, such as those differentiating deliberative and implemental mind-sets (Gollwitzer & Kinney, 1989) or systematic and heuristic processing (e.g., Chaiken, Liberman, & Eagly, 1989); and models differentiating automatic and controlled processes in stereotyping, prejudice, and discrimination (e.g., Devine, 1989). Many other examples might be cited (for a review, see North & Fiske, 2012). The enthusiasm for social cognition was such that Ostrom (1984) could proclaim, not without ample credibility, that "social cognition reigns sovereign" (p. 29) over other approaches to understanding social behavior.

This is not to say that other topics were dormant, however. Motivation was becoming more important in social psychology, as exemplified by growing attention to self-regulation. Several major models were formulated during this period, among them Carver and Scheier's (1981) control theory, Deci and Ryan's (1985) self-determination theory, Higgins's (1987) self-discrepancy theory, and Greenberg, Pyszczynski, and Solomon's (1986) terror management theory (for a review, see Higgins, 2012). More broadly, self-related research expanded from viewing the self as the object of knowledge (i.e., self-esteem, contents of the self-concept) to also considering the self as a causal agent motivated to pursue personal and psychological goals (see Chapter 5). Numerous "self"-related processes became popular, such as self-evaluation maintenance, self-enhancement, self-verification, and self-assessment (Sedikides & Strube, 1997; Taylor, 1998). Some of this work, under the heading of motivated social cognition, provided a much needed "hot" dynamic contrast to then prevailing "cool" information-processing approaches to social cognition. It was not until the 1990s, however, that these approaches became widely adopted.

Social psychology's net was also widening during this period. Emotion and emotion regulation were becoming increasingly popular topics (Manstead, 2012; Zajonc, 1998), coincident with the founding of the International Society for Research on Emotions in 1984. Research on interpersonal attraction gradually slowed but was supplanted beginning in the 1980s by research on social psychological processes affecting the development, maintenance, and termination of close relationships (for a review, see Reis, 2012). This vigorous extension was facilitated by a key pair of conferences held in Madison, Wisconsin, in 1982 and 1984, which led to the founding of a new professional organization (now called the International Association for Relationship Research) and two specialty journals. And what about social psychology's original research interest—groups? It became less central than in earlier periods, although groups research was still being conducted, somewhat more in a renaissance of European social psychology than in North America, led by scholars such as Serge Moscovici and Henri Tajfel (for a review, see Levine & Moreland, 2012). Nevertheless, even here the limits of models based in the mind of the individual were plain. As Moreland, Hogg, and Hains (1994) document, research on traditional topics such as group structure, performance, and influence ebbed whereas intergroup relations research (social identity, stereotyping, and prejudice) thrived (see Chapter 12).

Perhaps more significant than all of these changes in content were changes in the way that research was conducted. Research ethics boards became standard (and, some would say, overzealous), requiring more thorough attention to the protection of research participants' welfare and raising questions about procedures such as deception and informed consent (McGaha & Korn, 1995). A more substantive change involved the introduction of microprocessors, which made available sophisticated tools for conducting research and analyzing data. For example, computerized technology allowed researchers to measure reaction times within milliseconds or to present stimuli at exposure lengths that could be carefully controlled to be subliminal or supraliminal (Bargh & Chartrand, 2014; Gawronski & de Houwer, 2014). These tools afforded unprecedented opportunities to ask questions (e.g., about automaticity or implicit processes) that earlier researchers could barely imagine.

Yet more widespread were changes in data analysis. In 1970, most analyses were conducted using large, cumbersome, malfunction-prone manual calculators. Nearly all published studies presented very simple statistics, largely because analyses involving more than three variables required matrix algebra (which most social psychologists eschewed). By 1990, sophisticated statistical software on mainframe or personal computers was ubiquitous, making complex multivariate procedures routine. Invention thus spawned necessity, in the sense that social psychologists began to rely extensively, and often insist, on research and statistical methods that took advantage of this new-found computing power. For example, diary methods such as experience sampling first appeared in the 1970s (for a history, see Wheeler & Reis, 1991), structural equation models became known and useful (Reis, 1982), and Kenny's social relations model transformed studies of person perception (Kenny, 1994). Baron and Kenny's (1986) paper on mediation, the most-cited article in the history of *JPSP*, also changed the way that research is done. Methods for assessing mediation were not just a new tool for social psychologists; they altered the research agenda and broadly helped advance theory by making routine the pursuit of evidence for mediating processes.

Journals were changing, too. In April, 1980, *JPSP* split into its current three independent sections under a single cover. Nominally designed to contend with the distinct expertise that the three areas were presumed to require, as well as the workload created by ever-increasing submissions, the split was a sign of growing specialization and complexity. For similar reasons, in this era several other new journals were founded, including the *Personality and Social Psychology Bulletin* in 1975, and the *European Journal of Social Psychology* and the *Journal of Applied Social Psychology* in 1971. Reis and Stiller (1992) documented the field's increasing complexity. Comparing articles published in *JPSP* in 1968, 1978, and 1988, they found that, over time, articles had become longer, had more citations, and reported more studies with more subjects per study, more detailed methods, and more complex statistical analyses.

All these activities suggest that although McGuire (1973) seems to have missed the mark in predicting the demise of the laboratory experiment, he was spot-on about much of the rest of it: "deriving hypotheses from a systems theory of social and cognitive structures that takes into account multiple and bidirectional causality among social variables" (p. 446). By 1990, social psychologists were asking multifaceted questions about more intricate concepts, they were using more sophisticated methods to collect and analyze their data, and their publications were growing in length, detail, and complexity. Even if bidirectionality had not yet become common—for example, experiments with single-direction causality continued to dominate over correlational approaches—researchers were thinking in terms of and beginning to test mediational models. All of these signs indicated that social psychology had progressed along the path of becoming an established science (Kuhn, 1962).

Spreading Tentacles, Deeper Roots, and a Move toward Biology: 1990–2010

As 1990 arrived, SPSP had about 2,800 postgraduate and student members. By the end of 2008, membership had doubled, to over 5,600. Although some of this increase may reflect growth in mainstream academic psychology departments, a larger portion likely reflects the spread of social psychology into related disciplines and applied positions. Several such expansions are apparent. Social psychological research is increasingly represented in law (e.g., eyewitness testimony, jury decision-making), business and economics (e.g., judgment and decision-making, behavioral economics), medicine (e.g., motivational processes in health-related behavior, social influences on health and well-being), family studies (e.g., interpersonal processes in family relationships), education (e.g., achievement motivation, student–teacher interaction), and politics (e.g., voting behavior). This scholarly diaspora may be seen as a sign of the field's health. The domain of social psychology is the study of how the social context affects behavior, an expertise increasingly sought by basic scientists and applied practitioners in other disciplines. Social psychologists also tend to have excellent skills conceptualizing and conducting research on the effects of social context, which is also valued in various academic and applied settings.

There is no irony in the fact that the influence of social psychology has grown steadily by exporting its theories, methods, and talent to other fields. Taylor (2004) noted, "Whereas social psychology used to be a relatively small field of scholars talking primarily to each other, now we have unprecedented opportunities to collaborate with the other sciences in ways that we would have never imagined even a few years ago" (p. 139). Such outreach is an essential part of scientific relevance in the contemporary world. It has often been argued that the future of science rests in interdisciplinary research programs involving multiple investigators with specialized expertise (sometimes called "big science") to address important problems, and this is no less true in designing interventions and applied programs that build on basic science. The spreading tentacles of social psychology, a trend that, if anything, appears to be accelerating (though it is far from an accomplished fact), thus augurs the field's continued participation in the most important science and applications of the day.

Social psychology's dispersion did not occasion neglect of the field's core. Topics popular or emerging at the beginning of this period, discussed earlier in this chapter, experienced theoretical advances, partly due to the accumulation of research and partly due to the availability of yet more sophisticated methods and tools. For example, programming packages such as E-Prime[®], MediaLab[®], and DirectRT[®] enabled most researchers with access to a desktop computer to run complex, precisely timed experiments. Relatively sophisticated social-cognitive protocols, such as lexical decision tasks, subliminal and supraliminal priming, and implicit assessment, became standard, and topics amenable to study by these and similar methods, such as automaticity, dual-process models, the impact of nonconscious goals, motivated social

cognition, emotion, and affective influences on judgment and decision-making, prospered. To be sure, social psychologists had long been interested in nonconscious processes, but they lacked the tools to study them and the data to theorize in a knowledgeable way about them. The availability of such methods, and the resultant impact on research and (especially) theory, might be considered a hallmark of this period.

Similarly, in the 2000s, the Internet grew in reach and bandwidth, making large, international, specialized, and diverse samples accessible for surveys and experiments to any and all researchers (a trend that accelerated post-2010, as will be discussed). Newer Internet-based tools, such as social networking sites and immersive virtual worlds, and other microprocessor-based technologies (e.g., ambulatory assessment, virtual reality) are poised to further expand the possibilities (Reis & Gosling, 2009). If the most influential figure in the social psychology of the middle 20th century was Hitler, arguably the most influential figures since 1980 were the inventors of microprocessors.⁶

Indispensable as these new tools may be, Baumeister, Vohs, and Funder (2007) noted a downside: Direct observation of behavior has been increasingly supplanted by the study of “self-reports and finger movements”—that is, by data provided through hand-written self-reports or keystrokes on a computer keyboard. By their tally, only about 15% of the articles published in *JPSP* in 2006 included behavioral measures (compared to about 80% in 1976). Many social psychologists trace their interest in the field to the “golden era” of laboratory experiments, when experimental realism was high and research participants were fully engrossed in experimentally created circumstances. (Think, for example, about Milgram’s obedience experiment, Latané and Darley’s bystander intervention studies, or Asch’s conformity research.) Vivid laboratory experiments of this sort are rare these days, because, as Baumeister et al. (2007) suggest, they may be impractical or unethical for certain topics (e.g., sexual behavior), they are difficult, time-consuming, and labor-intensive to conduct, and it is unclear that journals value them any more than they do studies of self-reports and finger movements. Given that the correspondence between self-reports, implicit associations, and reaction times on the one hand and actual behavior on the other hand is imperfect, the paucity of actual behavioral studies raises questions for some about the relevance of contemporary research (Baumeister et al., 2007).

Although many of the substantive advances in social psychology after 1990 represent a deepening of what is understood about established theories and phenomena, two novel trends have also been influential. One of these is greater attention to biology, both in developing new methods (e.g., functional magnetic resonance imaging [fMRI]) and theoretically, in particular the biological functions, consequences, and mechanisms of social behavior. For example, because social psychologists were interested in situational causes of behavior, they historically tended to avoid evolutionary accounts. Nevertheless, as evolutionary psychology moved away from models featuring inherited, relatively immutable dispositions and toward concepts that asked about flexible behavioral adaptations designed to solve problems of survival and reproduction (see Chapter 16), social psychologists became more intrigued. This interest was emphasized in a seminal review by Buss and Kenrick (1998), who noted:

[E]volutionary psychology places social interaction and social relationships squarely within the center of the action. In particular, social interactions and relationships surrounding mating, kinship, reciprocal alliances, coalitions, and hierarchies are especially critical, because all appear to have strong consequences for successful survival and reproduction. From an evolutionary perspective, the functions served by social relationships have been central to the design of the human mind. (p. 994).

Since then, concepts in evolutionary psychology have appeared regularly in social psychology texts (albeit not without controversy; e.g., see Park, 2007) and are an increasingly valuable source of research

hypotheses about, for example, attraction, close relationships, prosocial behavior, aggression, social identity, group identity and formation, leadership, social cognition, and emotion.

Another sign of the influence of biological approaches in social psychology is the birth and exceptional growth of social neuroscience, which seeks to identify and understand neural processes underlying social behavior (see Chapter 15). To be sure, psychophysiological studies of social behavior, including psychophysiological processes occurring primarily in the brain, are not new (Cacioppo & Petty, 1983). But the rapid advance of cognitive neuroscience in the past two decades has had a profoundly energizing effect. The key in this regard is the development of fMRI for noninvasively capturing patterns of brain activation associated with psychological processes. Social neuroscientists use neuroscientific methods to test hypotheses about the neural processes responsible for the phenomena that social psychologists traditionally study at a behavioral level. For example, Beer (2007) examined evidence about activity in the medial prefrontal cortex to determine whether chronic self-evaluation is best represented by accurate self-assessment or self-enhancement; Aron et al. (2005) used fMRI to support their model of intense romantic love as a motivational state rather than as an emotion; and Decety and Jackson (2006) have used fMRI to better understand the neural and cognitive foundations of empathy. Social neuroscience is misconstrued when it is described as “finding social behavior in the brain.” Rather, the goal is to inform social-psychological theory according to what is known about neural function and architecture (i.e., how the brain works and does not work) and, simultaneously, to better understand how the brain enacts the psychological and social processes that characterize everyday life (Blascovich, 2014; Cacioppo et al., 2003). Though social neuroscience is still very young, there is reason to believe that over time it will do much to better ground social-psychological theories in a biologically plausible reality.

The second trend that became prominent during the 1990s was culture. Although culture was surely a part of social psychology in the early days (e.g., in Wundt’s folk psychology), over the years interest in culture waned, probably because of the field’s quest for invariant basic processes of social behavior. Nonetheless, as social psychologists reconsidered the impact of culture, partly stimulated by the growth of social psychology outside of North America, research began to accumulate showing that many social psychological processes once thought to be “basic” or “universal” did in fact vary from one culture to another (Fiske, Kitayama, Markus, & Nisbett, 1998). Nowhere was this more evident than in studies of social cognition comparing individualist cultures (North America, Western Europe) with communal cultures (East Asia). In one compelling instance, the so-called fundamental attribution error was shown to be characteristic of European Americans but not of Asians (e.g., Miller, 1984). By now there is sufficient evidence to indicate that cultural influences are relevant to most domains of social psychology, as reflected in a special section of the journal *Perspectives on Psychological Science* that addressed many such examples (Sternberg, 2017).

It is too soon to know which of these trends will continue, which may turn out to be dead ends, and where they will lead social psychology. But if nothing else, they demonstrate that the relentless curiosity of social psychologists has few boundaries.

Change Is Here—The Rise of Big Data and the Reproducibility Crisis:

2010–The Present Day

Since the publication of the first edition of this textbook, social psychologists have continued their vigorous pursuit of any and all topics within the field’s purview. Indeed, judging by journal publications and conference presentations, it seems clear that activity in the field has grown, perhaps even exponentially. At

the same time, two important new developments have initiated major changes in how social psychologists go about their business.

The first of these developments concerns large, Internet-based samples, either through web-hosted data collection sites (e.g., mTurk, ResearchMatch, Qualtrics Online Sample) or “big data”—extremely large and potentially complex data sets compiled from social media (e.g., Facebook, online dating sites) or other pre-existing data sources (e.g., cell phone records, archived longitudinal panel studies such as Midlife in the United States, MIDUS). Both of these data sources allowed researchers to generate, sometimes with relatively little effort, extremely large samples with several important benefits (aside from the obvious benefit of statistical power): the possibility of efficiently conducting multiple direct and conceptual replications; the ability to test hypotheses with naturalistic field data; the statistical power to examine multiple-variable or complex patterns of moderation; and the capacity to examine longitudinal trends without waiting for time to pass. These data sources have unquestionably changed the landscape of social psychological research for the better (see Chapter 21).

Aside from the ease of conducting research, studies conducted on web-hosted data collection sites have proliferated for another reason: the claim that they offer more diverse and representative samples than the typical pool of freshmen and sophomores enrolled in psychology courses (Gosling, Vazire, Srivastava, & John, 2004). On its face, there seems little reason to doubt this claim, but other concerns have been raised about these samples—for example, that participants are prone to be inattentive to instructions or materials (Maniaci & Rogge, 2014a), that the same individuals participate multiple times in a single study, that worker communities communicate about studies before participating, or that participants have a potentially problematic degree of insight into the content or methods of a study, owing to past participation in similar, perhaps numerous, studies (Chandler, Mueller, & Paolacci, 2014). These concerns have not diminished the appeal of web-hosted data collection, but they have given rise to the development of procedures intended to minimize their impact (Chandler et al., 2014; Maniaci & Rogge, 2014a). Optimizing the manner in which data can be collected via the Internet is very much a “work in progress” for social psychology.

Trouble in Paradise? The Reproducibility Crisis

As the discipline of social psychology prospered, questions began to appear about its substantive core. Seminal in this challenge were two articles that confronted what their authors felt were serious empirical shortcomings. The first, by Simmons, Nelson, and Simonsohn (2011), argued that flexible and often undisclosed research practices were likely to have created a literature with an abundance of published “false positives”—that is, findings that yielded nominally significant results for a false hypothesis. In the second article, John, Loewenstein, and Prelec (2012) anonymously surveyed a large sample of academic psychologists, identifying what they labeled as a “surprisingly high” rate of questionable research practices (QRPs). Both of these reports focused on psychological science in general and not on social psychology in particular; in fact, they may be seen as part of a much broader challenge to the validity of scientific research, occasioned by a controversial and much debated article by Ioannidis (2005), provocatively entitled “Why Most Published Research Findings Are False.” Nevertheless, despite the wide disciplinary reach of the concerns raised in these and other articles, the response of social psychology has been particularly and perhaps uniquely robust and self-critical.

Fuel was added to this fire by the apparent low rate of replication found in several large-scale multisite replications.⁷ For example, in one replication of 100 experimental and correlational studies published in three psychology journals, depending on the criterion used, only 36% to 47% of the replications yielded significant results (Open Science Collaboration, 2015). Other similar replication projects have yielded mixed

results; in one case, replications supported 11 of the 13 classic and contemporary effects that were tested (Klein et al., 2014), whereas in another example, a 23-lab replication failed to support the well-known ego depletion effect (Hagger et al., 2016). The interpretation of such results remains contentious. For example, Gilbert, King, Pettigrew, and Wilson (2016) noted that when the Open Science Collaboration’s replications are corrected for error, power, and bias, “the data are consistent with the opposite conclusion, namely, that the reproducibility of psychological science is quite high” (p. 1037). In another case, Baumeister and Vohs (2016) pointed out that all of Hagger et al.’s (2016) replications were conducted with a method that had never been used in the original research establishing the ego depletion effect. All social psychologists agree about the importance of reproducibility, but the degree to which a problem exists remains an open question (Motyl et al., 2017).

Advocates of the “reproducibility is a problem” position usually cite QRPs as a major reason for what they see as a prevalence of false positives in the published literature. To be sure, critics have identified methodological issues in the John et al. (2012) research, arguing that when these issues are corrected, QRPs appear to be much less common than the original authors claimed (e.g., Fiedler & Schwarz, 2016). Nevertheless, at least some of the concerns raised in this debate have a long-standing history that predates the current controversy: for example, low statistical power (Cohen, 1962), publication bias (Greenwald, 1976; Rosenthal, 1979), selective reporting of results and hypothesizing after results are known (Kerr, 1998), incentive systems that reward novelty and positive results over replications and failures (Nosek, Spies, & Motyl, 2012), and limitations of significance testing (Kline, 2004). As a result, there currently exists a discipline-wide endeavor to address at least some of these issues. For example, in the mid-2010s, virtually all major journals in social psychology began attending much more closely to issues surrounding sample sizes and statistical power. They also began to endorse greater transparency about methods and data management, such as by providing online access to additional documentation for published articles through supplemental online material. Other less widely adopted but still increasingly common changes included preregistration of hypotheses and the provision of archival access to materials and data (e.g., through the Center for Open Science).

Although the debate over these and related concerns sometimes produces more heat than light, especially in the occasional blog post, most social psychologists see empirically informed and temperate discussion about questionable practices and their potential remedies as a healthy sign of progress in the field, or, as Motyl et al. (2017) assessed it, evidence that “the field is evolving in a positive direction” (p. 34). As of this writing, it seems clear that the field has agreed on greater statistical power, greater transparency, and replication as essential practices. There is less consensus about other changes (e.g., preregistration, fully open-to-all data, and replications in independent labs prior to publication).

For some commentators, confidence in the reproducibility of one’s findings trumps other criteria, leading them to prioritize practices such as high levels of statistical power, replication, preregistration, and/or open access to one’s data (e.g., LeBel, Berger, Campbell, & Loving, 2017; LeBel, Campbell, & Loving, 2017; Munafò et al., 2017; Zwaan, Etz, Lucas, & Donnellan, 2017). In one case, Benjamin et al. (2017) proposed adoption of $p < 0.005$ as a criterion for all new discoveries. Other commentators have underscored trade-offs among several criteria of high-quality, high-impact science, including discovery, internal and external validity, consequentiality, and cumulativeness along with reproducibility, thus encouraging flexibility in the application of rules and guidelines (e.g., Fiedler, Kutzner, & Krueger, 2012; Finkel, Eastwick, & Reis, 2015, 2017; McGrath, 1981; Reis & Lee, 2016; Stroebe, 2016). What is clear is that the general turmoil in the field stimulated by the aforementioned challenges has galvanized attention to questions about how to make social psychological research maximally meaningful, informative, influential, and cumulative.

Conclusion

Past is prologue, Shakespeare wrote, but the future is ours to create. What can the history of social psychology reveal that might usefully guide new investigators preparing to create the field's future? Our progress as a discipline suggests several trends. Social psychologists have always been interested in the same core phenomena—how behavior is affected by the social world in which our lives are embedded—but, as we have seen, the ways in which that interest is explored and expressed have varied markedly. Part of this variability reflects the intellectual, social, and political context of the world in which we live and work. Social psychologists by custom and by inclination tend to rely on the best available conceptual and methodological tools available to them. To be sure, social psychologists are not mere followers of contemporary trends—through research, teaching, and writing, social psychologists contribute to scholarly and popular movements. We might reasonably expect, then, that future social psychologists will continue to explore important questions about timely topics, using state-of-the-art tools.

These trends notwithstanding, the processes and phenomena most central to social psychology have a certain timelessness to them, in the sense that the best principles and theories are general enough to apply to whatever particulars are most prominent at the moment. Whether the principle is Hammurabi's assertion that taking "an eye for an eye" will result in a well-functioning social group, Festinger's theory of cognitive dissonance, or automaticity in social evaluation, the goal is to provide an abstract account of behavior that transcends specific circumstances. For example, good theories of social influence ought to include principles that help us explain social interaction, regardless of whether it occurs face to face, over the telephone, on Facebook, with robots, or by some medium not yet invented.

Of course this does not mean that established theories will not be displaced by better ones. A clear sense of history allows scholars to propose and test better (more accurate, more comprehensive, or more deeply detailed) theories. Isaac Newton (1676) famously remarked, "If I have seen a little further it is by standing on the shoulders of giants." One way in which history informs current progress is by providing a ladder up to the giant's shoulders: identifying what has been determined and dispensing important clues about what needs to be understood better and what novel research directions might be most informative. In this regard, then, I disagree with one distinguished social psychologist's recommendation that new students *not* read the literature, because it would constrain their imagination (for additional information, see Jost, 2004).

An indisputable prediction is that technological and statistical advances will provide innovative methods that allow social psychologists to ask and answer more probing and, in some instances, entirely new types of questions. As the complexity of these tools grows, so too will specialization, increasing the necessity for collaboration with scholars who possess different expertise. I expect, then, that the trend toward "big science" will continue—multidisciplinary collaborations among researchers with diverse training and proficiency. Social psychologists have often been reluctant to initiate such collaborations, but there is little doubt that such participation is needed for the field to thrive (Taylor, 2004). Even more important, social psychologists must make their expertise visible so that researchers from other disciplines will invite their contributions (Reis, 2008). A similar conclusion applies to becoming more involved in the translation and application of our theories and research to improve people's lives.

The history of social psychology is the history of people trying to better understand the intrinsically social world in which they live. Studying the field's history represents one step in creating not just the future of a field of scholarship but all of our futures.

Notes

1. For helpful suggestions and comments on an earlier version of this chapter, I thank David Buss, David Funder, Bill Graziano, Mike Maniaci, and the editors of this volume.
2. Field theory is actually more a perspective and method than a formal theory, as Lewin himself acknowledged.
3. Current membership in Society of Experimental Social Psychology is 1,115. By contrast, SPSP had almost 4,000 nonstudent members in July of 2017. The European Association for Social Psychology had 1,042 post-PhD members at roughly the same time.
4. Another change that took place during this period was the split of psychological social psychology and sociological social psychology. Earlier, these two approaches to social behavior had been at least partially aligned, reflected, for example, in the University of Michigan's Institute for Social Research, which expressly incorporated both approaches. By the mid-1970s, these two fields with the same subdisciplinary names had become essentially independent, each with its own traditions, literature, journals, and meetings.
5. Within social psychology, that is. Gergen's writing has had more influence in fields where textual analysis is more important, such as discourse analysis and communications.
6. Just who deserves this credit remains a matter of considerable debate, in both historical accounts and the US patent office.
7. A few highly publicized instances of outright fraud also upped the ante in this furor, notably the case of Diederik Stapel, to that point an eminent researcher who admits to having fabricated the results of dozens of studies (Enserink, 2012).

References

- Abelson, R. P., Aronson, E., McGuire, W. J., Newcomb, T. M., Rosenberg, M. J., & Tannenbaum, P. H. (Eds.). (1968). *Theories of cognitive consistency: A sourcebook*. Chicago, IL: Rand McNally.
- Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 267–300). New York, NY: Academic Press.
- Ajzen, I., & Fishbein, M. (1974). Factors influencing intentions and the intention-behavior relation. *Human Relations*, 27, 1–15.
- Allen, V. L. (1965). Situational factors in conformity. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 133–175). New York, NY: Academic Press.
- Allport, F. H. (1924). *Social psychology*. Boston: Houghton Mifflin.
- Allport, G. W. (1935). Attitudes. In C. Murchison (Ed.), *A handbook of social psychology*. Worcester, MA: Clark University Press.
- Allport, G. W. (1954). The historical background on modern social psychology. In G. Lindzey (Ed.), *Handbook of social psychology* (2nd ed., Vol. 1, pp. 1–80). Reading, MA: Addison-Wesley.
- Altman, I., & Taylor, D. A. (1973). *Social penetration: The development of interpersonal relationships*. New York, NY: Holt, Rinehart & Winston.
- Arkin, R. (Ed.). (2011). *Most underappreciated: 50 prominent social psychologists talk about hidden gems*. New York, NY: Oxford University Press.
- Aron, A., Fisher, H., Mashek, D., Strong, G., Li, H., & Brown, L. (2005). Reward, motivation and emotion systems associated with early-stage intense romantic love. *Journal of Neurophysiology*, 93, 327–337.

- Aronson, E., & Patnoe, S. (1997). *The jigsaw classroom: Building cooperation in the classroom* (2nd ed.). New York, NY: Addison Wesley Longman.
- Asch, S. E. (1946). Forming impressions of personality. *Journal of Abnormal and Social Psychology*, 41, 258–290.
- Asch, S. E. (1952). *Social Psychology*. New York, NY: Prentice Hall, Inc.
- Asch, S. E. (1956). Studies of independence and conformity: A minority of one against a unanimous majority. *Psychological Monographs*, 70(9), 1–70.
- Bandura, A., & Walters, R. H. (1963). *Social learning and personality development*. New York, NY: Holt, Rinehart, and Winston.
- Bargh, J. A., & Chartrand, T. L. (2014). The mind in the middle: A practical guide to priming and automaticity research. In H. T. Reis & C. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 311–344). New York, NY: Cambridge University Press.
- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Baumeister, R. F., & Vohs, K. D. (2016). Misguided effort with elusive implications. *Perspectives on Psychological Science*, 11, 574–575.
- Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the science of self-reports and finger movements: Whatever happened to actual behavior? *Perspectives on Psychological Science*, 2, 396–403.
- Beer, J. S. (2007). The default self: Feeling good or being right? *Trends in Cognitive Sciences*, 11, 187–189.
- Bem, D. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in Experimental Social Psychology* (Vol. 6, pp. 2–62). New York, NY: Academic Press.
- Benjamin, D. J., Berger, J. O., Johannesson, M., Nosek, B. A., Wagenmakers, E.-J., Berk, R., . . . Johnson, V. E. (2017). Redefine statistical significance. *Nature Human Behaviour*, 1, 1–5.
- Berscheid, E. (1992). A glance back at a quarter century of social psychology. *Journal of Personality and Social Psychology*, 63, 525–533.
- Berscheid, E., & Walster, E. (1974). Physical attractiveness. *Advances in Experimental Social Psychology*, 7, 157–215.
- Blascovich, J. (2014). Psychophysiological methods. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 101–122). New York, NY: Cambridge University Press.
- Block, J. H., Haan, N., & Smith, M. B. (1969). Socialization correlates of student activism. *Journal of Social Issues*, 25, 143–177.
- Brehm, J. W. (1966). *A theory of psychological reactance*. New York, NY: Academic Press.
- Bruner, J., & Tagiuri, R. (1954). The perception of people. In G. Lindzey (Ed.) *The handbook of social psychology* (Vol. 2, pp. 634–654). Cambridge, MA: Addison-Wesley.
- Burger, J. M. (2009). Replicating Milgram: Would people still obey today? *American Psychologist*, 64, 1–11.
- Buss, D. M., & Kenrick, D. T. (1998). Evolutionary social psychology. In D. Gilbert & S. Fiske (Eds.), *The Handbook of Social Psychology* (4th ed., Vol. 2, pp. 982–1026). Boston, MA: McGraw-Hill.
- Byrne, D. (1971). *The attraction paradigm*. New York, NY: Academic Press.
- Cacioppo, J. T. (2004). Common sense, intuition, and theory in personality and social psychology. *Personality and Social Psychology Review*, 8, 114–122.
- Cacioppo, J. T., Berntson, G. G., Lorig, T. S., Norris, C. J., Rickett, E., & Nusbaum, H. (2003). Just because you're imaging the brain doesn't mean you can stop using your head: A primer and set of first principles. *Journal of Personality and Social Psychology*, 85, 650–661.
- Cacioppo, J. T., & Petty, R. E. (1983). *Social psychophysiology: A sourcebook*. New York, NY: Guilford.
- Cartwright, D. (1979). Contemporary social psychology in historical perspective. *Social Psychology Quarterly*, 42, 82–93.
- Cartwright, D., & Zander, A. (1953). *Group dynamics: Theory and research*. New York, NY: Harper & Row.
- Cartwright, D., & Zander, A. (1960). *Group dynamics: Theory and research* (2nd ed.). New York, NY: Harper & Row.
- Cartwright, D., & Zander, A. (1968). *Group dynamics: Theory and research* (3rd ed.). New York, NY: Harper & Row.
- Carver, C. S., & Scheier, M. F. (1981). *Attention and self-regulation: A control-theory approach to human behavior*. New York, NY: Springer.
- Chaiken, S., Liberman, A., & Eagly, A. H. (1989). Heuristic and systematic information processing within and beyond the persuasion context. In J. S. Uleman & J. A. Bargh (Eds.), *Unintended thought* (pp. 212–252). New York, NY: Guilford.
- Chandler, J., Mueller, P., & Paolacci, G. (2014). Nonnaïveté among Amazon mechanical Turk workers: Consequences and solutions for behavioral researchers. *Behavior Research Methods*, 46, 112–130.
- Cohen, J. (1962). The statistical power of abnormal-social psychological research: A review. *Journal of Abnormal and Social Psychology*, 65, 145–153.
- Cooper, J. M. (2007). *Cognitive dissonance: Fifty years of a classic theory*. Thousand Oaks, CA: SAGE.
- Cronbach, L. J. (1955). Processes affecting scores on “understanding of others” and “assumed similarity.” *Psychological Bulletin*, 52, 177–193.
- Decety, J., & Jackson, P. L. (2006). A social-neuroscience perspective on empathy. *Current Directions in Psychological Science*, 15, 54–58.
- Deci, E. L. (1975). *Intrinsic motivation*. New York, NY: Plenum.
- Deutsch, M. (1949). A theory of cooperation and competition. *Human Relations*, 2, 129–152.
- Deutsch, M., & Gerard, H. G. (1955). A study of normative and informational social influence upon individual judgment. *Journal of Abnormal and Social Psychology*, 51, 629–636.
- Devine, P. G. (1989). Stereotypes and prejudice: Their automatic and controlled components. *Journal of Personality and Social Psychology*, 56, 5–18.
- Dollard, J., Doob, L. W., Miller, N. E., Mowrer, O. H., & Sears, R. R. (1939). *Frustration and aggression*. New Haven, CT: Yale University Press.
- Enserink, M. (2012). Final report on Stapel also blames field as a whole. *Science*, 338, 1270–1271.
- Erdelyi, M. H. (1990). Repression, reconstruction, and defense: History and integration of the psychoanalytic and experimental frameworks. In J. L. Singer (Ed.), *Repression and dissociation: Implications for personality theory, psychopathology, and health* (pp. 1–31). Chicago, IL: University of Chicago Press.
- Fahrenberg, J. (2015). *Theoretische psychologie* [Theoretical psychology]. Lengerich, Germany: Pabst Scientific.
- Festinger, L. (1950). Informal social communication. *Psychological Review*, 57, 271–282.
- Festinger, L. (1954). A theory of social comparison processes. *Human Relations*, 7, 117–140.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Evanston, IL: Row, Peterson.
- Fiedler, K., Kutzner, F., & Krueger, J. I. (2012). The long way from α -error control to validity proper problems with a short-sighted false-positive debate. *Perspectives on Psychological Science*, 7, 661–669.
- Fiedler, K., & Schwarz, N. (2016). Questionable research practices revisited. *Social Psychological and Personality Science*, 7, 45–52.
- Finkel, E. J., Eastwick, P. W., & Reis, H. T. (2015). Best research practices in psychology: Illustrating epistemological and pragmatic considerations with the case of relationship science. *Journal of Personality and Social Psychology*, 108, 275–297.
- Finkel, E. J., Eastwick, P. W., & Reis, H. T. (2017). Replicability and other features of a high-quality science: Toward a balanced and empirical approach. *Journal of Personality and Social Psychology*, 113, 244–253.
- Fiske, A. P., Kitayama, S., Markus, H. R., & Nisbett, R. E. (1998). The cultural matrix of social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, (4th ed., Vol. 2, pp. 915–981). New York, NY: McGraw-Hill.
- Fiske, S. T. (1992). Thinking is for doing: Portraits of social cognition from Daguerreotype to laserphoto. *Journal of Personality and Social Psychology*, 63, 877–889.
- Franzoi, S. L. (2007). History of social psychology. In R. F. Baumeister & K. D. Vohs (Eds.), *Encyclopedia of social psychology* (Vol. 1, pp. 431–439). Thousand Oaks, CA: SAGE.

- Funder, D. C. (1987). Errors and mistakes: Evaluating the accuracy of social judgment. *Psychological Bulletin*, 101, 75–90.
- Funder, D. C. (2006). Towards a resolution of the personality triad: Persons, situations and behaviors. *Journal of Research in Personality*, 40, 21–34.
- Gawronski, B., & De Houwer, J. (2014). Implicit measures in personality and social psychology. In H. T. Reis & C. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 283–310). New York, NY: Cambridge University Press.
- Gendron, M., & Barrett, L. F. (2009). Reconstructing the past: A century of ideas about emotion in psychology. *Emotion Review*, 1, 316–339.
- Gergen, K. J. (1973). Social psychology as history. *Journal of Personality and Social Psychology*, 26, 309–320.
- Gergen, K. J. (2001). Psychological science in a postmodern context. *American Psychologist*, 56, 803–813.
- Gilbert, D. T., King, G., Pettigrew, S., & Wilson, T. D. (2016). Comment on “Estimating the reproducibility of psychological science.” *Science*, 351, 1037–1037.
- Goethals, G. R. (2003). A century of social psychology: Individuals, ideas, and investigations. In M. A. Hogg & J. Cooper (Eds.), *The SAGE handbook of social psychology* (pp. 3–23). Thousand Oaks, CA: SAGE.
- Gollwitzer, P. M., & Kinney, R. F. (1989). Effects of deliberative and implemental mind-sets on illusion of control. *Journal of Personality and Social Psychology*, 56, 531–542.
- Gosling, S. D., Vazire, S., Srivastava, S., & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist*, 59, 93–104.
- Greenberg, J., Pyszczynski, T., & Solomon, S. (1986). The causes and consequences of a need for self-esteem: A terror management theory. In R. F. Baumeister (Ed.), *Public self and private self* (pp. 189–212). New York, NY: Springer-Verlag.
- Greenwald, A. G. (1976). An editorial. *Journal of Personality and Social Psychology*, 33, 1–7.
- Greenwood, J. D. (2004). *The disappearance of the social in American social psychology*. New York, NY: Cambridge University Press.
- Hagger, M. S., Chatzisarantis, N. L., Alberts, H., Anggono, C. O., Batailler, C., Birt, A. R., . . . & Calvillo, D. P. (2016). A multilab preregistered replication of the ego-depletion effect. *Perspectives on Psychological Science*, 11, 546–573.
- Hastorf, A., & Cantril, H. (1954). They saw a game: A case study. *Journal of Abnormal and Social Psychology*, 49, 129–134.
- Heider, F. (1958). *The psychology of interpersonal relations*. New York, NY: Wiley.
- Higgins, E. T. (1987). Self-discrepancy: A theory relating self and affect. *Psychological Review*, 94, 319–340.
- Higgins, E. T. (2012). Motivation science in social psychology: A tale of two histories. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 199–218). New York, NY: Psychology Press.
- Hinde, R. A. (1997). *Relationships: A dialectical perspective*. East Sussex, England: Psychology Press.
- Hollander, E. P. (1968). The society of experimental social psychology: An historical note. *Journal of Personality and Social Psychology*, 9, 280–282.
- Homans, G. C. (1950). *The human group*. New York, NY: Harcourt, Brace.
- Ioannidis, J. P. (2005). Why most published research findings are false. *PLoS Medicine*, 2(8), e124.
- Jahoda, G. (2007). *A history of social psychology: From the eighteenth-century Enlightenment to the Second World War*. New York, NY: Cambridge University Press.
- John, L. K., Loewenstein, G., & Prelec, D. (2012). Measuring the prevalence of questionable research practices with incentives for truth telling. *Psychological Science*, 23, 524–532.
- Jones, E. E. (1985). Major developments in social psychology during the past five decades. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology*, (3rd ed., Vol. 1, pp. 47–107). New York, NY: Random House.
- Jones, E. E. (1998). Major developments in social psychology during the past five decades. In G. Lindzey & E. Aronson (Eds.), *The handbook of social psychology*, (4th ed., Vol. 1, pp. 3–57). New York, NY: Random House.
- Jones, E. E., & Davis, K. E. (1965). From acts to dispositions: The attribution process in person perception. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 2, pp. 219–266). New York, NY: Academic Press.
- Jost, J. T. (2004). A perspectivist looks at the past, present and (perhaps) the future of intergroup relations: A quixotic defense of system justification theory. In J. T. Jost, M. R. Banaji, & D. Prentice (Eds.), *Perspectivism in social psychology: The yin and yang of scientific progress* (pp. 215–230). Washington, DC: APA.
- Kahneman, D., & Tversky, A. (1973). On the psychology of prediction. *Psychological Review*, 80, 237–251.
- Katz, D. (1965). Editorial. *Journal of Personality and Social Psychology*, 1, 1–2.
- Katz, D., & Braley, K. W. (1933). Racial stereotypes of 100 college students. *Journal of Abnormal and Social Psychology*, 28, 280–290.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska Symposium on Motivation* (Vol. 15, pp. 192–238). Lincoln, NE: University of Nebraska Press.
- Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E., & Van Lange, P. A. M. (2003). *An atlas of interpersonal situations*. New York, NY: Cambridge University Press.
- Kelley, H. H., & Thibaut, J. W. (1978). *Interpersonal relations: A theory of interdependence*. New York, NY: Wiley.
- Kenny, D. A. (1994). *Interpersonal perception: A social relations analysis*. New York, NY: Guilford.
- Kerr, N. L. (1998). HARKing: Hypothesizing after the results are known. *Personality and Social Psychology Review*, 2, 196–217.
- Klein, R. A., Ratliff, K. A., Vianello, M., Adams, R. B., Jr., Bahník, S., Bernstein, M. J., . . . Nosek, B. A. (2014). Investigating variation in replicability. *Social Psychology*, 45, 142–152.
- Kline, R. B. (2004). *Beyond significance testing: Reforming data analysis methods in behavioral research*. Washington, DC: APA.
- Kruglanski, A. W., & Stroebe, W. (Eds.) (2012). *Handbook of the history of social psychology*. New York, NY: Psychology Press.
- Kuhn, T. S. (1962). *The structure of scientific revolutions*. Chicago, IL: University of Chicago Press.
- LaPiere, R. T. (1934). Attitudes versus actions. *Social Forces*, 13, 230–237.
- Latané, B., & Darley, J. (1970). *The unresponsive bystander: Why doesn't he help?* New York, NY: Appleton-Century-Crofts.
- LeBel, E. P., Berger, D., Campbell, L., & Loving, T. J. (2017). Falsifiability is not optional. *Journal of Personality and Social Psychology*, 113, 254–261.
- LeBel, E. P., Campbell, L., & Loving, T. J. (2017). Benefits of open and high-powered research outweigh costs. *Journal of Personality and Social Psychology*, 117, 230–243.
- Levine, J. M., & Moreland, R. L. (2012). A history of small group research. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 383–405). New York, NY: Psychology Press.
- Lewin, K. (1943). Forces behind food habits and methods of change. *Bulletin of the National Research Council and National Academy of Sciences*, 108, 35–65.
- Lewin, K. (1951). *Field theory in social science*. New York, NY: Harper.
- Maniaci, M. R., & Rogge, R. D. (2014a). Caring about carelessness: Participant inattention and its effects on research. *Journal of Research in Personality*, 48, 61–83.
- Maniaci, M. R., & Rogge, R. D. (2014b). Conducting research on the Internet. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (2nd ed., pp. 443–470). New York, NY: Cambridge University Press.
- Manstead, A. S. R. (2012). A history of affect and emotion research in social psychology. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 177–198). New York, NY: Psychology Press.
- McDougall, W. (1908). *Introduction to social psychology*. Boston, MA: Luce.
- McGaha, A., & Korn, J. H. (1995). The emergence of interest in the ethics of psychological research with humans. *Ethics and Behavior*, 5, 147–159.
- McGrath, J. E. (1981). Dilemmatics: The study of research choices and dilemmas. *American Behavioral Scientist*, 25, 179–210.

- McGuire, W. J. (1973). The yin and yang of progress in social psychology: Seven koan. *Journal of Personality and Social Psychology*, 26, 446–456.
- McGuire, W. J. (1997). Creative hypothesis generating in psychology: Some useful heuristics. *Annual Review of Psychology*, 48, 1–30.
- McMartin, C., & Winston, A. S. (2000). The rhetoric of experimental social psychology, 1930–1960: From caution to enthusiasm. *Journal of the History of the Behavioral Sciences*, 36, 349–364.
- Mead G. H. (1934). *Mind, self, and society*. Chicago, IL: University of Chicago Press.
- Milgram, S. (1963). Behavioral study of obedience. *Journal of Abnormal and Social Psychology*, 67, 371–378.
- Milgram, S. (1965). Some conditions of obedience and disobedience to authority. *Human Relations*, 18, 57–76.
- Milgram, S. (1974). *Obedience to authority*. New York, NY: Harper & Row.
- Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology*, 46, 961–978.
- Mischel, W. (1968). *Personality and assessment*. New York, NY: Wiley.
- Mischel, W. (2006). Bridges toward a cumulative psychological science. In P. A. M. Van Lange (Ed.), *Bridging social psychology* (pp. 437–446). Mahwah, NJ: Erlbaum.
- Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review*, 102, 246–268.
- Moreland, R. L., Hogg, M. A., & Hains, S. C. (1994). Back to the future: Social psychological research on groups. *Journal of Experimental Social Psychology*, 30, 527–555.
- Motyl, M., Demos, A. P., Carsel, T. S., Hanson, B. E., Melton, Z. J., Mueller, A. B., . . . Skitka, L. J. (2017). The state of social and personality science: Rotten to the core, not so bad, getting better, or getting worse? *Journal of Personality and Social Psychology*, 113, 34–58.
- Munafò, M. R., Nosek, B. A., Bishop, D. V. M., Button, K. S., Chambers, C. D., Percie du Sert, N., . . . Ioannidis, J. P. A. (2017). A manifesto for reproducible science. *Nature Human Behaviour*, 1, 0021.
- Murray, H. A. (1938). *Explorations in personality*. New York, NY: Oxford University Press.
- Newcomb, T. M. (1943). *Personality and social change: Attitude formation in a student community*. New York, NY: Holt, Rinehart and Winston.
- Newcomb, T. M. (1961). *The acquaintance process*. New York, NY: Holt, Rinehart, and Winston.
- Newton, I. (1676). Letter to Robert Hooke. Retrieved from http://en.wikiquote.org/wiki/Isaac_Newton
- Nisbett, R. E., & Ross, L. (1980). *Human inference: Strategies and shortcomings of social judgment*. Englewood Cliffs, NJ: Prentice-Hall.
- North, M. S., & Fiske, S. T. (2012). A history of social cognition. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 81–99). New York, NY: Psychology Press.
- Nosek, B. A., Spies, J. R., & Motyl, M. (2012). Scientific utopia: II. Restructuring incentives and practices to promote truth over publishability. *Perspectives on Psychological Science*, 7, 615–631.
- Open Science Collaboration. (2015). Estimating the reproducibility of psychological science. *Science*, 349(6251), aac4716.
- Ostrom, T. M. (1984). The sovereignty of social cognition. In R. S. Wyer Jr. & T. K. Srull (Eds.), *Handbook of social cognition* (Vol. 1, pp. 1–38). Hillsdale, NJ: Erlbaum.
- Ostrom, T. M. (1989). Three catechisms for social memory. In P. R. Solomon, G. R. Goethals, C. M. Kelley, & B. R. Stephens (Eds.), *Memory: Interdisciplinary approaches* (pp. 201–210). New York, NY: Springer-Verlag.
- Park, J. H. (2007). Persistent misunderstandings of inclusive fitness and kin selection: Their ubiquitous appearance in social psychology textbooks. *Evolutionary Psychology*, 5, 860–873.
- Petty, R. E., & Cacioppo, J. T. (1986). The elaboration likelihood model of persuasion. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 19, pp. 123–205). New York, NY: Academic Press.
- Prince, M., & Allport, F. H. (1921). Editorial announcement. *Journal of Abnormal Psychology and Social Psychology*, 16, 1–5.
- Rasensberger, J. (2004, February 8). Kitty, 40 years later. *New York Times* (Final ed.), Sect. 14, p. 1, col. 2.
- Reis, H. T. (1982). An introduction to the use of structural equations: Prospects and problems. In L. Wheeler (Ed.), *Review of Personality and Social Psychology* (Vol. 3, pp. 255–287). Thousand Oaks, CA: SAGE.
- Reis, H. T. (2008). Reinvigorating the concept of situation in social psychology. *Personality and Social Psychology Review*, 12, 311–329.
- Reis, H. T. (2012). A brief history of relationship research in social psychology. In A. W. Kruglanski & W. Stroebe (Eds.), *Handbook of the history of social psychology* (pp. 363–382). New York, NY: Psychology Press.
- Reis, H. T., & Gosling, S. D. (2009). Social psychological methods outside the laboratory. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 82–114). New York: Oxford University Press.
- Reis, H. T., & Lee, K. Y. (2016). Promise, peril, and perspective: Addressing concerns about reproducibility in social-personality psychology. *Journal of Experimental Social Psychology*, 66, 148–152.
- Reis, H. T., & Stiller, J. (1992). Publication Trends in JPSP: A three-decade review. *Personality and Social Psychology Bulletin*, 18, 465–472.
- Rosenberg, M. J. (1965). When dissonance fails: On eliminating evaluation apprehension from attitude measurement. *Journal of Personality and Social Psychology*, 1, 28–43.
- Rosenthal, R. (1979). The file drawer problem and tolerance for null results. *Psychological Bulletin*, 86, 638–641.
- Ross, E. A. (1908). *Social psychology*. New York, NY: McMillan.
- Ross, L., & Nisbett, R. E. (1991). *The person and the situation: Perspectives of social psychology*. Philadelphia, PA: Temple University Press.
- Ross, L., Ward, A., & Lepper, M. R. (2009). A history of social psychology. In D. Gilbert, S. Fiske, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., Vol. 1, pp. 3–50). New York, NY: Oxford University Press.
- Schachter, S., & Singer, J. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, 69, 379–399.
- Sedikides, C., & Strube, M. J. (1997). Self-evaluation: To thine own self be good, to thine own self be sure, to thine own self be true, and to thine own self be better. In M. P. Zanna (Ed.), *Advances in experimental social psychology* (Vol. 29, pp. 209–269). New York, NY: Academic Press.
- Sherif, M. (1936). *The psychology of social norms*. New York, NY: Harper Bros.
- Simmons, J. P., Nelson, L. D., & Simonsohn, U. (2011). False-positive psychology: Undisclosed flexibility in data collection and analysis allows presenting anything as significant. *Psychological Science*, 22, 1359–1366.
- Steele, C. M. (1988). The psychology of self-affirmation: Sustaining the integrity of the self. In L. Berkowitz (Ed.), *Advances in experimental social psychology*. Vol. 21, *Social psychological studies of the self: Perspectives and programs* (pp. 261–302). San Diego, CA: Academic Press.
- Sternberg, R. J. (2017). Types of generalization: Introduction to the special section of *Perspectives on Psychological Science* on cultural psychology. *Perspectives on Psychological Science*, 12, 757–761.
- Stroebe, W. (2016). Are most published social psychological findings false? *Journal of Experimental Social Psychology*, 66, 134–144.
- Taylor, S. E. (1998). The social being in social psychology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, (4th ed., Vol. 1, pp. 58–95). New York, NY: McGraw-Hill.
- Taylor, S. E. (2004). Preparing for social psychology's future. *Journal of Experimental Social Psychology*, 40, 139–141.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. New York, NY: Wiley.
- Triplet, N. (1898). The dynamogenic factors in pacemaking and competition. *American Journal of Psychology*, 9, 507–533.
- Van Lange, P. A. M. (Ed.). (2006). *Bridging social psychology*. Mahwah, NJ: Erlbaum.
- Wallach, M. A., Kogan, N., & Bem, D. J. (1962). Group influence on individual risk taking. *Journal of Abnormal and Social Psychology*, 65, 75–86.
- Wheeler, L., & Reis, H. T. (1991). Self-recording of everyday life events: Origins, types, and uses. *Journal of Personality*, 59, 339–354.

- Winter, L., & Uleman, J. S. (1984). When are social judgments made? Evidence for the spontaneousness of trait inferences. *Journal of Personality and Social Psychology*, 47, 237–252.
- Wittenbaum, G. M., & Moreland, R. L. (2008). Small-group research in social psychology: Topics and trends over time. *Social and Personality Psychology Compass*, 2, 187–203.
- Wood, D., & Furr, R. M. (2016). The correlates of similarity estimates are often misleadingly positive: The nature and scope of the problem, and some solutions. *Personality and Social Psychology Review*, 20, 79–99.
- Wundt, W. (1916). *Elements of folk psychology: Outlines of a psychological history of the development of mankind*. London, England: Allan & Unwin.
- Zajonc, R. B. (1998). Emotions. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology*, (4th ed., Vol. 2, pp. 591–632). New York, NY: McGraw-Hill.
- Zwaan, R. A., Etz, A., Lucas, R. E., & Donnellan, M. B. (2017). Making replication mainstream. *Brain and Behavioral Sciences*, 41, e120.