



SYMPOSIUM ON THE CONTRIBUTIONS OF WILLIAM McGUIRE TO POLITICAL PSYCHOLOGY

On the Structure and Dynamics of Human Thought: The Legacy of William J. McGuire for Social and Political Psychology

John T. Jost

New York University

Curtis D. Hardin

Brooklyn College and Graduate Center, City University of New York

We humans seem to have evolved with a need to know, a need to represent reality to ourselves insofar as our cognitive apparatus allows. This representational or knowing process appears to be a crucial aspect of our mode of coping with the environment. It is the tragedy of knowledge that this process, which we cannot do without, we cannot do well: it inevitably misrepresents the environment both by oversimplifying and by distorting it. . . . The only thing more outrageous than using our faulty intellectual processes, including scientific inquiry, to arrive at a representation of reality is not to use them.

(William J. McGuire, 1985b, pp. 584–585)

The generation before mine was preoccupied with origins, whether evolution of the species or habit acquisition by the individual organism; the generation after my mid-century epistemological generation has been followed by one preoccupied with power, in actuality or in image. The elderly Yeats, in his poem *Politics*, poked gentle fun at Thomas Mann's assertion that the destiny of man now presents its meaning in political terms, but Mann was prescient. Although a few topics dominate each generation, certain basic issues do receive some attention from every age

cohort, so that even in the current political age there is an audience for my epistemological wonderings.

(William J. McGuire, 1999, p. 396)

Throughout the second half of the twentieth century, William J. McGuire (1925–2007) may have been the most original and surreptitiously influential theorist at the intersection of social, cognitive, and political psychology. He was a subtle, dialectical thinker, whose work addressed the structure of human belief systems, that is, the ways in which the individual's thoughts about the world and the self are linked to one another in mental space (McGuire, 1960c, 1961, 1968, 1981, 1990; McGuire & McGuire, 1991). His understanding of cognitive structure, which stressed logical and motivational connections among thoughts, feelings, and opinions, has had profound implications for the scientific understanding of human belief systems, including political attitudes and ideologies. He built creatively on this basic model in developing a process-oriented approach to persuasion (e.g., belief and opinion change) that treated every instance of social influence as a complex, dynamic interaction involving person, message, and contextual factors (McGuire, 1960a, 1964, 1969a, 1981, 1985a). By incorporating *structural* and *dynamic* forces, McGuire's work as a whole constitutes a powerful and uniquely balanced appreciation of oppositional forces in human thinking—namely those forces that promote stability versus change, consistency versus creativity, and constraint versus flexibility.

In his epistemological preoccupation with the systematic organization of thought, McGuire accomplished more than any other individual, including Gordon Allport and his own mentor, Carl Hovland, to unify the scientific study of attitudes and attitude change. His rigorous conceptual frameworks (McGuire, 1969a, 1985a) have proved indispensable, not only in social psychology but also in political science, communication, marketing, and public health, among other disciplines. McGuire also tailored his approach to the study of belief systems to better understand systems of *self*-knowledge, thereby highlighting sources of stability and malleability in personal and social identities (e.g., McGuire & Padawer-Singer, 1976; McGuire, McGuire, & Cheever, 1986; McGuire & McGuire, 1988). McGuire's lifelong fascination with the history and philosophy of science motivated him to analyze major intellectual trends and epochal developments within the fields of social psychology (e.g., McGuire, 1985a, 1985b, 1986b) and political psychology (McGuire, 1993)—and even in the course of Western civilization more broadly (McGuire, 1976). Near the end of his career, McGuire returned explicitly to his early philosophical training in proposing a perspectivist meta-theory that was, in essence, *a theory of belief systems about belief systems* (e.g., McGuire, 1989, 1997, 1999, 2004).

In this article, we start by recounting the highlights of a remarkable life and career in social and political psychology. These historical and biographical details help to thicken the contextual appreciation of his ideas—placing *the perspectivist*

in perspective (see also Hunyady & Jost, 2004; Jost & Banaji, 2008). Next, we discuss the details of his most influential theorizing and research with respect to three major areas of scholarship, namely the study of attitudes and attitude change, self and identity, and perspectivism as a method for understanding and conducting programmatic research in the behavioral sciences. We close by considering McGuire's legacy for the future of social and political psychology.

Historical and Biographical Background

Childhood and Education

William James McGuire was born on February 17, 1925, the second of three children in an Irish Catholic family of modest means in New York City. His deepest childhood memories included sitting atop a horse-driven wagon with his father, a milkman and member of the Teamsters' Union, as they made rounds before daybreak in Harlem during the years of the Great Depression (McGuire, 1999, p. 4). McGuire claimed to have been an average pupil (or worse) in Catholic school, but a high school principal took notice when he scored exceptionally on a standardized aptitude test.

War years. McGuire frequently said that World War II provided him with an education. He joined the army in 1943 at the age of 17 and ultimately played a role in the liberation of Dachau; memories of the war, both painful and proud, would resurface frequently in subsequent decades, although he rarely spoke about them. At a Yale alumni conference in April of 2006, McGuire asked:

Does anyone here remember Bruno Bettelheim's 1943 article in the *Journal of Abnormal and Social Psychology* describing his experiences with extreme behavior (e.g., identification with the aggressor) while he was incarcerated in a 1930s concentration camp? His camp was Dachau, 15 km north of Munchen. You will remember the pictures. I remember the smells. I drove my tank into Dachau. To appreciate what this means, consider Aeschylus, arguably the greatest dramatist in European history . . . Aeschylus chose to be remembered not for his plays and awards but instead chose as his epitaph, "Aeschylus. He fought at Marathon and the long-haired Persians know it well." Likewise, those of my generation might choose to be remembered, not for this book or that, but for an epitaph like "McGuire. He drove his tank into Dachau and the short-haired National Socialists know it well."

McGuire's experiences as a tank driver were so bitter that he abstained from automobile driving for the remainder of his life. When the war ended, the G.I. Bill of Rights enabled him to study philosophy and psychology at Fordham University, where he received a B.A. in 1949 and an M.A. in 1950. During this period, McGuire

also worked as a part-time hospital attendant and served as a Democratic precinct captain for a Congressional district in the Bronx, New York (McGuire, 1999, p. 5).

The next year McGuire returned to Europe—as he would regularly throughout his life—as a Fulbright scholar at the historic Katholieke Universiteit te Leuven. His academic interests at the time centered on phenomenological philosophy, including the writings of Edmund Husserl (1859–1938) and his favorite, Maurice Merleau-Ponty (1908–1961). While in Belgium, McGuire not only encountered Simone de Beauvoir (1908–1986), a local billiards *aficionado*, but also the Gestalt psychologist A.E. Michotte (1881–1965), whose lectures he attended. It was during this year, which McGuire (1999) later described as “one of the few relaxed years of my adult life” (p. 5), that experimental psychology finally trumped philosophy in terms of McGuire’s dominant career interest. Nevertheless, a manifest curiosity and sophistication with regard to epistemology and metaphysics undergirded all of his scientific work as one of the first cognitively oriented social psychologists.

Yale years. From 1951 to 1954 McGuire completed his doctoral work at Yale University in the Department of Psychology. Although he had planned to combine symbolic logic and learning theory in the tradition of Clark Hull (1884–1952), McGuire was drawn into the activities of the Yale Communication and Attitude Change Program headed by Carl Hovland (1912–1961). Hovland, who had served in the U.S. War Department’s Office of Education and Information from 1942 to 1945 (see McGuire, 1996), built on wartime studies of propaganda and morale, some of which were published in the book series on *The American Soldier*, a series that helped to forge the discipline of modern political psychology (e.g., Hovland, Lumsdaine, & Sheffield, 1949; Stouffer et al., 1949). Although Hovland had been trained as an experimental (cognitive) psychologist at Northwestern and Yale, he made major empirical contributions to several areas of social psychology, such as applying Dollard, Doob, Miller, Mowrer, and Sears’ (1939) psychodynamic-behaviorist theory of frustration and aggression to explain the lynching of Blacks in the South during the Jim Crow era (Hovland & Sears, 1940). By the early 1950s, Hovland was recognized as the world’s leading expert on the psychology of persuasion and attitude change, as evidenced by his 1954 invited chapter for the *Handbook of Social Psychology*. McGuire himself would eventually inherit this distinction (e.g., McGuire, 1969a, 1985a).

As a doctoral student, McGuire learned much from Irving Child, Irving Janis, Neal Miller, and many others at Yale, but he credited Leonard Doob (1909–2000) with inspiring a lifelong interest in social psychology. Following a tutorial with Doob, McGuire spent 1954–55 at the University of Minnesota in the laboratory of Leon Festinger, who was then developing cognitive dissonance theory (e.g., Festinger, 1957). Although McGuire claimed no “mentors” in the usual sense, the influences of Hovland and Festinger are clearly discernible in McGuire’s diverse research programs on persuasion and attitude change (e.g., McGuire, 1964, 1969a, 1985a) and cognitive consistency (e.g., McGuire, 1960a, 1960b, 1968), respec-

tively. During his postdoctoral year in Minnesota, McGuire married Claire Vernick, whom he had encountered in New Haven a few years earlier, when he caught her reading his favorite Dostoevsky novel, *The Idiot* (McGuire, 2006). Their marriage lasted 53 years, until his death, and produced three children (James, Anne, and Steven), as well as numerous scientific collaborations.

A Career in Social and Political Psychology

During a long and distinguished career, McGuire served on the faculties of Yale (twice, from 1955 to 1958 and from 1971 to 2007), the University of Illinois (1958–61), Columbia (1961–67), and the University of California at San Diego (1967–70). He was a cofounder of the Society for Experimental Social Psychology and a President of the Personality and Social Psychology Division of the American Psychological Association. McGuire is considered by some to be the “father of social cognition” (Wyer, 1991, p. vii), an approach to social psychology that emerged in the wake of the “cognitive revolution” of the 1950s and 1960s. His theoretical and empirical work would influence several disciplines in the social and behavioral sciences, including political science, sociology, and communication.

According to professional lore, a bet with an anxious colleague led McGuire to withhold publishing any journal articles before receiving tenure; indeed, the year after receiving tenure, ten of his articles finally appeared (Banaji & Hastie, 1999). After stints at Yale and Illinois, McGuire returned to New York City in 1961 to teach at Columbia University, where his colleagues included Otto Klineberg and Stanley Schachter in psychology and Paul Lazarsfeld and Robert Merton in sociology. His tenure at Columbia did much to stimulate an abiding interest in political psychology (including the study of public opinion), but McGuire’s published work during this period generally addressed principles of cognitive consistency (McGuire, 1960a, 1960b, 1961) and resistance to persuasion (McGuire, 1961, 1962, 1964).

Balancing “basic” and “applied” research goals. In 1967, the McGuire family moved to the University of California, San Diego, at a turbulent time, when many students and others were pressuring faculty members to become more politically active. In what came to be known as the “crisis in social psychology,” critics challenged both the universalistic aspirations of scientific psychology and what some perceived to be moral indifference among experimental social psychologists to pressing social problems (e.g., Gergen, 1973; Smith, 1972). Earlier, Ring (1967) had taken McGuire (1965) to task for dismissing humanistic, action-oriented research in the tradition of Kurt Lewin. In response, McGuire (1967) described a “two-front war” that social (and political) psychologists are obliged to fight:

If our work stays close to the basic, theory-oriented pole, we are liable to laymen’s abuse for engaging in a Mandarin activity that is of interest only to our fellow social psychologists and consists in obscuring common-

sense truths and fallacies behind professional jargon. If, on the other hand, we go too close to the applied, action-oriented pole, we are exposed to the abuse of the establishment who complain that we have been seeking narrow and possibly incorrect *ad hoc* solutions to specific problems, at a time when more basic, theoretically oriented research is necessary to allow a broader advance in the near future.

Ultimately, McGuire (1969b) argued that each approach has its own characteristic advantages and disadvantages to be celebrated, described, and delineated rather than muddled together in some middle-of-the-road compromise. Should one emulate the “convergent” style of Carl Hovland, who applied an eclectic range of theoretical and methodological tenets to fully understand a single practical problem (e.g., how to achieve maximum persuasion)? Or, instead, should one emulate the “divergent” style of Clark Hull or Leon Festinger, both of whom “had theory, will travel” and sought out fresh applications of the same basic theoretical approach? McGuire believed that each style was admirable, but the transcendent capacity to do both, which he dubbed “systems-style theorizing,” would be ideal.

In one of his most celebrated articles, “The Yin and Yang of Progress in Social Psychology: Seven Koan,” McGuire (1973b) again sympathized with critics of the austere information-processing approach he helped to pioneer in experimental social psychology but remained steadfast in his defense of the utility of basic science (see Jost & Kruglanski, 2002). McGuire (1973b) put it this way:

In our father’s house there are many rooms . . . there is a place for the philosopher of mind and the social philosopher, as well as for the scientific psychologist. . . . But the scientific psychologist can offer something beside and beyond these armchair thinkers in that we not only generate delusional systems, but we go further and test our delusional systems against objective data as well as for their subjective plausibility. (p. 452)

McGuire returned to Yale in 1971 as Chair of the Department of Psychology. By this time, his research focused on the role of personal distinctiveness (or salience) in the self-concept, the connection between language and thought, and, eventually, the dynamic operation of thought systems, in which he returned to the primary themes of his earliest published work.

A distinctive personality. In professional settings, McGuire frequently courted an iconoclastic reputation, as when he exhorted his audiences to don sunglasses to protect their eyes from excessive brilliance. At dinner parties and receptions, he regaled colleagues and students with amusing anecdotes seasoned with historical and literary allusions. Despite (or perhaps because of) his distinguished research program on the attitudes and opinions of others, McGuire was coy about his own political views, although he occasionally claimed to have been a Trotskyite in his pre-disillusionment youth.

McGuire published little with anyone other than his wife, Claire. This approach to work did not detract from his notorious generosity in reviewing and promoting, both critically and constructively, the work of students and colleagues. As Editor of the *Journal of Personality and Social Psychology* from 1967 to 1970 and frequent reviewer for many other granting and publication outlets, McGuire wrote thousands of polite, telling action letters that sometimes rivalled the length of the original submissions (e.g., see Weiner, 2008, p. 79). McGuire (1999) later noted that, "I consider my main teaching contribution during 40 years in academia to be this Stakhanovite commenting on specific manuscripts from across the nation and the world" (p. 97).

Accolades. Despite the high regard—and, truth be told, apprehension—in which he was held by his local colleagues, McGuire joked that the magnitude of his professional reputation increased exponentially with distance from New Haven. Indeed, he spent as much time as possible working in libraries, museums, cafés, and other favorite spots in "hardship posts" such as London, Paris, and Budapest. He was awarded honorary degrees from the Eötvös Loránd University of Budapest, Hungary (1990), and the University of Bologna, Italy (2005). McGuire received all of the highest honors his field had to offer, including the American Psychological Association's Distinguished Scientific Contribution Award (1988), the Association for Psychological Science's William James Fellow Award (1989), and the Society of Experimental Social Psychology's Distinguished Scientist Award (1992). In 1998, he was offered the International Society of Political Psychology's prestigious Harold Lasswell Award for Distinguished Scientific Contributions to Political Psychology. He accepted this award on July 4, 2000, in Seattle, where he delivered a talk entitled "A Half Century of Research on U.S. Presidential Elections: Whence, Where, and Whither." McGuire was named a Fellow of the American Academy of Arts and Sciences in 2002.

At age 75, after months of training, McGuire set out with nothing but a backpack and spent May of 2000 hiking 500 kilometers in northern Spain along the legendary Camino de Santiago de Compostela ("Way of St. James"), which religious pilgrims have traversed since medieval times. By all accounts, it was "one of his proudest moments" (Pilkus, 2008). To celebrate his extraordinary life and career, a *Festschrift* conference was held in his honor at Yale University from April 19 to 22, 2001 (see Jost, Banaji, & Prentice, 2004). McGuire died of complications arising from Parkinson's disease on December 21, 2007, at his home, surrounded by his wife and children. A memorial service was held at Yale University on May 3, 2008, near the Grove Street Cemetery, where McGuire is buried.

Contributions to the Study of Attitudes and Attitude Change

McGuire's writings on structural and dynamic processes involved in human cognition have direct implications for political and religious ideologies, among

other belief systems, as many have observed (e.g., Banaji & Heiphetz, 2010; Converse, 1964; Doise, 2004; Eagly & Diekmann, 2004; Hunyady, 1998; Iyengar & McGuire, 1993; Jost, 2006; Sniderman & Tetlock, 1986). By developing rigorous, process-oriented conceptual frameworks, McGuire helped to unify the study of attitudes and attitude change once and for all (e.g., see Banaji & Heiphetz, 2010; Breckler, 1984; Crano & Prislin, 2008; Petty & Wegener, 1998; Pratkanis, Breckler, & Greenwald, 1989). The influence of these contributions has been conspicuous and noteworthy in a variety of disciplines, including political science (e.g., Brody, 1986; Converse, 1964; Huddy, 2002; Sniderman & Tetlock, 1986; Zaller, 1992), communication (e.g., Iyengar, 2004; Pfau, 1997), marketing (e.g., Compton & Pfau, 2004; Grier & Deshpandé, 2001), and public health (e.g., Chassin, Presson, & Sherman, 1990; Duryea, 1983), among others.

Sources of Logical and Psychological Constraint in Belief Systems

The probabilistical model of cognitive consistency. McGuire's earliest theoretical and empirical work addressed questions of *cognitive consistency*, that is, the extent to which there exist intrapsychic pressures to maximize congruity or balance among idea elements and to minimize incongruity or dissonance (e.g., McGuire, 1960a, 1960c, 1968, 1981). According to McGuire's *probabilistical model*, one important source of cognitive consistency (or constraint) stems from the formal rules of logic, which people (like Meno's slave) obey even in the absence of any formal education or training. That is, he proposed that individual beliefs within a person's cognitive system are related to one another in a manner that resembles major and minor premises in a logical syllogism, but with one important caveat: People do not simply assume that some belief is either completely true or false; rather, they assume (perhaps tacitly) that there is some continuous probability that each belief is true (cf. Hacking, 1975/2004).

To take an example suggested by Petty, Priester, and Wegener (1994, pp. 75–76), a voter might think that (a) it is highly likely ($p = .9$) that if a political candidate favors gun control, then s/he is good for the country and (b) it is reasonably likely that a specific candidate does indeed favor gun control ($p = .7$). To the extent that the voter is cognitively consistent, he or she should be fairly likely to believe that the candidate is good for the country ($p = .9 \times .7 = .63$). McGuire's (1960a, 1960c) research suggested that people do indeed show reasonable levels of cognitive consistency when one computes the relevant subjective probabilities of beliefs that are logically connected. The probabilistical model received a good deal of empirical support in subsequent research programs (e.g., Anderson, 1971; McGuire & McGuire, 1991; Watts & Holt, 1970; Wyer, 1970, 1974; Wyer & Goldberg, 1970; Wyer & Hartwick, 1980), although McGuire

(1968) lamented that most people seemed less cognitively consistent than he had originally assumed.

Rationalization and wishful thinking. Congruent with his broader epistemological position that all theories are inherently incomplete, McGuire argued from the beginning that probabilistic logical constraints are *not* the only possible causes of cognitive consistency or constraint (see also Evans, 1980; McGuire & McGuire, 1991). Other more *motivational* possibilities include “wishful thinking,” that is, bringing one’s likelihood estimates into alignment with one’s wishes (e.g., assuming that if you like a given candidate then s/he must share your attitudes about gun control), and “rationalization,” bringing one’s desires into alignment with one’s likelihood estimates (e.g., assuming that if a given candidate is likely to win, then his/her attitudes about gun control must be more appealing). As McGuire (1968) put it:

If our Panglossian rationalizer tended to feel that this was the best of all possible worlds, then his belief in the likelihood of pollution at the city beach should compel him to accept also the proposition that pollution was a good thing, or otherwise suffer psychological *angoise*. (pp. 145–146)

In support of McGuire’s *rationalization* postulate, Kay, Jimenez, and Jost (2002) demonstrated that Democrats could be made to regard a Republican presidency (and Republicans to regard a Democratic presidency) as more *desirable* simply by convincing them that it was more *likely* to occur. The notion that people engage in both “sour grapes” and “sweet lemons” forms of rationalization is integral to system justification theory, which suggests that most people do resemble *Candidate’s* Pangloss in exaggerating the desirability and especially the justness of the status quo (see also Kay et al., 2007).

Remote ramifications. McGuire’s probabilistic model has direct implications for belief dynamics, including *persuasion*. To the extent that specific beliefs are connected probabilistically to other beliefs and desires within the individual’s cognitive system, a change in one belief through persuasion should exert ripple effects (or “remote ramifications”) throughout the system. As usual, McGuire (1981) was drawn to a medical analogy:

A course in physiological psychology dealt with the technique of teasing out the histological structure of the nervous system by putting in lesions or electrical impulses at various places in the spinal cord or brain and tracing the ramifications through the central nervous system. The analogy occurred to me that perhaps I could put in changes at focused points in the belief system and get to understand the organization of the mind by tracing the ideological and behavioral ramifications of these experimentally induced, focused alterations. (p. 291)

There are at least two well-developed methodological paradigms that draw out the implications of McGuire's model of remote ramifications. First, according to the "Socratic method of persuasion," McGuire (1960a) demonstrated that simply by asking questions of another person, it is possible to increase the salience of certain beliefs and, in so doing, strengthen the connections among their (probabilistically) interrelated beliefs, that is, "increasing the strain toward logical consistency" (McGuire, 1981, pp. 299–301; see also Henninger & Wyer, 1976; Watts & Holt, 1970; Wyer, 1974). The basic idea is that "the person does have a need for cognitive consistency in his or her belief system but often neglects to think about the related beliefs all at one time, so they get out of line with one another" (McGuire, cited in Evans, 1980, p. 175; see also Converse, 1964). The Socratic method of simply asking questions to "activate" certain thoughts or evaluations and observing the psychological consequences of such activation anticipated "priming" methods in social and cognitive psychology by more than a decade (e.g., see Higgins & Bargh, 1987).

In a second type of experimental paradigm, McGuire presented entirely new information to alter the perceived likelihood that a given belief is true; this process initiates a change in the beliefs and desires that are logically or psychologically connected to the original belief, even if those consequences were left unmentioned (McGuire, 1960, 1981, pp. 301–305; see also Dillehay, Insko, & Smith, 1966; McFarland & Thistlethwaite, 1970; Watts & Holt, 1970). For instance, exposing individuals to expert opinion suggesting that "additional funds will be invested in higher education by the states" increases their acceptance of logically consistent beliefs, such as "an increasing proportion of students will attend universities in their own states, rather than out-of-state universities" (Hastie & Rawson, 2004, pp. 58–62). McGuire's consideration of remote ramifications anticipated the now common technique of "push-polling," whereby questioners try to change opinions as they purport to ask about them. Intriguingly, McGuire's model incorporated a temporal dimension by which the belief system is (nonconsciously) updated; that is, he assumed that remote ramifications of persuasive messages might take hours or even days to take effect (see McGuire, 1968).

Implications for political ideology. Philip Converse (1964) drew heavily on McGuire's probabilistic model of cognitive structure and persuasion in building an argument that most of the population lacked sufficient logical consistency and constraint in their belief systems to be considered "ideological":

McGuire [1960c] has reported a fascinating experiment in which propositions from a few syllogisms were scattered thinly across a long questionnaire applied to a student population. The fact that logical contingencies bound certain questions together was never brought to the attention of the students by the investigator. Yet one week later the questionnaire was applied again, and changes of response to the syllogistic propositions reduced significantly the measurable level of logical

consistency. The conclusion was that merely “activating” these objectively related ideas in some rough temporal contiguity was sufficient to sensitize the holders to inconsistency and therefore to occasion readjustment of their beliefs.

On a broader canvas, such findings suggest that simple “thinking about” a domain of idea-elements serves both to weld a broader range of such elements into a functioning belief system and to eliminate strictly logical inconsistencies defined from an objective point of view. Since there can be no doubt that educated elites in general, and political elites in particular, “think about” elements involved in political belief systems with a frequency far greater than that characteristic of mass publics, we could conservatively expect that strict logical inconsistencies (objectively definable) would be far more prevalent in a broad public.

Converse argued (largely on the basis of survey data from the 1950s) that only 10–15% of the most highly educated and sophisticated members of the public were willing (or able) to resolve inconsistencies among their political beliefs and opinions, for example, simultaneously demanding decreased taxes and increased governmental benefits.¹ On the basis of findings such as these, Converse concluded, among other things, that ordinary citizens do not structure their political attitudes according to abstract ideological concepts such as liberalism and conservatism. It may be worth noting that Converse focused primarily on logical connections among idea elements, largely ignoring what McGuire said about processes of *rationalization* and other motivational connections within the ideological network (see also Jost, 2006).

In any case, Converse’s conclusion that most people lack ideological consistency, sophistication, and coherence remains enormously influential in political science to this day (e.g., Bishop, 2005; Fiorina, 2006; Kinder, 1998; Krosnick, Visser, & Harder, 2010; Zaller, 1992). Thus, in commenting on McGuire’s theory, Sniderman and Tetlock (1986) opined that, “A syllogism is a natural metaphor for idea systems,” but it is not “an especially fitting metaphor for mass belief systems, at any rate as far as politics is concerned” (p. 79). Writing in 1968, McGuire admitted wistfully that the average person did not appear to be as logical or as cognitively well-structured as he had initially believed. He conceded, for example, that, “It now seems somewhat less certain that formal logic does provide a useful

¹ Robert Lane (1973)—a colleague and friend of McGuire’s at Yale—criticized Converse’s (1964) application of McGuire’s (1960c) syllogistic analysis to the domain of political ideology, focusing on the example whereby “persons who believe simultaneously in (1) expansion of welfare services, (2) cutting taxes, and (3) balancing the budget are deemed illogical” (p. 103). Lane observed that “the logic is not constraining for two reasons: each person can argue for cutting something he does not care about and expanding welfare services and cutting taxes. Or, alternatively, he can argue . . . for a non-tax device to increase revenue—namely, a lottery” (p. 103).

core for a process simulation of human thinking” (p. 161), and that, “Laziness and absolute limitations of information handling seem to prevent [the person] from making full use of his total body of information at any one moment” (p. 159). McGuire even worried that “I have perhaps over-intellectualized the degree of connectedness in human thought, having committed the pathetic fallacy of judging others to be too much like myself” (p. 156).

Keeping the faith. Notwithstanding these reservations, it is far from clear that McGuire fully endorsed the post-Converse consensus that the overwhelming majority of the population lacks ideological structure or consistency. He wrote, for instance, that:

I myself have kept the faith, clinging desperately to the assumption that people feel that certain of their beliefs have a bearing on others, and that they can be embarrassed by discovering that they hold an incompatible set. I even cling to the position that people maximize, not only the consistency, but also the interconnectedness of the system. (1968, p. 143)

Subsequent research programs on modes of cognitive dissonance resolution, self-perception, self-verification, self-affirmation, and related constructs provide considerable evidence in support of McGuire’s assumption of “motivated consistency” (e.g., see Swann & Bosson, 2010, especially pp. 608–610), although these areas of research have had a negligible impact on political science thus far. Some years later, McGuire (1981) more directly confronted the enormous skepticism within political science concerning the existence of ideology:

I assume that there is a force toward structure in the mind such that the person tends to maintain connectedness (i.e., to perceive relationships among the propositions) and coherence (i.e., to prefer some patterns to others among beliefs on related propositions). . . . These [empirical] confirmations of the assumption that there is *a strong tendency to maintain structure among one’s beliefs are a needed corrective to surveys of political attitudes that seem to suggest that people’s belief systems are neither connected nor coherent to any appreciable extent.* (p. 303; emphasis added)

McGuire’s (1985a) *Handbook of Social Psychology* chapter devoted considerable space to the “end of ideology debate” (see also Banaji & Heiphetz, 2010; Jost, 2006; Sniderman & Tetlock, 1986), which he framed in characteristically dialectical fashion. First, in the spirit of Converse and the many skeptics in that tradition, McGuire (1985a, pp. 248–249) adduced eight reasons for doubting the ideological sophistication of ordinary citizens: (1) they lack basic information about political issues and mistake the causes of their own preferences; (2) they often answer “no opinion” in response to issues of political significance; (3) many

attitudes exhibit cross-temporal or cross-situational instability; (4) opinions differ in response to minor changes in wording and ordering of items; (5) affective evaluations correlate poorly with cognitive judgments; (6) attitudes that share ideological similarities correlate weakly with one another; (7) people frequently adopt positions that violate their own self- or class-interest; and (8) abstract policy preferences frequently contradict judgments people make in specific situations.

At the same time, McGuire's commitment to balancing oppositional notions (e.g., "yin and yang"), which surfaced constantly in his meta-theoretical work (e.g., see Banaji, 2004; McGuire, 1973b), led him to list several strategies for "salvaging" the concept of ideology, including: (1) improving the statistical reliability of attitude measures; (2) sampling involved, highly educated respondents rather than uninvolved, uneducated respondents; (3) studying political elites rather than the mass public; (4) conducting research in contexts of greater ideological polarization; (5) investigating ideology in people of certain personality types, such as political activists or those who score high on the need for cognition; (6) focusing more on affective (vs. cognitive) aspects of political ideology; and (7) treating liberalism and conservatism as orthogonal dimensions. As a testament to McGuire's prescience, it should be noted that the first six of these "salvaging" proposals have received extensive empirical support over the past 25 years (e.g., Delli Carpini & Keeter, 1996; Federico & Sidanius, 2002; Judd & Krosnick, 1989; Sniderman, Brody, & Tetlock, 1991; Zaller, 1992; see Jost, Federico, & Napier, 2009, for a review). In looking back on the "end of ideology" period, McGuire (1993) wryly concluded that "ideology was not dead but hiding out in Paris and Frankfurt" (p. 23). Finally, it is worth noting that critics—and perhaps even McGuire himself—may have failed to take the implications of the probabilistic model seriously enough. The idea that social and political attitudes cohere imperfectly follows from the hypothesis that minor premises are probabilistically held, and many are held with low or moderate probabilities.

Tension and elasticity of ideological linkages. McGuire's model was never intended to predict or explain perfect consistency among idea elements within a belief system. Rather, McGuire (1960c) always assumed that "the individual's chain of reasoning is best represented by a 'loose-link' or 'elastic' model, with a certain amount of give or stretch" (p. 99). He wrote, for instance, that:

The belief system is not a rigid structure; rather there is a certain amount of slack in the chain which ties one concept to another. A certain amount of discrepancy can build up before the incongruent belief exercises any appreciable force for change on related beliefs. Since this slack would be accumulative as one traces the implications of a belief change throughout the belief system, the waves created by a discrepant piece of information would tend gradually to die out. (McGuire, 1968, p. 158)

Indeed, as Sniderman et al. (1991) point out, “McGuire’s model . . . leads us to expect marked differences in consistency across situations,” so that, “If we find ourselves in situations where the positions we take matter, we can tighten the linkages between our political ideas, even if only temporarily” (p. 29). As we have suggested, researchers have indeed observed reasonable levels of ideological consistency in the belief systems of those who are motivationally involved or engaged in politics (e.g., Hamill, Lodge, & Blake, 1985; Judd & Krosnick, 1989; Lavine, Thomsen, & Gonzales, 1997). Furthermore, consistent with McGuire’s (1969a) work on persuasion, researchers have found that citizens acquire specific ideological content largely to the extent that they *attend* to and *comprehend* information flowing from political elites (e.g., Converse, 1975; Lau & Redlawsk, 2001; Popkin, 1994; Zaller, 1992). As ideological polarization within the United States has increased in the early twenty-first century, and a larger proportion of the population has become politically engaged, evidence of cognitive and motivational linkages among core ideological beliefs and values has proven to be much less elusive (e.g., Abramowitz & Saunders, 2008; Goren, 2004; Jost, 2006; Stimson, 2004).

Resistance to Propaganda and Persuasion

Inoculation theory. It was the topic of resistance to persuasion that first brought McGuire widespread admiration in social psychology (Pearce, 2008). This work constituted a major extension of his basic model of cognitive structure and remote ramifications, insofar as it addressed the possibility that existing belief systems could be maintained against deliberate attempts by others to introduce cognitive or ideological instability. Billig (2003) recounts:

There had been persistent rumors that captured soldiers could be turned into communist supporters by techniques of intensive propaganda. The American military were keen to develop psychological techniques to counter the effects of such propaganda. McGuire hypothesized that those most at risk from political propaganda were those whose basic ideological beliefs had never been challenged, just as those who lived in “germ-free” environments never built up antibodies against future infection. McGuire’s experiments demonstrated that subjects will be more resistant to propaganda challenges if they are previously exposed to small “doses” of propaganda that provoke them to create or look for counterarguments. Armed with counterarguments, recipients are better equipped to resist the appeals of propaganda. (p. 224)

Thus, drawing on another analogy from medical science, McGuire (1961a, 1962, 1964, 1970) proposed “inoculation theory” to explain why people’s beliefs are susceptible to conversion in domains that are seldom exposed to persuasive attack. Because cultural truisms, for instance, are so rarely questioned, the beliefs under-

lying them are rarely if ever rehearsed, leaving people largely defenseless against unanticipated challenges. McGuire's experiments demonstrated that vulnerability to persuasion could be prevented by "belief immunization," that is, by exposing an individual to a relatively weak attack on the belief and allowing him or her to engage in counter-argumentation (McGuire, 1961, 1962; McGuire & Papageorgis, 1961, 1962; Papageorgis & McGuire, 1961). Other studies revealed that forewarning of persuasive intent could serve to undermine the likelihood of persuasion (e.g., Brock, 1967; Dean, Austin, & Watts, 1971; Petty & Cacioppo, 1986; Wood & Quinn, 2003) and that opinions on controversial issues resemble truisms in that they are surprisingly easy to overturn (e.g., Burgoon, Cohen, Miller, & Montgomery, 1978; Szybillo & Heslin, 1973).

Inoculation theory continues to anchor the social psychological understanding of attitude strength and resistance to persuasion (e.g., Albarracín & Vargas, 2010; Compton & Pfau, 2004; Eagly & Chaiken, 1993; Knowles & Linn, 2004; Petty, Tormala, & Rucker, 2004; Sagarin, Cialdini, Rice, & Serna, 2002). More broadly, McGuire's contribution transformed research on attitude change by empirically refuting the pervasive assumption that individuals are passive recipients of persuasive messages. Instead, targets of persuasion are active participants insofar as the structure and dynamics of individual belief systems play a crucial role in determining the outcome of a persuasive attempt. Thus, McGuire's ideas stimulated highly productive research programs on "cognitive response models of persuasion" (e.g., Greenwald, 1968; Petty, Ostrom, & Brock, 1981) and, eventually, the elaboration likelihood (Petty & Cacioppo, 1986) and heuristic-systematic (Eagly & Chaiken, 1993) models of persuasion. His work on belief inoculation and resistance to persuasion also led McGuire (1969a, 1985a) to think more systematically about the various endogenous and exogenous factors that ultimately determine the extent to which a given persuasion attempt is successful.

The ethics of persuasion. Despite the remarkable success and lasting influence of his work on resistance to persuasion, McGuire expressed ambivalence concerning its practical and commercial use, as he noted in a revealing interview conducted by Evans (1980):

I must confess that I felt like Mr. Clean when I started this immunization work because while everybody else was studying how to manipulate people, I was studying how to keep them from being manipulated. But now I appreciate more that the person has to be open to outside influence: if one had to learn everything from one's own direct experience, one probably wouldn't survive. . . . Immunizing somebody against change isn't always very healthy for the reason that people do have to be open to outside influence.

I am also uneasy because subsequent developments in advertising show that our immunization research can be used for questionable purposes. I

remember a call I got from an advertising agency bigwig just after this research was publicized. He said, “Very interesting, Professor: I was really delighted to read about it.” Somewhat righteously, I replied, “Very nice of you to say that, Mr. Bigwig, but I’m really on the other side. You’re trying to persuade people, and I’m trying to make them more resistant.” “Oh, don’t underrate yourself, Professor,” he said, “What you’re doing will be very helpful to us in reducing the effectiveness of our competitors.” And so it has turned out. Before our immunization research, advertisements always ignored the opposition as if it didn’t exist. But now mentioning the other brands and deflating their claims is becoming almost standard. (pp. 179–180)

For years, McGuire pondered the ethical subtleties of persuasion research and ultimately concluded that, “a few aberrant young who see visions and old who dream dreams may discern that persuasion is the worst possible mode of social mobilization and conflict resolution—except for all the others” (McGuire, 1985a, p. 235).

Attitudes and Attitude Change: A Process-Oriented Approach

On the strength of his work on cognitive consistency and resistance to persuasion, McGuire’s reputation as an incisive theorist, ingenious researcher, and lucid writer was firmly established by the mid-1960s. Soon thereafter, he published several influential literature reviews that afforded space for him to more fully develop the theoretical and meta-theoretical foundations of experimental work on attitude change. One of these reviews (McGuire, 1969a) was a book-length manuscript of more than 80,000 words, requiring 179 small-print pages of the *Handbook of Social Psychology*. That chapter, along with an equally indispensable contribution to the 1985 edition of the same *Handbook*, constituted a monumental synthesis of several decades’ worth of research on the topic of attitudes. According to Google scholar, these chapters have been cited well over a thousand times each, though it is almost certain that the numbers understate the impact of McGuire’s influence on attitude theory and research (e.g., see Eagly & Chaiken, 1993).

The communication/persuasion matrix. The *Handbook* chapters by McGuire (1969a, 1985a) capitalized on the “communication/persuasion matrix,” namely a method of identifying main and interaction effects involving “input” and “output” variables involved in the process of persuasion. This matrix established the basic conceptual framework that has helped researchers to organize the voluminous literature on attitude change to this day (e.g., Albarracín & Vargas, 2010; Crano & Prislín, 2008; Eagly & Chaiken, 1993; Petty & Wegener, 1998; Zaller, 1992). If attitudes researchers can

be said to possess a periodic table of the elements, the communication/persuasion matrix is it.

On the “input” side, McGuire listed five classes of variables involved in persuasion: source, message, channel, receiver, and target. Thus, communicative sources who are seen as credible, trustworthy, attractive, likeable, similar, familiar, and powerful are more likely than those who are not to effect attitude change, all other things being equal (McGuire, 1985a). Similarly, messages that are clear, forceful, literal, and humorous are generally more persuasive, as are two-sided communications that acknowledge opposition arguments (consistent with belief inoculation theory). In terms of channel factors, McGuire concluded that television exposure is not as influential as most people assume and that reading conveys depth-of-processing advantages in terms of information storage and retrieval. Much of McGuire’s early work focused on receiver characteristics such as self-esteem, intelligence, age, anxiety, and so on; he concluded that “maximum persuadability occurs at intermediate levels on many dispositional variables” (McGuire, 1985a, p. 286). The target of persuasion is often some form of behavior, such as voting or buying, but McGuire also considered potential outcomes such as delay, persistence, and resistance to attitude change.

The communication/persuasion matrix also specifies a number of “mediating” or “output” variables, that is, psychological processes engaged in by recipients of persuasive messages that ultimately determine the extent of persuasion. Initially, McGuire (1969a) focused simply on processes of attention, reception, and yielding. Eventually, the list expanded to at least a dozen such processes, including exposing oneself to a given message, comprehending the arguments, liking the conclusion, generating related cognitions, acquiring relevant skills, agreeing with the arguments, storing the attitude change, and acting in accordance with the new attitude (McGuire, 1985a, p. 259, Table 1). The greatest advantage of McGuire’s approach is the fact that it explicitly recognizes possibilities for trade-offs and interactions among input and output variables. For example, a source variable such as expertise might increase the persuasive impact of messages directed at thoughtful, highly engaged receivers of persuasion, but it might well interfere with the persuasiveness of the same message when presented to distracted, uninterested receivers. Such complex interactions would soon become paradigmatic in the attitude change literature, inspiring “dual process” models that account for both deep, deliberate, reason-based and relatively superficial, automatic, association-based modes of social influence (e.g., Eagly & Chaiken, 1993; Petty et al., 1994).

Implications for political communication. The implications of McGuire’s process-oriented model of attitude change for understanding the determinants of public opinion were readily apparent to political scientists concerned with understanding the effectiveness of formal and informal modes of political communication (e.g., Iyengar & Kinder, 1987; Lodge & McGraw, 1995; Mutz, Sniderman, & Brody, 1996; Popkin, 1994). For instance, Brody (1986, p. 300)

considered the effects of the mass media in terms of McGuire's input-output model:

It seems likely that reporters are a more "credible" source, in terms of the persuasive communications paradigm (McGuire, 1973a), than are election competitors. This means, *inter alia*, that news about the candidates as potential leaders and news about their program proposals should be most persuasive to those predisposed to be convinced (e.g., fellow partisans). Those predisposed to be skeptical are less likely to find such news credible and persuasive. Of course, all of this communication is subject to the attention, comprehension, and the yielding mediators and individual differences through which they operate. (McGuire, 1973a)

Much as Converse (1964) had applied McGuire's (1960c) work on cognitive consistency to the study of political ideology, John Zaller (1992) applied McGuire's (1969a) work on attitude change to the study of mass communication and public opinion formation:

The psychological literature on opinion change lends great support to the notion that individuals typically fail to reason for themselves about the persuasive communication they encounter. Instead, people rely on cues about the "source" of a message in deciding what to think of it. Reviewing this evidence in an influential 1969a article, William McGuire wrote: "The given message is judged as fairer, more factual, more thoroughly documented, its conclusion following more validly from its premises, and even more grammatical, when it is ascribed to a high- as opposed to a low-credibility source" (p. 198). Although the studies McGuire cites do not necessarily involve political sources that are Democrat or Republican, or liberal or conservative, they ought to generalize to these kinds of sources. . . . McGuire goes on to note that people do not seem to *learn* more from credible sources; they simply tend to accept their opinion leadership more readily. (Zaller, 1992, p. 45)

It is interesting to note that McGuire (1986a, 1991) himself wrote several articles decrying the "myth of massive media impact" (cf. Zaller, 1996). Although he acknowledged the intuitive appeal of the notion that the mass media must have large effects on individual thought and behavior, McGuire's characteristically exhaustive review of research concerning media influences on violence, aggression, sexuality, stereotyping, and other issues led him to the conclusion that "the evidence that the media have massive impacts on the American public is surprisingly weak" (1999, p. 169). However, his position was not that the media are unimportant, but rather that the media are not very influential in the *way* that is typically assumed. He proposed that "even if the media do not generally have large

effects, in special subdomains of behavior they may have sizable effects that are lost in evaluations that are looking only for broad spectrum effects” (McGuire, 1999, p. 177).

In applying the cognitive model of persuasion to the special case of media influence, and in congruence with his perspectivist epistemology, McGuire (1991) gathered and synthesized findings from scores of studies indicating that certain types of mass media communications may well have appreciable effects when one identifies the circumstances and receiver (or audience) characteristics that interact to enhance the persuasive power of certain messages. For example, whereas media depictions of violence may have little effect on aggressive outcomes for the population as a whole, they may exert large effects on specific subpopulations that are predisposed to violence. This original insight has now become paradigmatic in the early twenty-first century age of targeted persuasion, market segmentation, and niche marketing (e.g., McDonald & Dunbar, 2004; Penn & Zalesne, 2007).

Contributions to the Study of Self and Identity

As befitting a dyed-in-the-wool phenomenologist, McGuire eventually applied his general model of belief systems to systems of *self*-knowledge, that is, beliefs about one’s own personal attributes and the network of connections among them (e.g., McGuire & McGuire, 1988; McGuire & Padawer-Singer, 1976; McGuire et al., 1986). By focusing on a wide range of attributes, McGuire saw an opportunity to compensate for the overemphasis in social psychology on the *evaluative* dimension (i.e., self-esteem).² By incorporating both structural and dynamic assumptions, McGuire identified sources of stability and malleability in personal and social identities, influencing the direction of research on the self-concept for at least a generation (e.g., Greenwald & Pratkanis, 1984; Grier & Deshpandé, 2001; Hardin, 2004; Markus & Wurf, 1987; Prentice, 1990; Turner, 1987).

Distinctiveness Theory and Minority Identification

As a left-handed, self-identified ethnic Catholic from a working class background, McGuire often perceived himself as a minority figure in the academy. And, in looking back on his year as a Fulbright fellow in Belgium, McGuire (1999) noted that:

Things differ, not by what they are, but by what they are not. The handful of Thomistic fellow travelers (most also war veterans and Fulbrighters)

² McGuire (1999) believed that scientists were like “organisms [that] over-congregate at optimal points” and that “those of us able to stand alone should foster evolution and progress by exploiting neglected, nonoptimal niches” (p. 378).

argued that I was deviating from orthodox Aristotelian Thomism toward Scotism and reminded me that such Duns Scotus obscurities had contributed the word *dunce* to the English language. These metaphysical speculations gave rise to my distinctiveness theory research. . . . (p. 7)

Perhaps it was not surprising, then, that McGuire proposed *numerical distinctiveness* as a major determinant of self-related cognitions. For instance, McGuire and McGuire (1980) hypothesized and found that left-handers are more likely than right-handers to spontaneously mention handedness when asked to list their most significant personal characteristics. Similarly, children (at least in the United States) are more likely to describe themselves in terms of physically distinctive or unusual characteristics, such as height and hair color (McGuire & McGuire, 1981), and children whose family composition renders them a minority in terms of gender (e.g., a boy with several sisters or a girl with many brothers) are more likely to identify their sex as an important personal characteristic (McGuire & Padawer-Singer, 1976). Racial and ethnic minority (versus majority) children are also more likely to describe themselves in racial or ethnic terms (McGuire, McGuire, Child, & Fujioka, 1978). Theoretical and methodological insights such as these were replicated and extended in various research programs on *self-schemata*, which showed that information pertaining to matters of habitual self-concern becomes more accessible in memory (e.g., Bargh & Pratto, 1986; Markus, 1977; Markus & Smith, 1981; Schwarz et al., 1991).

Extrapolating from McGuire's research on the self-concepts of children to those of adults and from temporary to persistent minority status, it follows from distinctiveness theory that (under certain conditions, at least) members of minority groups should identify more strongly with their group than members of majority groups. This is indeed what the research literature on social identification suggests (e.g., Brewer, 1991; Huddy, 2002; Leonard, Mehra, & Katerberg, 2007; Sidanius, Levin, van Laar, & Sears, 2008), although researchers have sometimes offered different explanations for the phenomenon (e.g., Turner, 1987). Some determinants of the self-concept (e.g., family composition and structure) are relatively stable, giving rise to chronically accessible differences in group identification. A virtue of McGuire's model is that it also helps to explain acute (i.e., temporary) situational or contextual variability in self-states. His dialectical approach was unique in social psychology during the person vs. situation debates of the 1970s, but McGuire's conviction that human thought and behavior are determined jointly by chronic individual differences and temporary situational factors eventually became part of the paradigmatic "common language" of social psychology (Higgins, 1990).

The Dynamic Self-Concept

McGuire argued that human thought systems manifest relatively stable influences arising from social structure, personality, and habits of thinking, as well as

dynamic influences associated with situation-specific social contexts and task-related goals. Thus, when McGuire turned his attention to what he described as “everyone’s favorite topic,” namely *the self*, his initial discoveries of chronic differences in the contents of self-descriptions arising from numerical distinctiveness (or minority status) naturally elicited a parallel discovery: that many aspects of the self-concept are fluid and malleable across social situations.

For instance, McGuire and his colleagues demonstrated in a series of ingenious studies that personal characteristics such as gender, ethnicity, and eye color are more prominent in self-descriptions when immediate social environments (e.g., home vs. school) render them distinctive (see McGuire & McGuire, 1988). Such results, which are captured by the phrase “the dynamic self-concept,” rejuvenated interest in older, analogous findings (e.g., Festinger, 1954; Gergen, 1965; Videbeck, 1960). They also directly or indirectly inspired dozens of replications and creative extensions, including demonstrations that self-judgment is influenced by, *among other things*: self-presentational goals (Jones, Rhodewalt, Berglas, & Skelton, 1981); the salience of certain pieces of information about the self (Salancik & Conway, 1975); and the characteristics and performance standards of whoever happens to be present (e.g., Strack, Schwarz, Chassein, Kern, & Wagn, 1990).

The discovery of the dynamic self-concept turned psychological orthodoxy on its head. At least since Freud, personal identity was conceived of as the product of an individual mind that was a stable, more or less unified structure across time and place (e.g., see Allport, 1955; Greenwald, 1980). Without rejecting the notion that the self-concept is, at least in part, a relatively stable manifestation of chronic habits, motives, interests, and social roles, McGuire’s striking empirical findings and rhetorical flair helped to transform the social psychological understanding of the self by bringing it under the theoretical auspices of the social cognitive paradigm, which stressed both chronic and temporary construct accessibility (e.g., Banaji & Prentice, 1994; Greenwald & Pratkanis, 1984; Higgins & Bargh, 1987; Markus & Wurf, 1987).

Advantages and Disadvantages of Individualism and Collectivism

There is one more example of McGuire’s dialectical thinking that is more obscure than the others but no less insightful or relevant to social and political psychology. In thinking broadly about the relationship between the individual and society, McGuire was moved to consider the advantages and disadvantages of individualistic and collectivistic systems or models of society (e.g., Hofstede, 1980; Markus & Kitayama, 1991; Triandis, 1989). Upon receiving an honorary doctorate from the Eötvös Loránd University in Budapest, Hungary, McGuire (1990) spoke these words to a Central/Eastern European audience that was still reeling from the drop of the Iron Curtain and the rapid transition from socialism to capitalism:

As regards the individualism versus collectivism polarity, the immediate course of history seems to be flowing away from collectivism toward individualism. However, the broad perspective of history suggests that this flow is not permanently unidirectional, like the River Danube, but just a phase in a tidal oceanic movement that ebbs and flows, so that in time today's flow will reverse. This is as it should be because each pole, individualism and collectivism, has aspects both beneficial and harmful, both to persons and to society.

For the person, individualism has the advantage of giving autonomy but the disadvantage of causing alienation; and for society, individualism has the advantage of providing initiative but the disadvantage of provoking conflict. At the other pole, collectivism has for the individual the advantage of giving a sense of belongingness and the disadvantage of imposing a feeling of constraint; and for society, collectivism has the advantage of encouraging cooperation but the disadvantage of causing stagnation. We scholars must think both in the short term and in the long term to find a Hegelian synthesis to get the best of both worlds by maximizing, for the person and for society, the benefits of both individualism and collectivism and by minimizing the disadvantages of both. (pp. 3–4)

Unfortunately, McGuire himself never carried out empirical research on these intriguing ideas. Nevertheless, the voluminous research literature on individualism and collectivism appears to substantiate some of his claims, especially the notion that each type of orientation is associated with some social and psychological advantages and disadvantages (e.g., see Oyserman, Coon, & Kemmelmeier, 2002, pp. 30–40).

Perspectivism: A Philosophy of Science for Social and Political Psychology

McGuire (1967, 1973b) sympathized with social constructionists and other critics of experimental social psychology to some degree because he shared their dissatisfaction with positivist philosophy of science. One hastens to add, however, that McGuire's impulse—unlike that of most critics—was to conduct *more* rather than less empirical research (see also Jost & Kruglanski, 2002). At the same time, he was suspicious of “fun and games” laboratory studies in which the experimenter played the role of “stage manager” in the production of what could be considered parlor tricks, as well as purely intuitive, hunch-based theorizing in psychology and political science. Much of McGuire's work, as we have seen, relied upon the logical use of theory to derive novel empirical implications from plausible starting assumptions, such as “there is a strain toward cognitive consistency” (McGuire, 1968, 1981) or “the extent of persuasion depends upon pro-

cesses of attention, reception, and yielding” (McGuire, 1969a), or “the more distinctive (i.e., rare) an attribute is, the more psychologically salient it will be” (McGuire et al., 1978).

By the same token, McGuire rejected logical empiricism as a perfect model for scientific research. In fact, he regarded it not only as a poor description of how behavioral scientists actually do their work (cf. Kuhn, 1962), but as downright misleading:

[T]he social psychology Establishment has been erroneously depicting this empirical confrontation as a test of the hypothesis and that this misperception has distorted and delayed social psychological research during the past quarter century. I have been arguing that the logical empiricism paradigm . . . represented a step forward during the middle third of the twentieth century. However, it has now outlived its usefulness in that its corrective insights have been adequately absorbed by the field and its shortcomings are warping research. (McGuire, 1985b, pp. 570–571)

McGuire developed a novel epistemological stance based on what he called the *tragic theory of knowledge* and, subsequently, a practically oriented user’s guide to the conduct of behavioral research. The general form and structure of his guiding philosophy of scientific exploration is perceptible in virtually all of his scientific writings, but these ideas were first formalized in his articles and chapters devoted to “contextualism” (McGuire, 1983, 1985b) and, later, “perspectivism” (McGuire, 1989, 1999, 2004).³

Tragic Theory of Knowledge

As conveyed in the first epigraph we chose for this article, McGuire took seriously the fact that all knowledge, including scientific knowledge, is necessarily the product of human mental activity.⁴ This introduces certain unavoidable limitations. Specifically:

Oversimplification occurs because our cognitive limitations require such reductions as slicing the seamless web of reality rather arbitrarily into thought-sized chunks; abstracting a few features of reality while electing

³ Before settling on “perspectivism,” McGuire tried out various terms (in addition to “contextualism”) for describing his philosophy of science, including “constructionism” and “transactionalism” (personal correspondence, Claire McGuire, May 2, 2010), as well as “interactionalism,” that is, “seeking and reporting circumstances that both support and refute [one’s] hypothesis” (Evans, 1980, p. 184).

⁴ McGuire was by no means an epistemological relativist (or a skeptic), however, because he assumed, as Donald Campbell (1993) put it, that *reality* is a “plausible co-selector of belief” and that clever scientific methods can help to improve the extent to which signals coming from reality are detected (see Jost & Kruglanski, 2002).

ignorance of the others; focusing on the relationships between a few ‘variables’ while illogically assuming that everything else is constant, and so on. More serious than these oversimplifications are the distortions inherent in knowing, such as assimilating observations to such ill-fitting mental categories as we may have available; lumping diverse entities in a common concept by ignoring their essential peculiarities; and warping our perceptions and inferences to conform to our values, desires, and expectations. These limitations are not peculiar to social-psychological knowledge (though some optimists have argued that they arise only in fields like ours because of some special contradictions and/or special interests in social science topics or methods). It can be shown that the tragedy of knowledge—that our necessary representing of reality necessarily misrepresents it—pertains equally to the natural sciences. . . . (McGuire, 1985b, p. 584)

McGuire’s tragic view of knowledge holds that human belief systems are not just inherently incomplete representations of reality but the best and most useful are highly selective ones that enable people to focus adaptively on the most telling aspects of an overly complex and otherwise unmanageable environment. Echoing insights from his work on the self-concept, perspectivism suggests that “complex stimuli are selectively perceived in terms of their distinctive features” (McGuire, 1989, p. 214).

Given that scientific knowledge is inherently representational, it follows that a given scientific idea, hypothesis, or theory is unavoidably distorted and incomplete. This, in turn, has several important implications. For one thing, it renders trivial the Popperian goal of empirically disconfirming (untrue) theories in the quest to identify the last standing (true) theory. After all, no idea is perfect in light of its representational (and therefore selective) nature. Although perspectivism breaks from positivism concerning the nature of knowledge and the goal of scientific research, McGuire nevertheless emphasized the necessity of empirical confrontation. Empirical observation may be unnecessary to falsify a theory, but it is necessary to identify when a given theory is true *enough* for a given (pragmatic) purpose: “All knowledge representations are imperfect but differ in type and degree of imperfection. Which is the least imperfect depends on the use to which the knowledge is put” (1999, p. 400).

In short, perspectivism prescribes rigorous empirical confrontation not to determine *whether* a theory is true but *how* and *when* it is true.

In logical empiricism, the purpose of the empirical work is to test the theory; in contextualism, the purpose of the empirical work is to construct the theory by clarifying its meanings and implications, its hidden assumptions and limitations, and revealing contexts in which it does and does not hold. In contrast to logical empiricism’s contention that some

theories are right and some wrong and that the function of the empirical work is to test which of several opposed theories is right, contextualism asserts that each of the several different theories is right and that the empirical work is conducted in order to reveal the contexts in which each of the complementary theories obtain. (McGuire, 1985b, p. 573)

According to McGuire, the scientific hypothesis is simply a proposition awaiting the kind of conceptual, theoretical, and empirical exploration that will reveal the conditions under which it is true as well as the conditions that limit its utility or value. If no single theory can be identified as the best way to represent a given phenomenon, then the function of an idea or insight is to distinctively highlight some aspects of a given phenomenon (at the necessary expense of others). The insight should be exploited through systematic conceptual and empirical exploration of multiple hypotheses, theories, and mechanisms. Liberated from the logical-positivist burden to be unconditionally true, the now frankly provisional scientific idea becomes a cognitive tool to be explored, manipulated, and combined with other ideas and insights with the eventual goal of identifying the circumstances under which it helps in our tragic quest for knowledge.

McGuire's epistemological stance was subtle, and it can easily be misconstrued, as the following exchange illustrates:

EVANS: Are you saying that all hypotheses are equally true, or that there is no need for empirical research to test hypotheses?

McGUIRE: Not quite the first (although I do agree with Blake that "everything possible of being believed is an image of truth") and definitely not the second. I think that empirical research is a vital part of the discovery process. But I take its function to be not in testing whether or not our hypothesis is true but rather in clarifying what our hypothesis means. One should carry out research to discover the circumstances under which it does not obtain. . . . What I am urging is that lab and field researchers design their studies and their reports to capitalize on this discovery process, seeking and reporting circumstances that both support and refute the hypothesis. (Evans, 1980, p. 184)

Although McGuire earned a masters' degree in philosophy, he was not a philosopher by profession, and it is unclear how his perspectivist philosophy of science would fare against sophisticated epistemological critiques. He seems to be proposing a "tragic" theory of knowledge that is *not*, in the end, entirely skeptical and a kind of pragmatic post-positivism that rejects both relativism and Popper's falsificationism (see also Jost & Kruglanski, 2002). In any case, McGuire's writings on perspectivism convey the originality of his thinking and the sincerity of his

effort to close the woeful gap between philosophy of science as an abstraction and the day-to-day practice of actual scientists.

Scientific Creativity and Theory-Building

McGuire emphasized that science is a process of creativity and discovery, not just hypothesis testing and falsification. He complained frequently that methodological training in behavioral science focuses almost exclusively on hypothesis *testing* (i.e., quantitative analysis) and not at all on the process of hypothesis *generation* (i.e., theory creation). To redress this imbalance, he developed a set of worksheets to assist students (and other researchers) in their efforts to forge rich sets of nonobvious, contrasting predictions (see Appendix in Jost, Banaji, & Prentice, 2004).

For similar reasons, McGuire (1997) listed and discussed 49 “creative heuristics” that he deemed useful for fostering scientific creativity. These are golden nuggets of uncommon sense, such as: accounting for deviations from the general trend; extrapolating from similar problems already solved; juxtaposing opposite problems to suggest reciprocal solutions; pushing an obvious hypothesis to an implausible extreme; alternating preferred with nonpreferred research styles; identifying counterforces obscuring an obvious relation; quixotically defending a preferred theory; decomposing nonmonotonic effects into simpler relations; allowing open-ended responses for content analysis; pitting confounded factors against one another; and engaging in multivariate fishing expeditions. Most research advisors would counsel against frivolities such as these, but McGuire celebrated and promoted them.

McGuire’s most distinctive and influential recommendations (see chapters in Jost, Banaji, & Prentice, 2004) are probably the following: (a) engage in dialectical, oppositional thinking (e.g., turn a hypothesis on its head, reverse the assumed direction of causality, or change the sign of a hypothesized relationship), (b) demand simple, formal, syllogistic explanations for each hypothesis generated (to facilitate systematic theorizing and to expose tautologies), and (c) move directly from a favored hypothesis to a consideration of mediating and moderating variables as well as boundary conditions. Above all, McGuire implored his students to *play* with ideas. He famously advised that: “If you’re trying to explain a pretzel-shaped universe, you may need a pretzel-shaped theory” (Evans, 1980, p. 180).

Concluding Remarks

We begin the “end game” (as McGuire might call it) by voicing our trepidation at having imposed upon the enormously creative, sundry, and eclectic writings of William J. McGuire a structure and continuity that he might well have resisted in the name of complexity and dynamism. Much as scientific theories, according to perspectivism, serve the tragic necessity of (over) simplifying the world as it is,

we have stressed the common and most distinctive themes of his *oeuvre* in order to convey the power and beauty of its major thrusts. In so doing, we have largely suppressed the urges to introduce qualifications, equivocations, and hair-splitting exercises that McGuire himself so often favored. Risking his disapproval from the grave, we console ourselves with the notion that his own particular genius is more likely to influence future work in social and political psychology (living, as it were, to fight another day) to the extent that it is understood as a unified system, a coherent whole, a structure of thought.

McGuire himself was tremendously fond of making predictions, especially about the course of research trends in social and political psychology. So, what did he portend? First, he anticipated an increase in *systems-style* theorizing (McGuire, 1985b), which would include “many variables, each of which is allowed to covary naturalistically without rigid predesignation as independent or dependent variables” and advanced statistical techniques to identify “bidirectional causal links, multiple causal paths between any two variables, and feedback loops” (McGuire, 2003, p. 123). In political psychology, McGuire (1999) believed that the “increasing availability of social data archives and growing technical capacity for collecting and causally analyzing multivariate time-series data will make systems styles of research more possible” (p. 365). Furthermore, he believed that world politics were moving in such a direction that an understanding of *intergroup relations* would become crucial, thereby eclipsing “intrapersonal” eras of research that emphasized personality, attitudes, and ideology, respectively (McGuire, 1993, 1999).

Finally, McGuire (1997) eagerly welcomed the advent of evolutionary theorizing when it comes to the structure and functions of human cognition and behavior and observed that, “A functional, adaptivity orientation deriving from evolutionary presuppositions is probably the most common metatheory guiding contemporary psychologists, at least implicitly” (p. 20). Although McGuire recognized (and condemned) past abuses of evolutionary psychology (e.g., eugenics, social Darwinism), he concluded that “it would be maladaptive to abandon all use of intellectual tools that could lead to error or be politically incorrect” (p. 20; see also McGuire, 1999, p. 402). Given his interests, it is perhaps no surprise that one of his children (James McGuire) became a political scientist, and another (Anne McGuire) an evolutionary psychologist.

Finally, we close by suggesting audaciously, in the manner of our mentor, a few ways in which McGuire’s work could and should inform the development of theory and research in social and political psychology for future generations. First, he would recommend that scholars think more dialectically in terms of reconciling oppositional insights. Given that every scientific idea is inherently incomplete and distorted, one should begin by hypothesizing the conditions under which its implications may not merely be wrong but backwards. For instance, we all know that people inherit many of their political attitudes from their parents (e.g., Jennings & Niemi, 1968; Sears & Levy, 2003), but what are the conditions under

which the relationship between parent-offspring attitudes might be negative, or the direction of causality might be reversed? Drawing on McGuire's theorizing on resistance to attitude change, for example, there must be some circumstances under which children would react against and move *away* from the political attitudes of their parents. One might hypothesize that source variables such as parental ignorance or receiver variables such as attachment style or contextual variables such as the quality of peer relationships might well interact to produce telling reversals. Or, reversing the causal direction, why not explore the conditions under which children bring about changes in the political attitudes of their parents?

Second, given that scientific ideas are inherently incomplete and distorted, one should embrace the assumption that for any given phenomenon there are many causes, explanations, mechanisms, and consequences. Doing this would require authors to embrace more untidiness and ambiguity than is typically acknowledged in the "General Discussion" sections of the field's top journals. Furthermore, it is common enough but scientifically inadequate to dismiss a given theory as *incomplete*. Rather, the perspectivist seeks to elucidate the conditions under which a given theory conveys "an image of the truth" and the conditions under which an alternative theory is more satisfying. This is a much subtler enterprise than logical empiricism or the Popperian up-or-down, corroborate-or-reject philosophy of science that has come to dominate social and political psychology. Tetlock (2007), a former student of McGuire's, struck just such a perspectivist chord in commenting on debates concerning the relationship between various psychological characteristics and left-right political orientation:

A recent meta-analysis of the literature has sparked controversy by concluding that right-wing conservatism is related to dogmatism and intolerance of ambiguity; uncertainty avoidance; fear of threat, loss, and death; system instability; and epistemic needs to achieve order, structure, and closure as well as negatively related to openness to experience, integrative complexity, and (to a lesser extent) self-esteem (Jost, Glaser, Kruglanski, & Sulloway, 2003). The authors do, though, add a critical caveat: This does not mean that liberals crave uncertainty and risk. There can be rigidity of the left as well as of the right. Their claim is simply that rigidity of the left is markedly less common than that on the right. . . .

Neither the explanans (cognitive style) nor the explanandum (ideology) in the dispute between Jost et al. (2003a, 2003b) and Greenberg and Jonas (2003) is a static trait entity. Each has a dynamic component that permits it to vary across contexts, issues, and time. There are settings in which the linkages between cognitive style and ideology are powerful and in the direction posited by Jost and colleagues . . . and other settings in which the relationships vanish.

All that said, it is noteworthy that although the main effect revealed in the Jost and colleagues (2003a, 2003b) meta-analysis can be neutralized, it never seems to reverse direction so that, across issues, conservatives as a group score as more flexible and multidimensional than liberals. . . . In this author's view, political psychology needs more disagreements of the sort represented in the exchange between Jost and colleagues and Greenberg and Jonas. The net result was clarification. (pp. 905–906)

For McGuire, interesting questions were seldom, if ever posed in “either/or” terms; he preferred “when” and “how.” Scientific controversies, according to McGuire, should not focus on whether one or another perspective is true (or even truer), but when and under what circumstances each perspective is true enough to illuminate, however partially, the causes of human behavior.

In these and related prescriptions, which he laid out himself in considerable, enlivening detail (e.g., McGuire, 1973b, 1983, 1989b, 1997, 2004), McGuire argues that the scientific hypothesis is simply a proposition that—as one tool among many in the scientist's toolbox—should be freed from the philosophical burdens of metaphysical absolutism and seen for what it is: a product of human creativity that can help us in our necessary, noble, and ultimately tragic quest for knowledge. We may never attain a perfectly accurate understanding of reality—what Rorty (1979) referred to as a “mirror of nature”—but we close with the optimistic suggestion that what we can attain might actually be better and more practical. Our knowledge, whether as laypersons or as scientists, is bound to oversimplify reality, and a perspicacious reading of McGuire suggests, however slyly and against the grain, that oversimplification (i.e., selective perception in terms of distinctive features) might just be what makes the knowledge valuable. A pocket-sized map of New York City—every would-be traveler and epistemologist must finally admit—is far more useful than a perfectly detailed life-sized replica would be.⁵ The tragedy of knowledge, in other words, may be a blessing in disguise.

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⁵ We have adapted and urbanized this metaphor from the original writings of Lewis Carroll (1893, *Sylvie and Bruno Concluded*) and Jorge Luis Borges (1946/1998, “On Exactitude in Science”).

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