

**The Palimpsestic Syndrome in Management Research:  
Stereotypes and the Obliteration Process**

William P. Bottom

Dejun Kong

*John M. Olin School of Business*

and

Zhan Zhang

*Department of Economics*

Washington University in St. Louis

**Abstract**

We investigated Merton's contention that Lippmann's concept of stereotype has been obliterated by incorporation in social psychology and management research. Citation analysis of top-tier journals revealed very few references in social psychology, essentially none in management. Content analysis of citations indicates that the literatures have obliterated significant knowledge regarding Lippmann's participant-observation method, his status embedded in an elite policy network, the larger social theory of which the stereotype concept was but one element, and his contribution to the development of behavioral science. This obliteration makes disciplinary and paradigmatic fragmentation appear far greater than it truly is. Loss of this knowledge will hinder further advances in the behavioral program currently undergoing a renaissance in social science and business research.

**KEYWORDS: Stereotype; Cognitive Illusions; Behavioral Science**

The authors wish to thank Jason Colquitt, Simon de Jong, Dinette Timmerman and members of the GOMER's group at the Olin School of Business for helpful comments on an earlier version of this manuscript.

## **The Palimpsestic Syndrome in Management Research:**

### **Stereotypes and the Obliteration Process**

Humans are prone to mental illusions generated from basic processes in perception (Bruner, Goodnow, & Austin, 1956; Bruner, 1957; Dearborn & Simon, 1959), memory (Roediger and McDermott, 2000), and judgment (Gilovich, Griffin, & Kahneman, 2003). These systematic biases have been identified and replicated through rigorous experimentation employing a wide range of methods and measures. Of course, scientists share similar human weaknesses. But the practices and institutions that comprise and support the scientific method presumably permit considerable extension of the bounds on human rationality and reason. How well do they function at limiting bias and distortion?

A palimpsest is “a parchment or other writing surface on which the original text has been effaced or partially erased, and then overwritten by another; a manuscript in which later writing has been superimposed on earlier (effaced) writing.” (OED, 2<sup>nd</sup> Edition). Merton (1966; see also Sills and Merton, 1992; Garfield, 1975; Merton, 1968) saw that as an apt metaphor for the accumulation of knowledge in science. Based upon careful study of the development of ideas in the physical sciences, he concluded:

“... in the transmission of ideas each succeeding repetition tends to erase all but one antecedent version, thus producing what may be described as the anatomic or palimpsestic syndrome.”

Perhaps Merton’s most compelling demonstration of this process of “obliteration by incorporation” was tracing the historical roots of an aphorism he (1956) himself had wrongly attributed to Newton, “If I have seen farther it is only by standing on the shoulders of giants.” In a digressive search for the aphorism through history, Merton (1966) identified its “true source” as a long forgotten 12<sup>th</sup> century

philosopher, Bernard of Chartres. As to the palimpsestic syndrome itself, Merton attributed it to a combination of human nature coupled with the incentive structure and communal norms of science:

“most of us tend to attribute a striking idea or formulation to the author who first introduced us to it. But often, that author has simply adopted or revived a formulation which he (and others versed in the same tradition) know to have been created by another. The transmitters may be so familiar with its origins that they mistakenly assume these to be well-known. Preferring not to insult their readers’ knowledgeability, they do not cite the original source or even refer to it. And so it turns out that the altogether innocent transmitter becomes identified as the originator of the idea when his merit lies only in having kept it alive, or in having brought it back to life after it had long lain dormant or perhaps in having put it to new and instructive use.”

Merton also took steps to slow the obliteration process. He worked closely with the information scientists of the ISI, the group responsible for creating the Science Citation Index, the Social Science Citation Index, and the Web of Science (Merton, 2000; Garfield, 1975). He later (Sill and Merton, 1992) collaborated on the construction of an extensive compendium of important quotations in social science.

“Leading readers back to the sources ... can help them place even extended quotations in their larger context” (p. xv). “Some of the quotations ... have become part of the culture. The identity of their authors is generally no longer given and, in due course, the original source becomes unknown to many making use of these anonymized quotations... Concepts and phrasings – such as charisma, stereotype, opportunity costs, significant others, self fulfilling prophecy have entered the vernacular with little awareness of their sources.” (p. xvii).

As original source for the concept of a self fulfilling prophecy (Merton, 1956), Merton certainly had some personal experience with the obliteration phenomenon. But how well does the palimpsestic syndrome actually characterize knowledge accumulation in psychology? And how is management research, which seeks to apply basic knowledge from psychology, affected by obliteration?

Stereotype, among Merton’s exemplars of social science obliteration, is a firmly established building block for contemporary theories of social cognition (Kunda, 1999; Schneider, 2004). Social psychologists continue to develop and test

new insights about the operation, function, and durability of stereotypes. We have recently learned that stereotypes provide a vital means of processing social information that economizes on scarce cognitive resources (Macrae & Bodenhausen, 2000). The conscious awareness that one is likely to be perceived and judged by others using widely held stereotypes itself generates distinctive emotional responses within the target that contributes to behavior that generates a self-fulfilling prophecy (Steele & Aronson, 1995). Well established stereotypes influence processing, and behavior, at a nonconscious level. They are activated by environmental cues, shape responses, and even complex molar behavior without the awareness of the individual (Bargh, Chen, & Burrows, 1996).

We have also learned that counteracting the potential bias introduced by stereotypes is far from straightforward. Deliberate attempts by a sophisticated processor to consciously suppress unwelcome stereotypes while interacting with an individual “exemplar” of the stereotype actually make the stereotype more accessible. This enhanced accessibility then requires still greater vigilance and cognitive effort to suppress further (Lambert, et al, 2003; Lambert et al., 1998; Lambert et al., 1997).

Research on social cognition, building on the stereotype concept, has also begun to draw many more applications from scholars in other disciplines, including those who study political (Todorov, et al. 2006), legal (Jolls & Sunstein, 1996), and management systems (Bilimoria & Piderit, 1994). Hiring (Heilman, Block & Stathatos, 1998), performance appraisals (Kulik & Ambrose, 1993), and negotiations are basic managerial processes that require a very high level of information processing in frequently stressful interpersonal relations. Management researchers (Bottom & Paese, 1996; Kashima, et al., 2003; Kray, Galinsky, & Thompson, 1992; Kray & Thompson, 2005) have just begun to apply the concept of stereotype to

explain aspects of the negotiation process. Some (Fragale & Neale, 2006; Thompson, 2006) foresee the extension of the concept as part of a larger “social cognition” approach to negotiation that can complement what are seen as alternative, more long standing approaches, such as behavioral decision theory.

The branching of research on stereotypes into the study of management raises a number of questions. How far has obliteration actually progressed in stereotype research? Will the application of stereotype research into new fields such as managerial cognition hasten that obliteration? What, if any, information has been lost as a consequence? Is any obliterated information material or does the loss actually reflect an efficient winnowing of information? It seems quite possible that the relevant central core of ideas has been transmitted to succeeding generations of scholars without encumbering them with less significant historical detail.

Seeking answers to these questions we undertook a systematic investigation of the origins and evolution of the stereotype concept in social science. The paper is structured as follows. We first examined quantitative data on the citation patterns associated with the concept in top tier journals in social psychology and management. We then looked at qualitative aspects of the specific references to the original source material. Assessment of the “larger context” of the original source illustrates the existence of certain significant gaps in understanding. Not all obliterated information was irrelevant, some of the gaps appear to have retarded progress in basic research. Unless rectified they will continue to confuse and hinder application to understanding managerial cognition.

### **Analyzing Journal Citation Patterns**

The word stereotype originally entered the lexicon in the 18<sup>th</sup> century as a means of describing a primitive printing process ‘in which a solid plate or type-metal,

cast from a papier-mâché or plaster mould taken from the surface of a forme of type, is used for printing from instead of the forme itself (OED Online).” By the start of the 20<sup>th</sup> century, the term was being used as a metaphor for mental process. Cognitively effortless repetition of ideas borrowed from another source was called “stereotypic” thought, as though one were mentally running off mechanical duplications, i.e. “something continued or constantly repeated without change” (OED). During his inflammatory speeches to the mobs gathered in Munich Beer Halls during the early 1920’s, Adolf Hitler used the term in precisely this manner,

“In the winter of the year 1919-20 we National Socialists for the first time put to the German people the question, whose is the guilt for the War? And we received pat from all sides the *stereotyped* answer of despicable self-humiliation: ‘We confess it: the guilt for the War is ours!’ Yes the whole revolution was made artificially on the basis of this truly monstrous lie.” (Speech of 13 April 1923, reprinted in Baynes, 1969, p. 54, italics added).

An economist, Wesley C. Mitchell had earlier made use of the term in a related fashion in his (now largely obliterated) call for economists to incorporate psychological theory into their conceptions of market behavior,

“before we start school, still more before we begin to earn our livings and to vote, our numberless unlearned capacities have grown into certain more or less *stereotyped* combinations utterly different from the combinations of the cave man (Mitchell, 1914, p. 15).

But The Oxford English Dictionary, Sills and Merton (1990), and contemporary textbooks on social cognition (Kunda, 1999; Schneider, 2004) trace the definition of a “stereotype” as used in social psychology to the same source, the book Public Opinion written by Walter Lippmann (1922). According to OED, Lippmann was responsible for redefining stereotype to mean “A preconceived and oversimplified idea of the characteristics which typify a person, situation, etc.; an attitude based on such a preconception. Also, a person who appears to conform closely to the idea of a type.” This agreement indicates that whatever obliteration that

Sills and Merton may have detected is still, at most, only partial. Prominent textbook authors have not completely forgotten.

We sought to assess the relative extent and trends in obliteration by examining the pattern of journal citations to this source over time. The search method relied on the electronic database PSYCINFO, “an abstract (not full-text) database of psychological literature from the 1800s to the present.” The database includes records of all journal articles published by the American Psychological Association dating to their initial issues as well as other non-APA journals that would be classified as top tier publications by most scholars.

The search set included (1) *Journal of Personality and Social Psychology* (1965-2006) as well as its predecessors (The Journal of Abnormal Psychology and Social Psychology, 1922-1925 and The Journal of Abnormal and Social Psychology, 1925-1965); (2) *Journal of Experimental Social Psychology* (1965-present), (3) *Personality and Social Psychology Review* (1975-2006), (4) *Personality and Social Psychology Bulletin* (1997-2006), and (5) *Journal of Applied Social Psychology* (1971-2006). Two primary journals of general psychology, (6) *Psychological Bulletin* and (7) *Psychological Review* were also included in this search as was *Annual Review of Psychology*. Though not exhaustive, this set does represent a broad sample of the more important sources of basic research.

### **Search Terms and Results**

Concepts closely related to “stereotype” have also been the subject of extensive research over the past several decades. Mervis and Rosch (1981) saw Lippmann’s (1922) theory of stereotype as a special case of a very general cognitive phenomenon whereby highly correlated attribute clusters function as a basis for “assigning category membership” to make the world seem more orderly than it is.

According to their prototype theory of category structure, personalities such as “introvert” are organized similarly to object categories such as “bird” or “fish”. So pictures in our heads determine categorical judgments of all kinds.

While our search could conceivably have been extended to include studies of category formation and structure, we focused instead on two search terms, stereotype and schema. These terms have been commonly and nearly interchangeably used in the social cognition literature. Searches were conducted on citations to Lippmann (1922) and on the two text keywords. Counts of papers were taken that cited either the original version of the book *Public Opinion* or reprinted versions that appeared in subsequent years (1949, 1965, 1991, 1997). A separate count of papers were taken that made use of the keyword “stereotype,” the keyword “schema”, or both.

Items from the database were double-checked against a partial physical search of journals in the decade of the 1920’s and the decade of the 1950’s to insure a proper count. Only a partial count is available for the current decade. Table 1 shows the total count of papers on social psychology published by decade, the total number of papers that make use of the concept of stereotype for those same time periods, and the number that cited the original source.

Research on social cognition has grown steadily over time with growth accelerating in recent decades. Even during the initial years following publication of the book, most published papers making use of the concept neglected to cite the original source. The non-citing percentage increased dramatically in a fashion consistent with the obliteration process through the 1950’s when no published papers cited the source. The book has been cited again in the last several decades, though by a lesser percentage of papers than during the earliest time period.

Insert Table 1 about Here

### **An Illustration of the Palimpsestic Syndrome**

Search results are consistent with the palimpsestic syndrome. The recent rebound in percentage citations in social psychology suggests some reason for questioning either the particular stage of the process or perhaps its permanence. Qualitative examination of the published papers themselves yields further insight into the dynamics.

The first reference to “stereotype” in Psychological Bulletin was Kimball Young’s 1927 paper entitled “The Field of Social Psychology”. Young surveyed subjects that had been recently studied by social psychologists. Reviewing several studies on prejudice, he noted “Rice’s experiment on ‘stereotypes’ [which] reveals still another way of uncovering the sources of prepossession.” While Young failed to reference Lippmann (1922) as a source of any relevance to understanding prejudice, he did point the reader to this particular experiment.

Rice (1926) reported an experimental test of errors subjects made in matching photographs of individuals to their actual professions (bootlegger, Bolshevik, French Prime Minister, business executive). In Rice’s words,

“What Lippmann calls ‘stereotypes’ or ‘pictures in our head’ concerning the supposed appearance of individuals of a certain race, class occupation, or social group, may determine to which of these groups the original of a photograph is unconsciously referred by the examiner.” (p. 268).

Young was plainly not ignorant of Lippmann’s work since he cited the sequel to Public Opinion, (Lippmann, 1926) as demonstrating that “Lippman has grown more skeptical of the older formulations of public opinion (Young, 1927, p. 674).”

Unfortunately Young is no longer available to fully clarify his thinking. But it appears reasonable to conjecture that his failure to cite the original source was consistent with Merton’s observation that since everyone likely to read the paper knew the source, the reader felt no obligation to cite the work. Perhaps he felt that

citing it would insult the reader's intelligence.

By the 1950's obliteration had advanced much further. Allport (1954) discussed the concept of stereotype at some length in his classic treatment of prejudice. His reference to Public Opinion was brief:

"To Mr. Lippmann goes credit for establishing the conception in modern social psychology. His treatment, however excellent on the descriptive side, was somewhat loose in theory. For one thing he tends to confuse stereotype with category." (p. 187).

Modern cognitive scientists have since rejected the basis for Allport's criticism, the clean distinction between stereotype and category (Lakoff, 1989; Rey, 1983; Rosch & Mervis, 1985; Medin, 1989). Another book from that era on the same subject (Saenger, 1953) contains sections on "Beliefs and stereotypes," "Effects of stereotypes", and "Stereotyping and projection" but no reference at all to Lippmann.

### **Obliteration in the Study of Managerial Cognition**

Using the JSTOR database we searched articles published in Academy of Management Journal, Academy of Management Review, Administrative Science Quarterly, and Organization Science. From the PSYCINFO database, we also searched for papers published in the Journal of Applied Psychology. We sought to find papers that used the terms "stereotype" or "schema". We then sought to find papers that cited Public Opinion.

Insert Table 2 about Here

The top panel of Table 2 summarizes the count of papers in each journal by decade of publication. There has been an increasing frequency of papers published that use the cognitive concepts of stereotype and/or schema across the various journals. The counts are greatest in AMR and lowest in JAP. The lower panel suggests that obliteration is virtually complete in the managerial cognition literature. The lone managerial cognition citation to the work in any of these journals (Zalkind &

Costello, 1962) appeared years ago in *Administrative Science Quarterly*. The other managerial citation (O'Connor, 1988) is an extended examination of the early history of the Harvard Business School. Though not really about managerial cognition, she notes the substantial link between Lippmann's ideas, the elite network in which he was embedded, and the subsequent development of Human Relations research at HBS.

### **The Context of the Original Source**

Examination of citation counts is consistent with Sills and Merton's conclusion that the stereotype concept has undergone considerable obliteration by incorporation. Advances in understanding the operation of stereotypes obliterated awareness of the original source. Translation of these research findings into the study of managerial cognition has furthered obliteration. There is essentially no recognition of the original source even in comprehensive literature reviews (eg. Walsh, 1995).

But has any significant information been wiped from the palimpsest by this overwriting? Or has winnowing proceeded efficiently? Examination of the more recent, rebound citations in social psychology indicate that little more about Lippmann's work is being passed along than that it was actually the original source.

One recent example was provided by Judd and Park (1993, p. 109):

"Social stereotypes have a long and convoluted history in social psychology. They were initially brought to the attention of social scientists by the journalist Walter Lippmann (1922) who defined them, albeit imprecisely, as generalizations about social groups that are rigidly held, illogically derived, and erroneous in content."

This interpretation is difficult to reconcile with Mervis and Rosch's contention that Lippmann's "pictures in our head" constitute the basis for all forms of categorical judgment. Indeed more recently Schneider (2004) looked closely at Public Opinion arriving at very different conclusions than either Judd and Park or Allport:

“Perhaps the most remarkable features of Lippmann’s treatment are the ways in which he anticipated much of what we now take to be the modern perspective on the topic, despite his lack of training in social science and psychology.”

Indeed what Lippmann actually wrote is much more subtle than “illogically derived and erroneous in content:”

“[T]here are uniformities sufficiently accurate, and the need for economizing attention is so inevitable, that the abandonment of all stereotypes for a wholly innocent approach to experience would impoverish human life. What matters is the character of the stereotypes, and the gullibility with which we employ them.” (Lippmann, 1922, p. 60).

So Lippmann considered stereotypes indispensable for economizing on scarce cognitive resources. Whether they serve a productive function depends on their “character” (i.e. content, so they could be more or less accurate) and the awareness by the individual of the limitations of their accuracy.

When employed by more sophisticated decision makers, they can serve a highly constructive function in “the cognitive toolbox” (Macrae & Bodenhausen, 2000). Though the proper conceptual machinery for making such statements precise, modern probability theory, had yet to be developed, Lippmann’s proposition addressed both expertise and judgmental confidence. One should rely on the accuracy of the stereotype only to the extent warranted by its validity. But one can accomplish nothing by means of “a wholly innocent approach”, i.e. without referencing any “pictures in our heads.”

Though lacking the clarity provided by probability theory, some process like the “representativeness heuristic” (Gilovich, Griffin, and Kahneman, 2003) was certainly implicated in Lippmann’s description of judgment. Schneider also went well beyond most citations to the work by providing some background on Lippmann’s own influences, noting that he studied psychology with William James at Harvard.

### **Lippmann’s Background and Influences**

Lippmann (1889-1974) also studied political science with Graham Wallas, another former student of James. Wallas's (1906) major work was an attempt to begin the building of a science of politics around a study of individual psychology and individual behavior. Lippmann cited both James (1890) and Wallas (1906) frequently in *Public Opinion*, though neither had developed anything quite like the stereotype construct. So what events led Lippmann to this enduring formulation?

Judd and Park's observation that Lippmann was a journalist is technically accurate. A co-founder of the *New Republic*, he later penned the most influential political newspaper column in America, "Today and Tomorrow" (Steel, 1999). These biographical details reveal a problem with describing Lippmann by occupation as "a journalist". Because, as Steel (1999) noted, there is no contemporary analog to Lippmann in modern journalism he cannot be a representative exemplar of the professional stereotype. Calling him simply a journalist, obscures important individuating information. Bob Woodward may be most similar among today's journalists because of his access to the inner circles at the very highest level of government. But Woodward writes (eg. Woodward, 2006; Bernstein & Woodward, 1974) in a style that eschews opinion or philosophy for reportage. He appears to provide little or no advice to Presidential administrations but functions as a conduit.

"Lippmann was not merely a stylist, or a confidant of the mighty. He was a learned man with a deep interest in philosophy and history, and the author of several path-breaking books. He had the mind of a scholar and the pen of a reporter... Overnight he became not only an authority, but a sensation, and even a household word (Steel, 1999: xiii)." Though he declined chaired professorships at Harvard and Amherst as well as the Presidency of the University of North Carolina he served on the Board of Overseers at Harvard for decades (Blum, 1999), mediating disputes over

hiring and promotions in the economics department among other University activities.

As an outsider whose Jewish ethnicity posed a serious impediment to penetrating into higher circles, Lippmann succeeded through a combination of assimilation, intellectual ability, effort, and shrewd network building. By 1912, he was serving as advisor to Theodore Roosevelt's presidential campaign. He would serve an advisory function for every subsequent President up to and including Richard Nixon. Djelic (2004) identified Lippmann as a central player in the transatlantic network responsible for the Marshall Plan to rebuild Europe in the 1950's. But it was during the wartime Wilson administration (1916-1919) that Lippmann participated most publicly. Figure 2 plots his position in an affiliation network of government agencies during the war and social science "think tanks" that emerged after the war. This was part of the network O'Connor (1998) noted in her AMR article on HBS.

A trusted confidante of Wilson's closest confidante, Lippmann was assigned to recruit and organize social science experts to prepare the administration for peace negotiations (Gelfand, 1963). In the process of compiling the analyses prepared by "The Inquiry" experts, Lippmann helped draft Wilson's most significant foreign policy speech. In the so-called Fourteen Points, Wilson articulated American war aims. They had such universal appeal that they later provided the stated basis on which Germany surrendered to the Allied and Associated Nations. When the peace conference began Lippmann was already in Paris serving on the Committee for Public Information. This agency had been responsible for generating propaganda to build enthusiasm for the war effort among the Allies and to undermine the morale of the Central Powers. The Paris Peace Conference represented, among many other things, an unprecedented opportunity for bridging structural holes in social networks. Lippmann initiated friendships with British delegates such as John Maynard Keynes

and Harold Nicolson.

At the conclusion of the war all three men became founding members of the so-called Anglo-American Institute for International Affairs (see Parmar, 2004), a pioneering think tank meant to facilitate research and expert policy guidance on matters of state in Great Britain and the United States. The American organization, “the Council on Foreign Relations (CFR)” quickly devised “the study group method” to enable the most expert members to work closely on generating reports about problems of paramount importance. Lippmann joined one of the first study groups, examining “International Organization.”

### **Two Case Studies in Applied Social Science**

Consideration of the context of Lippmann’s activities at the time he wrote “Public Opinion” establishes certain aspects of his work not previously considered by researchers studying “stereotypes.” The work actually represents two carefully linked case studies. The research method behind this theory development was participant-observation from an especially well placed vantage point. The first of Lippmann’s case studies seeks an explanation of the remarkable success achieved by the Committee on Public Information. The censorship and marketing efforts of the CPI changed the attitudes of a skeptical public that had elected Wilson for his neutrality into a rabidly anti-German war machine willing to send its youth to die in France and Belgium. American forces eventually suffered 204,000 wounded and 107,000 deaths, casualty figures considerably larger than the combined losses incurred in Vietnam and Iraq (Bottom, 2003).

As Lippmann explained it, the Committee succeeded by manipulating the “pictures” in the heads of the average citizen that he/she used to form a “pseudo-environment,” a mental model of the actual external environment. Figure 1

contains a few of the more memorable “pictures” that the CPI put in the heads of the American public. At least one of those pictures, Flagg’s finger-pointing Uncle Sam, has endured as a national symbol. According to the theory, as building blocks for mental models, these stereotypes yield an opportunity for leaders to “manufacture consent” (Lippmann, 1922, p. 158) for policies by manipulating the blind spots of the citizenry. Correlated errors in thinking caused by similar blind spots among citizens can generate mass support for ideas that would otherwise divide a diverse constituency. This process works both for business leaders and government officials.

But Lippmann’s second case study emphasized the problem posed by manufacturing consent on such a vast scale. The peace negotiations that ensued failed to generate a settlement serving the interests of any of the parties to it. It was not merely Pareto inefficient, it was an unworkable fiasco. Blind spots in the mental models, or “pseudo-environments”, of the negotiators were the primary cause. The very first example of a stereotype that Lippmann provided was an illustration of this obstacle to effective negotiating.

The three major negotiators at the peace conference represented studies in contrasting styles. The aged French Prime Minister Georges Clemenceau bargained in a tough, intransigent manner. He appeared unwilling to consider concessions that would compromise what he perceived to be French national interests, clashing frequently with Woodrow Wilson whom he disparaged as naïve and hypocritical (Keynes, 1977; Macmillan, 2003). Lippmann explained Clemenceau’s negotiating strategy as determined by the construction of a mental model of the problem from stereotypes held in memory:

“Could anyone have penetrated the mind of M. Clemenceau, would he have found there images of the Europe of 1919, or a great sediment of stereotyped ideas

accumulated in a long and pugnacious existence? Did he see the Germans of 1919, or the German type as he had learned to see it since 1871? He saw the type, and among the reports that came to him from Germany, he took to heart those reports, and, it seems those reports only, which fitted the type that was in his mind. If a junker blustered, that was an authentic German; if a labor leader confessed the guilt of the empire, he was not an authentic German.”

Lippmann neglected to elaborate on the events he was describing in this example. In fact he had long since departed Paris when they actually took place. He must have learned details of them through the network of contacts he forged, including fellow CFR member. He was, however, describing a very tangible turning point, not hypotheticals or generalities as it may appear to a modern reader. A “junker” is “as a term of reproach, a narrow-minded, overbearing (younger) member of the aristocracy of Prussia ... whose aim it is to maintain the exclusive social and political privileges of their class” (OED). The blustering “junker” in Paris was actually an older aristocrat, Count Ulrich von Brockdorff-Rantzau, Foreign Minister of the new German government that had deposed the Kaiser. He led the German negotiating team. Brockdorff-Rantzau, whose bearing and omnipresent monocle were the picture of a traditional Prussian aristocrat, had been privy to rumors that the Allies intended to impose harsh terms. According to rumors that had reached Berlin, the Allied negotiators had abandoned Wilson’s 14 Points to impose draconian terms that would bankrupt Germany, strip it of assets, and require an admission of guilt for causing the war (Luckau, 1941).

The labor leader in the German delegation, Johannes Giesberts, represented a considerable faction of the German public that embraced Wilson’s principles, acknowledging errors made by the Kaiser’s government in order to effect honest reconciliation with the Allies. When the Allies refused to allow the Germans face to face negotiations, permitting only the exchange of written notes it confirmed Brockdorff-Rantzau’s worst fears. At a hastily planned ceremony for handing the

Germans the first draft of the treaty for their study, the Count gave a speech which replaced cautious language proposed by his advisors with defiant language based on his own preconceptions of what the Allies had put in the document they were about to hand him.

“The demand is made that we shall acknowledge that we alone are guilty of having caused the war. Such a confession in my mouth would be a lie ... I do not want to reply to reproaches with reproaches but if we alone are asked to do penance, one should remember the Armistice... Crimes in war may not be excusable, but they are committed in the struggle for victory... The hundreds of thousands of noncombatants who have perished since November 11, because of the blockade were destroyed coolly and deliberately after our opponents had won... Remember that when you speak of guilt and attonement.” (Speech of Count Brockdorff-Rantzau on May 7, 1919 at the Trianon Palace Hotel, Versailles, Reprinted in Luckau, 1941, p. 220-221).

Compounding the effect, he remained seated for the duration of his oratory, neglecting to look at the Allied leaders as he spoke. Opinions differed about these actions. The Allied leaders, encouraged by Clemenceau, took Brockdorff-Rantzau's actions as confirmation of German conceit. Clearly Brockdorff-Rantzau reflected the typical German view, Giesberts did not. That certainly justified the need to impose harsh, even punitive, terms to prevent renewed German militarism. Others, noting the Count's inexperience with public speaking, interpreted his actions as driven by extreme nervousness and wobbly knees (Luckau, 1941; Macmillan, 2004).

The endgame of the negotiation reflected a self-fulfilling prophecy that left behind a complicated, incomplete, and badly flawed system of treaties. Despite Brockdorff-Rantzau's fears, there had actually been no real “war guilt” clause in the document that the Allies handed him on May 7. But there was, however, a flawed American construction in the reparations section drafted in a misguided attempt to moderate the financial demands France and Great Britain had attempted to impose on Germany. The clause was a compromise intended to help the Germans and it was inserted by the supposedly pro-German Wilson. Of course the Germans were privy

to none of these internal negotiations. And the clauses ambiguous phrasing was close enough to Brockdorff-Rantzau's fears that it became thereafter "the war guilt clause," a major tool of Nazi propaganda (Bottom, 2006b; see Hitler's quote above).

Other aspects of the Treaty system reflected still more limited judgment and foresight. Territorial decisions regarding the Balkan states, Palestine, and Mesopotamia have since posed vexing challenges to would-be peacemakers (Fromkin, 1989). The Mesopotamian settlement, which received scant direct attention from statesmen preoccupied with the German Treaty, resulted in the ill-fated British mandate and the deeply factionalized state of Iraq. One of the best informed British experts on the region, Gertrude Bell, confided her fears to a friend during the peace conference:

" ' O my dear they are making such a horrible muddle of the Near East, I confidently anticipate that it will be much worse than it was before the war – except Mesopotamia which we may manage to hold up out of the general chaos. It's like a nightmare in which you foresee all the horrible things which are going to happen and can't stretch out your hand to prevent them'" (quoted by Macmillan, 2004, p. 400).

Her alarm was shared by other experts at the Peace Conference. They constructed think tanks to provide a mechanism for correcting these errors, providing a system of policy formulation that would be wiser and more far sighted (Bottom, 2006a; Parmar, 2002). Bell, Keynes, and Lippmann all became founding members in the so-called Anglo-American Institute. In *Public Opinion*, Lippmann derived very general social theory and a prescriptive theory of organization from these two complex cases and from his experience with the think tanks. His work was based not merely upon his own observations but those of the central members in the elite network in which he was a highly central member (see Figure 2).

In *Public Opinion*, the concept of stereotype was introduced to provide a foundation for a complex theory of decision (see eg. Chapter 4: Time and Attention),

of negotiation (eg. Chapter 10: The Detection of Stereotypes), of marketing, (Chapter 21: The Buying Public) of leadership (Chapter 15: Leaders and the Rank and File), and ultimately for a normative theory of organization (Part 8: Organized Intelligence).

Examining the work as a whole and in its full context, it becomes apparent that Lippmann meant for stereotypes to stand for all “the pictures in our heads,” not merely those representing other people. What he intended was a very general theory of category formation and access along the lines eventually developed by Mervis and Rosch (1981; Rosch & Mervis, 1975; see also Lakoff, 1988; Medin, 1989). His was certainly not the narrower concept rendered decades later by Judd and Park, “as generalizations about social groups that are rigidly held, illogically derived, and erroneous in content.”

This general theory of category structure and access is illustrated by Lippmann’s critical observations about the risks of escalating conflict by engaging in the kind of “principled negotiation” later advocated by Fisher and Ury (1981). Here he generalized from the failure of the 14 Points he had helped draft toward a general proposition about negotiation.

“The very use of these principles, so pretentious and so absolute, meant that the spirit of accommodation did not prevail and that, therefore, the substance of peace was not there. For the moment you start to discuss factories, mines, mountains, or even political authority, as perfect examples of some eternal principle or other, you are not arguing, you are fighting. That eternal principle censors out all the objections, isolates the issue from its background, and its context, and sets going in you some strong emotion, appropriate enough to the principle, highly inappropriate to the docks, warehouses, and real estate. And having started in that mood you cannot stop.” (Lippmann, 1922, p. 86)

One particular destroyed French coal mine can be dealt with as a matter for monetary compensation. But a decision maker can only understand and reason about that particular mine by first relating it to some larger category of objects.

This is a very general cognitive proposition about negotiation. In the minds’ eye,

negotiators must deal with some categorical representation of an issue, not the particulars. The effect of the stereotype will loom greatest when, as was certainly true in this negotiation, the negotiators had scant opportunity to even visit destroyed mines to form mental pictures of them.

Lippmann concluded that when the categories used by the negotiators to structure the problem were chosen to represent, not the category “all coal mines” or even “all mines” but rather, eternal principles such as “open covenants of peace”, “self determination,” “a secure sovereignty”, or “the principle of justice to all peoples and all nationalities” (terms used by Woodrow Wilson in An Address to a Joint Session of Congress, 8 January 1918, reprinted in Link, 1984, p. 534) then possible compromises disappeared. The ability to settle differences or horse-trade concessions on one issue for concessions on another became acutely emotional matters. Using modern social science terminology, Wilson (abetted by Lippmann) had inadvertently turned the issue of compensation for damaged mines into something like the issue of compromise over “sacred values” (Tetlock, 2003). One cannot easily logroll a little “principle of justice to all peoples and all nationalities” here for a little sacrifice of “open covenants of peace” there.

Lippmann’s complex social theory, built from the rough outline of a complex psychological theory, was derived from the actual mistakes made by expert decision makers working in the very highest circles of business and government. It was derived from practical experience to provide the outline for a theory of social conflict and negotiation failure. In the final section of the book, “Organized Intelligence”, Lippmann crystallized the elite networks’ views regarding the solution to the problem posed by stereotypes, blind spots, and the complexity of modern society. This was a prescriptive organizational theory.

### **Blind Spots and Organized Intelligence**

The solution to developing wise policy can be seen as an extrapolation from the organizational work Lippmann undertook with the Inquiry. Then he had recruited and supported the best American social scholars to conduct applied research on the negotiation problems Wilson would confront at any peace conference. But his solution also affirmed and extended “the Anglo-American Institute for Foreign Affairs” organization design. Generalizing from these examples, Lippmann recommended financial investment in interdisciplinary, empirical social science. The money would fund economic analysis, political analysis, and psychological analysis on human blind spots and human error. As Lippmann described it, “the study of error is not only in the highest degree prophylactic, but it serves as a stimulating introduction to the study of the truth” (Lippmann, 1922: 256).

This quotation was one of several from Public Opinion that Sills and Merton (1990) memorialized in encyclopedic form, hoping to slow the obliteration process. Another such quotation indicated the reason Lippmann wanted this study of error funded. As only O’Connor (1988), among modern business scholars, seems to have recognized, he envisioned it providing a curriculum for future leaders who could understand the psychology of decision, individual limitations, and blind spots - “to prepare them to deal with the world with a great deal more sophistication about their own mind.”

#### **“The Network or Cartel in the Social Sciences”**

By the mid-1950’s, the newly structured “Office of the President” in the executive branch had been expanded to include both a Council of Economic Advisors and a Psychological Strategy Board. The social psychologist Hadley Cantril (1967) had advised Franklin Roosevelt throughout World War II, providing continual

updates on public attitudes toward events during the prosecution of that war. At the request of Psychological Strategy Board Director Nelson Rockefeller he conducted a demonstration of the impact of cognitive illusions on policy making to President Eisenhower in 1955. The Ford Foundation had recently established a program to fund and develop Behavioral Science. Their program included establishment of the think tank, the Center for Advanced Study in the Behavioral Sciences in 1952 (Robin, 2001).

Simultaneously the same foundation was embarking on a parallel project to improve the training of future business leaders by encouraging a curriculum founded on business research. That project would culminate at the end of the decade with the release of a report with recommendations to rebuild business schools using the tools of behavioral science (Bottom, 2006). The eventual result was a complete transformation of the industry. Within this same time frame, multiple congressional investigations culminated in warnings about a dangerous “network or cartel in the social sciences” (Wormser, 1958) funded by the interlocking directorates of the Rockefeller, Carnegie, and Ford Foundations.

The development of behavioral science, the means of implementing the basic concept of “organized intelligence” proceeded despite many obstacles. In describing a stereotype, Lippmann had asked what would be found “if one could penetrate the mind of M. Clemenceau.” Yet at this time, mainstream academic psychology was just beginning its rigid adherence to the dictum of pure behaviorism, purging any notions of mental process from scientific discourse (Watson, 1912; Simon, 1986). Behavioral science, a science dedicated to the prophylactic effects of studying human error, advanced the study of mental processes not through mainstream experimental psychology but instead haltingly through social psychology (eg. Cantril, 1934, Allport

& Postman, 1947), psychometrics (eg. Thurstone, 1927; 1932), and political science (Simon, 1986).

### **Obliteration of Context**

To complete our assessment of obliteration, we examined the content of all those papers that actually cited Lippmann in both social psychology and management.

Coders were trained to answer a series of questions regarding how Lippmann's work was referenced by these papers. The first question simply asked how many times Lippmann was referenced in the paper along with the following yes or no questions.

1. Did the author note that Lippmann was the original source of the psychological concept of "stereotype"?
2. Did the author refer to Lippmann's professional status as a journalist?
3. Did the author note that Lippmann was embedded in the higher circles of government and industry when he authored the book?
4. Did the author indicate that Lippmann had based his theory development on participant-observation of the CPI and/or the Paris Peace Conference?
5. Did the author disclose that Lippmann's concept of stereotype was meant to characterize all "pictures in our heads" or only those about other people?
6. Did the author note the connection between Lippmann's psychological theory and his social or organizational theory?
7. Did the author note the impact of Lippmann's work on the explosive growth in behavioral science that followed?

Table 3 summarizes the results of this coding process. Lippmann's embeddedness, methodology, and his social and organizational theory have been fully obliterated in social psychology as has the impact of the work on establishing behavioral science. One of but two managerial citations, O'Connor's archival research on HBS, was the only paper in the search set that noted Lippmann's social/organizational theory and his impact on the growth of behavioral science.

Writing in American Political Science Review, a journal outside the search set, Herbert Simon (1986) noted that during his doctoral studies in political science in the 1940's, Lippmann's Public Opinion and Wallas's Human Nature and Politics served as "the harbingers" of the "behavioral revolution". However neither Simon nor O'Connor discuss the concept of stereotype.

### **Discussion**

Merton likened scientific progress to a palimpsest. Current studies of a given phenomenon partially overwrite the original sources of ideas. In time, those sources may be fully obliterated. Sills and Merton (1990) claimed that "stereotype" was one concept that has been so obliterated. In this study we examined their contention. Citation counts in top journals revealed rapid obliteration reaching essential completion during the 1950's when no papers in social psychology cited it at all. An interesting rebound, of modest dimensions, occurred during the 1970's and 80's when a small percentage of papers appeared that again noted that Walter Lippmann introduced the social psychologist's definition of the concept in 1922.

What were the causes of this rebound? Perhaps it was the flowering of the cognitive revolution which allowed psychologists to rediscover the generality of Lippmann's concept of pictures in the head, as Rosch and Mervis did. They also rediscovered, as Bottom (2003) and Schneider (2004) have, that Lippmann's research was jarringly contemporary, seemingly "anticipating" very recent insights regarding cognition. Or perhaps the preventive efforts like Sills and Merton's encyclopedia or the ISI Social Science Citation Index have had their intended prophylactic effect on scientific error. Whatever the cause, the rebound effect appears to be fairly stable in percentage terms within social psychology. The rebound has yet to spread to management research, though management researchers are increasingly employing

the construct.

Merton and Sills claimed that some understanding of the context of an original idea is also important. Qualitative examination of citations revealed far more persistent obliteration. Research in social psychology has completely ignored the context, purpose, and broader message of the book. It has ignored the higher circles that helped Lippmann formulate his ideas. It has ignored his research method. Rebound sources, except Schneider (2004) have not attempted to look any further.

This obliteration phenomenon has proved to be no great impediment to understanding the operation and impact of stereotypes on particular judgments as the work of Bargh, Steele, Lambert, and others illustrates. However it has greatly confused debates over the potential implications of these mental processes for understanding applied problems. It has abetted disciplinary silos which divided cognitive theory and social cognitive theory. The failure to recognize source and method have also permitted unnecessary questions to persist about the external validity of this stream of research.

The new generation of rational choice modelers created in the wake of von Neumann and Morgenstern's (1947) utility theory axioms have consistently dismissed the evidence for systematic human error and cognitive illusions as laboratory parlor tricks (Gilovich & Griffin, 2002). Coursey and Roberts (1991) stated this plainly, "Competition in political markets will tend to eliminate aggregate anomalies [i.e. cognitive illusions or framing effects] just as it does in economic markets." Staking out a more balanced position, Zeckhauser (1986, S440) put the burden of proof that they are not parlor tricks entirely on behavioral science,

"If we believe that nonrational behavior in economics is as unimportant to real world resource allocation as optical illusions are to real world perception, the subject should be left to those few psychologists who wish to use economics as an area in which they explore thought ... Measuring the real world consequences is the major challenge to

the behavioralists.”

Zeckhauser’s burden of proof confuses the carefully controlled laboratory studies of psychologists with the unfortunately obliterated original source of those ideas. The source was not social psychologists, but rather elite policy makers who subsequently established and funded behavioral science to better understand their own persistent blind spots. His notion of a burden of proof was certainly not advanced by economists of Lippmann’s era (Keynes, 1919, 1977; Mitchell, 1914) who were either observers of, or party to, the same appalling policy mistakes. It seems highly unlikely that the Great Depression, World War II, and Holocaust that ensued would have led them to any greater appreciation for the descriptive power of rational choice assumptions or the power of market forces to eliminate cognitive illusions.

The conclusions Lippmann drew from his participant-observation of the two cases differed little from those of his fellow participants in the think tanks they formed after the war (see Keynes, 1919; Nicolson, 1933). As the author of what inadvertently turned into the fateful “war guilt clause” in the Treaty of Versailles put it,

“those who then played important parts on the world’s stage were blind and stupid... What is important is to find the reasons for this blindness and stupidity which are now apparent. This, I think, cannot be adequately explained in terms merely of individual deficiencies. Rather it seems consequent upon the operation of general principles.” (Dulles, 1940).

Through carefully controlled studies using laboratory experimentation, behavioral science has made considerable progress in advancing understanding of these general principles, just as it was intended to (Kahneman, 2003).

However the obliteration phenomenon coupled with disciplinary silos created obstacles to broader recognition of progress and to application of that understanding to applied fields such as management. Recent interest in “behavioral decision

theory” (Gilovich, Griffin, & Kahneman, 2003), “behavioral finance” (Thaler, 1993), “behavioral game theory” (Camerer, 2003) and “behavioral law and economics” (Korobkin & Ulen, 2000) is more quickly to lead to genuinely new insights if the obliterated parts of the palimpsest are not so occluded. None of these sources traces the “behavioral revolution” any further back than Herbert Simon. None has acknowledged Simon’s (1986) own observation that Walter Lippmann and Graham Wallas were the true harbingers of that revolution.

A primary concern for social science policy is that taxpayer subsidized programs of research will simply continue to rediscover obliterated parts of the palimpsest as new insights. Public patience for such inefficient knowledge management is likely to have its limits. The seemingly new insight (Bottom & Paese, 1997; Thompson, 2004) that stereotypes can affect the proper settlement of a negotiation suggests this pattern is likely. As we have shown, the concept of stereotype actually originated as an element of Lippmann’s theory of negotiation failure. If we can begin to more efficiently make use of existing knowledge while augmenting it with new research then professional education (whether business, law, medicine, engineering, or government) may finally prove the truth of Lippmann’s contention about the prophylactic effects of the study of human error. And in the process we may yet validate Sills and Merton’s decision to memorialize Lippmann’s quote in encyclopedic fashion.

## REFERENCES

- Allport, G. W. (1954). The Nature of Prejudice. Reading MA: Addison Wesley.
- Bargh, J. A., Chen, M., & Burrows, L. (1996). Automaticity of social behavior: Direct effects of trait construct and stereotype priming on action. Journal of Personality and Social Psychology, 71, 230-244.
- Baynes, N. H. 1969. The Speeches of Adolf Hitler: April 1922-August 1939, Volume I. New York: Howard Fertig.

- Bernstein, C., & Woodward, B. 1974. All the President's Men. New York: Simon & Schuster.
- Bilimoria, D., & Piderit, S.K. Board committee membership: Effects of sex-based bias. Academy of Management Journal, 37: 1453-1477.
- Blair, I.V., Judd, C. M., Sadler, M.S., & Jenkins, C. (2002). The role of afrocentric features in person perception: Judging by features and categories. Journal of Personality and Social Psychology, 83, 5-25.
- Bless, H., Schwarz, N., & Bodenhausen, G. V. (2001). Personalized versus generalized benefits of stereotype disconfirmation: Trade-offs in the evaluation of atypical exemplars and their social groups. Journal of Experimental Social Psychology, 37, 386-397.
- Bottom, W. P. (2006a). Before the Ford Foundation: Evolution of the research based model of business education. Best papers of the Annual Meeting of the Academy of Management, Atlanta GA.
- Bottom, W. P. (2006b). Smoke and mirrors: Cognitive illusions and the origins of appeasement. Working Paper, Washington University in St. Louis.
- Bottom, W. P. (2003). Keynes' attack on the Versailles Treaty: An early investigation of the consequences of cognitive illusions, bounded rationality, and framing effects. International Negotiation, 8: 367-402.
- Bottom, W. P., & Paese, P. W. (1997). False consensus, stereotypic cues and the perception of integrative potential in negotiation. Journal of Applied Social Psychology, 27, 1919-1940.
- Brigham, J. C. (1971). Ethnic stereotypes. Psychological Bulletin, 76, 15-38.
- Bruner, J. S. (1957). On perceptual readiness. Psychological Review, 63, 123-152.
- Bruner, J. S., Goodnow, J. J., & Austin, G. A. (1956). A Study of Thinking. New York: John Wiley.
- Camerer, C. (2003). Behavioral Game Theory. New York: Russell Sage.
- Cantril, H. (1967). The Human Dimension: Experiences in Policy Research. New Brunswick NJ: Rutgers University Press.
- Cantril, H. (1934). The social psychology of everyday life. Psychological Bulletin, 31: 297-330.
- Coursey, D. L. & Roberts, R. D. (1990). Competition in political and economic markets. Public Choice, 83-89.
- Dearborn, D., & Simon, H. A. (1958). Selective perception: A note on the

- departmental identification of executives. Sociometry, 21, 140-144.
- Djelic, M-L. (2004). Social networks and country-to-country transfer: Dense and weak ties in the cross-national diffusion of ideas and practices. Socio-Economic Review 2:341-370.
- Dulles, J. F. (1940). Preface to P. M. Burnett, Reparation at the Paris Peace Conference. New York: Columbia University Press.
- Eagly, A. H., & Steffen, V. J. (1984). Gender stereotypes stem from the distribution of women and men into social roles. Journal of Personality and Social Psychology, 46, 735-754.
- Edwards, A. L. (1940). Four dimensions in political stereotypes. Journal of Abnormal and Social Psychology, 35, 566-572
- Fiske, S.T., & Dyer, L. M. (1985). Structure and development of social schemata: Evidence from positive and negative transfer effects. Journal of Personality and Social Psychology, 48, 839-852.
- Fromkin, D. (1989). A Peace to End All Peace: The Fall of the Ottoman Empire and the Creation of the Modern Middle East. New York: Holt.
- Garfield, E. (1975). The “obliteration phenomenon” in science – and the advantage of being obliterated. Current Contents, Dec 22, 5-7.
- Gilovich, T., & Griffin, D. (2002). Introduction – Heuristics and Biases: Then and Now. In T. Gilovich, D. Griffin & D. Kahneman (Eds.), Heuristics and Biases: The Psychology of Intuitive Judgment. New York: Cambridge University Press, 1-18.
- Hamilton, D. L., & Sherman, S.J. (1996). Perceiving persons and groups. Psychological Review, 103, 336-355
- Hamilton, D. L., Stroessner, S. J., & Driscoll, D. M. (1994). Social cognition and the study of stereotyping. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Eds.), Social cognition: Impact on social psychology (pp. 291-321). San Diego, CA: Academic Press.
- Heilman, M. E., Block, C. J. & Stathatos, J. (1998). The affirmative action stigma of incompetence: Effects of performance information ambiguity. Academy of Management Review, 40: 603-625.
- Higgins, E. T. (1996). Knowledge activation: Accessibility, applicability, and salience. In E. T. Higgins & A. Kruglanski (Eds.), Social psychology: Handbook of basic principles (pp. 133-168). New York: Guilford Press.
- Iyengar, S., & Simon, A. F. (2000). New perspectives and evidence on political communication and campaign effects. Annual Review of Psychology, 51, 149-169.

- James, W. (1890). The Principles of Psychology. New York: Holt.
- Jolls, C., & Sunstein, C. R. (2006). The law of implicit bias. California Law Review, 94: 969-996.
- Judd, C. M., & Park, B. (1993). Definition and assessment of accuracy in social stereotypes. Psychological Review, 100, 109-128.
- Kahneman, D. (2003). Maps of Bounded Rationality: Psychology for behavioral economics. American Economic Review, Vol. 93, No. 5, 1449-1475.
- Karlins, M., Coffman, T. L., & Walters, G. (1969). On the fading of social stereotypes: Studies in three generations of college students. Journal of Personality and Social Psychology, 13, 1-16.
- Kashima, Y., Kashima, E.S., Gelfand, M., Goto, S., Takata, T., Takemura, K., & Zhang, Z. (2003). War and peace in East Asia: Sino-Japanese relations and national stereotypes. Journal of Peace Psychology, 9: 259-276.
- Kashima, Y., Woolcock, J., & Kashima, E. S. (2000). Group impressions as dynamic configurations: The tensor product model of group impression formation and change. Psychological Review, 107, 914-942.
- Katz, D., & Braly, K. W. (1935). Racial prejudice and racial stereotypes. Journal of Abnormal and Social Psychology, 30, 175-193.
- Keynes, J. M. (1977). Second thoughts on President Wilson. In E. Johnson (ed.), The Collected Writings of John Maynard Keynes, Vol XVII. London: MacMillan, 51-77.
- Keynes, J. M. (1919). The Economic Consequences of the Peace. London: Macmillan.
- Klauer, K. C., & Wegener, I. (1998). Unraveling social categorization in the “who said what?” paradigm. Journal of Personality and Social Psychology, 75, 1155-1178.
- Korobkin, R. B., & Ulen, T. S. (2000). Law and behavioral science: Removing the rationality assumption from law and economics. California Law Review, 88: 1051-1144.
- Kray, L. J., Galinsky, A., & Thompson, L. (2002). Reversing the gender gap in negotiations: An exploration of stereotype regeneration. Organizational Behavior and Human Decision Processes, 87: 386-409.
- Krueger, J. (1996). Personal beliefs and cultural stereotypes about racial characteristics. Journal of Personality and Social Psychology, 71, 536-548.
- Kulik, C. T., & Ambrose, M. L. (1993). Category-based and feature-based processes

in performance-appraisal: Integrating visual and computerized sources of performance data. Journal of Applied Psychology, 78: 821-830.

- Kunda, Z. (1999). Social Cognition: Making Sense of People. Cambridge MA: MIT Press.
- Kunda, Z., Spencer, S. J. (2003). When Do Stereotypes Come to Mind and When Do They Color Judgment? A Goal-Based Theoretical Framework for Stereotype Activation and Application. Psychological Bulletin, 129, 522-544.
- Lakoff, G. (1987). Women, Fire, and Dangerous Things: What Categories Reveal about the Mind. Chicago: University of Chicago Press
- Lambert, A. J., Payne, B. K, Jacoby, L. J., Shaffer, L. M., Chasteen, A. L., & Kahn, S. R. (2003). Stereotypes as dominant responses: On the “social facilitation of prejudice in anticipated public contexts. Journal of Personality and Social Psychology, 84, 277-295.
- Lambert, A. J., Chasteen, A. L., & Khan, S. & Manier, J. (1998). Rethinking assumptions about stereotype inhibition: Do we need to correct our theories about correction? In R. S. Wyer (Ed.) Advances in social cognition (Vol. 11). Hillsdale, NJ: Erlbaum.
- Lambert, A. J., Khan, S., Lickel, B., & Fricke, K. (1997) Mood and the correction of positive vs. negative stereotypes. Journal of Personality and Social Psychology, 72, 1002-1116.
- Link, A. S. (ed.). (1984). The Papers of Woodrow Wilson, v. 45. Princeton NJ: Princeton University Press.
- Linville, P. W., Fischer, G. W., & Salovey, P. (1989). Perceived distribution of the characteristics of in-group and out-group members: Empirical evidence and a computer simulation. Journal of Personality and Social Psychology, 57, 165-188.
- Linville, P. W., & Jones, E. E. (1980). Polarized appraisals of outgroup members. Journal of Personality and Social Psychology, 38, 689-703.
- Lippmann, W. (1927). The Phantom Public: A Sequel to ‘Public Opinion’. New York: Macmillan.
- Lippmann, W. (1922). Public Opinion. New York: Free Press.
- Luckau, A. (1941). The German Delegation at the Paris Peace Conference. New York: Columbia University Press.
- Macmillan, M. A. (2003). Paris 1919: Six Months That Changed the World. New York: Random House.
- Macrae, C. N., & Bodenhausen, G. V. (2000). Social cognition: Thinking

- categorically about others. Annual Review of Psychology, 51: 93-120.
- Mackie, D. M., & Smith, E. R. (1998). Intergroup relations: Insights from a theoretically integrative approach. Psychological Review, 105, 299-329.
- Manis, M., & Paskewitz, J. (1986). Stereotypes and social judgment. Journal of Personality and Social Psychology, 50, 461-473.
- McCauley, C., Stitt, C. L., & Segal, M. (1980). Stereotyping: From prejudice to prediction. Psychological Bulletin, 87, 195-208.
- Medin, D. L. (1989). Concepts and conceptual structure. American Psychologist, 44, 1469-1481.
- Merton, R. K. (2000). On the Garfield Input to the Sociology of Science: A Retrospective Collage. In B. Cronin & H. B. Atkins (eds.), The Web of Knowledge: A Festschrift in Honor of Eugene Garfield. Medford NJ: Information Today, 435-448.
- Merton, R. K. (1965). On the Shoulders of Giants: A Shandean Postscript. New York: Free Press.
- Merton, R. K. (1956). Social Theory and Social Structure. New York: Free Press.
- Mervis, C. B., & Rosch, E. (1981). Categorization of natural objects. Annual Review of Psychology, 32: 89-115.
- Mitchell, W. C. (1914). Human behavior and economics: A survey of recent literature. Quarterly Journal of Economics, 29: 1-47.
- Neale, M. A., & Fragale, A. R. (2006). Social cognition, attribution, and perception In negotiation: The role of uncertainty in shaping negotiating processes and outcomes. In L. Thompson (Ed.), Negotiation Theory and Research. New York: Taylor & Francis.
- Neuberg, S. L., & Newsom, J. T. (1993). Personal need for structure: Individual differences in the desire for simple structure. Journal of Personality and Social Psychology, 65, 113-131.
- Nicolson, H. (1933). Peacemaking 1919. London: Constable.
- O'Connor, E. S. (1999). The Politics of Management Thought: A Case Study of the Harvard Business School and the Human Relations School. The Academy of Management Review, 24: 117-131.
- O'Sullivan, C. S., & Durso, F. T. 1984. Effect of schema-incongruent information on memory for stereotypical attributes. Journal of Personality and Social Psychology, 47, 55-70.

- Parmar, I. (2004). Think Tanks and Power in Foreign Policy: A Comparative Study of the Role and Influence of the Council on Foreign Relations and the Royal Institute of International Affairs, 1939-1945. London: Palgrave.
- Plaks, J. E., & Higgins, E. T. (2000). Pragmatic use of stereotyping in teamwork: Social loafing and compensation as a function of inferred partner-situation fit. Journal of Personality and Social Psychology, 79, 962-974.
- Rice, S. A. (1926). "Stereotypes": A source of error in judging human character. Journal of Personnel Research, 5, 267-276.
- Robin, R. (2001). The Making of the Cold War Enemy: Culture and Politics in the Military-Intellectual Complex. Princeton, NJ: Princeton University Press.
- Roediger, H. L. & McDermott, K. B. 2000. Distortions of memory. In E. Tulving and F. I. M. Craik, (eds.), The Oxford Handbook of Memory. Oxford: Oxford University Press, 149-164.
- Rosch, E., & Mervis, C. B. (1975). Family resemblances: Studies in the internal structure of categories. Cognitive Psychology, 7, 573-605.
- Saenger, G. (1953). The Social Psychology of Prejudice. New York: Harper.
- Schneider, D. (2004). The Psychology of Stereotyping. New York: Guilford Press.
- Sherman, J. W., Lee, A. Y., Bessenhoff, G. R., & Frost, L. A. (1998). Stereotype efficiency reconsidered: Encoding flexibility under cognitive load. Journal of Personality and Social Psychology, 75, 589-606.
- Sills, D. L., & Merton, R. K. (Eds.). (1991). Social Science Quotations. Volume 19 of the International Encyclopedia of the Social Sciences. New York: Macmillan.
- Simon, H. A. (1986). Human Nature and Politics: The Dialogue of Psychology with Political Science. American Political Science Review, 79: 293-304.
- St. Clair, L. 1919. The Story of the Liberty Loans: Being a Record of the Volunteer Liberty Loan Army, Its Personnel, Mobilization, and Methods. How America at Home Backed Her Armies and Allies in the World War. Washington DC: James William Bryan Press.
- Steele, C., & Aronson, J. (1995). Stereotype vulnerability and the intellectual test performance of African-Americans, Journal of Personality and Social Psychology,
- Steel, R. (1999). Walter Lippmann and the American Century. New Brunswick, NJ: Transaction.
- Tetlock, P. (2003). Thinking the unthinkable: Sacred values and taboo tradeoffs. Trends in Cognitive Sciences, 7: 320-324.

- Theofiles, G. (1973). American Posters of World War I. New York: Dafran House.
- Thompson, L. (2006). Negotiation Theory and Research. New York: Taylor&Francis.
- Thurstone, L. L. (1934). The vectors of the mind. Psychological Review, 41, 1-32.
- Thurstone, L. L. (1927). Attitudes can be measured. American Sociological Review,
- Todorov, A., Mandisodza, A. N., Goren, A., & Hall, C. C. 2005. Inferences of competence from faces predict election outcomes. Science, 308: 1623-1626.
- von Neumann, J., Morgenstern, O. (1947). Theory of Games and Economic Behavior. Princeton, NJ: Princeton University Press.
- Wallas, G. (1906). Human Nature and Politics. Gloucester MA: Smith.
- Walsh, J. P. (1995). Managerial and Organizational Cognition: Notes from a Trip Down Memory Lane. Organization Science, 6: 280-321
- Watson, J. B. (1913). Psychology as the behaviorist views it. Psychological Review, 20, 158-177.
- Weber, R., & Crocker, J. (1983). Cognitive processes in the revision of stereotypic beliefs. Journal of Personality and Social Psychology 38, 689-703.
- Wheeler, S. C., Petty, R. E. (2001). The Effects of Stereotype Activation on Behavior: A Review of Possible Mechanisms. Psychological Bulletin, 127 (6), 797-826.
- Woodward, B. (2006). State of Denial. New York: Simon and Schuster.
- Wormser, R. (1958). Foundations: Their Power and Influence. New York: Devin Adair.
- Young, K. (1927). The field of social psychology. Psychological Bulletin, 24:661-691.
- Zalkind, S. S., & Costello, T. W. (1962). Perception: Some Recent Research and Implications for Administration. Administrative Science Quarterly, 7: 218-235.
- Zeckhauser, R. (1986). Behavioral versus rational economics: What you see is what you conquer. Journal of Business, 59: S435-S449.

Table 1

Articles published in major social psychology journals that reference stereotypes and the original source of that concept.

Decade	Articles in Social Psychology	Articles referencing "Stereotype" concept	Articles citing Lippmann's <i>Public Opinion</i> (1922)	Percentage
1920-1929	795	6	1	16.7%
1930-1939	840	10	2	20.0%
1940-1949	934	10	2	20.0%
1950-1959	1530	15	0	0.0%
1960-1969	2183	18	1	5.6%
1970-1979	3401	49	1	2.0%
1980-1989	4015	103	10	9.7%
1990-1999	4440	125	7	5.6%
2000-2006	3495	127	8	6.3%

Note. Sources searched were the Annual Review of Psychology, Psychological Review, Psychological Bulletin, Journal of Personality and Social Psychology and its precursors, Journal of Experimental Social Psychology, Personality and Social Psychology Review, Personality and Social Psychology Bulletin, and Journal of Applied Social Psychology.

Table 2

Content of the references to Lippmann (1922) or later editions in major outlets of social psychology and management.

Authors	Year	Times Referenced	Noted Origin	“Journalist”	Elite Network	Case Studies	Cognitive Theory	Social Theory	Behavioral Science
1 Katz & Braly	1935	1	Yes	No	No	No	No	No	No
2 Edwards	1940	3	Yes	No	No	No	Yes	No	No
3 Karlins, et al.	1969	1	Yes	No	No	No	No	No	No
4 Brigham	1971	10	Yes	No	No	No	No	No	No
5 Linville & Jones	1980	1	No	No	No	No	No	No	No
6 McCauley, et al.	1980	11	Yes	No	No	No	Yes	No	No
7 Mervis & Rosch	1981	1	No	No	No	No	Yes	No	No
8 Weber & Crocker	1983	2	Yes	No	No	No	No	No	No
9 Eagly & Steffen	1984	1	No	No	No	No	No	No	No
10 O’Sullivan & Durso	1984	2	Yes	No	No	No	No	No	No
12 Fiske & Dyer	1985	1	No	No	No	No	No	No	No
13 Manis & Paskewitz	1986	1	No	No	No	No	No	No	No
14 Martin	1987	1	Yes	No	No	No	No	No	No
15 Linville, et al.	1989	1	No	No	No	No	No	No	No
16 Neuberg & Newsom	1993	1	No	No	No	No	No	No	No
17 Judd & Park	1993	1	Yes	Yes	No	No	No	No	No
18 Krueger	1996	2	Yes	Yes	No	No	No	Yes	No
19 Hamilton & Sherman	1996	1	No	No	No	No	No	No	No
20 Sherman, et al.	1998	7	Yes	No	No	No	Yes	No	No
21 Klauer & Wegener	1998	1	No	No	No	No	No	No	No
22 Mackie & Smith	1998	1	No	No	No	No	No	No	No
23 Plaks & Higgins	2000	1	No	No	No	No	No	No	No
24 Kashima, et al.	2000	1	No	No	No	No	No	No	No
25 Macrae & Bodenhausen	2000	2	Yes	No	No	No	No	No	No
26 Iyengar & Simon	2000	1	No	No	No	No	No	No	No
27 Bless, et al.	2001	1	No	No	No	No	No	No	No
28 Blair, et al.	2002	1	Yes	No	No	No	No	No	No
29 Klauer, et al.	2003	1	No	No	No	No	No	No	No
30 Sherman, et al.	2005	1	No	No	No	No	No	No	No
31 Zalkind & Costello*	1962	1	Yes	No	No	No	No	No	No
32 O’Connor*	1998	8	No	No	No	No	No	Yes	Yes

\*Represent publications in management journals.

Table 3

Count of articles using “Stereotype” or “Schema” concept in major management journals.

Decade	AMJ 1963-2000	ASQ 1956-2002	Org. Sci. 1990-2001	AMR 1976-2000	JAP 1920-2006	Total	Cites of 'Public Opinion'
1920-1929	0	0	0	0	2	2	0
1930-1939	0	0	0	0	0	0	0
1940-1949	0	0	0	0	3	3	0
1950-1959	0	8	0	0	2	10	0
1960-1969	10	28	0	0	4	42	1
1970-1979	30	24	0	26	6	86	0
1980-1989	24	36	0	56	12	128	0
1990-1999	40	21	46	61	4	172	1
2000-2006	7	13	9	16	9	54	0

Note. AMJ represents *Academy of Management Journal*; ASQ represents *Administrative Science Quarterly*; Org Sci. represents *Organization Science*. JAP represents *Journal of Applied Psychology*.

Figure 1.

A selection from the images produced under the auspices of the Division of Pictorial Publicity (a department of the Committee on Public Information) to change American attitudes toward participation in the war in Europe.



Note. The poster art was created by (from l to r), Frederick Strothmann (1918), H. R. Hipps (1917), James R Flagg (1917), and Howard C. Christy (1918) (source: St. Clair, 1919; Theofiles, 1973).