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Bias and Bifurcation in the Telling of the History of Social Psychology

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Abstract

The demand for understanding human behavior during World War II, created an unprecedented approach to social scientific research that required cross-disciplinary collaboration among anthropologists, sociologists, and psychologists. For many, this was a first opportunity to work with scholars from other academic disciplines (Dallenbach, 1946). In addition to the challenging nature of measuring an attitude, these assignments led psychologists and sociologists to envision research problems in ways that they had never imagined, and to experiment with new methodologies in research design and data analysis (Smith, 1984). What resulted from these innovations was a new ability to quantify human attitudes and morale, which would eventually lead to the emergence of a new field of psychology, called "Social Psychology" in the years following the war (Triplet, 1992). This article explains the ways in which historians and practitioners characterize the causal and/or correlative relationship between the research conducted by social scientists on behalf of the United States Government during WWII and the emergence of Social Psychology as an independent discipline in the years following WWII. Both substantive and methodological advances were made in social science research during this time, which created the conditions for the evolution of Social Psychology as an academic and a scientific discipline (Allport & Schmeidler, 1943; Allport & Veltfort, 1943). I illustrate the extent to which the methodological innovations are overlooked in the retelling of this history.

Keywords: social psychology, history of science, World War II, behavioral sciences research, attitude measurement, methodology in social psychology.

> "Just as World War I gave new impetus to the study of human aptitudes, so World War II has given new impetus to the study of attitudes. The psychologists, anthropologists and sociologists who studied problems of motivation and social adjustment in World War II have an obligation, comparable to that of the generation earlier, to report on their studies and thus to speed up the process of development of the science of man".
>
> Samuel Andrew Stouffer, *The American Soldier,* 1949

Because war requires a deep understanding of the human psyche to motivate soldiers, inspire allies, and outsmart enemies, war fighters have always considered psychology a fundamental aspect of their craft. Since people have been fighting, warriors have been studying other warriors, friend, and foe (Sun Tzu, 1981). One of the results of that preoccupation has been the development of the social sciences more broadly, and psychology more specifically (Boring, 1945). Whether the level of analysis is individuals, groups or societies, war has shaped our understanding of human behavior (Clausewitz, 1976).

One of the wars for which that relationship cannot be overstated, is World War II. In the United States, almost one thousand social scientists were recruited to conduct research that focused primarily on measuring soldier behaviors and attitudes (Clausen, 1984). The War Department wanted to know soldiers' thoughts about a collection of administrative aspects of their military experience: their food, housing, leadership, on-post services such as the libraries and gymnasiums, the soldiers' clubs, their exercise requirements, and their uniforms. In addition, the War Department wanted to know soldiers' thoughts about more tactical and operational matters, such as their thoughts about the war overseas, their fellow soldiers, African American soldiers, their leaders, combat duty, British soldiers as allies, service in Guam, and the cohesion and morale in their units (What the Soldier Thinks, 1945). The nature of this kind of attitudinal research required scientists for the first time to gather both qualitative (interview) and quantitative (survey) data, and then combine those to create an accurate and generalizable estimate of what soldiers felt and thought (Smith, 1984; Clausen, 1984; Herman, 1995).

The challenge of this unprecedented approach to social scientific research would demand cross-disciplinary collaboration among anthropologists, sociologists and psychologists, and for many of them, this was a first opportunity to work with scholars from other disciplines (Dallenbach, 1946). In addition to the challenging nature of measuring an *attitude*, these assignments led psychologists and sociologists to envision research problems in ways that they had never imagined, and to experiment with new methodologies in research design and data analysis (Smith, 1984). What resulted from these innovations was a new ability to quantify human attitudes and morale, which would eventually lead to the emergence of a new field of psychology, called "Social Psychology" in the years following the war (Triplet, 1992).

My purpose here is to explain the ways in which historians and practitioners characterize the causal and/or correlative relationship between the research conducted by social scientists on behalf of the United States Government during WWII and the emergence of Social Psychology as an independent discipline in the years following WWII. Both substantive and methodological advances were made in social science research during this time, which created the conditions for the evolution of Social Psychology as an academic and a scientific discipline (Allport & Schmeidler, 1943; Allport & Veltfort, 1943). I will illustrate the extent to which the methodological innovations are overlooked in the retelling of this story.

I investigated research about the history of the behavioral or social sciences, the history of Psychology, the history of Social Psychology, WWII and the social sciences, WWII and Psychology, WWII and Social Psychology, the relationship between the United States government and academia, the American Psychological Association, and other associations of social scientists during WWII. I also examined the history of research methodologies in the social sciences during WWII.

I examined first-hand accounts of the methodological and substantive challenges posed by the types of projects assigned to social scientists during WWII. I gleaned factual accounts of the actual experiments and measurements that were crafted on behalf of the mandates issued by the U.S. Government. From this research, it was possible to determine the details of the experiments and the analyses that were conducted and how those reflective practitioners recounted their activities. From that history, I inferred correlations between methodological and substantive innovations and the conditions that reportedly parented Social Psychology.

I examined historical sources for insights into how those scholars made sense of the accounts produced by the primary sources. From these secondary sources, I analyzed the purported relationship between the work done during WWII and the linkages attributed to the emergence of Social Psychology following the war. This analysis provided insight into what questions the existing scholarship raises about the origins of Social Psychology, and to what extent that scholarship is reliable and comprehensive. Specifically, I examined prevalent themes for the relative weight historians put on methodological and substantive innovations and the role they played in creating the conditions for Social Psychology to emerge in the years following WWII.

Here I outline the specific ways that methodological and substantive advances are treated in the literature of this history. Of interest is what is stated regarding the links between the U.S. Government's task assignments, the interdisciplinary research designs fashioned to answer the challenge of those assignments, and the methodological advances that enabled the research projects to be completed. I highlight how the primary and secondary literature characterizes those relationships and connects them to the emergence of Social Psychology. I also examined the prevalent themes that emerged with respect to the relative impact that methodological and substantive innovations had on the development of Social Psychology as its own discipline.

As awareness of Social Psychology spread in the aftermath of WWII, many institutions sought out its powers to inform their work. Not only did the Central Intelligence Agency invest in the promises of Social Psychology (Moore, 1978), it would become the "go to" science for the ubiquitously influential advertising industry, and would eventually inform what would become a national conversation about our Constitution and race, sex and equality (Cina, 1981). This burgeoning appetite for Social Psychological expertise translated into higher education as a demand, and that demand was answered – Social Psychology exploded in popularity among graduate students (Jahoda, 2007).

In response to the increased popularity and perceived importance of Social Psychology, institutions of higher education altered their organizational structures to accommodate the new discipline. Psychology departments in many colleges and universities across the country added Social Psychology programs and hired scholars who could lead those programs and their students. By the late 1950's, Social Psychology had established itself within the domain of higher education and was on its way to becoming a very popular science in the field of Psychology (Moore, 1978). From the 1950's through the 1970's, the number of Ph.D.'s awarded in Social Psychology tripled from roughly 400 to 1,200 (National Science Foundation Report, Special Reports | NSF 06-319 | October 2006; "U.S. Doctorates in the 20th Century"; Appendix A: Doctorates awarded, by detailed field; http://www.nsf.gov/statistics/nsf06319/appa.cfm#taba1).

Given the significant rise of the field of Social Psychology during the post WWII years, it is important to clearly understand the conditions that led to its emergence and popularity. The discipline has a history, and in that history, there are substantive and methodological accounts of what led to the emergence of the science after WWII, and these accounts have framed our understanding of it. I contend that in those histories, there are oversights, which have altered, albeit slightly, our knowledge of the genesis of an academic discipline that has had a profound impact on the behavioral sciences and higher education.

Social Psychology is the scientific study of how the actual, imagined, or implied presence of others influences people's thoughts, feelings, and behaviors (Allport, F., 1924). During WWII, both the substantive and methodological innovations made in Social Psychology were a direct result of government-commissioned research. These disciplinary advances created the conditions for the emergence of Social Psychology in the years following the war (Allport, G., & Schmeidler, 1943; Allport, G., & Veltfort, 1943; Viteles, 1946; Katz, 1951; Lumsdaine, 1984; Sewell, 1989; Gilbert, Fiske, & Lindzey, 1998). I examined how social scientists and historians wrote the histories of the theoretical and the methodological innovations that occurred in social psychological research during and after WWII. Much of the history of Social Psychology focuses on the substantive (theoretical) innovations made during WWII, and much less of it is attributed to the methodological (design, sampling, survey and statistical) innovations that occurred in service of the demanding tasks asked of these social scientists. If these histories are examined closely, it becomes clear that the methodological innovations, which are marginalized in the telling of the history of Social Psychology, are quite critical to the success of the research during WWII.

In the early part of the twentieth century, scholars in the United States, influenced by European "social scientists", continued the social scientific intellectual trajectory by focusing their work in what would become social psychology. William James introduced the first vestiges of psychology to Harvard University through his work in the Philosophy department. George Herbert Mead, of the University of Chicago, and James Mark Baldwin, of Johns Hopkins and Princeton University, both adopted elements of European studies into their own work in what would become Experimental Psychology. In turn, Mead influenced the foundations of Social Psychology through his work in social behaviorism, which focused on the study of communication behavior in social situations. Baldwin, who founded the Psychology Department at Princeton University, established early work in Developmental Psychology and influenced Jean Piaget, Lawrence Kohlberg and Lev Vygotsky. In addition, William McDougall of Harvard University and Edward Ross of the University of Wisconsin published the first books on Social Psychology in 1908 (McDougall, 1908; Ross, 1908). However, the two books were fundamentally different in scope and perspective, underscoring the fact that Social Psychology was not yet close to becoming a codified discipline (Lubek & Apfelbaum, 2000). (For a review, please see Jahoda, 2007).

In the first decades of the 20th Century, U.S. government sponsored research accelerated the development of the social sciences, because the work was focused, funded, and protected. During WWI, psychologists like Louis Thurstone of the University of Chicago, worked on intelligence testing for the U.S. government. Shortly after WWI, Thurstone, influenced by Floyd Allport of Syracuse University, began to focus his measures on attitudes.

Allport had written a textbook on Social Psychology in 1924, and the sections regarding human attitudes intrigued Thurstone, and he began to focus his work on attitude measurement. In 1931, while serving on President Hoover's task force to study social trends, Thurstone developed a scale that measured the impact of war films on people's attitudes toward war (Britt, 1937; Jahoda, 2007).

The work that social scientists put into President Hoover's task force, eventually led to the establishment of the Society for the Psychological Study of Social Issues (SPSSI) in 1936. Members of this organization dedicated themselves to providing solutions to the social problems that were increasingly coming into focus with government-funded studies. SPSSI further advanced the developmental trajectory of the social sciences by harboring interest in the collaboration of psychologists and sociologists. This kind of interdisciplinary collaboration was one of the key factors that led to the development of Social Psychology (Lundberg, 1936; Britt, 1937; Brown, 1937; Murphy, 1939; Cartwright, 1948; Allport, 1968).

In the interwar years, Social Psychology grew in popularity and many social scientists were exploring ways to better understand the influences that society had on individuals and that individuals had on each other. What emerged, however, was a plethora of publications on "Social Psychology", none of which resembled the other. This lack of an organizing principle or grand theory, and any methodological consistency, caused many to call for more rigor, precision and modeling after the "physical" sciences (Lundberg, 1936; Britt, 1937; Brown; 1937; Allport, F., 1937; Murphy, 1939).

> "We need a social psychology which is something more than the elaboration of the obvious, and something more than a collection of good guesses. We need a vital and well systematized knowledge of fundamentals in human motivation and the manner in which these fundamentals are canalized and expressed in an ordered society (Murphy, p. 109)".

Specifically outlined was the need for carefully defined and reliably measured human variables under varying conditions. This level of control combined with highly developed design and methodology, would contribute to Social Psychology becoming a *respectable* science (Britt, 1937; Lundberg, 1936, Murphy, 1939; Cottrell & Gallagher, 1941). Given that Social Psychology rested at the intersection of increasingly individuating disciplines, its growth and development toward more scientific rigor required interdisciplinary collaboration. Calls for such cooperation emerged in the 1930's and manifested in the work of Yale's Institute for Human Relations, as well as publications such as The Social Sciences and their Interrelations by Ogburn & Goldenweiser (Ogburn & Goldenweiser, 1927; Cottrell & Gallagher, 1941). Braced within this movement for more scientific validity was a call for moderation with respect to the quantitative aspects of measurement. These scholars were afraid that methodology might compete for the place of sound thinking and rational conceptualization. They cautioned:

> There is nothing in the journals that bulks so large and boots so little as the current attempts to measure various aspects of personality. With a few welcome exceptions, the quantifiers seem to have lost track of the intricacy and subtlety of the material at hand, namely interpersonal relations, in favor of developing methods which deal with increasingly segmental and isolated bits of behavior (Cottrell & Gallagher, p. 115).

These social scientists, opposing the unbridled growth of methodology, felt Social Psychological insights did not come from the cultivation of statistical research, but rather from combining a variety of philosophical and scientific disciplines and bringing them to bear on social phenomena (Britt, 1937; Brown; 1937; Allport, F., 1937; Cottrell & Gallagher, 1941).

By the beginning of World War II, the social sciences had evolved toward well-defined disciplinary fields such as Sociology, Psychology, Economics, and Anthropology. Social Psychology was not yet an official academic discipline. It had certainly been named, and was a topic of great interest, but it had not yet matured enough to produce its own grand theory or any standardized experimental methods. It was with this tension between the desire to become more scientific and methodologically sound and the desire to become more philosophically and conceptually coherent that social scientists entered WWII.

In the recorded history of Social Psychology there are differing degrees to which authors give credit to substantive and methodological innovations for creating the conditions leading to the establishment of the discipline. In 154 histories written from WWII to 2010, two primary categories of focus emerge: those focusing on the theoretical content collaborations and those focusing on the methodological innovations contributing to the establishment of the discipline of Social Psychology.

I examined 117 content-related books and articles, and 37 methods-related books and articles in my research. Two important sets of volumes anchored this investigation. The first is the iterative Handbooks of Social Psychology published in 1935, 1954, 1968, 1985, 1998 and 2010. Each of these volumes begins with a section dedicated to a "state of the discipline" address, which includes a detailed outline of the origins of the field. I focused my attention on these histories, because they are the stewards of the discipline's story.

In addition to these handbooks, I included a second set of volumes written during and immediately following WWII. Studies in Social Psychology during World War II (Stouffer, et. al., 1950), is a four-volume record of the social scientific experiments and studies conducted for the U.S. Government during World War II. Samuel Stouffer, a Social Psychologist from the University of Chicago, led the effort to record and relay a comprehensive history of those efforts. The first volume, *Adjustment During Army Life* (Stouffer, Suchman, DeVinney, Star, and Williams, 1949), focuses on examining the challenges young soldiers experienced adjusting to the institutional life of the United States Army. The second volume, *Combat and Its Aftermath* (Stouffer, Lumsdaine, A., Lumsdaine, M., Williams, Smith, Janis, Star and Cottrell, 1949), studies the specific personal issues encountered in combat and their effects. The third volume, *Experiments on Mass Communication* (Hovland, Lumsdaine and Sheffield, 1949), outlines the effects of mass communication at home and abroad on attitudes toward the war effort. The fourth and final volume, *Measurement and Prediction* (Stouffer, Suchman, DeVinney, Star and Williams, 1949), examines the methodological problems of measurement and prediction, and suggests directions for future technologists.

For each item of these histories, I recorded the attributions authors made regarding the drivers and enablers of progress and development in Social Psychology. Interestingly, those attributions assimilate into two primary categories. The first category is the attribution of theoretical and content innovations. By this I mean, detailed discussions about the intellectual and philosophical underpinnings of the growth of the science. In these cases, authors discuss the ways that philosophy, sociology, anthropology and psychology interacted to inform the developing perspectives and theories of Social Psychology. As these authors gleaned new insights from their studies and thought work, they wrote about their impact on the growth and development of Social Psychology as a discipline. The second category that emerged was the attribution of methodological innovations. By this I mean, detailed discussions of the advances in statistics, research design, survey administration, sampling methods, and measurement that contributed to the growth and development of the science of Social Psychology. In these cases, authors discuss the ways that research methods enhanced and enabled the developing perspectives and theories of Social Psychology.

A careful analysis of these two sets of volumes, and much of the literature of the history of Social Psychology, reveals an interesting bias that suggests the content or theoretical advances in Social Psychology factor more prominently in the histories than the methodological advances in Social Psychology. There is an interesting observation that supports this assertion. Gordon Allport alone wrote four of the six history sections in the Handbooks published in the 20th Century (Allport, G., 1935, 1954; 1968; & 1985). In each of these histories, Gordon Allport uses his own father's (Floyd Allport) definition of Social Psychology, published in 1924 in the book Social Psychology (Allport, F., 1924). The very same definition appears in each of those Handbook histories (Allport, G., 1935, 1954; 1968; & 1985). This, in of itself, does not necessarily suggest a bias, however, Gordon Allport actively campaigned to caution Social Psychologists against becoming too enamored of experimental methodologies. He invariably attributed the melding of the theoretical aspects of psychology, sociology, philosophy, and anthropology to the emergence of Social Psychology as a discipline. He guardedly mentioned the role that experimental methods played in the development of the science, and always caveated any consolations with cautions (Allport, F., & Boring, 1967; Gardner & Allport, G., 1959; Lindzey, 1989; Glibert, Fiske, & Lindzey, 1998; Johnson & Nichols, 1998).

In much of the historical literature of Social Psychology exists this same bias toward theoretical and content innovations, and away from experimental and methodological ones in recounting the growth and development of Social Psychology. Although those methodological histories do exist, they rarely appear as prominent or with equanimity. One of the exceptions is the second set of volumes by Samuel Stouffer and his colleagues (1950) Studies in Social Psychology during World War II. These authors do provide a detailed account of the methodological innovations that contributed to the evolving science of Social Psychology (Stouffer, S.A., Guttman, L., Suchman, E. Lazarsfeld, P., Star, S. & Clausen, J., 1950; Mahoney & Baker, 2007; Lubek & Apfelbaum, 2000; Kish, 1990; Likert, 1948; Stouffer, Suchman, DeVinney, Star and Williams, 1949).

These volumes focused on some of the more comprehensive studies undertaken by the Research Branch of the Information and Education Division of the War Department during World War II. Each volume's research focus is evident in its title. Together these volumes covered such topics as adjustment to Army life and individual morale, the impact of both mass communications and combat on soldiers' attitudes about a variety of issues. In addition, there was one entire volume focused on articulating the key methodological considerations and innovations that allowed for each of the many studies to be completed. In addition to the laborious detail found in the fourth and final volume, *Measurement and Prediction* (Stouffer, et. al., 1949), each volume contained some brief examinations and explanations of the design and statistical innovations achieved for each experiment. These four volumes, only issued once, recount the methodological drivers and enablers of the maturation of the science of Social Psychology, and yet never obtained the level of circulation or respect that each of the handbooks of Social Psychology did. In part, the lack of visibility of these important texts biases the telling of the histories of Social Psychology. In most of its history, theory-oriented discussions appear as critical and central to the development of Social Psychology, despite the major role methodological advances played in the advancement of the field.

During World War II, the United States Government recruited over one thousand social scientists to conduct research that focused primarily on measuring soldier behaviors and attitudes (Clausen, 1984; Katz, 1951; Stouffer, 1950; Huey, 1947; House, 2008; Britt & Morgan, 1946). The War Department wanted to better understand soldiers' thoughts and feelings about various aspects of their daily lives: their food, housing, leadership, on-post services such as the libraries and gymnasiums, the soldiers' clubs, their exercise requirements, and their uniforms. In addition, the War Department wanted to know soldiers' thoughts about more tactical and operational matters, such as the war overseas, their fellow soldiers, African American soldiers, their leaders, combat duty, British soldiers as allies, service in Guam, and the cohesion and morale in their units. These studies assisted the War Department in war planning by providing keen insight into troop morale, troop attitudes, enemy morale, and public opinion (What the Soldier Thinks, 1945; Dallenbach, 1946; Boring 1945; Cartwright, 1946; Stouffer, et. al., 1950). The fact that such a vast number of attitudes had to be measured quickly and often required scientists for the first time to invent new ways of gathering both qualitative (interview) and quantitative (survey) data, and then combine those to create accurate and generalizable estimates of what soldiers felt and thought (Smith, 1984; Clausen, 1984; Herman, 1995).

The challenge of this unprecedented approach to social scientific research would demand cross-disciplinary collaboration among anthropologists, sociologists and psychologists, and for many of them this was a first opportunity to work with scholars from other disciplines (House, 2008; Dallenbach, 1946; Cartwright, 1946; Merton & Lazarsfeld, 1950; Smith, 2003). In addition to the challenging nature of measuring an *attitude*, these assignments led psychologists and sociologists to envision research problems in ways that they had never imagined, and to experiment with new methodologies in research design and data analysis (Smith, 1984). As a result of these innovations, scholars gained a new ability to *quantify* human attitudes and morale, which created the conditions for further maturation of the field of study called Social Psychology in the years following the war (Stouffer, et. al., 1950; Merton & Lazarsfeld, 1950; Triplet, 1992; Johnson & Nichols, 1998). Unfortunately, the histories of Social Psychology rarely highlight these methodological innovations.

The Research Branch of the Information and Education Division of the War Department ran many of the government-mandated studies. The administrators selected a handful of social scientists to conduct research on its behalf. From the University of Chicago, they selected Samuel Stouffer to run the professional staff. In turn, Samuel Stouffer recruited Leonard S. Cottrell from Cornell University to run the survey section, and Carl I. Hovland of Yale University to run the experimental section. In addition, Stouffer established a small statistics section for his colleague A.J. Jaffe from Columbia University to run. The Research Branch also had a large pool of consultants from academia and the government, many of whom became leading Social Psychologists. Among these were John Dollard of Yale, Louis Guttman of Cornell, Hadley Cantril and Frederick Mosteller of Princeton, Paul Lazarsfeld, Robert Merton and Frank Stanton of Columbia, Philip Hauser of the Census Bureau and his colleague Rensis Likert of the Department of Agriculture. There also was a field section responsible for managing the data collection activities of all the field stations located in the following theatres: Europe, Mediterranean, Central and Southwest Pacific, Panama and the Caribbean, India-Burma and Alaska. In its short tenure during WWII, this office surveyed more than 500,000 soldiers and produced more than 300 manuscripts (Stouffer, et. al., 1949).

Although this office conducted thousands of studies on behalf of the U.S. Government, many are classified, and inaccessible. Of the studies the U.S. Government did release, many immediately influenced U.S. Government policy and practices.

Typically, the U.S. Government commissioned these studies with a demand for urgency because of pressing wartime operational or personnel issues. The duty-bound social scientists forced themselves to design, deploy, collect, analyze and write in unprecedentedly abbreviated time frames, the results of which were siphoned into the government's decision-making processes. Of these visible and influential research projects, I have selected three to illustrate. These studies include an analysis of infantry soldier morale and motivation, the influence of propaganda on attitudes toward combat and unit cohesion, our enemies and reasons for the war, post-war demobilization, and the G.I. Bill (Stouffer, et. al, 1949).

The first of these influential studies, titled *Infantry Morale*, determined reasons for the poor attitudes Infantry soldiers held toward their branch of service, training, daily routines, pay, and duty. Initial research data showed that the U.S. Army had a problem. Infantrymen suffered from critically low morale. The social scientists realized they needed to understand how extensive the morale problem was, as well as determine the more complicated array of drivers of this low morale. Given this challenge, they would need to leverage both quantitative survey techniques, and gain access to more subjective data through interviews.

> The major methodological problems, in brief, have been (1) to develop sampling methods, which would give a truly representative miniature of that part of the population affected by specific problems being investigated; (2) to tap complete and trustworthy expressions of attitudes toward and experience with specific topics or programs, and to secure such reactions in a uniform reliable way from all people interviewed in so far as possible; and (3) to devise methods of analysis which, while permitting quantitative treatment of the data, would yet preserve the context of the rich narrative material (Marquis, p. 116).

After devising and employing this newly minted "mixed method" research design, specifically targeting the reasons for such poor morale, the social scientists recommended, and the U.S. Army implemented, the following changes for soldiers in the Infantry branch: higher pay, more meaningful performance feedback in their evaluation ratings, the commissioning and awarding of the Combat Infantryman Badge, and the Expert Infantryman Badge, and an intense publicity campaign (Stouffer, 1948). A year later, the researchers surveyed the force again, and the morale of the Infantry was on par with the whole force (Stouffer, et. al., 1949; Merton and Lazarsfeld, 1950).

The U.S. Government's attempts to influence people's attitudes and understandings of the war gave birth to the second set of influential social psychological research. This research informed the U.S. Government's Psychological Operations (PSYOPS), which became more popular during the war. PSYOPS targeted U.S., Japanese, German and allied combatants and civilians and attempted to influence attitudes and understanding through carefully crafted communication campaigns. In order to determine the design of these strategic communication blitzes, the U.S. Government turned to the social scientists in the Office of War Information and Education (Hovland, et. al, 1949). These social scientists determined that films could be the most effective delivery mechanism. Their research helped them determine the relative effectiveness of two types of films: films to influence knowledge and films to influence emotions. These studies helped the U.S. Army learn that it was able to target specific audiences to create desired effects. The Army discovered that it could effectively alter the attitudes of American soldiers toward the British and Germans on a variety of dimensions. These films also improved soldiers' motivation to fight and win the war (Hovland, et. al., 1949).

In the execution of this work, social scientists advanced their understanding and utilization of *before-after* and *after-only* survey techniques and discovered the importance of *baseline measurement of percentage change* (Hovland, et. al., 1949). Researchers administered these two surveys differently. In the case of the *before-after* experiment, the researcher administered the survey before the soldier saw a film (the treatment), and then again afterward. In the *after-only* technique, researchers surveyed two groups of soldiers immediately after the film treatment, but only one group saw the film. The latter method was easier to administer but rendered less conclusive results regarding the influence of the films, and the former method was more difficult to administer, but rendered much more reliable results. In addition to these methodological advances, the scientists also discovered the use of *baseline for measurement of percentage* techniques, in order to eliminate the bias introduced by the varying education levels of soldiers involved in the experimentation projects. This technique flattened the differences in knowledge by a simple mathematical manipulation, thus rendering the respondents before the film treatment equivalent in prior knowledge (Hovland, et. al. 1949).

The third influential set of studies, called "Demobilization" began in 1945. When it became clear that United States might be winning the war, planners in the War Department needed to address issues regarding how to demobilize the force, and in so doing, how to pick which personnel to deactivate and in what sequence. Again, the social scientists surveyed, interviewed, and analyzed data and found that a combination of factors determined the best way to select soldiers who should go home and in what sequence. The factors that entered their logarithm included: the number of years in service, the number of years deployed, the amount of time in direct combat, and the number of children each soldier had. Because the scientists used methodological techniques to tap into the soldiers' attitudes and desires regarding demobilization, they recommended to the War Department ways to design and implement a demobilization plan perceived by the armed forces to be fair and just (Stouffer, 1948).

In each of these sets of studies, the methodological innovations determined in part the Social Psychological insights gained from the research, and yet, the telling of these stories often omits the details of those innovations. In the following section, I will expand upon those very details, and in so doing make clear that the U.S. Government's research demands created the conditions for social scientists to both discover and invent more effective ways to measure trends and attitudes of the American soldier. In turn, these discoveries led to further advances in the art and science of Social Psychology (Stouffer, et. al., 1949; Merton & Lazarsfeld, 1950; Katz, 1951).

Although the intellectual advances made in the content of Social Psychology during WWII were captivating, I assert that the research could not have succeeded without the methodological innovations of scholars such as Rensis Likert, Herbert Hyman, Leslie Kish, Louis Guttman, Carl Hovland, Leonard Cantril, and Paul Lazarsfeld (Stouffer, et. al., 1949). These social scientists comprised the backbone of the methodological teams that measured the attitudes and morale of American and enemy soldiers and civilians. The Division of Program Surveys (Department of Agriculture), the Research Branch of the Information and Education Division of the War Department, and the Strategic Bombing Survey (Morale Division of the Office of War Information) drove innovations in social psychological research methodologies (Merton & Lazarsfeld, 1950; Stouffer, Guttman, Suchman, Lazarsfeld, Star, Clausen, 1950; Smith, 1969; Lumsdaine, 1984; Converse, 1987; Lubek, 2000; Mahoney & Baker, 2007). Each of these researchers was a member of either one or both organizations.

The researchers utilized surveys, interviews, attitude scaling, Likert scales, statistical sampling, and experimental studies (Marquis, 1944; Allport, G., & Veltfort, 1943; Cartwright, 1948; Schmeidler & Allport, G., 1944; Viteles, 1946). Each of these methodologies gained more sophistication during the war and improved the ability of researchers to determine any population's attitudes about any issues. Of specific importance were Herbert Hyman's interview techniques, Paul Lazarsfeld's Latent Structural Analysis, Rensis Likert's sampling techniques, and Louis Guttman's Scalogram Theory (Merton and Lazarsfeld, 1950; Stouffer, et. al., 1950; Gibson, 1959).

Herbert Hyman developed sophisticated interviewing techniques that sought to control for as much variation as possible among the interviewers. These techniques involved structuring sentences in a specific way that targeted the exact attitudinal domain sought by each question. Hyman coached interviewers to ask the survey questions in specific ways, and in mandated order, so that their interviews were as identical as possible. This interview protocol standardization significantly reduced the variance (error) introduced by interviewers. The importance of this error reduction is that it produced reliable data that created the conditions for broader generalizations across populations (Likert, 1948; Gibson, 1959; Converse, 1987; Mahoney & Baker, 2007).

Paul Lazarsfeld refined *partialing*, which in today's statistical lexicon is called "controlling for a variable". With this technique, a researcher isolates variables in a causal analysis to determine the exact level of influence between two variables (an independent variable or the cause and a dependent variable or the effect). This technique prevents the interference of other ancillary variables. This controlling for the influence of intervening variables in causal relationships, renders causation analysis far more accurate (Merton & Lazarsfeld, 1950; Gibson, 1959; Alwin & Campbell, 1987; Sewell, 1989). Lazarsfeld also developed Latent Structure Analysis (LSA), which is a generalization of the Spearman-Thurstone factor analysis utilized on intelligence testing. LSA is like factor analysis in that that a latent variable might be inferred from response patterns to a series of questions.

> Latent variables arise mainly, but not exclusively, in the social sciences. This is because social science often deals in concepts, which are constructs rather than the directly measurable variables, which are typical of physical sciences. The earliest example, and still one of the most important, is general intelligence or g. This goes back to Spearman (1904) and was constructed to describe the variation among individuals in what appeared to be common to a wide range of mental tests. Psychology and sociology abound in such latent variables. Attitudes as well as abilities are all spoken of in the discourse of these subjects as things, which occur in varying amounts and which, therefore, appear in the theory as quantitative variables. In economics, variables like business confidence play a similar role. It could be justly claimed that the aspiration of these subjects to be regarded as sciences depends on the success with which latent variables can be quantified (November 2010). *Factor Analysis and Latent Structure: Overview*. In Maxzip. Retrieved February 2, 2011,
> from http://maxizip.com/2010/11/factor-analysis-and-latent-structure-overview/).

In the case of Lazarsfeld's work during WWII, Latent Structure Analysis, or LSA, enabled researchers to gain access to otherwise inaccessible attitudinal indices (Converse, 1987).

Adding to both Hyman's and Lazarsfeld's innovations, Rensis Likert refined sampling so that *area probability sampling* became the method du jour. Area probability sampling involved dividing an entire target population into mutually exclusive strata and then selecting specific groups of interest, community clusters, or organizations randomly. This kind of sampling removed the potential for bias that contaminated quota sampling. Quota sampling, which was the only method of sampling known up until WWII, involved hand picking target respondents based on a best guess estimate of their representational robustness. Area probability sampling removed the interviewer from the process, so the selection of the sample became purely mathematical and therefore far less subject to any human biases (Stouffer, et. al., 1949; Mahoney & Baker, 2007). In addition, Likert devised a scaling method for questionnaires that significantly reduced the possible responses per question to merely five options. By standardizing the response scale, Likert simplified and shortened the length of all of the branch's surveys, so that standardized interviewing complemented the data collection effort. This "Likert" scale is widely used today (Stouffer, et. al., 1949; Converse, 1987; Kish, 1990).

In addition to Lazarsfeld and Likert's innovations, Louis Guttman added to the methodological advances by developing the Scalogram Theory. He claimed that questionnaire items have an order such that ideally persons who answer the same question favorably all have higher ranks on that scale item than persons who answer the same question unfavorably. The researcher deduces the endorsed items from the person's rank or scale or score. Ideally, scales derived from scalogram analysis have the property that the responses to the individual items are reproducible from the scale scores. This complicated simplification significantly reduced the number of survey questions from the usual requisite 30 questions per item to almost seven (Stouffer, et. al., 1950). This downsizing of the item questions allowed time for the open-ended interview questions, enabling researchers to acquire richer data from their subjects (Wolfle, Likert, Marquis & Sears, 1949; Kish, 1990; Converse, 1987). (For a thorough discussion of the technical aspects of these methodological advancements, see Viteles, 1946; Merton & Lazarsfeld, 1950; Stouffer, Guttman, Suchman, Lazarsfeld, Star, Clausen, 1950; Katz, 1951; Gibson, 1959; Lumsdaine, 1984; Lubek, 2000; Converse, 1987; Sewell, 1989; Johnson & Nichols, 1998; Danziger, 2000; Mahoney & Baker, 2007).

The use of these innovations in research methods enabled social psychologists to measure attitudes of soldiers and civilians on a scale never imagined. These methodological innovations allowed researchers to answer the demands the U.S. government made for information that would assist significantly in the war efforts, and yet they are substantively absent from a huge portion of the literature on the history of Social Psychology.

For some, the center of gravity for this phase in the evolution of Social Psychology was the nature of the collaboration efforts among the social scientists conducting the research on issues critical to the war effort (Johnson & Nichols, 1998; House, 2008; Hoffman, 1992; Britt & Morgan, 1946). Many looked to the content of the social science research requested by the U.S. government and felt the topics were clearly in line with the definition of Social Psychology proposed by Floyd Allport in 1924 (Allport, F., 1924; Allport, G., & Schmeidler, 1943).

The U.S. Government gave social scientists the charter to

> …receive and consider requests for aid on psychological problems that came from federal agencies, devise ways and means of meeting those requests, catalog the social science research, and to inform the psychological community as to what was going on in advances in the social sciences (Dallenbach, p. 499).

Many of the researchers "felt this was an unparalleled opportunity to experiment into the mysteries of human motivation, attitudes and behavior" (Herman, p. 305), and then be able to distribute the successful results of their efforts to the social psychological academic community (Herman, 1995). In their rhetoric are examples of their bias toward the importance of the role their discipline played in winning the war.

> For the military man psychology is not merely a special body of knowledge from which the soldier can draw a collection of tricks that he may apply in order to deal more successfully with his comrades, with the men he commands, and with the enemy. It is not just a source from which he can obtain certain isolated scientific findings that may help him improve the techniques of warfare. It is a science the established principles of which are as basic to war as leadership, tactics, strategy and logistics (Boring, p. vii).

"The application of social psychology in selecting and training men and in guiding the design of weapons did more to help win the war than any other single intellectual activity" (Herman, pg. 19). So convincing were these claims and the work that propelled them, even President Eisenhower stated that psychology had proven its right to "a place of dignity in our military arsenal" (Herman, pg. 40). And finally, not only was social psychology a weapon in the military arsenal, but also, according to the leading social psychologist, Gardner Murphy, a weapon that could *prevent* war altogether (Abel, 1945).

Complementing these accounts, are the Social Psychology Handbooks published at unequal intervals from 1935 to 2010. Social Psychologists respect these handbooks as the standards setters in the field, and the handbooks' iterative characterization and histories of Social Psychology are the discipline's origin myth for both scholars and students. An official history, used in graduate mentoring, may simultaneously become the background guide for both the mentor (the field's current proponent) and the novice (the field's future practitioner). It will then further contribute to the framing and justifying of their shared commitments and contributions – past, present and future. For Social Psychology, the Handbook chapters on its history provided an official picture and institutional recounting (Lubek & Apfelbaum, p. 408).

Perhaps a problem with the Handbook histories is that one person, and one person only, wrote four, of the six volumes. Gordon Allport was a social scientist deeply loyal to political philosophy, psychology, and sociology. Allport believed in the power of theorizing over experimentation, and traced the intellectual roots of Social Psychology from Auguste Comte, Jeremy Bentham & John Stuart Mill, Thomas Hobbes, John Locke, William Godwin, Nicolas Condorcet, William McDougall, and John Dewey, to Peter Kropotkin, Ashley Montagu, and Herbert Spencer, Walter Bagehot, George Herbert Mead and William James, and Gustav LeBon (Allport, G., 1968). Given his allegiance to the purity of intellectual history, Allport focused his history of Social Psychology on two primary objectives: to preserve the intellectual heritage of Social Psychology, and to counter the pull that experimental social psychologists were beginning to have in the wake of WWII. Given the impact these handbooks had and have on the understanding of the origins of the field, we must concede that the way Gordon Allport imagined and wrote his histories is the way we come to understand Social Psychology.

In examining the contents of these many Handbook histories, I find, as early as 1935, Allport's cautionary tone with respect to the somewhat adversarial relationship between experimentalists and theorists. Seeking to establish the predominance of theory, Allport writes "…there are inherent limitations in all methods of testing, and unless these are kept in check, the zeal for measurement will overstep reasonable bounds" (Allport, G., in Murchison, C., pg. 832). Further buttressing the mandate for the preeminence of theory over methodology, he went on to claim in the 1954 Handbook, "Epistemological decisions underlie the building of Social Psychology as a science. To assume that ad hoc experiments themselves the arbiters of truth is naïve. No experiment interprets itself; no fact speaks for itself. Theories that transcend the specific instances are necessary (Allport, G., in Lindzey, G., pg. 50)". The 1968 Handbook of Social Psychology contained his *piece de le resistance* against methodological dominance.

> The watchwords for today are "experimentation, automatic, computation, statistical reliability, replicability". Noteworthy scientific gains result from this hard-nosed approach. There is, however, one serious disadvantage: neat and elegant experiments often lack generalizing power. Many contemporary studies seem to shed light on nothing more than a narrow phenomenon studied under specific conditions. Even if the experiment is successfully repeated there is no proof that the discovery has wider validity. It is for this reason that some current investigations seem to end up in elegantly polished triviality – snippets of empiricism, but nothing more (Allport G., in Lindsey, G. & Aronson, E., p. 68-69).

Gordon Allport seemed to be concerned that students of Social Psychology would lose their grounding if they did not dig into the original writings of the leading thinkers of the past. He felt that the professionalism of the science and its scientists depended on a thorough respect for, and understanding of its history (Allport, G., in Lindzey, G., 1954). In defense of his discipline's importance, he often stated that Social Psychology alone could answer one of the pressing questions facing the United States of America. "How is it possible to preserve the values of freedom and individual rights under conditions of mounting social strain and regimentation (Allport, G. in Lindzey, G., p. 4, 1954; Allport G., in Lindsey, G. & Aronson, E., p. 2, 1968)?" In response to this query, Allport recounted the burst of creative effort during WWII that added much to our theoretical understanding of the phenomena of leadership, public opinion, rumor, propaganda, prejudice, attitude change, morale, communication, decision-making, race relations, and conflicts of values (Allport, G., 1954; Allport, G., 1968).

These quotations represent the major themes found in many of the histories written about how the war created the conditions for advancing the science of Social Psychology. That theme focuses on the prevailing social psychological theoretical subject matter that social scientists had to engage in their interdisciplinary efforts to answer the U.S. Government's research questions. Researchers will seldom find in these prominent histories any detailed coupling of those compelling *theoretical* questions with the *methodological* advances made in both the design and quantitative methods of the research. This bifurcation of the telling of the history of Social Psychology is and should be of concern to intellectual historians both inside and outside of the field.

The *whole* history of Social Psychology is neither obvious nor uniformly told. On the one hand, there are the Handbooks stewarded by Gordon Allport who believed that a fascination with methods was obviating the progress of theory and pushing Social Psychology in the wrong direction. In fact, the only time Allport wrote about methodology was to say it was moving Social Psychology in the wrong direction.

> Our addiction to the pompous and erroneous term "methodology" betrays our preoccupation. We inflate our methods into "methodologies" because we are so conscious of them and so childishly proud. No one can object to clear methods, to an accurate handling of data, or to severe self-scrutiny in research. But the obsessiveness we encounter in our journal articles seems to betoken a drift" (Allport, G., in Lundstedt, S., p. 15).

Although these handbooks contained methodology sections, methodology is absent from the history sections. This bias leaves much of the history of methodologists and the contributions of their methodologies untold. On the other hand, there are accounts that focus on the significant methodological advances made during WWII. "It is difficult for the most enthusiastic supporter of quantitative methods in the social sciences to overvalue the contributions made by these researchers" (Katz, p. 512), but these kinds of testimonials are not at the center of the history of Social Psychology. An overwhelming majority of the details recounted in the methodological histories are *not* in the literature of the history of Social Psychology, such as the Handbooks, but rather in the literature of applied sciences such as opinion polling, social issues, consulting psychology and vocational behavior. Historical literature mentions methodological innovations in passing, at best. In addition to that found in Stouffer's fourth volume of Studies in Social Psychology during WWII, one has to cobble together from a variety of different disciplines, the story that recounts the impact that methodological advances had on the emergence of Social Psychology (Hyman, 1955; Smith, 1969; Sahakian, 1975; Gigerener, Swijtink, & Porter, 1989; Greenwood, 2004; Segal, 2007).

What were the motives behind the obvious bifurcation of the history of Social Psychology? Gordon Allport may have been trying to preserve the *field* of Social Psychology, and Samuel Stouffer may have been trying to preserve the *science* of Social Psychology. I could characterize Allport's histories as a cult of personality competing for disciplinary predominance, as well as shrinking government subsidies in the wake of WWII.

Perhaps his drive focused on both an allegiance to what he perceived were Social Psychology's intellectual ancestors, and the need for consistently funded research. In his eyes, the construction of truths came from hard earned philosophical reasoning that may or may not find a proof in the laboratory. He gave his allegiance to the discipline's intellectual heritage, which caused the historical accounts to become increasingly narrow. What is somewhat problematic with Allport's stance is that while he attacks experimental Social Psychologists for compromising theory for design, he commits the logic error of assuming an elegantly designed experiment's results are not generalizable to the larger population. Given the advances in both sampling and measurement, the results of well-designed Social Psychological experiments do generalize, and provide powerful insights into human attitudes. Allport's "either/or" bias regarding theory and method prevented him from embracing the benefits of advances in methodology. Furthermore, because he wielded so much power in the voice of the science, he managed to silence the very practices that were enabling his theories to grow.

Not until 1998 did the Handbooks interrupt Gordon Allport's histories of Social Psychology. It was in the 1998 handbook the editors authorized an additional historian, Edward E. Jones from Princeton University. The 1998 handbook published Gordon Allport's long running history, but added a chapter written by Professor Jones called *Major Developments in Five Decades of Social Psychology*. Jones's history significantly departed from Allport's previous decades of framing the history of Social Psychology. In this, the first new history to appear in the Handbook of Social Psychology, Jones captured both the theoretical and methodological innovations in the five decades preceding 1998.

In the Handbook of Social Psychology published in 2010, the editors not only eliminated Gordon Allport's history, completely, but also did not commission Edward E. Jones to update the history he wrote in 1998. Instead, they commissioned a team of three other social psychologists, Lee Ross and Mark Lepper of Stanford University, and Andrew Ward of Swarthmore College to write the Handbook history for this latest issue. Like Jones' in 1998, this 2010 history addresses both theoretical and methodological advances in balanced proportions. This suggests, perhaps, that the editors of these Handbooks have dedicated themselves to writing histories that are more balanced than the ones preceding.

I have attempted to demonstrate the differential way the history of Social Psychology treats theoretical and methodological developments. I suggest that this discipline has a history that is bifurcated, and therefore not fully accessible. My research discloses the disparity between what the history of Social Psychology claims as its intellectual and theoretical enablers, and what other resources outside these histories reveal regarding the methodological innovations that enabled critical theoretical advances. After fifty years, and the death of the discipline's "god father", Gordon Allport, scholars who inherited the telling of the discipline's history, radically changed it. They eliminated Allport's earlier traces of Social Psychology's philosophical intellectual history and added the missing methodological pieces. The altogether absence of Gordon Allport's historical hegemony more than signaled the changing of the guard.

That there is such a broad divide between the easily accessible official accounts and the more elusive scattered critical accounts of the history of Social Psychology raises issues about the management of knowledge in academic disciplines. Any history has bias, and scholars are aware of it, but this has several implications for knowledge production. The first is the impact biases can have on how scholars understand and steward academic disciplines. That history socializes incoming cohorts of scholars, whose task is to take up the mantle and add to the discipline's future, while keeping it connected to the past. Certainly, if the history is strongly biased, young developing scholars have a more challenging journey toward the "truth" of their discipline. Of course, that "truth" is always a product of countless subjective decisions, and so the responsibility of scholarship is to constantly call into question what is becoming doctrine. Scholars must be devoted to eliminating illusions, which may be wiser than discovering a truth (Ludwig Borne).

Another implication of disproportional biases in the production of knowledge is that scholars should attempt to agree on which disciplinary genre they are working. That decision determines in many respects how they will mine and create knowledge. In the case of the social sciences, there is a variety of ways to pursue human truths, some of which involve philosophical (theoretical) experiments of observation and interpretation, some of which involve laboratory (methodological) experiments of observation and measurement, and many of which involve both. Social Psychology and history derive themselves from involving both. The clear overlap between the art of social sciences and the science of history is what perhaps contributed to the development of two very different historical styles in Social Psychology.

There were some who embraced the new discipline as a challenging opportunity to observe and interpret social phenomena through the lens of history's great thinkers – a philosophical and theoretical foundation. There were others who espoused a more experimental agglomeration of phenomenological data, which lent itself to interpretation and generalizations – an experimental and measurement-based foundation. The first was more deductive and the latter was more inductive. In the absence of integration, these two styles remained in parallel, which has left the discipline with a somewhat bifurcated and odd intellectual history. Because of this, I suggest scholars be much more aware of the discourses that shape their own discipline.

Lastly, an implication of the imbalanced writing of any discipline's history begs the question of whether the tension between two fundamentally different approaches to understanding a discipline's development indicates a healthy Hegelian discourse toward a synthesis of best ideas and practices or an unfortunate schism that leaves the discipline in epistemological limbo. I argue in the case of Social Psychology, the discipline has yet to answer this question.

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