A RESTIVE LEGACY

The History of Feminist Work in Experimental and Cognitive Psychology

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In the last century feminist psychologists have contributed to refining and improving research in experimental psychology. While the accomplishments are cause for celebration during the American Association of Psychology's (APA) Centennial year, especially given the sexism that has accompanied scientific practices, we need to examine more carefully the difficulties—past and present—that attend feminist efforts in the discipline. This brief article explores the strategies that feminist researchers have used to eliminate androcentrism and sexism from experimental and, more recently, cognitive psychology. Such historical reassessment not only reveals the multiple and insightful means by which feminist psychologists have proceeded, but also indicates that feminist work must continue to focus on epistemological and theoretical problems as well as methodological ones.

They have never been trained to work like men. . . . Women's customs have changed so rapidly that work traditions have never had a chance to soak in [and] . . . not being trained from infancy to the tradition of incessant manipulative work, they drop out of the race as soon as they get comfortable. (Watson, 1927/1978, p. 142)

Thus went John B. Watson's appraisal of modern women. Although he was commenting on a series of articles written by modern women of the 1920s, his remarks intimate some of the attitudes toward women undertaking work in the field of psychology. Women were handicapped in this experimental science which, if nothing else, required "incessant manipulative work."

Historical reassessments of women's participation in psychology belie Watson's conjecture about modern women and work. Women psychologists have contributed to the making of experimental psychology throughout the last century, and although often forgotten or misattributed, their contributions on many occasions have been substantive and innovative (see O'Connell & Russo, 1983, 1990; Rosenberg, 1982; Rossiter, 1982; Russo & Denmark, 1987; Scarborough & Furumoto, 1987; Shields & Mallory, 1987; Stevens & Gardner, 1982). The delayed, and sometimes reluctant, acceptance of women's work in science is hardly unique to psychology; James D. Watson's (1980) late acknowledgment of Rosalind Franklin's role in the discovery of DNA is exemplary of such lack of recognition. Psychology, like other scientific institutions, has displayed sexism in its treatment of women workers and in its subject matter (Shields, 1975a, 1975b), and did so despite the presence of successful women scientists.

We know from historical reappraisals that some women did succeed in becoming practitioners within this domain of science. We know less about how they managed to survive, and sometimes even to flourish, particularly when their worldview differed from that of male-centered scientists. This essay takes up the question of how feminist thinkers (most of whom were women) have fared in experimental psychology. The question promises no simple story, and what follows merely begins to explore the complexities involved in bringing feminism to this single experimental science.

EXPERIMENTATION, COGNITION, AND FEMINISM

In order to understand how researchers brought their gender consciousness, particularly in the form of feminist awareness, to experimental and cognitive psychology, it is first necessary to unbundle the guiding axioms of the experimental and cognitive paradigm. Twentieth-century experimental psychology adopted the techniques of hypothesis-making, controlled observation, and deduction to develop lawful claims about the nature of mental processes. In aspiring to the scientific model, it promoted reductionism (seeking the most elementary causes of mental events) and predictability (privileging knowledge that enables prediction of mental events). Thus, the core ambitions of traditional experimental psychology have included controlled observation, isolation of distinct events, and causal and reductionist explanations.

These desiderata implied dualisms of multiple sorts: mind-body, objective-subjective, rational-irrational, voluntary-involuntary, autonomousdependent, and so on. Cartesian splits, or the working assumption of these splits, then, are constitutive of an experimental science of mental events. The dualisms implicit in the scientific enterprise have been found to reflect the cultural dualities of gender: male equals mind, rational, and autonomous; female equals body, irrational, and dependent. The ideal of scientific method also presumes a standpoint of detached observers with interests in manipulation and control of objects in the world, and this standpoint is considered to be masculine (Bleier, 1986; Fee, 1983; Harding, 1986; Keller, 1985; Merchant, 1980).

Paralleling this gendered epistemology is a gendered experience of doing science. In this view, science is considered masculine performance; the scientist is male. Thus, Margaret Rossiter (1982) proposed that "women scientists" becomes a contradiction in terms. Within psychology alone there are many examples of how the contradiction has surfaced as exclusion or discrimination. For instance, Titchener successfully campaigned to exclude women from the prestigious "Experimentalists" society (Furumoto, 1988; for other examples, see Capshew & Lazlo, 1986; Scarborough & Furumoto, 1987; Shields & Mallory, 1987).

Given that psychology is an inherently reflexive science—one involving the production of truth statements about a class of objects (humans) of which the observer is a member—then women's double consciousness as women and as scientists can take even more complicated forms (on reflexivity in science, see Gruenberg, 1978; Morawski, in press; Woolgar, 1988a, 1988b). Once reflexivity is considered, it becomes necessary to attend to the way in which psychologists' personal identities and cultural understandings enter into their scientific practice. Whenever women scientists' reflexive awareness includes awareness of gender and its imbalance in science and/or society, then that awareness is, in the broadest sense of the term, feminist.

Throughout the last century of experimental psychology some women practitioners have expressed feminist concerns. However, the manner in which those concerns have actually influenced their professional activities is highly variable, ranging from silent recognition (lament, regret, and private sarcasm) to visible reaction (rebellion, argument, and refusal). Historical studies will enable us to chart the multiple and varied means by which women psychologists brought (or did not bring) their feminist interests to experimental psychology. Their efforts undoubtedly were constrained or enabled by specific historical conditions, particularly by prevailing labor opportunities and cultural attitudes toward women. The remainder of this article offers a contextual framework (Bohan, 1990) for such historical research, and then identifies some women psychologists who worked to reconcile their feminism with their participation in experimental psychology. Such an exploration, by necessity, is restricted to those researchers who at some point made public their feminist commitments; for those who remained silent about their feminism or who engaged in feminist work outside their science, another story needs to be recovered. It must be recognized that some women found the conflicts between experimental psychology and feminist thought, coupled by difficult career conditions, to be insurmountable, and therefore followed other career paths (Agronick, 1988).

PERIOD 1: 1890-1920

During most of the 19th century, psychology consisted of speculative writings and assorted experimental excursions; by the 1890s, a professional discipline was taking form through the establishment of laboratories, courses, departments, journals, and a professional society. In the United States, this "new" psychology unabashedly declared itself to be scientific; whatever theories were entertained, they were to be submitted to scrutiny of a scientific sort, ideally experimentation. In the first three decades, the new psychology realized substantial professional development and expansion; it marshaled workers, research participants, research topics, and a market for its products (Camfield, 1969; Danziger, 1990; O'Donnell, 1985).

Among psychology's new workers and consumers were women for whom the opportunity to enter higher education was made available in the late 19th century (Rosenberg, 1982; Scarborough & Furumoto, 1987). During these early years, "women comprised a larger proportion of workers in psychology than in more mature sciences such as physics and chemistry" (Scarborough & Furumoto, 1987, p. 7). Like their sisters in other sciences, this first generation of women psychologists faced barriers to the most prestigious employment opportunities; in addition to discrimination, they encountered conflicts between their personal, political, and professional involvements. They also faced a psychology that, although only in its formative stages, already harbored sexist biases in its theories and methods (Shields, 1975a, 1982). Some of these women, who were committed to their current feminist and/or suffragist ideals, confronted this sexism in their research and writing (Agronick, 1988; Lewin, 1984; Morawski, 1985; Rosenberg, 1982; Scarborough & Furumoto, 1987; Shields & Mallory, 1987).

Given the antagonistic atmosphere surrounding women's professional presence in psychology, women who brought to their experimental work any feminist visions faced a challenge. One approach was to test their beliefs using the scientific methods developed in the new experimental psychology. The work of Helen Thompson Woolley and Leta Stetter Hollingworth exemplifies this tactic. In her dissertation, Thompson Woolley conducted experiments on sex differences. Her findings in this and other experimental studies assured her of the minimal nature of sex differences and, hence, supported her belief in equality. Nevertheless, Thompson Woolley recognized that experimental psychology was a limited instrument. As early as 1903 she confessed that finding female and male subjects

who had similar social training and experiences, "even in the most democratic community, is impossible" (Thompson, 1903, pp. 2-3). Hollingworth focused her dissertation research not on sex differences but on a phenomenon unique to women: their physiological periodicity and its relation to psychological processes. Hollingworth's research results provided concrete evidence for debunking the folklore that supported a relationship between women's work efficiency and the menstrual cycle. She attributed such folklore to male psychologists and then identified a contradiction in their scientific practice: while male experimentalists asserted that grave and profound changes occurred throughout the menstrual cycle, they made no allowance for this variability when women were participants in their laboratory (Hollingworth, 1914).

PERIOD 2: 1920-1945

The 1920s were something of a watershed decade for experimental psychology. Reinforced by rapid expansion of the previous decades and their participation in World War I, psychologists contemplated continued success. Experimental practices were becoming routinized (Danziger, 1990), and psychologists were ambitiously engaged in the production of contending theories and systems (Sokal, 1984). However, the Depression curtailed such ambitions and decreased employment opportunities; by the late 1930s, psychology had settled into a program of behaviorist research. World War II was to reinvigorate the discipline's growth and activity level. During this period American feminism entered a new course. Once suffrage had been achieved, feminists lost their unifying cause and the movement entered a period of relative quietude (Cott, 1986).

For women psychologists working in this era, career opportunities were limited and often consisted of adjunct appointments, unstable research positions, or work in applied fields (Rossiter, 1982). Thus, the occasion for constructing feminist science or critique were limited, and some feminists may have been adopting strategies of silence and indirect action. If this was the case, then perhaps the career of Catherine Cox Miles, a successful researcher, exemplifies the work of such women. Between 1927 and 1947, Miles's research examined attributes of masculinity and femininity without commitment to either the nativist or environmental explanations of gender.

Not all women were silent. Alice I. Bryan exhibited one strategy for bringing feminist investments to psychology during this period of methodological, theoretical, and economic restrictiveness. In a sense Bryan enacted the dual consciousness of women scientists by standing outside the drama and producing editorial commentary on its sexist practices. Bryan chose to write about women's place in psychology and to support her analysis with the field's most precious tool—quantification. Bryan pro-

duced at least four articles that assessed the factors impacting on women's participation in American psychology. Perhaps such interest in quantifying women's personal experiences stemmed from her own alienating experience in graduate school where "it was tacitly agreed among graduate students that men were the preferred candidates for both university instructorships as well as for most teaching positions at the college level" (cited in O'Connell & Russo, 1983, p. 75). Her own arduous process of receiving tenure at Columbia's School of Library Services sadly illustrates the plight of this era's women academics.

It is not surprising that Bryan's collaborative work on women in psychology, which was conducted with E. G. Boring, required compromise. In a later autobiographic sketch, Bryan described her "subjective" experience behind their "objective" text:

As Boring himself indicates, there was no disagreement as to the findings of our surveys. Some of the conclusions that Boring wanted us to draw, however, especially of an "admonitory" nature, were in my opinion personal value judgments not warranted by our findings. I was glad that Boring subsequently published his own paper because it affords an opportunity for any interested reader to compare the views expressed as his "truth" with the findings of our studies. (cited in O'Connell & Russo, 1983, p. 79)

In the forward to his autobiography, *Psychologist at Large*, Boring implied that it was because of Bryan's "feminist bias" that she was unable to endorse his personal judgments as joint conclusions. Boring regrettably claimed, then, that the team had to "retreat" and present only factual findings (O'Connell & Russo, 1983, p. 79).

PERIOD 3: 1946-1965

Following World War II, experimental psychology underwent both further restriction and diversification. While laboratory experimentation became even more refined and privileged as the preferred method of inquiry, there was also considerable expansion in subfields, especially in social, clinical, developmental, and personality psychology. Likewise, behaviorism flourished and then was ultimately challenged by cognitive approaches. However, the methodological canon that accompanied behaviorism, the controlled observation and quantification of events, survived in the new cognitive psychology which turned toward scrutiny of the "black box" of internal mental events. During the immediate postwar years, Americans generally were concerned with the recovery of economic stability, as well as traditional activities and values, including the reaffirmation of the traditional roles of females as homemakers and mothers. Women's entrance into the professions was not encouraged (Thibaut, 1987). However, the return to this cultural convention was interrupted.

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By the early 1960s, some American women began a liberal critique of sex roles that was to grow into what is now known as the "second wave" of feminism in America. The ethos of this movement is captured in Dixon's (1969) account: "Male supremacy, marriage, the structure of wage labor—each of these aspects of women's oppression has been crucial to the resurgence of the women's struggle. It must be abundantly clear that radical social change must occur before there can be significant improvement in the social position of women" (p. 199).

Along with this changing cultural atmosphere - one of restriction of activity and then, finally, of revolt - coupled with an almost silent revolution in psychology's metatheory, feminist work evolved in complex and diverse ways. With resistance to women in professional positions and a notable decline in the number of employed women professionals, the atmosphere of the 1940s and 1950s was hardly conducive to feminist activities. At least two strategies were available to psychologists who grappled with a consciousness of gender and women. Given the monolithic status of experimentation, one strategy entailed coupling experimental work with a program of women's rights. In 1946, Georgene Seward furnished such a connection in her book Sex and the Social Order. Seward exhibited an experimentalist's precision and knowledge in her review of research on sex differences; she then synthesized these scientific findings in a mandate for social reform that claimed women's rightful position as workers and thinkers in American society. Borrowing postwar rhetoric, Seward (1946) wrote, "We are in the process of building a new world, and we cannot escape the challenge of showing how factors related to sex may be mobilized in that reconstruction" (p. viii). Linking sexual division of labor to primitive and fascist societies, Seward called for an end to the practice of "confusing women's biological functions with their social role and maintaining male monopoly in the world of achievement" (p. 249). She refashioned ideas about the war and sex differences to conclude: "Victory for the democratic way of living means a democratic reformulation of sex roles" (p. 249). Thus, Seward's argument anticipated several feminist attitudes of the following decades.

PERIOD 4: 1966-1985

During the years 1965–1985, experimental psychology moved toward becoming synonymous with cognitive psychology. Whether inspired by the discourses of computer technology, philosophy, or biology, experimental psychologists attempted to develop a language of internal mental processes. Moreover, although for the most part, established laboratory methods were retained, some researchers raised concerns about these techniques, questioning the validity, ethics, relevance, and meaning of experimentation. This challenge took some cues from a larger voice of self-

criticism in the social sciences (see Rabinow & Sullivan, 1979), which, in turn, coincided with a liberal critique of American culture generally (from the civil rights movement to the antiwar movement). Feminist activities in the form of the "women's movement" formed part of this liberal critique and impacted directly on the participation of women in psychology; for instance, the implementation of coeducation in formerly single-sex schools and the institution of Affirmative Action programs influenced both the hiring of women and the type of psychological research that was deemed appropriate. In the end, however, the liberalization of social thought did not have a major effect on psychological research, where the predominant "cognitive turn" appears to have incorporated little of the self-criticism and political awareness that transpired during the 1960s and 1970s.

Feminist activities of the 1960s and 1970s made way for a new form of scholarship across the disciplines, including psychology. Feminist researchers worked to recover the untold past of women's lives, to debunk sexual myths, and to propose theories that both recognized women's experiences and also positioned sex and gender as meaningful, if not essential, categories for explanation. Within psychology, feminist researchers have devised multiple strategies for bringing feminism to experimental and cognitive studies. The earliest and most prominent of the strategies was the empiricist debunking of masculine assumptions, methods, and findings. Maccoby and Jacklin's (1974) comprehensive analysis of research on sex differences, Constantinopole's (1973) analysis of the faulty assumptions underlying masculinity and femininity constructs, and Parlee's (1973) experimental critique and empirical correctives of the biases of menstrual research are stellar examples of how researchers used the logic and rules implied in the experimental program to reveal the biases saturating it. Their work is representative of an exceptional body of research that deconstructed areas of experimental research using its very methods and metatheory; this work continues to uncover neglected features of gender.

A second strategy might be called the recovery of women's experiences, past and present. One facet of this recovery platform focused on historical reassessment of women's accomplishments in psychology as well as documentation of their subjection to discrimination and exclusion (as noted earlier). Another side of the recovery gave attention to psychological experiences unique or common to women, including, but certainly not limited to, research on gender roles across the lifespan, reproductive functions, prejudice and discrimination, personality, and cognitive-emotional capacities. A third strategy emerging during this period was one of professional organization which took form primarily in Division 35 (the Division of the Psychology of Women) of the APA and in the Association of Women in Psychology. A final strategy, which was emergent throughout the period yet still only tentatively realized, consists of a more global critique and rejection of some of the basic tenets of experimental (and cognitive)

psychology. Implied in numerous critical essays such as those by Weisstein (1971), Sherif (1979, 1982), and Parlee (1979), among others, this critique suggests that the experimental paradigm, however repaired through feminist revision, provides an inappropriate and insufficient framework. Psychological processes, like gender, are inextricably linked to social context and cannot be adequately represented through experimental models which strip or neglect contextual phenomena.

PERIOD 5: FROM PRESENT TO FUTURE

With the Centennial celebration of psychology's foremost professional association, the APA, feminist projects have been undertaken in every corner of a now multifaceted discipline. However, the present moment of feminist work in experimental and cognitive psychology is anything but unified; rather, it consists of multiple strategies and practices. In this sense, feminist psychologists are not unlike their feminist counterparts in other sciences who have harnessed varied epistemologial forces, from empiricism and materialism to utopianism and postmodernism, in order to construct feminist science (Harding, 1986).

The achievements of this feminist project deserve continued recognition. The gains are primarily on three fronts: (a) the increased number and visibility of women researchers, teachers, authors, editors, and administrators; (b) the reduction of some blatantly biased procedures such as failure to attend to the sex of research participants and experimenters and the reporting of sex differences; and (c) an impressive increase in studies of experiences that are particular to women's lives (Crawford & Marecek, 1989; Kimmel, 1989; Lott, 1985; Lykes & Stewart, 1986; Wordell, 1990).

At the same time, these gains are partial in the sense that they do not address the full range of feminist thinking. Fine and Gordon (1989) refered to these partialities as a "disciplinary reluctance" to engage gender/ women at all and an absence of theoretical models that adequately tie gender to a complex structure of power (see Kahn & Yoder, 1989). Disciplinary reluctance is readily observable not only in ongoing methodological debates about testing for sex differences (Baumeister, 1988; Eagley, 1987, 1990a, 1990b), but also, and perhaps more perniciously, in the tendency to forget correctives to research programs and thus repeat ageold biases (Morawski, 1990). The difficulties inherent in the need to consider the extensive matrix of power (and to recognize underlying connections between gender, class, and race) pose challenges for feminist work within psychology. As long as gender is taken to be simply an attribute of individuals, even when it is distinguished from biological "sex," then connections between gender and societal power structures cannot be forged.

Axiomatic to traditional cognitive psychology is the belief in autonomous individuals who, first, are capable in theory, although not always in practice, of being rational actors, and who, second, function through mental representations or constructions of reality (Sampson, 1981). These axioms negate consideration of the essentially social nature of what is taken as "individual," "identity," or "autonomy." Emphasis on the "mental" underestimates the significance of the material, which includes concrete resources, institutional structures, historical alterations, and physical bodies. The commonly held distinctions between the private (internal) and the public (external) further encourages a negligence of social practices, namely, status hierarchies, institutionalized racism, or sexism (Unger, 1989). Cognitive psychology thus posits a unitary self, views phenomena like gender to be simple "attributes" or "schemata," and renders invisible the contradictions in identity (subjectivity) that are constituted through one's membership in a particular race, class, age group, and gender.

Feminist research in certain specialty areas is posing challenges to the traditional business of experimental and cognitive psychology, and the future of the cognitive paradigm must be configured within this broader context. For instance, feminist-oriented social psychological research forces a recognition of gender as a societal category and of the relational dynamics of cognitions (for example, see Deaux & Major, 1987). Feminist work in developmental psychology has indicated that environmental and even cultural circumstances determine cognitive competencies; Eccles's (1989) studies of developmental gender differences in mathematics illustrate the necessity of investigating these noncognitive determinants.

CONCLUSION

Throughout the last century, women psychologists have scaled substantial barriers to their full-fledged participation in experimental and cognitive psychology. Those women working with feminist objectives faced even greater challenges. They had to find ways or, more often, invent ways, of countering sexist practices and ideas. Their strategies for doing so were innovative, if sometimes marginalized. Their multiple achievements are a legacy for the efforts of the next century of feminist psychologists. The work that lies ahead will entail substantial transformations of epistemology, theory, and method; it will require new conceptualizations addressing issues of power, social structure, and subjective experiences. As was done throughout the previous century, feminist psychologists sometimes will have to undertake strategies that are local, indirect, and innovative. Given the enormity of the discipline and the plurality of feminist frameworks (Crawford & Marecek, 1989), these future activities will be multiple and diverse. As feminists undertake this immense task of replacing, in

addition to interrupting, the epistemological and theoretical conventions of experimental psychology, the century that lies ahead for feminist psychologists promises to be as challenging and exciting as the last.

REFERENCES

- Agronick, G. (1988). Feminist psychologists, 1915-1930: Personal, political, and professional constraints. B.A. thesis, Wesleyan University, Middletown, CT.
- Baumeister, R. F. (1988). Should we stop studying sex differences altogether? American Psychologist, 43, 1092-1095.
- Bleier, R. (1986). Science and gender: A critique of biology and its theories on women. New York: Pergamon.
- Bohan, J. S. (1990). Contextual history: A framework for re-placing women in the history of psychology. Psychology of Women Quarterly, 14, 213-227.
- Camfield, T. (1969). Psychologists at war: The history of American psychology and the First World War. Unpublished Ph.D. dissertation, University of Texas at Austin.
- Capshew, J. H., & Lazlo, A. C. (1986). We would not take no for an answer: Women psychologists and gender politics during World War II. Journal of Social Issues, 42, 157-180.
- Constantinople, A. (1973). Masculinity-femininity: An exception to a famous dictum. Psychological Bulletin, 80, 389-407.
- Cott, N. F. (1986). Feminist theory and feminist movements: The past before us. In J. Mitchell & A. Oakley (Eds.), What is feminism? (pp. 49-62). Oxford: Basil Blackwell.
- Crawford, M., & Maracek, J. (1989). Feminist theory, feminist psychology: A bibliography of epistemology, critical analysis and applications. Psychology of Women Quarterly, 13, 477-491.
- Danziger, K. (1990). Constructing the subject: Historical origins of psychological research. New York: Cambridge University Press.
- Deaux, K., & Major, B. (1987). Putting gender into context: An interactive model of genderrelated behavior. Psychological Review, 94, 369-389.
- Dixon, M. (1969). The rise of women's liberation. In B. Roszak & T. Roszak (Eds.), Masculine/feminine: Readings in sexual mythology and the liberation of women. New York: Harper Colophon.
- Eagley, A. H. (1987). Reporting sex differences. American Psychologist, 42, 756.
- Eagley, A. H. (1990a). On the advantages of reporting sex comparisons. American Psychologist, 45, 560-562.
- Eagley, A. H. (1990b). Reporting on sex differences. American Psychologist, 45, 756-757.
- Eccles, J. S. (1989). Bringing young women to math and science. In M. Crawford & M. Gentry (Eds.), Gender and thought: Psychological perspectives (pp. 36-58). New York: Springer-Verlag.
- Fee, E. (1983). Women's nature and scientific objectivity. In M. Lowe & R. Hubard (Eds.), Women's nature and scientific objectivity (pp. 9-28). New York: Pergamon.
- Fine, M., & Gordon, G. M. (1989). Feminist transformations of/despite psychology. In M. Crawford & M. Gentry (Eds.), Gender and thought: Psychological perspectives (pp. 146-174). New York: Springer-Verlag.
- Flanagan, O. J., Jr. (1981). Psychology, progress, and the problem of reflexivity: A study in the epistemological foundations of psychology. Journal of the History of Behavioral Sciences, 17, 375-386.
- Furumoto, L. (1988). Shared knowledge: The experimentalists, 1904-1929. In J. G. Morawski (Ed.), The rise of experimentation in American psychology (pp. 94-113). New Haven, CT: Yale University Press.
- Gruenberg, B. (1978). The problem of reflexivity in the sociology of science. Philosophy of Social Science, 8, 321-343.

- Harding, S. (1986). The science question in feminism. Ithaca, NY: Cornell.
- Hollingworth, L. S. (1914). Functional periodicity. New York: Teacher's College.
- Kahn, A. S., & Yoder, J. D. (1989). The psychology of women and conservativism. *Psychology of Women Quarterly*, 13, 417-432.
- Keller, E. F. (1985). Reflections on gender and science. New Haven, CT: Yale University Press.
- Kimmel, E. B. (1989). The experience of feminism. Psychology of Women Quarterly, 13, 133-146.
- Lewin, M. (Ed.). (1984). In the shadow of the past: Psychology portrays the sexes. New York: Columbia University Press.
- Lott, B. (1985). The potential enrichment of social/personality psychology through feminist research and vice versa. American Psychologist, 40, 155-164.
- Lykes, M. B., & Stewart, A. J. (1986). Evaluating the feminist challenge to research in personality and social psychology: 1963-1983. Psychology of Women Quarterly, 10, 393-412.
- Maccoby, E. E., & Jacklin, J. W. (1974). The psychology of sex differences. Stanford, CA: Stanford University Press.
- Merchant, C. (1980). Death of nature: Women, ecology and the scientific revolution. New York: Harper & Row.
- Morawski, J. (1985). The measurement of masculinity and femininity: Engendering categorical realities. *Journal of Personality*, 53, 196-221.
- Morawski, J. G. (1990). Toward the unimagined: Feminism and epistemology in psychology. In R. T. Hare-Mustin & J. Maracek (Eds.), *Making a difference* (pp. 150-179). New Haven, CT: Yale University Press.
- Morawski, J. G. (in press). Self regard and other regard: Reflexive practices in American psychology, 1890-1940. Science in Context.
- O'Connell, A. N., & Russo, N. F. (1983). Models of achievement. New York: Columbia University Press.
- O'Connell, A. N., & Russo, N. F. (Eds.). (1990). Women in psychology: A bio-bibliographic sourcebook. New York: Greenwood.
- O'Donnell, J. (1985). The origin of behaviorism: American psychology, 1870-1920. New York: New York University Press.
- Parlee, M. B. (1973). The premenstrual syndrome. Psychological Bulletin, 80, 454-465.
- Parlee, M. B. (1979). Psychology of women. Signs, 5, 121-133.
- Rabinow, P., & Sullivan, W. M. (Eds.). (1979). Interpretive social science: A reader. Berkeley: University of California Press.
- Rosenberg, R. (1982). Beyond separate spheres. New Haven, CT: Yale University Press.
- Rossiter, M. W. (1982). Women scientists in America: Struggles and strategies to 1940. Baltimore: Johns Hopkins University Press.
- Russo, N. F., & Denmark, F. L. (1987). Contributions of women to psychology. In M. R. Rosenzweig & L. W. Porter (Eds.), Annual Review of Psychology, 38.
- Sampson, E. E. (1981). Cognitive psychology as ideology. American Psychologist, 36, 730–743.
- Scarborough, E., & Furumoto, L. (1987). Untold lives: The first generation of American women psychologists. New York: Columbia University Press.
- Seward, G. H. (1946). Sex and the social order. New York: McGraw-Hill.
- Sherif, C. W. (1979). Bias in psychology. In S. Harding (Ed.), Feminism and methodology (pp. 37-56). Bloomington: Indiana University Press.
- Sherif, C. W. (1982). Needed concepts in the study of gender identity. *Psychology of Women Quarterly*, 6, 375-398.
- Shields, S. A. (1975a). Functionalism, Darwinism, and the psychology of women: A study in social myth. American Psychologist, 30, 739-754.
- Shields, S. A. (1975b). Ms. Pilgrim's progress. American Psychologist, 30, 852-857.
- Shields, S. A. (1982). Variability hypothesis: The history of intelligence. Signs, 7, 769-797.

- Shields, S. A., & Mallory, M. E. (1987). Leta Stetter Hollingworth speaks on "Columbia's legacy." Psychology of Women Quarterly, 11, 285-300.
- Sokal, M. M. (1984). James McKeen Cattell and American psychology in the 1920s. In J. Brozek (Ed.), Explorations in the history of psychology in the United States (pp. 273-323). Lewisburg, PA: Bucknell University Press.
- Stevens, G., & Gardner, S. (1982). The women of psychology (Vols. 1-2). Cambridge, MA: Schenkman.
- Thibaut, G. M. (1987). The dissenting feminist academy: A history of the barriers to feminist scholarship. New York: Peter Lang.
- Thompson, H. B. (1903). The mental traits of sex. Chicago: University of Chicago Press.
- Unger, R. K. (1989). Sex, gender, and epistemology. In M. Crawford & M. Gentry (Eds.), Gender and thought (pp. 17-35). New York: Springer-Verlag.
- Watson, J. D. (1980). The double helix: A personal account of the discovery of DNA. New York: Athenaeum.
- Watson, J. B. (1978). The weakness of women. In E. Showalter (Ed.), These modern women: Autobiographical essays in the twenties (pp. 141-143). Old Westbury, CT: Feminist Press. (Original work published 1927)
- Weisstein, N. (1971). Psychology constructs female. In V. Gornick & B. K. Moran (Eds.), Women in sexist society (pp. 207-224). New York: American Library.
- Woolgar, S. (Ed.). (1988a). Knowledge and reflexivity. London: Sage.
- Woolgar, S. (1988b). Science: The very idea. New York: Tavistock Publications.
- Worell, J. (1990). Feminist frameworks: Retrospect and prospect. Psychology of Women Quarterly, 14, 1-5.