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Socially Constituted Knowledge: Philosophical, Psychological, and Feminist Contributions

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The notion of knowledge as socially constituted is explored within a broad philosophical and psychological context. It is suggested that this epistemic commitment represents a significant challenge to conventional understandings of psychological phenomena and is a salient perspective associated with the *Weltanschauugen* philosophy of science, the social constructionist movement in social psychology, the feminist critique, and recent contributions to the psychology of gender. Regarding the latter, the conceptual revisions of Chodorow, Gilligan, and Bem are outlined as exemplars of a view of knowledge as socially constituted.

Ouestions concerned with the nature and validity of scientific knowledge have historically been the province of philosophers and sociologists of science (Barber and Hirsch, 1963; Barnes, 1974; Kuhn, 1962/1970; Polanyi, 1958; Popper, 1935/1959; Suppe, 1977; Toulmin, 1953). Although the ranks of psychologists calling for a critical examination of the philosophical assumptions associated with psychology's knowledge base and methods of inquiry appear to be growing (cf. Campbell, 1974; Hoshmand, 1989; Koch, 1981; Mahoney, 1976; Manicas and Secord, 1983; Polkinghorne, 1983; Royce and Powell, 1983; Weimer, 1979), mainstream psychology continues to reflect the values and interests of the status quo (Prilleltensky, 1989). In spite of this state of affairs, new critical challenges to psychology's epistemological core continue to emerge. Most significant among these derive from the social constructionist movement in social psychology (Gergen, 1982, 1985a; Gergen and Morawski, 1980), feminist scholarship and research (Bleier, 1986; Harding, 1986; Lott, 1985) and the changing landscape of the psychology of gender (Hare-Mustin and Marecek, 1988; Matlin, 1987; Unger, 1983).

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One important consequence of these converging critical themes is that psychologists are becoming increasingly aware that psychological research, rather than being value-free, is conducted within a context of shared epistemological assumptions and social discourse which serve to order, assign meaning to, and valuate experience (cf. Howard, 1985; Kimble, 1984; Krasner and Houts, 1984). This view runs contrary to conventional positivist notions about the nature of psychological and scientific knowledge as being founded upon a bedrock of objective and value-free facts.

One intent of this paper is to bring the epistemological foundations of scientific and psychological knowledge into critical relief. Toward this end, various forms of mounting criticism of positivist conceptualizations will be reviewed with particular emphasis upon those generated by the *Weltanschauugen* (or "world outlook") philosophy of science (Suppe, 1977), the social constructionist movement in psychology, and the feminist critique of science. A second purpose — and guiding theme of the foregoing analysis — is to suggest that while a positivist world view continues to dominate mainstream psychological research and practice, social constructionism, on the other hand, appears to be a prominent epistemic commitment associated with contemporary developments in the "new psychology" of sex and gender.

Philosophical and Psychological Contexts

Two Views of Scientific Knowledge

Although recent detailed analyses of the history of the philosophy of science identify several phases of conceptual evolution and development (cf. Polkinghorne, 1983), most useful to the foregoing discussion is the epistemic tension created by two contemporary approaches to understanding the structure of scientific knowledge: the *logical-positivist* and the *Weltanschauugen* philosophies of science (Suppe, 1977). For decades, logical positivism was the dominant epistemological model for the philosophy of science. First articulated by members of the Vienna circle during the early part of the twentieth century, logical positivism held that the meaning of scientific statements is equated with the empirical operations designed to investigate them. Gergen (1982) identified three assumptions which constitute the core of the logical-positivist philosophy of science:

(1) The major function of science is to construct general laws of principles governing the relationship among classes of observable phenomena.

(2) The general laws or principles comprising scientific knowledge should be consistent with empirical fact. Scientific investigation is properly concerned with establishing an objective grounding for systematic theory.

(3) Through continued empirical assessment of theoretical propositions and their deductions, scientific understanding can progress. Scientific knowledge is cumulative. (pp. 7-8)

Thus within a positivist framework knowledge is equated with its observational base and is assumed to be the product of inductive reasoning and the subsequent building and testing of general hypotheses. The role of theory development within this framework is to increasingly reflect or map reality in a direct manner.

Since the late 1950s this "received view" of scientific knowledge has been firmly criticized by historians and philosophers of science who have drawn attention to the notion that science is done from within a conceptual framework which tends to constrain the kinds of questions worth asking about a phenomenon and the types of answers deemed acceptable (cf. Feyerabend, 1975; Hanson, 1958; Kuhn, 1962/1970; Polanyi, 1958). Referred to as the Weltanschauugen philosophy of science, this alternative view challenges the logical positivist assumption that scientific knowledge is based upon theory-free (and value-free) observations and, by way of contrast, emphasizes the theory-dependent nature of scientific observations, meanings, and facts (Suppe, 1977). According to the Weltanschauugen perspective, any explicit theory or concept (or "fact") is embedded within a more tacit philosophical, historical, or cultural context from which the specific theory derives its meaning. This "world outlook" analysis of knowledge is described by Polkinghorne (1983):

All knowledge is relative to one's perspective; there is no absolute point of view outside of one's historical and cultural situation. Neither pure sense data nor formal logic can provide an absolute foundation for knowledge. The character of one's knowledge, the categories according to which experience is formed, what is considered as reasonable, and so on — all of these are functions of one's Weltanschauung. One never has access to reality: one can only look through the opaque spectacles of the cognitive apparatus of one's historically given Weltanschauung. (p. 103)

The world outlook analysis underscores the notion that scientific conduct rather than being a logical process that leads to objective knowledge and timeless truths, is instead a human activity that occurs within an historical and cultural context — a context which imbues scientific observations with unique meanings and interpretations. Fundamentally constructivist in nature, this perspective suggests that scientists, rather than passively receiving reality, actively construct the meanings that frame and organize their observations and experience (Morawski, 1982).

Psychological Worldviews

An important conceptual development in psychology paralleling the positivist-Weltanschauugen distinction in the philosophy of science is Gergen's (1982, 1985a) recent differentiation between exogenic and endogenic worldviews. According to Gergen, "exogenic" refers to theories of knowledge which impart priority to external reality. Associated with such thinkers as

Locke, Hume, and Mills, and various logical empiricists, the exogenic perspective assumes that valid knowledge is a function of the degree to which understandings map the contours of the real world. By way of constrast, "endogenic" denotes those theories of knowledge which hold the processes of mind as preeminent. Associated with the philosophies of Spinoza, Kant, Nietzsche, and various phenomenologists, the endogenic perspective — with its emphasis upon constructive and organization processes endemic to the organism — leads to a view of reality and knowledge as relative rather than absolute.

Under the powerful sway of positivism American psychology has predominantly endorsed an exogenic approach to the understanding of psychological phenomena. However, growing dissatisfaction with the positivist foundation of exogenic psychology has contributed to a recent revitalization of endogenic thought. Emphasizing the subjective nature of knowledge, the legitimacy of multiple interpretations of experience, the value-laden character of science, and a view of the individual as the primary agent of human action, current expressions of this trend include cognitive constructivism (Guidano, 1987; Mahoney, 1988), hermeneutics (Packer, 1985), the experiential method (Barrell, 1986), and contemporary phenomenology (Giorgi, 1985).

Transcending the exogenic-endogenic dichotomy. The endogenic world view in its purest form, however, also suffers from the problem of justification. As Gergen (1987) indicates, this position taken to its extreme — that is, to the point of construing reality as a purely mental construct (i.e., radical constructivism) — is equally vulnerable on epistemic grounds as the logical postivist (exogenic) commitment:

Although strongly appealing in certain respects, social thinkers (among others) have discerned limitations in the assumption that the forestructure of understanding lies "within the mind of the beholder." To commit oneself to this position is ultimately to end in either the quagmire of innate categories or solipsism (or both). (p. 6)

In order to retain the wisdom of the endogenic approach while at the same time to avoid the conceptual pitfalls, Gergen (1985a, 1987) advocates a *social constructionist* epistemology that places knowledge not in the environment (exogenic) or exclusively in the minds of single individuals (endogenic) but rather in the processes of social exchange and linguistic construction which constrain personal categories of understanding. Social constructivism corresponds to several similar emerging conceptual reconciliations between (a) an individual's *personal* construction of reality through a network of mental schemas and (b) a collectivity's *social* construction of reality through a network of socially constituted ideologies, language systems, and practices (cf. Arbib and Hesse, 1986; Coulter, 1983; Freyd, 1983; Lykes, 1985). For example, Arbib and Hesse (1986) draw the distinction between mental (individual) and social schemas. In elaborating on the latter, they state:

. . . schemas shared by the individuals of a community may cohere into a behavior pattern that defines a reality external to each individual. We refer to that pattern as a social schema and stress that it may not be internalized in its entirety within the head of any one individual. The coherence between the overt behaviors of all other individuals in a community, including the playing out of different roles, shapes the development of the schemas of that individual; and to the extent that this individual comes to assimilate those communal patterns, to that extent will he or she in turn provide part of the coherent context for the development of others. (Arbib and Hesse, 1986, pp. 129–130)

The notion that personal constructions of understanding are constrained by the social milieu – that is, the context of shared meaning systems which develop, persist, and change over time – is the essence of a social constructionism.

Social Constructionism

At a metatheoretical level the basic assumptions of the social constructionism orientation have been discussed by Gergen (1985b) and include:

- (1) The belief that what we know of the world is determined by the conceptual and linguistic categories we possess to define it. Because our conceptual frameworks tend to predispose us toward certain lines of inquiry, the conclusions we draw are more the products of our language than of empirical discovery.
- (2) The idea that the concepts and categories by which the world is comprehended are social artifacts products of historically situated interchanges among people. As a result, the meanings and connotations of these conceptual frames vary over time and across contexts.
- (3) The view that the degree to which a particular belief or understanding is sustained across time is not fundamentally dependent on its empirical validity, but on the vagaries of social influence, negotiation, and control processes.
- (4) The notion that descriptions and explanations of the world are of critical significance in social life, as they are integrally intertwined with the full gamut of activities in which people engage.

What emerges from these basic assumptions is a view of knowledge as a socially-constituted artifact of communal exchange that challenges conventional understandings of psychological knowledge as founded upon a positivist conception. Social constructionism has much in common with the previously described *Weltanschauugen* philosophy of science because it encourages one to "suspend belief that commonly accepted categories or understandings receive their warrant through observation" and "invites one to challenge the objective basis of conventional knowledge" (Gergen, 1985a, p. 267). Further, a social constructionism perspective suggests that people categorize the world the way they do because they have engaged in social processes and various forms of symbolic interaction (e.g., language) that make salient or somehow

presuppose those categories (Shweder and Miller, 1985). Within this context, the rules for "what counts as what" are inherently ambiguous, continuously evolve, and are free to change according to the predilections of those who use them (Gergen, 1985a). Because rules of action and forms of understanding are thought to be intimately connected to social processes, they are seen as sustaining certain types of social interactions and patterns to the exclusion of others. For example, to construe individuals in such a fashion that they possess inherent qualities invites certain patterns of interaction to the exclusion of others. Social constructionism forms the metatheoretical bases for critical revisions of a growing number of conceptual domains: rejected knowledge (Wallis, 1979), emotion (Averill, 1985; Harré, 1986), helping relationships (Gergen and Gergen, 1983), human sexuality (Greenberg, 1988; Laws and Schwarz, 1977; Tiefer, 1987), mental illness (Gergen, 1990; Sarbin, 1990), mind (Coulter, 1979, 1983), personhood (Cushman, 1990; Gergen and Davis, 1985; Harré, 1984; Sampson, 1985), scientific knowledge (Bevan, 1991; Knorr-Centina, 1981: Mendelsohn and Weingert, 1977), social change and reform (Lewis, Grant, and Rosenbaum, 1988) and technological systems (Bijker, Hughes, and Pinch, 1987; Mackenzie and Wajcman, 1985).

Because of its concern with the valuational underpinnings of scientific accounts, emphasis upon processes of interpretation, and endorsement of a communal basis of knowledge, social constructionism offers a broad epistemological context for understanding recent trends of development associated with the feminist movement in science and psychology — particularly, the recent shift in theory and research on sex and gender. This is the focus and following section of this paper.

The Feminist Critique

Feminism means finally that we renounce our obedience to the fathers and recognize that the world they have described is not the whole world. Masculine ideologies are the creation of masculine subjectivity; they are neither objective, nor value-free, nor inclusively "human." Feminism implies that we recognize fully the inadequacy for us, the distortion, of male-created ideologies, and that we proceed to think, and act, out of that recognition. (Rich, 1977, p. xvii)

One of the strongest challenges to the logical positivist conception of science has come from feminist thinkers. The feminist critique (as it has come to be called) represents a search for a way to know the world that is not malecentered. Its intent is to look at scientific knowledge through a feminist lens, a lens that, unlike its male counterpart, asks gendered questions about that knowledge. In essence, feminists argue that modern science, like gender, is a category of social construction molded by a society in accordance with its predominant (male-centered) values — values which have often been used

to perpetuate gender stereotypes and negative views of women (Birke, 1986; Bleier, 1984, Jagger, 1983).

Although a comprehensive examination of the feminist critique is beyond the scope of this article, some salient themes of this movement will be highlighted. Most notable, according to a feminist perspective science is fundamentally reductionistic, hierarchical, and rests on questionable claims of objectivity and rationality. Feminist scientists, for example, have challenged the reductionism of sociobiology - a theory which contends that genes determine behavioral traits and thus establish a biological basis for women's position in society (cf. Birke, 1986; Bleier, 1984; Rosser, 1982). With regard to a view of science as hierarchical, Fee (1981) suggests that science, as it has been practiced, alienates and contributes to the domination of people and nature. She argues for a science that is "feminized" - a science that is more responsive to human needs and more concerned with working with and not against the forces of nature. The conventional depiction of scientific knowledge as objective and value-neutral has also been a central focus of many feminists who point to the masculine bias that has dominated the methods, theories. "facts," and interpretations within existing science (cf. Bleier, 1986; Fee, 1986; Harding, 1986; Keller, 1985; Lott, 1985; Roberts, 1981). The feminist critique even raises questions about the nature of scientific rationality. Harding (1983), for example, suggests that what is rational is gendered - in other words it varies according to sex. She writes that a rational woman is capable of empathy and of incorporating the views of others into her own, while a rational man acts rationally when he distances himself from others and makes decisions "objectively." The major implication of Harding's conception is that modern science reflects the ideals of modern man - that is, the separation of subject and object, observer and observed into distinct and separate entities. By way of contrast, feminist thinkers argue for a more relational basis of scientific understanding, one which requires that

... disinterestedness be intertwined with involvement, that object be fused with subject, that perspectives be blended and yet held apart, and while the observer is bound by certain rules (logical consistency, telling the truth as he or she sees it, unearthing and not imposing meaning) one should not delude oneself into believing in a false or naive objectivism. (Farganis, 1986, p. 184)

In sum, a central theme underscored by the feminist critique of science is that scientific knowledge cannot be neutral or objective because it is structured by power relations which are not only unequal across the boundaries of gender but also across the dimensions of class and race. As Rose (1983), in her recapitulation of Virginia Woolf's (1938) earlier insight, has stated: "science . . . is neither sexless, nor classless; she is a man, bourgeois, and infected too" (p. 74). Perhaps in no other area of psychology is the feminist critique so strongly felt as in the study of sex and gender.

Sex and Gender: A New Paradigm

Traditionally the study of differences between men and women has been dominated by a research paradigm that treated sex as a *subject variable* — that is, as a characteristic within the person that somehow determines the way he or she will think and behave (Matlin, 1987; Parlee, 1981; Unger, 1979). As Bleier (1986) has pointed out, this paradigm has largely been guided by the assumptions that (a) significant cognitive "sex differences" exist and (b) that these differences may be best explained at a biological level of analysis. As a consequence, the search for physiological differences in the development, structure, and/or functioning of the male and female brain has tended to be the primary focus of researchers who have identified sex as a subject variable (cf. Caplan, MacPherson, and Tobin, 1985; Fausto-Sterling, 1985).

In recent years, however, (a) a general dissatisfaction with the data base on which assumptions about sex differences are founded (cf. Frodi, Macaulay, and Thorne, 1977; Maccoby and Jacklin, 1974; Matlin, 1987; Sherman, 1971) and (b) questions concerning the use of sex differences as explanations for behavior rather than as merely descriptions of it (Unger, 1979), have served to catalyze a shift in perspective away from the study of sex as a subject variable to the study of sex as a stimulus variable (Parlee, 1981; Unger, 1979). This new research paradigm has been largely concerned with how people respond to a stimulus person who is either female or male (cf. Grady, 1979). In other words, rather than assuming the operation of a stable set of causal variables (e.g., biological sex) as the primary determinant of individual differences in behavior, the sex as stimulus variable approach acknowledges the importance of culturally-based notions of masculinity and femininity and their influence upon the way in which people construe and assign meaning to self and others. This shift in perspective has also necessitated a distinction in terminology - particularly between the terms "sex" and "gender." While "sex" refers to the biologically-based categories of male and female, "gender," on the other hand, refers to those characteristics assigned to a particular sex within a particular sociocultural context (Unger, 1979).

The study of sex and gender from a "sex as stimulus variable" perspective is represented by an increasing number of empirical investigations and theoretical statements (O'Leary and Hansen, 1985; Wallston and O'Leary, 1981). For example, in an extensive review of the person perception literature on physical attractiveness, competence, and attributions for the cause of competence, Wallston and O'Leary (1981) concluded that sex and gender are central constructs in person perception. However, one of their more interesting findings was that responses to levels of male competence and female attractiveness tend to vary depending upon the social context. As a result, subsequent research has become increasingly more sensitive to social and context

tual variables (cf. Eagly and Chrvala, 1986; Etaugh, Houlter, and Ptasnik, 1988; Rosenwasser and Dean, 1989). In line with this trend, Fine (1985) outlines a number of strategies designed to enhance the contextual validity of feminist psychological research. Similarly, Gervasio and Crawford (1989) recently offer a conceptual and methodological critique of research on the social evaluation of assertive speech and propose an alternative framework based on speech act theory and the social roles that are created and maintained through conversational interaction.

The shift from the study of "sex differences" to the study of the way males and females are personally and socially construed implies a shift toward a view of knowledge as socially constituted. Unger (1983) underscores this implication by stating that

In the new psychology of sex and gender, maleness and femaleness are viewed largely as social constructs that are confirmed by sex-characteristic styles of self-presentation and the differential distribution of females and males into different social roles and statuses and maintained by intrapsychic needs for self-consistency and the need to behave in a socially desirable manner. (Unger, 1983–1984, p. 229)

Theoretical Revisions: Chodorow, Gilligan, and Bem

To illustrate what I believe is a social constructionist trend in feminist understandings of gender differences, three significant theoretical contributions will be briefly outlined — those of Nancy Chodorow, Carol Gilligan, and Sandra Bem.

A relational "way of knowing." In a widely discussed book, The Reproduction of Mothering, Chodorow (1978) attempts to account for the "reproduction within each generation" of certain "nearly universal differences" that characterize feminine and masculine gender roles and personality. More specifically, she seeks to address the question "why do women mother?" As a backdrop for her theory, Chodorow rejects traditional explanations based upon biological propensities and social learning theory (cf. Rossi, 1978) and instead contends that

Gender differences and the experience of difference are socially and psychologically created.... Differences and gender difference do not exist as things in themselves: they are created relationally, and we cannot understand difference apart from this relational construction. (Chodorow, 1987, p. 250)

From these social constructionist assumptions, Chodorow sets forth an object relations account of gender difference rooted in the formative identification and differentiation processes of selfhood development. According to Chodorow, the generally exclusive role of women in childcare provides a relational context for young girls to identify with their mothers which, as a result,

minimizes self-other differentiation. For young boys, on the other hand, separation and individuation are critically tied to gender identity. Developmentally speaking, they must break this maternal bond (that is, separate) in order to identify with their fathers. In sharp relief, Chodorow hypothesizes that because females remain attached to their first object relation (mother). they tend to emerge from childhood with a self defined through relationship and connection – a self which not only has a strong capacity for experiencing another's needs or feelings but which also desires to bear and mother children. Boys, forced to renounce their primary identification with their mothers, construct a self founded on autonomy and separation. According to Chodorow, young men learn to make distinctions between themselves and others and to devalue instances of relationships built on affect. As a result, they emerge into adulthood relatively well-prepared to function in the impersonal world of work which encourages objectivity and distancing. Similar conceptualizations have been offered by other prominent feminist theorists (cf. Belenky, Clinchy, Goldberger, and Tarule, 1986; Dinnerstein, 1976; Harding, 1981; Keller, 1982).

A different moral voice. Gilligan (1982), a developmental psychologist, challenges the universality of Kohlberg's androcentric theory of moral development and

... seeks to identify in the feminine experience and construction of social reality a distinctive voice, recognizable in the different perspective it brings to bear on the construction and resolution of moral problems. (Gilligan, 1987, p. 279)

On the basis of her study (personal interviews) of the way individuals resolve significant moral dilemmas in their lives, Gilligan contends that males and females, boys and girls, do not develop at different rates through universal stages of moral development (as Kohlberg's theory suggests), but rather they move along different kinds of developmental paths and look at moral problems in different ways. Drawing on Chodorow's (1978) theoretical framework, Gilligan offers a corrective that delineates two relationally-constructed and gender-based modes of moral judgement: justice and care.

According to Gilligan (1982), because men's identity development is defined through separation and autonomy, they tend to approach moral decisions abstractly and objectively with an emphasis on rational principles of rights and justice. Women, on the other hand, whose conceptions of self are rooted in a sense of connection and relatedness to others, tend to approach moral problems concretely and contextually with an emphasis on personal responsibility and care. Gilligan further notes that because women's self-definition derives from a sense of caring and sensitivity to others, these characteristics render them relatively inferior on moral-judgement scales based upon

abstract laws and moral principles embedded in the values of separation and autonomy — for example, concepts of "blind justice," fairness, rights, and so forth (Murphy and Gilligan, 1980). At the crux of Gilligan's position is not that women's moral development is less mature than men's but rather that it is different. She writes:

The failure to see the different reality of women's lives and to hear the differences in their voices stems in part from the assumption that there is a single mode of social experience and interpretation. By positing instead two different modes, we arrive at a more complex rendition of human experience which sees the truth of separation and attachment in the lives of women and men and recognizes how these truths are carried by different modes of language and thought. (Gilligen, 1982, pp. 173–174)

Interview and empirical data which corroborate Gilligan's thesis that gendered constructions of self and morality might be linked have been presented by Lyons (1983).

Although the theoretical revisions of Chodorow and Gilligan have not gone uncriticized (cf. Auerbach, Blum, Smith, and Williams; 1985; Bart, 1984; Greeno and Maccoby, 1986; Rossi, 1984), their mutual conceptual focus upon the differential social processes of attachment and relationship that are believed to form the contextual network through which women and men come to understand themselves and their moral behavior points to a view of knowledge as socially constituted.

Gender schema theory. In a recent series of conceptual and empirical works, Bem (1981, 1983, 1985, 1987) articulates a gender schema theory in order to explain how and why children so frequently employ the category of sex as a cognitive organizing principle, or schema. Gender schema theory proposes that children become sex typed, in part, because they posess a "general readiness" to construct and organize information — particularly information about the self — in terms of the culture's definitions of masculinity and femininity (Bem, 1985). By the same token, gender comes to have such priority over other dimensions of experience because

... the culture communicates to the developing child both implicitly and explicitly that sex is one of the most important categories — if not the most important category — in human social life; that unlike other social categories with more limited reach, the dichotomy between male and female has and ought to have intensive and extensive relevance to virtually every domain of human experience. (Bem, 1987, p. 271)

Thus while acknowledging the role of constructive cognitive processes in sex typing, gender schema theory further proposes that an individual's personal constructions are a function of the sex-differentiated practices of the social community which define sex as a salient social category. According to Bem (1985), the transformation of a given social category (or social schema) into

a highly available cognitive schema depends on the degree to which the values and practices of the social context (a) construct an association between that category and a range of other attributes and behaviors and (b) assign the category far-reaching social significance — that is, whether a wide array of social institutions and norms differentiates between persons, behaviors, and characteristics on the basis of the category (p. 211). Bem's epistemic commitment to a socially constituted knowledge base is evident in her contention that the conceptual categories which are deemed significant are largely determined by the categories and distinctions between people that one's culture emphasizes. Gender schema theory "is as much a theory about our culture and its lenses as it is a theory about personality or individual differences" (Bem, 1987, p. 265).

Concluding Remarks

One of the primary tenets of a view of knowledge as socially constituted is that individuals categorize the world the way they do because they have participated in social processes which make salient those categories. The affinity between the Weltanschauugen perspective in the philosophy of science and the feminist critique is their mutual emphases on the world-as-constructed - emphases which allow for questions to be raised about the world as taken-forgranted. While the Weltanshauugen perspective draws attention to the notion that scientific knowledge is philosophically, historically, and culturally situated, the feminist critique argues that the dominant Weltanshauggen of contemporary science is fundamentally androcentric. In other words, both perspectives raise serious questions about the presumed objectivity of science with respect to the ways in which values influence research and the ways in which science is a socially constituted activity. Feminist theorists, however. seek to anchor their critic on the presumed masculine mode that governs science - one that emphasizes manipulation, control, and detachment. Within this context one can appreciate the similarity between the works on mothering, identity formation, and moral development (Chodorow, Gilligan) and the linkage between gender and scientific practice made by feminist critics of science. Keller (1983) has cogently described the implications of attributing masculinity to the very nature of scientific thought:

... in characterizing scientific and objective thought as masculine, the very activity by which the knower can acquire knowledge is also genderized. The relation specified between knower and known is one of distance and separation. It is that between a subject and object radically divided, which is to say no worldly relation. Concurrent with the division of the world into subject and object is, accordingly, a division of the forms of knowledge into "objective" and "subjective." The scientific mind is set apart from what is to be known . . and its autonomy is guaranteed . . . by setting apart its modes of knowing from those in which that dichotomy is threatened. (p. 191)

In essence, the feminist characterization of the contemporary "scientific mind" and its ways of knowing as masculine — that is, connoting autonomy, separation, and distance — is significant in that it identifies within the scientific status quo a rejection of any commingling of subject and object (Fee, 1983; Harding, 1983; Keller, 1983).

In contrast, a view of knowledge as socially constituted is fundamentally a contextualist "way of knowing" (cf. Pepper, 1942). Within this worldview there are no stable, universal, or exhaustive categories. As a result, meanings are intimately tied to specific contexts, which are themselves in flux. Understanding is sought through an examination of the socially negotiated processes by which constructions of meaning are defined (and redefined) across contexts and over time. Also significant to a view of knowledge as socially constituted is that what is known cannot be separated from the context that is the knower. Observers are a part of the phenomena they observe and their unique frames of reference are inherently connected to the particular meanings that emerge. This view challenges the dualisms characteristic of positivist conceptions (objectivity/subjectivity, reason/emotion, mind/body, nature/culture) and suggests that categories of meaning are not graven images of fixed reality, but rather represent mere heuristic devices for understanding human existence - devices subject to revision through critical articulation and assessment.

By inviting one to critically "challenge the objective basis of conventional knowledge" (Gergen, 1985a, p. 267) and to consider the social nature of our personal and shared constructions of reality, a view of knowledge as socially constituted appears to represent a significant and viable epistemology associated with the Weltanschauugen philosophy of science, the social constructionist movement in social psychology, feminist scholarship, and emerging trends in the psychology of sex and gender. It is the convergence of these trends that holds promise toward reconstructing the core theoretical and conceptual systems of psychology and thereby laying the foundation for the emergence of a new, more contextually-sensitive knowledge base.

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