Anuario de Psicología 2003, vol. 34, nº 2, 291-303 © 2003, Facultat de Psicología Universitat de Barcelona

Viewing developmental psychology through the lenses of feminist theories

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> Feminist theories provide a framework through which to explore interesting issues in developmental psychology, This article describes 10 feminist theories: liberal, socialist, African-American/ethnic, essentialist, existentialist, psychoanalytic, radical, postmodern, post-colonial, and cyberfeminist. The implications of each for developmental psychology are presented. Several of these theories argue for new accounts of development that take the experiences, values, and interests of women and girls as their starting point.

> Key words: Feminist theories, women's studies, development, gender, girls, developmental theory.

Las teorías feministas proporcionan un marco general para explorar los resultados de la psicología del desarrollo. Este artículo presenta diez teorías feministas y comenta las implicaciones de cada una de ellas. Las teorías tratadas son: la liberal, étnica Africana-Americana, esencialista, existencialista, psicoanalítica, radical, post moderna, postcolonial y ciberfeminismo. Algunas de estas teorías abogan por nuevas explicaciones del desarrollo que tomen como punto de partida las experiencias, valores e intereses de las mujeres y niñas.

Palabras clave: teorías feministas, estudios de mujeres, desarrollo, género, niñas, teorías del desarrollo.

Individuals unfamiliar with feminist scholarship or women's studies often assume that feminist theory provides a singular and unified framework for analysis. In one sense this is correct; all feminist theories posit gender as a significant characteristic that interacts with other characteristics, such as race and class, to structure relationships between individuals, within groups, and within society as a whole. However, using the lens of gender to view the world results in diverse images or theories as seen in the following feminisms (Nicholson, 1997; Tong, 1998): liberal, socialist,

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African-American/ethnic, essentialist, existentialist, psychoanalytic, radical, postmodern, post-colonial, and cyberfeminist. Their variety and complexity provide a framework through which to explore interesting issues in developmental psychology, such as the causes of development, the processes underlying developmental change, and variability in developmental pathways and endpoints.

In this article, we describe each theory, identify the questions that each would raise about psychological development, show how each can serve as a critique of current accounts of development, and suggest fruitful new applications to the study of development. The chapter focuses not on gender differences but on the pervasiveness of masculine views, values, and models of development and on the potential contributions of feminist theories to a broader, richer, and more inclusive view of human development. We present the theories chronologically, in the order in which they tended to emerge and become influential. Most theories identified something that was missing in a prior theory or theories.

Liberal Feminism

Although liberal feminists today hold varied views compared to their 18th century predecessors (H. T. Mill, 1869/1970); J. S. Mill, 1851/1970; Wollstonecraft, 1891/1975), they generally believe that females are suppressed in contemporary society because they suffer unjust discrimination (Jaggar, 1983). Liberal feminists seek no special privileges for women and girls, and simply demand that everyone receive equal consideration and opportunity without discrimination on the basis of sex. However, the implications of liberal feminism extend beyond employment, access, and discrimination issues. Liberal feminism shares two fundamental assumptions with the foundations of the traditional scientific method: (1) Both assume that human beings are highly autonomous and obtain knowledge in a rational manner that may be separated from their social conditions, and (2) both accept *positivism* as their theory of knowledge. Positivism implies that «all knowledge is constructed by inference from immediate sensory experiences» (Jaggar, 1983, pp. 355-356). These two assumptions lead to the belief in the possibilities of obtaining knowledge that is both objective and value-free, concepts that form the cornerstones of the scientific method. Objectivity is contingent upon value neutrality or freedom from values, interests, and emotions associated with a particular class, race, or sex.

Feminist scholarship (e.g., Harding, 1986; Fausto-Sterling, 1992) has identified gender-based biases and the absence of value neutrality in science, particularly biology. The exclusion of females as experimental subjects, the focus on problems of primary interest to males, biased experimental designs, and interpretations of data based in language or ideas constricted by patriarchal parameters, have caused biased or flawed experimental results in many areas. For example, in biology, when female primates were studied, it was usually only in their interaction (usually reaction) to males or infants (e.g., Hrdy, 1984).

Although each scientist strives to be as objective and value-free as possible, most scientists, feminists, and philosophers of science recognize that no individual can be completely neutral or value-free. Instead, «objectivity is defined to mean independence from the value judgments of any particular individual» (Jaggar, 1983, p. 357). That is, the scientific community as a whole, by scrutinizing hypotheses and relevant evidence, corrects for any biases of individual scientists. Liberal feminists argue that lack of objectivity and presence of bias occur because of human failure to follow properly the scientivity.

tific method and avoid bias due to situation or condition. They argue that it was through attempts to become more value-neutral that the androcentrism in previous scientific research has been revealed. Thus, liberal feminists suggest that now that the bias of gender has been revealed by feminist critiques, scientists can take this into account and make appropriate corrections. Both men and women will use this revelation to design experiments, gather and interpret data, and draw conclusions and theories that are more objective and free from bias, including gender bias (Biology and Gender Study Group, 1989). Thus, it is assumed that as more women enter science the basic nature of science will be unchanged, except for the removal of barriers to women.

Most developmental psychology research falls within the positivist framework; some developmental research is consistent with a liberal feminist approach. First, exposing adults' biased observations of boys and girls sensitizes developmental researchers to possible biases in their own observations. For example, labeling a baby as male elicits different descriptions of the same videotaped behavior (Condry & Condry, 1976). A «boy» baby is described as angry when becoming upset after a jackin-the-box pops out, whereas a «girl» baby is described as fearful in response to the same event. Guarding against such biases would make developmental research more objective, and thus more scientific. Second, a liberal feminist approach would strive towards more equitable development for girls and boys. Differences in the socialization of boys and girls may have, for example, contributed to the greater entrance of males than females into science, math, and technology. Projects to attract more girls to science are important because increases in the number of women scientists would alleviate male bias and might lead to a more impartial science. Similarly, schools could achieve a more equitable development for boys and girls by eliminating differences in the treatment in the classroom, for example, eliminating teachers' propensity to call on boys more frequently than girls (Sadker & Sadker, 1994).

Third, feminist scholarship would focus on behaviors previously slighted by developmental researchers. Despite the strong representation of women among developmental researchers, certain topics have been slighted, perhaps because of our society's male-oriented value system. Examples from research on females are careoriented moral reasoning (Gilligan, 1982), «women's ways of knowing» that emphasize connections and relationships (Belenky, Clinchy, Goldberger, & Tarule, 1986; Goldberger, Tarule, Clinchy, & Belenky, 1996), nonphysical relational aggression (Crick & Rose, 2000), and girls' conversations (e.g., Goodwin, 1990).

In contrast to liberal feminism, all other feminist theories call into question some of the fundamental assumptions underlying the scientific method, its corollaries of objectivity and value neutrality, or its implications. They reject individualism for a social constructivist view of knowledge and question positivism and the possibility of objectivity obtained by value-neutrality. Many also imply that men and women may conduct scientific research differently, although each theory posits a different cause for the gender distinction. Although developmental psychologists have been receptive to critiques from a liberal feminist perspective, they generally are less familiar with, or less receptive to, the other theories of feminism, to be described next.

Socialist Feminism

Flowing from Marxism, socialist feminism views all knowledge as socially constructed and thus rejects the notion of a neutral, disinterested, individual observer. Knowledge, even scientific knowledge, cannot be objective and value free because the basic categories of knowledge are shaped by human purposes and values, and ultimately social class. Because the prevailing knowledge and science reflect the interests and values of the dominant class and gender, they have an interest in concealing, and may in fact not recognize, the way they dominate.

Although strict Marxist-feminism emphasizes class over gender, socialist feminism places class and gender on equal ground as factors that determine the position and perspective of a particular individual in society. Thus, women oppressed by both class and gender, occupy a position that provides an advantageous and more comprehensive view of reality. That is, in order to survive, the oppressed must understand and predict the behavior of the dominant group. This double vision is more accurate than that of the dominant group, who need only see the world from their own perspective, so have only a single, constrained viewpoint.

Developmental psychologists sometimes examine social class differences, though rarely examine their interaction with gender. But the potential impact of socialist feminism is far greater than this. The socialist feminist focus on the power of the dominant group raises the question of why, in developmental psychology, certain topics, subject groups, and interpretations of data are privileged over others (see Franks, 1992, for examples). Does this privileging reflect the values and interests of the dominant class of middle class white males? In the 1960's and 70's, developmental psychologists' receptivity to Piaget's focus on children's scientific concepts may in part have reflected anxieties about the position of the United States in the «cold war,» including the space race with the Soviet Union. Concerns about the effects of working mothers (but not working fathers) and «cocaine mothers» (but not «cocaine fathers») on development imply blame on only part of the population. Daycare is seen as a problem of working mothers but not working fathers. These examples suggest that a covert social value system based on differential power steers developmental psychology. Finally, the bulk of developmental research is on white middle-class, rather than low-income and/or minority, children. Thus, the dominant class is considered the norm and the underclass is «the other», the special case.

With respect to developmental theory, Vygotskian, and certain social-contextual, approaches (e.g., Rogoff, 1990) are consistent with the socialist-feminist view that knowledge is socially constructed. Children develop cognitively as they work or play with adults and peers. More advanced individuals direct and support children's emerging concepts. As children internalize their conversational interaction with others, the social plane creates the psychological plane. Interestingly, however, these approaches give almost no attention to how social class, the masculine values of a society, and the child's gender influence the nature of this construction of knowledge. The importance of such issues is revealed, for example, in studies showing that parents tend to discuss more of the emotional aspects of past experiences with daughters than with sons (Adams, Kuebli, Boyle, & Fivush, 1995). And middle-class parents consider expressing one's view a natural right for children, but working-class parents consider this something to be earned and defended by children (Wiley, Rose, Burger, & Miller, 1998).

African-American/Womanist and Racial/Ethnic Feminism

Like socialist critiques, African-American critiques reject the individualism, objectivity, and value-neutrality, of the positivist Eurocentric approach, and posit social construction as an approach to knowledge. Whereas Marxism posits class as the organizing principle around which the struggle for power exists, African-American critiques maintain that race is the primary oppression. According to African-American *feminist* approaches (Collins, 1990; Giddings, 1984; hooks, 1983, 1990; Lorde, 1984), for African-American women racism and sexism become intertwining oppressions that provide them with a different perspective and standpoint than that of either white women or African-American men (Collins, 1990).

African-Americans are underrepresented in the population of developmental psychologists while Caucasians are overrepresented, relative to their respective percentages in the population as a whole. This imbalance makes it particularly likely that in its choice of problems for study, its method and theories, and the conclusions drawn from the data, the profession and its theories represent and function to further white Eurocentric interests. The more comprehensive view of minority females, that derives from their race, class, and gender, is rarely represented among researchers or research participants. The vast majority of developmental research involves mainly white participants; relatively few studies focus on African-American or Latino children and, fewer still, girls in these groups. Using the experiences of African-American or Latino girls as a starting point can, however, provide new perspectives (Ginorio & Martínez, 1998; Leaper, 2000). For example, Goodwin (1990) observed how African-American girls engaged in a form of gossip dispute activity in order to create later events of great social importance. And work on African-American girls studying science illustrates complex interactions between gender and race (Clewell & Ginorio, 1996), Finally, recent work on Latino children reveals the effects on development of the importance that Latino culture places on strong family values and family unity, on the extended family as a support system for Latino mothers, and on girls' responsibilities for child care and housekeeping (Ginorio, Gutiérrez, Cauce, & Acosta, 1995). Research on diverse populations not only shows cultural differences, but also clarifies how social processes influence development.

Essentialist Feminism

Essentialism is the notion that every entity has certain inherent, fundamental properties, universal in its kind, that truly define it and makes it what it is. Essentialist feminist theory posits that women are different from men because of their biology, specifically their hormones, secondary sex characteristics, and reproductive systems. Essentialist feminists may attribute gender differences in visuo-spatial and verbal ability, aggression and other behavior, and other physical and mental traits to prenatal or pubertal hormone exposure.

In the earlier phases of the current wave of feminism, most feminists (Bleier, 1979; Fausto-Sterling, 1985; Hubbard, 1979; Rosser, 1982) fought against certain sociobiological research such as that by Wilson (1975), Trivers (1972), and Dawkins (1976) and some hormone and brain lateralization research (e.g., Buffery & Gray, 1972; Goy & Phoenix, 1971; Sperry, 1974) that seemed to provide biological evidence for gender differences in mental and behavioral characteristics. Essentialism was seen as a tool for conservatives who wished to keep women in the home and out of the work place. More recently, feminists have re-examined essentialism from perspectives ranging from conservative to radical (Corea, 1985; Dworkin, 1983; MacKinnon, 1982, 1987; O'Brien, 1981; Rich, 1976), with a recognition that biologically-based differences between the sexes might imply superiority and power for women in some arenas.

Essentialist positions can be found in developmental psychobiological, ethological, sociobiological, and neuropsychological work. For example, differences in the magnetic resonance images of brains (MRIs) of males and females, or other brain aspects of the brain, are sometimes interpreted as reflecting innate differences, though critiques point to experiential influences as well. Gender differences in mathematical, spatial, and verbal abilities (e.g., Halpern, 1992) often are considered biologically based. Essentialist examples not focused on gender differences include work on mental modules, theory of mind in autistic children, and children's developing concepts of the essence of people and objects (Gelman & Taylor, 2000). Essentialism also supports the work on children's universal cognitive structures, skills, or processes. Similarly, stage theories of development essentialize the child and strip behavior of its contextual influences. As these examples show, there are essentialist tendencies in developmental work generally and work on gender differences more specifically, but there are few examples of feminist essentialism focused on the uniqueness of «women» or female superiority (though work by Gilligan, 1982, and Belenky et al., 1986, sometimes is interpreted this way).

Existentialist Feminism

In contrast to essentialist feminism, existentialist feminism, first elaborated by Simone de Beauvoir (1974), suggests that society's interpretation of biological differences, rather than the actual biological differences themselves, lead to women's «otherness», the social construction of gender, and the devaluing of women and girls. Thus, gender differences in visual-spatial abilities and learning might be the result of the differential treatment and reactions that boys and girls in our society receive based on their biology. Developmental psychologists have provided abundant evidence for the contributions of socialization to gender differences and the subtle interplay of biological and environmental factors. In addition, girls have become «the other», as described by existentialist theory, when masculine metaphors (Scholnick, 2000), values (e.g., mastery–Code, 2000), definitions of behavior (e.g., aggression-Crick & Rose, 2002), and models of memory, and cognitive change (Miller, 2002) control what is studied, how it is studied, and how development is conceptualized.

Psychoanalytic Feminism

Based on the Freudian assumption that anatomy is destiny, psychoanalytic theory assumes that biological sex will lead to different ways for boys and girls to resolve the Oedipus and castration complexes that arise during the phallic stage of normal sexual development. However, as in existentialism, psychoanalysis recognizes that social influences also operate, as when the child-caretaker interaction differs depending on the sex of the child (and possibly that of the primary caretaker).

Rejecting the biological determinism in Freud, Dinnerstein (1977) and Chodorow (1978), in particular, have used an aspect of psychoanalytic theory known as object relations theory to examine the construction of gender and sexuality. They argue that male dominance emerges in society because boys are pushed to be independent, distant, and autonomous from their mothers or female caretakers while girls are permitted to be more dependent, intimate, and less individuated from theirs. Thus, males, because they feel comfortable with independence, autonomy, and distance, may be attracted to certain fields, such as science, that value these masculine characteristics (Keller, 1982, 1985). Consequently, science, in its current socially constructed version, excludes many women and girls from the field, selects topics of interest to males, and uses masculine theoretical models of control, mastery, and separation.

Psychoanalytic approaches have a long history in developmental psychology because of their focus on early socialization experiences, family dynamics, and identification of children with their parents (which results in the internalization of parental values, especially those of the same-sexed parent). These approaches often focus on the psychological separation of boys from their mothers, and on achieving autonomy, self control, and mastery, more than on the establishment of social bonds. A current psychoanalytically-inspired notion of interest to developmental psychologists studying attachment is infants' cognitive «working models» of their interaction with their caretakers (e.g., Bretherton, 1992). It is likely that the different ways that boys and girls interact with their parents lead to different types of working models.

Radical Feminism

Radical feminism maintains that women's oppression is the first, most widespread, and deepest oppression (Jaggar & Rothenberg, 1984). Since men dominate and control most institutions, politics, and knowledge in our society, they reflect a male perspective and are effective in oppressing women. Scientific institutions, practice, and knowledge are particularly male dominated and have been used to control and harm women (Bleier, 1984; Keller, 1985). Radical feminism rejects most scientific theories, data, and experiments because they not only exclude women scientists and participants but also because they are not women-centered. Moreover, radical feminism rejects dichotomies such as rational/feeling and mind/body, and Western «logical» thinking that is linear and not holistic.

Unlike the feminisms previously discussed, radical feminism does not have its basis in a theory such as Marxism, positivism, psychoanalysis, or existentialism, already developed for decades by men. Since radical feminism is based in women's experience, it rejects feminisms rooted in theories developed by men based on male experiences and world views. Because of their oppression, women have had few opportunities to come together, understand their experiences collectively, and develop theories based on those experiences. In an attempt to develop theories of knowledge based on women's experiences, women have met together in women-only consciousness-raising groups to examine their personal experiences (MacKinnon, 1987).

Drawing on women's and girls' experiences as a starting point for developmental research and theorizing rarely occurs in developmental psychology, despite the many women in the field. Main exceptions are the work of Gilligan and her colleagues who have studied women's care-based morality (e.g., Gilligan, 1982) and girls' experiences as preadolescents and adolescents and how these experiences cause changes in self concepts (e.g., Brown & Gilligan, 1992), and the work on women's ways of knowing (Belenky *et al.*, 1986). A final example might be all-female classrooms or schools.

Girls and boys engage in different sorts of activities that presumably lead to different learning experiences and views of the social world. Moreover, girls and boys spontaneously segregate in middle childhood, perhaps because of different preferred styles of play and interaction (Maccoby, 1998). Piaget (1932) explicitly omitted the experience of girls (moral reasoning when playing a hopscotch-like game) in favor of the experience of boys (playing marbles). He seemed perplexed by the fact that girls seemed as interested in the social interaction as the rules of the game or winning. It seems likely that moral reasoning would look quite different in the two sorts of groups. A focus on girl-only groups would be a starting point for a fresh look at what cognitive skills are developed during childhood play.

Postmodern Feminism

Postmodernism dissolves the universal knower, and postmodern feminism dissolves the possibility that women speak in a unified voice or that they can be universally addressed. Although one woman may share certain characteristics and experiences with other women because of her biological sex, still, her particular race, class, and sexual differences compared to other women, along with the construction of gender that her country and society give to someone living in her historical period, prevent the universalizing of her experiences to women in general. At least some postmodern feminists (e.g., Cixous & Clement, 1986; Kristeva, 1984,1987) suggest that women, having been marginalized by a dominant male discourse, may be in a privileged position, that of outsider to the discourse, to find the holes in what appears solid, sure, and unified.

Within developmental psychology, cultural psychologists most directly explore both the perspectives of those in the margins and the nonuniversal and diverse developmental pathways and endpoints of development. Cultural psychology examines the processes by which race, class, gender, nationality, and so on, interact to produce diverse «truths» both between and within cultures. Socialization practices are main mechanisms by which these various markers result in diverse selves and perspectives.

Postmodernism also challenges the assumption of progress in human activity. Developmental psychologists tend to assume that age-related changes reflect progress, and value the growing similarity between child and adult thought during development. Postmodern challenges to concepts of development as progress toward a predefined end state, and a consideration of discontinuities, regressions, multiple developmental pathways, and alternative endpoints, can be seen in the work of Bradley (1989), Burman (1994), and Morss (1992). Development may include detours, temporary regressions, indirect routes, diverse pathways, and rhythmicity, especially for women. And each «progression» may require the loss or another ability or tendency (Bjorklund & Green, 1992). Finally, postmodern feminism challenges the essentializing tendencies within developmental psychology, specifically, the search for universal aspects of development and the focus on similarities rather than differences among children of a particular stage, age, or category (e.g., «girls» as in middle class white girls, ignoring diversity in race, social class or ethnicity).

Post-colonial Feminism

After World War II, many previously colonized countries gained their independence. However, Western colonizers did not fully give up control. They continued their influence, particularly economically, but also politically, ideologically, and militarily. Feminists have suggested that just as patriarchy dominated colonial life, so does it dominate post-colonial activities. General themes include the underdevelopment of Southern continents by Europe and North America, ignoring, obscuring, or misappropriating earlier scientific achievements and history of countries in Southern continents, the fascination with (but exploitation of) so-called «indigenous science», and, more recently, the recognition that Southern countries must become

scientifically and technologically literate to join and compete in a global economy (Harding, 1998).

The particular forms and ways that these general themes are expressed vary, depending upon the history, culture, geography and length of colonization of both the colonized and colonizing countries. For example, the issues surrounding post-colonial science vary considerably between India and Kenya (Rosser, 2000). Although both India and Kenya were colonized by the British, the differences in indigenous cultures, geographies, and length of time since independence have led to remarkably different problems and uses of modern science and technology. In India, for example, amniocentesis has been used for sex determination to abort undesired female fetuses. The particularities of Indian culture, economics, and religion in which sons are highly valued and the elderly are cared for by sons, and where dowry prices to find a good marriage partner for daughters can be very expensive, encourage this use of amniocentesis. One outcome relevant to developmental psychology may be changes in family structure--boys might be raised with no, or few, sisters with whom to interact, and girls would rarely have older sisters as models. Another outcome with developmental impact might be the scarcity of females when males begin dating in adolescence or seeking marriage partners. Competition for females surely would affect peer interaction during adolescence. In Kenya, in contrast, the indigenous culture, through polygamy and valuing of children and agricultural production, discourages such sex selection and abortion of females.

Although developmental psychologists have examined the effects of cultural change on children in various countries, they have given little attention to the impact of postcolonialism on children's development suggested by the above examples. Postcolonial feminist theories could suggest fruitful new research questions for Vygotskian, social contextual, and cultural psychology approaches. Because the transition from colonialism to post-colonialism has taken different forms in different countries (e.g., war versus peaceful change), the effects on children and their development may take different forms in different countries.

Cyberfeminism

Cyberfeminism is the most recently proposed feminist theory. As the name suggests, cyberfeminism explores the ways that information technologies and the Internet provide avenues to liberate (or oppress) women. In the early 1990's the term «cyberfeminism» first began to be used in various parts of the world (Hawthorne & Klein, 1999), with VNS Matrix, an Australian-based group of media-based artists being one of the first groups originating the term.

The individuals who defined cyberfeminism (Plant, 1996; Millar, 1998) saw the potential of the Internet and computer science as technologies to level the playing field and open new avenues for job opportunities and creativity for women:

«A women-centered perspective that advocates women's use of new information and communications technologies of empowerment. Some cyberfeminists see these technologies as inherently liberatory and argue that their development will lead to an end to male superiority because women are uniquely suited to life in the digital age». (Millar, 1998, p. 200).

Absence of sexism, racism, and other oppressions would serve as major contrasts between the virtual world and the real world:

Anuario de Psicología, vol. 34, nº 2, junio 2003, pp. 291-303 © 2003, Universitat de Barcelona, Facultat de Psicología «Cyberfeminism as a philosophy has the potential to create a poetic, passionate, political identity and unity without relying on a logic and language of exclusion. It offers a route for reconstructing feminist politics through theory and practice with a focus on the implications of new technology rather than on factors which are divisive» (Paterson, 1994).

Discontinuity, speed, symbolic and linguistic spectacle, and constant change characterize information technology and digital discourse. Although these characteristics of instability and indeterminacy due to the changing technology open the possibility for other changes in the social realm and power relations, it is very unclear that information technologies and cyberculture will result in such social changes.

Some critics suggest that the current information technology revolution has resulted in a rigidifying and reifying of current power relations along previously existing gender, race, and class lines. For example, the internet becomes a tool making women more vulnerable to men using it for ordering brides from developing countries, prostitution, cybersex, assumption of false identities, and pornography (Hawthorne & Klein, 1999).

Despite their postmodern veneer of fragmentation, shifting identities, and speed, information technologies still rest upon the power of science and technology to emancipate humans and upon a faith in abstract reason. Millar (1998) defines this situation as «hypermodern». «Hypermodern» describes the packaging of modernity power relations that are universally patriarchal, racist, and bourgeois in a postmodern discourse of discontinuity, spectacle, and speed.

Is cyberfeminism really a feminist theory or could cyberfeminism merely represent an attempt to see information technology as the latest venue for women's liberation, much as Shulamith Firestone (1970) envisioned such liberation resulting from reproductive technologies? The answer to this question will emerge over the next few years.

Conclusions

Although only psychoanalytic feminism is explicitly developmental, all varieties of feminism, though in somewhat differing ways and to different degrees, encourage a questioning of current (patriarchal) assumptions about what in development should be studied, what processes of change underlie development, and how development should be studied. Liberal feminism, by simply advocating research free of gender bias, provides the least challenge to the question of what is important in development. At the other extreme, postmodern and radical feminism question the very categories of knowledge or behavior constructed by patriarchal societies. For example, the contrasts that drive developmental research, such as maturity versus immaturity, are called into question because they reflect prescriptive norms. However, other feminist theories suggest that environmental factors such as class (socialist feminism) and race (African-American feminism), along with historical-cultural change (e.g., postcolonial feminism) including technological (cyberfeminism) change, interact with gender to form more complex sources of change. Postmodern feminism emphasizes that these characteristics cause the same event to be experienced in different ways by different people, even within the category of «female». Family dynamics

and the role of the primary caretaker become powerful determinants in psychoanalytic feminism, while radical feminism looks to the experience of women and girls for previously unrecognized mechanisms of development and models of development. Finally, regarding methods, liberal feminism calls for research without gender bias, using current scientific methods, while radical and postmodern feminism advocate diverse researchers, using non-patriarchal methods involving less power of the researcher over the object of study.

These feminist theories may be identified within current developmental theories and research, though these linkages have not been made explicit. More importantly, these feminist theories suggest new questions about development that would enrich current theories of development. Such questions address the subtle interactions of gender, race, class, and ethnicity; the limits of science and technology, along with the benefits to science of diversity in its researchers and child participants; and power and marginality. The theories also raise issues about the impact of colonization on children in Southern countries, and about the potential for constructing new accounts of development that take the experiences, values, and interests of women and girls as their starting point.

REFERENCES

- Adams, S., Kuebli, J., Boyle, P. & Fivush, R. (1995). Gender differences in parent-child conversations about past emotions: A longitudinal investigation. Sex Roles, 33, 309-323.
- Belenky, M. F., Clinchy, B. M., Goldberger, N. R. & Tarule, J. M. (1986). Women's ways of knowing. New York: Basic Books.
- Biology and Gender Study Group. (1989). The importance of feminist critique for contemporary cell biology. In N. Tuana (Ed.), Feminism and science (pp. 172-187). Bloomington: Indiana University Press.
- Bjorklund, D. & Green, B. L. (1992). The adaptive nature of cognitive immaturity. American Psychologist, 47, 46-54.
- Bleier, R. (1979). Social and political bias in science: An examination of animal studies and their generalizations to human behavior and evolution. In R. Hubbard & M. Lowe (Eds), Genes and gender 2: Pitfalls in research on sex and gender (pp. 49-70). New York: Gordian Press.
- Bleier, R. (1984). Science and gender: A critique of biology and its theories on women. Elmsford, NY: Pergamon Press. Bradley, B. S. (1989). Visions of infancy. Oxford: Polity/Blackwell.
- Bretherton, I. (1992). Attachment and bonding. In V. B. Van Hasselt & M. Hersen (Eds.), Handbook of social development: A lifespan perspective. New York: Plenum Press.
- Brown, L. M. & Gilligan, C. (1992). Meeting at the crossroads: Women's psychology and girls' development. Cambridge, MA: Harvard University Press.
- Buffery, W. & Gray, J. (1972). Sex differences in the development of spatial and linguistic skills. In C. Ounsted & D. C. Taylor (Eds.), Gender differences: Their ontogeny and significance (pp. 5-19). Edinburgh: Churchill Livingstone.
- Burman, E. (1994). Deconstructing developmental psychology. London: Routledge.
- Chodorow, N. (1978). The reproduction of mothering: Psychoanalysis and the sociology of gender. Berkeley: University of California Press.
- Cixous, H. & Clement, C. (1986). The newly born woman. Minneapolis: University of Minnesota Press.
- Code, L. (2000). Naming, naturalizing, normalizing: "The child» as fact and artifact. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 215-237). New York: Routledge.
- Collins, P. H. (1990). Black feminist thought: Knowledge, consciousness, and the politics of empowerment. Boston: Unwin Hyman.
- Condry, J. & Condry, S. (1976). Sex differences: A study of the eye of the beholder. Child Development, 47, 812-819.
- Corea, G. (1985). The mother machine: Reproductive technologies from artificial insemination to artifical wombs. New York: Harpet & Row.
- Crick, N. R. & Rose, A. J. (2000). Toward a gender-balanced approach to the study of social-emotional development: A look at relational aggression. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 153-168). New York: Routledge.
- Dawkins, R. (1976). The selfish gene. New York: Oxford University Press.
- De Beauvoir, S. (1974). The second sex (H. M. Parshley, Trans. & (Ed.). New York: Vintage Books.
- Anuario de Psicología, vol. 34, nº 2, junio 2003, pp. 291-303
- © 2003, Universitat de Barcelona, Facultat de Psicologia

- Dinnerstein, D. (1977). The mermaid and the minotaur: Sexual arrangements and human malaise. New York: Harper Colphon Books.
- Dworkin, A. (1983). Right-wing women. New York: Coward-McCann.
- Fausto-Sterling, A. (1985/1992). Myths of gender. New York: Basic Books.
- Firestone, S. (1970). The dialectic of sex. New York: Bantam Books.
- Franks, B. (1992). Developmental psychology and feminism: Points of communication. Women's Studies Quarterly, 1-2, 28-40.
- Gelman, S. A., & Taylor, M. G. (2000). Gender essentialism in cognitive development. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 169-190). New York: Routledge.
- Giddings, P. (1984). When and where we enter: The impact of black women on race and sex in America. New York: Morrow.
- Gilligan, C. (1982). In a different voice: Psychological theory and women's development. Cambridge, MA: Harvard University Press.
- Ginorio, A. B., Guttérrez, L., Cauce, A. M. & Acosta, M. (1995). Psychological issues for Latinas. In H. Landrine (Ed.), Bringing cultural diversity to feminist psychology (pp. 241-263). Washington, DC: American Psychological Association Press.
- Ginorio, A. B. & Martínez, L. J. (1998). Where are the Latinos? Ethno-race and gender in psychology courses. Psychology of Women Quarterly, 22, 53-68.
- Goldberger, N., Tarule, J., Clinchy, B. & Belenky, M. (Eds.) (1996). Knowledge, difference and power. New York: Basic Books.
- Goodwin, M. H. (1990). He said, she said: Talk as social organization among Black children. Bloomington, IN: Indiana University Ptess.
- Goy, R. & Phoenix, C. H. (1971). The effects of testosterone propionate administered before birth on the development of behavior in genetic female rhosus monkeys. In C. H. Sawyer & R. A. Gorski (Eds.), Steroid hormones and brain function (pp. 193-201). Berkeley: University of California Press.
- Halpern, D. (1992). Sex differences in cognitive abilities (2nd ed.). Hillsdale, NJ: Erlbaum.
- Harding, S. (1986). The science question in feminism. Ithaca, NY: Cornell University Press.
- Harding, S. (1998). Is science multicultural? Post colonialisms, feminisms, and epistemologies. Bloomington and Indianapolis, IN: Indiana University Press.
- Hawthorne, S. & Klein, R. (1999). Cyberfeminism: Connectivity, critique, and creativity. North Melbourne: Spinifex.

Hooks, B. (1983). Feminist theory from margin to center. Boston: South End Press.

- Hooks, B. (1990). Yearning: Race, gender, and cultural politics. Boston: South End Press.
- Hrdy, S. B. (1984). Introduction: Female reproductive strategies. In M. Small (Ed.), Female primates: Studies by women primatologists (pp. 13-16). New York: Alan Liss.
- Hubbard, R. (1979). Introduction. In R. Hubbard & M. Lowe (Eds.), Genes and gender 2: Pinfalls in research on sex and gender (pp. 9-34). New York: Gordian Press.
- Jaggar, A. (1983). Feminist politics and human nature. Totowa, NJ: Rowman & Allanheld.
- Jaggar, A. & Rothenberg, P. (Eds.) (1984). Feminist frameworks (2nd ed.). New York: McGraw-Hill.
- Keller, E. F. (1983). A feeling for the organism: The life and work of Barbara McClintock. New York: W. H. Freeman.
- Keller, E. F. (1985). Reflections on gender and science. New Haven, CT: Yale University Press.
- Kristeva, J. (1984). The revolution in poetic language. New York: Columbia University Press.
- Kristeva, J. (1987). Tales of love. New York: Columbia University Press.
- Leaper, C. (2000). The social construction and socialization of gender during development. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 127-152). New York: Routledge.
- Millett, K. (1970). Sexual politics. Garden City, NY: Doubleday.
- Lorde, A. (1984). Sister outsider. Trumansburg, NY: Crossing Press.
- Maccoby, E. (1998). The two sexes: Growing up apart, coming together. Cambridge, MA: Harvard University Press.
- MacKinnon, C. (1982). Feminism, marxism, and the state: An agenda for theory. Signs: Journal of Women in Culture and Society, 7 (3), 515-544.
- MacKinnon, C. (1987). Feminism unmodified: Discourses on life and law. Cambridge, MA: Harvard University Press.
- Mill, H. T. (1970). Enfranchisement of women. In A. S. Rossi (Ed.), Essays on sex equality (pp. 89-122). Chicago: University of Chicago Press.
- Mill, J. S. (1970). The subjection of women. In A. S. Rossi (Ed.), Essays on sex equality (pp. 123-242). Chicago: University of Chicago Press.
- Millar, M. S. (1998). Cracking the gender code: Who rules the wired world. Toronto: Second Story Press.
- Miller, P. H. (2000). The development of interconnected thinking. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 45-60). New York: Routledge.
- Morss, J. R. (1992). Making waves: Deconstruction and developmental psychology. Theory & Psychology, 2, 445-465. Nicholson, L. (Ed.) (1997). The second wave: A reader in feminist theory. New York: Routledge.
- O'Brien, M. (1981). The politics of reproduction. Boston: Routledge & Kegan Paul.
- Paterson, N. (1994). Cyberfeminism. Retrieved, 1994, from http://echonyc.com:70/0/Cul/Cyber/paterson.
- Piaget, J. (1932). The moral judgement of the child. London: Kegan Paul.
- Plant, S. (1996). On the matrix: Cyberfeminist simulations. In R. Shiels (Ed.), Cultures of internet. London: Sage.

Anuario de Psicología, vol. 34, nº 2, junio 2003, pp. 291-303 © 2003, Universitat de Barcelona, Facultat de Psicología Rich, A. (1976). Of woman born: Motherhood as experience. New York: Norton.

Rogoff, B. (1990). Apprenticeship in thinking. New York: Oxford University Press.

Rosser, S. V. (1982). Androgyny and sociobiology. International Journal of Women's Studies, 5 (5), 435-444.

Rosser, S. V. (2000). Women, science, and society: The crucial union. New York: Teachers College Press.

Sadker, M. & Sadker, D. (1994). Failing at fairness: How America's schools cheat girls. New York: Scribner's.

- Scholnick, E. K. (2000). Engendering development: Metaphors of change. In P. H. Miller & E. K. Scholnick (Eds.), Toward a feminist developmental psychology (pp. 29-43). New York: Routledge.
- Sperry, R. W. (1974). Lateral specialization in the surgically separated hemispheres. In F. O. Schmitt & F. G. Wardon (Eds.), The neurosciences: Third study program. Cambridge, MA: MIT Press.

Tong, R. (1998). Feminist thought: A comprehensive introduction. Boulder, CO: Westview Press.

Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), Sexual selection and the descent of man (pp. 136-179). Chicato: Aldine.

Wiley, A. R., Rose, A. J., Burger, L. K. & Miller, P. (1998). Constructing autonomous selves through narrative practices: A comparative study of working-class and middle-class families. *Child Development*, 69, 833-847.

Wilson, E. O. (1975). Sociobiology: The new synthesis. Cambridge, MA: Harvard University Press.

Wollstonecraft, M. (1975). A vindication of the rights of woman (C. Poston, Ed.). New York: Norton.

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