Is EBE Theory Supported by the Evidence? Is It Androcentric? A Reply to Peplau et al. (1998)

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In their critique of the author's Exotic-Becomes-Erotic (EBE) theory of sexual orientation (D. J. Bern, 1996), L. A. Peplau, L. D. Garnets, L. R. Spalding, T. D. Conley, and R. C. Veniegas (1998) challenge his reading of the evidence concerning the antecedents of sexual orientation; they also contend that the theory neglects women's experiences. In reply, the author argues that L. A. Peplau et al. have misunderstood the critical antecedent variable of the theory and, hence, have misidentified the particular empirical findings that would serve to confirm or disconfirm its central contentions. The author also argues that the sex differences they cite are not relevant to the theory, whereas an important sex difference they do not cite is actually anticipated by it.

In their critique of my Exotic-Becomes-Erotic (EBE) theory of sexual orientation (Bem, 1996), Peplau, Garnets, Spalding, Conley, and Veniegas (1998) make two major points. First, they challenge my reading of the evidence concerning the antecedents of sexual orientation and, second, they argue that the theory neglects and misrepresents women's experiences, thereby invalidating my claim that the theory describes the modal path to sexual orientation for both men and women in our culture.

In this reply, I argue that Peplau et al. have misunderstood the critical antecedent variable of the theory and, hence, have misidentified the particular empirical findings that would serve to confirm or disconfirm its central contentions. With regard to their point concerning women, I argue that the sex differences they cite fall outside the purview of EBE theory and hence do not speak to its validity, whereas an important sex difference in sexual orientation they do not cite is actually anticipated by the theory. Because journal policy sharply limits the length of replies to critiques, I do not address several other, noncritical disagreements (e.g., the inferences that can or cannot be drawn from the Israeli kibbutz or the Sambian culture concerning familiarity and sexual attraction).

EBE theory adopts as its basic working assumption Frend's belief that our individual erotic preferences are the product of experiential factors. Accordingly, the theory's first challenge is to account for two observations that are so taken for granted that their need for theoretical explanation is rarely appreciated. The first observation is that most men and women in our culture have an exclusive and enduring erotic preference for either male or female partners; that is, most people use biological sex as the overriding criterion for selecting a sexual partner. The second observation is that most men and women in our culture have an exclusive erotic preference for opposite-sex partners. A third

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observation—the one that usually is seen as requiring explanation—is that a substantial minority of men and women have an erotic preference for same-sex partners. In seeking to account for these observations, EBE theory proposes a single unitary explanation for both opposite-sex and same-sex desire, and for both men and women.

The theory's second challenge is to account for departures from these modal outcomes, such as bisexuality, sexual orientations that are fluid and changeable, and sexual orientations that are not based on the biological sex of potential partners. As shown later, it is in attempting to meet this challenge that the theory speaks to differences between women and men in the development and expression of their sexual orientations.

Is EBE Theory Supported by the Evidence?

Feeling Different

The central proposition of EBE theory is that individuals can become erotically attracted to classes of individuals from whom they felt different during childhood. This feeling of being different is the theory's implicit definition of *exotic*, and it is important to note that it is a phenomenological state that is neither equivalent to nor reducible to some objective or externally defined measure of dissimilarity or unfamiliarity. The subjective state of feeling different from a class of individuals can have any of several antecedents, some common, some idiosyncratic.

The most common antecedent is a culture's gender polarization. Most cultures, including our own, polarize the sexes, setting up a sex-based division of labor and power, emphasizing or exaggerating sex differences, and, in general, superimposing the male-female dichotomy on virtually every aspect of communal life. These practices ensure that most boys and girls will grow up feeling different from opposite-sex peers and, hence, will come to be erotically attracted to them later in life. This, according to EBE theory, is why biological sex is the most common criterion for selecting a sexual partner in the first place and why heteroeroticism is the modal preference across time and culture.

A less common occurrence is the child who comes to feel different from same-sex peers and who, according to the theory, will develop same-sex erotic attractions. The theory proposes that the most common antecedent of feeling different from samesex peers is the child's aversions to sex-typical activities, preferences for sex-atypical activities, or both, often referred to as gender nonconformity.

The theory does not, however, propose that gender nonconformity is the only possible antecedent of feeling different from same-sex peers or that an externally defined indicator of sex atypicality guarantees that a child will feel different from his or her same-sex peers. Thus, contrary to the contention of Peplau et al., the theory's account of the developmental path to a lesbian orientation is not undermined by their observation that many heterosexual women were tomboys as children (i.e., enjoyed boys' activities), that being a tomboy is socially acceptable for girls in our society, and that many tomboys do not reject traditionally feminine activities.

In fact, in the large and intensive San Francisco study (Bell, Weinberg, & Hammersmith, 1981), the difference between the percentages of lesbians and heterosexual women who enjoyed boys' activities during childhood (81% vs. 61%, respectively) was less than half the size of the difference between them in their aversion to girls' activities (63% vs. 15%). Moreover, this latter difference was virtually identical to that between gay men and heterosexual men in their childhood aversion to boys' activities (63% vs. 10%; p < .0001 for all comparisons).

In other words, the majority of lesbians in the study were not only tomboys as children but also rejected traditionally feminine activities. But even this is not the critical observation. The central question for EBE theory is whether lesbians are significantly more likely than heterosexual women to have felt different from other girls on "tomboyishness" or other gender-related attributes during childhood. As shown below, they are.

Peplau et al. betray a similar misunderstanding of the critical antecedent variable when they criticize the theory for its inability to predict an individual's sexual orientation from the sibling sex ratio of his or her childhood home, and they cite the finding that, on average, gay men have more older brothers than heterosexual men (Blanchard & Bogaert, 1996). But as I noted in the original article, "EBE theory predicts that the effect of any childhood variable on an individual's sexual orientation depends on whether it prompts him or her to feel more similar to or more different from same-sex or opposite-sex peers" (Bem, 1996, p. 331), and I went on to suggest that if a young boy is gender nonconforming, the presence of older, more genderconforming brothers in the home is likely to enhance his feelings of being different from other boys. If he is gender conforming, then the presence of other gender-conforming boys in the home is likely to enhance his feelings of being similar to other boys. In other words, predicting sexual orientation from EBE theory requires knowing more than just the child's familiarity with same-sex or opposite-sex siblings or peers. We need to know whether the child feels different from them, a variable that was not assessed in this particular study.

Feeling Different for Gender-Related Reasons

In its general formulation, EBE theory predicts that feeling different from any class of individuals can potentially eroticize that class for the individual. A light-skinned person, for example, could come to eroticize dark-skinned persons through one or more of the processes described in the theory. The theory im-

plies, however, that to produce a differential erotic attraction to one sex or the other, the basis for feeling different must itself discriminate between the sexes; that is, an individual must feel different for gender-related reasons to arrive at a gender-based erotic orientation. Simply being lighter skinned, poorer, more intelligent, or more introverted than one's childhood peers does not produce the kind of feeling different that produces differential homoerotic or heteroerotic attraction.

As I reported in the original article, 71% of gay men and 70% of lesbians in the San Francisco study reported feeling different from their same-sex peers during childhood, compared with 38% and 51% of heterosexual men and women, respectively (p < .0005 for both gay-heterosexual comparisons). Peplau et al. believe that the theory is embarrassed by the large number of heterosexual respondents who also reported feeling different from their childhood peers.

As I also reported in the original article, however, the reasons given by the gay and lesbian respondents for feeling different were likely to be gender related; the reasons given by the heterosexual respondents were not. For example, 45% of the gay men who had felt different from other boys during childhood reported less interest in sports, 18% reported homosexual or lack of heterosexual interests, and 24% gave other gender-related reasons (e.g., being less masculine). In addition, 21% of the gay men in the study said that they had felt sexually different from other boys during childhood.

The responses of lesbian respondents were strikingly similar: 19% of lesbians who had felt different from other girls during childhood reported greater interest in sports, 17% reported homosexual or lack of heterosexual interests, and 34% gave other gender-related reasons (e.g., did not like girls' activities). In addition, 22% of the lesbians in the study said that they had felt sexually different from other girls during childhood.

In contrast, fewer than 8% of either heterosexual men or heterosexual women said that they had felt different from same-sex peers for gender-related reasons during childhood. By faiting to distinguish between gender-based and nongender-based reasons for feeling different, Peplau et al. have again misidentified the critical variable.

The Path Analyses

The San Francisco study's use of path analysis to test competing hypotheses about the development of sexual orientation was an innovation in the field of sexuality research. Moreover, the large sample sizes (approximately 1,000 homosexual and 500 heterosexual respondents) enabled the researchers to conduct separate analyses for several subsamples, including atypically gendered individuals (i.e., effeminate men or masculine women) and bisexuals. The study also included many of the variables relevant for testing EBE theory, albeit in piecemeal fashion. As Peplau et al. acknowledge, "[The] path analyses included many variables that are not part of EBE theory and therefore do not really provide an adequate test of Bem's ideas" (1998, p. 388). I agree with their conclusion, but the problem turned out to be less the multiplicity of independent variables than an unfortunate dichotomization of the dependent variable, sexual orientation.

Sexual orientation was assessed in the study by asking respondents to rate their sexual feelings and behaviors on the 7-point Kinsey Scale, which ranges from 0 = exclusively hetero-

sexual to 6 = exclusively homosexual. Those who obtained scores of 2-4 were defined as bisexual. But then, rather than using the full scale in their analyses or even trichotomizing respondents into heterosexual (0-1), bisexual (2-4), and homosexual (5-6), the researchers dichotomized the scale between 1 and 2, thereby grouping the bisexual and homosexual respondents into the same category.¹

This decision might have seemed reasonable on a priori grounds, but it should have been abandoned as soon as the researchers saw the results of their own subanalyses, which made it clear that the bisexual respondents were not only very different from their exclusively homosexual counterparts but actually were more like the heterosexual respondents in theoretically critical ways. For example, the researchers concluded from their interviews that the same-sex eroticism of most of the bisexual men and bisexual women appeared to be a socially learned. postadolescent "add-on" to an already established heterosexual orientation. Moreover, the bisexual respondents differed from their exclusively homosexual counterparts on some of the major antecedent variables. For example, the path correlation between gender nonconformity and same-sex eroticism was .59 for the exclusively homosexual women but only .13 for the bisexual women. Placing the bisexual and exclusively homosexual respondents in the same category thus reduced many of the correlations and increased the likelihood that important antecedent variables would be erroneously eliminated during the recursive process of discarding the weaker correlates from successive iterations of the path model.

This is, I believe, why the statistically significant feelingdifferent variables, cited above, "proved too weak for inclusion in the path model [for the males]" and were "eliminated during preliminary screenings in the overall path model for the females" (Bell et al., 1981, pp. 157-158). For example, the critical EBE variable "felt different from other boys in childhood for gender reasons" did, in fact, emerge as a significant predictor of a homosexual orientation in the path model for men-but only after the bisexual men had been removed from the analysis. The erroneous elimination of statistically significant antecedent variables was even more likely to occur in the path analyses for the women because the female samples were less than half the size of the corresponding male samples and the percentage of bisexual respondents was even higher. This had the consequence of reducing the statistical power of the analyses even further and exacerbating the illegitimate use of a dichotomous dependent variable. In short, the absence of the statistically significant feeling-different variables in path models that included the bisexual respondents is not very compelling evidence against EBE theory.

Nevertheless, it is still reasonable to worry about the reliability and validity of the currently existing evidence for the link between childhood feelings of being different and adult sexual orientation. In contrast to the link between childhood gender nonconformity and sexual orientation—which has been confirmed in more than 50 studies, including prospective ones (Bailey & Zucker, 1995)—the link between feeling different and sexual orientation has been assessed only in this one study and is based on adults' retrospective reports of their childhood feelings. To my knowledge, no study has ever asked gender-conforming and nonconforming children whether they felt dif-

ferent from same- or opposite-sex children, let alone followed them up into adulthood and assessed their sexual orientations.

Is EBE Theory Androcentric?

As a social psychologist by training and a 1970s feminist by temperament, I approach claims of sex differences with skepticism. Nevertheless, I agree with Peplau et al. that men and women, irrespective of their sexual orientations, differ from one another on several aspects of sexuality. As I tell my students, if you want to understand the sexuality of gay men, think of them as men; if you want to understand the sexuality of lesbians, think of them as women. (Thus, contrary to Peplau et al.'s opening statements, I actually have advanced beyond the nineteenth century concept of homosexuality as gender inversion.) I disagree, however, that these differences have the implications for EBE theory that Peplau et al. attribute to them, and I especially dispute the implication that my theory is the androcentric fantasy of yet another male theorist who believes that the whole of romantic life resides in the cojones.

The concept of sexual orientation comprises many different components, including sexual desire, sexual behavior, romantic feelings, and self-identification (Klein, Sepekoff, & Wolf, 1985). Peplau et al. note that "EBE theory focuses on 'Erotic/romantic attraction,' a concept Bem did not define but generally used to refer to sexual desire" (1998, p. 390). Peplau et al. are correct, and I now wish I had been more explicit in defining the theory's domain more narrowly and more accurately as sexual desire.

But even within the narrower domain of sexual desire, Peplan et al. are able to recite a litany of sex differences: Compared with women, men eroticize others on the basis of physical attributes; they treat those whom they desire as sex objects; they seek out and enjoy impersonal, even anonymous, sex; and, they have a greater supply of libidinal energy than women. Men are lust; they lead with their gonads. Women are limerance; they lead with their hearts.

How ironic. In other times and other places, Peplau is one of the field's most outspoken opponents of sex stereotypes, and it is her own research that has so persuasively demonstrated that gay men and lesbians are strikingly similar to each other (and to heterosexual men and women) in their desire for and attainment of enduring and satisfying love relationships (e.g., Peplau, 1991; Peplau & Cochran, 1980). But if all men are beasts, how can this be so?

Peplau et al. actually provide the answer: Lust and limerance are not polar opposites but qualitatively different phenomena. Limerance is an "erotic attraction that arises from an emotional attachment to a particular person . . . [and] is based on an intimate relationship with a specific individual, rather than attraction to a particular physical 'type' or class of persons' (Peplau et al., 1998, p. 391). Yes indeed, love is a wonderful

¹As the researchers acknowledged, dichotomizing sexual orientation also violated the requirement that dependent variables in a path analysis be normally distributed. (Today the data might be analyzed with statistical methods specifically designed for categorical dependent variables.) Because the sample sizes were large, this is probably not a serious problem for the overall analyses. As shown later, however, it becomes problematic in the path analyses of the smaller female subsamples.

aphrodisiac. But there is nothing here that contradicts EBE theory. When limerance occurs, it almost always does so within the class-based eroticism addressed by the theory. That is, most limerant men and women consistently and repeatedly select their successive beloveds from either the class of men or the class of women, but not both.

So even if men and women differ in the primacy or intensity of their sexual desires, this is not pertinent to EBE's account of how class-based erotic orientations develop. In fact, primacy and intensity aside, there are reasons for believing that men and women are more similar on the sexual desire component of sexual orientation than they are on other components, such as sexual behavior or self-identification.

For example, a national random survey of Americans conducted by the National Opinion Research Council (NORC; Laumann, Gagnon, Michael, & Michaels, 1994) found that twice as many men as women had had a same-sex partner during the previous year and twice as many men as women identified themselves as homosexual or bisexual. But the percentages of men and women who expressed predominantly same-sex desires were virtually identical (7.7% and 7.5%, respectively). Even the traditional belief, repeated by Peplau et al., that boys and girls experience their first sexual attractions at different ages is challenged by new findings that both men and women report their first sexual attractions, both same-sex and opposite-sex, as occurring when they were between 10 and 10.5 years of age (McClintock & Herdt, 1996).

I submit that these findings, in conjunction with the striking similarities of gay men and lesbians in their childhood aversions to sex-typical activities and feelings of difference from same-sex peers, further support the claim that the EBE account of sexual orientation applies as much to women as it does to men. The theory cannot, of course, embrace the full richness of women's (or men's) sexuality, but neither does it misrepresent or belittle that richness.

Curiously, Peplau et al. do not even mention a widely recognized sex difference that is pertinent to EBE theory: Women's sexual orientations are more fluid than men's. Many studies, including the San Francisco study and the NORC survey, have found that women are more likely to be bisexual than exclusively homosexual, whereas the reverse is true for men. Nonheterosexual women are also more likely to see their sexual orientations as flexible, even "chosen," whereas men are more likely to view their sexual orientations in essentialist terms, as inborn and unchangeable (Whisman, 1996). Thus, men who come out as gay after leaving heterosexual marriages or relationships often describe themselves as having "finally discovered" their "true" sexual orientation, but similarly situated lesbians are more likely to reject the implication that their previous heterosexual relationships were inauthentic or at odds with who they really were: "That's who I was then, and this is who I am now."

The greater fluidity of women's sexual orientations is actually anticipated by EBE theory. Except for its central proposition (exotic becomes erotic), the theory is "not intended to describe an inevitable, universal path to sexual orientation but only the modal path followed by most men and women in a gender-polarizing culture" (Bem. 1996, p. 331; italics added). In our

society, however, women actually grow up in a phenomenologically less gender-polarized culture than do men. As the San Francisco data revealed, girls are more likely than boys to engage in both sex-typical and sex-atypical activities and are more likely to have childhood friends of both sexes. This implies that girls are less likely than boys to feel differentially different from opposite-sex and same-sex peers and, hence, are less likely to develop exclusively heteroerotic or homoerotic orientations.

In short, I believe that neither I nor my theory neglects, misrepresents, or devalues women's sexuality. In fact, I believe that many of today's nonheterosexual women may be giving us a preview of what sexual orientations might look like in a less gender-polarized future. It is possible that we might even begin to see more men and women basing their erotic and romantic choices on a more diverse and idiosyncratic variety of attributes than just biological sex. As I remarked at the end of my article, "Gentlemen might still prefer blonds, but some of those gentlemen (and some ladies) might prefer blonds of any sex" (Bem, 1996, p. 332). The proposition that exotic becomes erotic would presumably still be valid, but it would no longer have as much utility in describing a modal path to sexual orientation for either men or women. And that is a concession to Peplau et al. that I am happy to make.

References

Bailey, J. M., & Zucker, K. J. (1995). Childhood sex-typed behavior and sexual orientation: A conceptual analysis and quantitative review. *Developmental Psychology*, 31, 43-55.

Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981). Sexual preference: Its development in men and women. Bloomington: Indiana University Press.

Bem, D. J. (1996). Exotic becomes erotic: A developmental theory of sexual orientation. *Psychological Review*, 103, 320-335.

Blanchard, R., & Bogaert, A. F. (1996). Homosexuality in men and number of older brothers. American Journal of Psychiatry, 153, 27– 31.

Klein, F., Sepekoff, B., & Wolf, T. J. (1985). Sexual orientation: A multi-variable, dynamic process. *Journal of Homosexuality*, 11, 35– 49

Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994).
The social organization of sexuality: Sexual practices in the United States. Chicago: University of Chicago Press.

McClintock, M. K., & Herdt, G. (1996). Rethinking puberty: The development of sexual attraction. Current Directions in Psychological Science, 5, 178-183.

Peplau, L. A. (1991). Lesbian and gay relationships. In J. C. Gonsiorek & J. D. Weinrich (Eds.), Homosexuality: Research implications for public policy (pp. 177-196). Newbury Park, CA: Sage.

Peplau, L. A., & Cochran, S. D. (1980, September). Sex differences in values concerning love relationships. Paper presented at the 88th Annual Convention of the American Psychological Association, Montreal, Quebec, Canada.

Peplau, L. A., Garnets, L. D., Spalding, L. R., Conley, T. D., & Veniegas, R. C. (1998). A critique of Bem's "Exotic Becomes Erotic" theory of sexual orientation. *Psychological Review*, 105, 387-394.

Whisman, V. (1996). Queer by choice. New York: Routledge.

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