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Exotic Becomes Erotic:  
Explaining the Enigma of Sexual Orientation

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In this address, I outline my “Exotic-Becomes-Erotic” theory of sexual orientation (Bem, 1996), which provides the same basic account for both opposite-sex and same-sex erotic desire—and for both men and women. It proposes that biological variables do not code for sexual orientation per se but for childhood temperaments that influence a child’s preferences for sex-typical or sex-atypical activities. These preferences lead children to feel different from opposite-sex or same-sex peers—to perceive them as “exotic.” This, in turn, produces heightened physiological arousal that subsequently gets eroticized to that same class of peers: Exotic becomes erotic. The theory claims to accommodate both the empirical evidence of the biological essentialists and the cultural relativism of the social constructionists. I also discuss sex differences in sexual orientation and the political implications of trying to explain homosexuality.

The question “What causes homosexuality?” is both politically suspect and scientifically misconceived. Politically suspect because it is so frequently motivated by an agenda of prevention and cure. Scientifically misconceived because it presumes that heterosexuality is so well understood, so obviously the “natural” evolutionary consequence of reproductive advantage, that only deviations from it are theoretically problematic. Freud himself did not so presume: “[Heterosexuality] is also a problem that needs elucidation and is not a self-evident fact based upon an attraction that is ultimately of a chemical nature” (1905/1962, pp. 11–12).

I agree with Freud. In fact, I would go further and assert that even the use of biological sex as the basis for choosing a sexual partner is a problem that needs elucidation. Accordingly, my Exotic-Becomes-Erotic (EBE) theory of sexual orientation (Bem, 1996) seeks to account for three major observations: First, most men and women in our culture have an exclusive and enduring erotic preference for either male or female persons; biological sex is, in fact, the overriding criterion for most people’s erotic choices. Second, most men and women in our culture have an exclusive and enduring erotic

preference for opposite-sex persons. And third, a substantial minority of men and women have an exclusive and enduring erotic preference for same-sex persons. 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 also seeks to account for sex differences in sexual orientation and departures from the modal patterns, such as bisexuality, sexual orientations that are not enduring but are fluid and changeable, and sexual orientations that are not even based on the biological sex of potential partners. And finally, the theory seeks both to accommodate and to reconcile the empirical evidence of the biological essentialists—who can point to correlations between sexual orientation and biological variables—and the cultural relativism of the social constructionists—who can point to historical and anthropological evidence that the concept of sexual orientation is itself a social construction (De Cecco & Elia, 1993).

Experience-based theories of sexual orientation have not fared well empirically in recent years. The most telling data come from an intensive, large-scale interview study conducted in the San Francisco Bay Area by the Kinsey Institute for Sex Research (Bell, Weinberg, & Hammersmith, 1981a). By comparing approximately 1,000 gay men and lesbians with 500 heterosexual men and women, the investigators were able to test several hypotheses about the development of sexual orientation. The study (hereinafter, the “San Francisco study”) yielded virtually no support for current experience-based theories of sexual orientation, including those based on processes of learning or conditioning or on family dynamics (e.g., classical psychoanalytic theory). In fact, family variables were not strongly implicated in the development of sexual orientation for either men or women.

But before we all become geneticists, biopsychologists, or neuroanatomists, it seemed to me worth another try. In particular, I believed that the theoretical and empirical building blocks for a coherent, experience-based developmental theory of sexual orientation were already scattered about in the literature. EBE theory is, then, an exercise in synthesis and construction.

### Overview of the Theory

The central proposition of EBE theory is that individuals become erotically attracted to a class of individuals from whom they felt different during childhood. Figure 1 shows how this phenomenon is embedded into the overall sequence of events that, according to the theory, leads to an individual's sexual orientation. The sequence begins at the top of the figure with Biological Variables (labeled **A**) and ends at the bottom with Erotic Attraction (**F**).

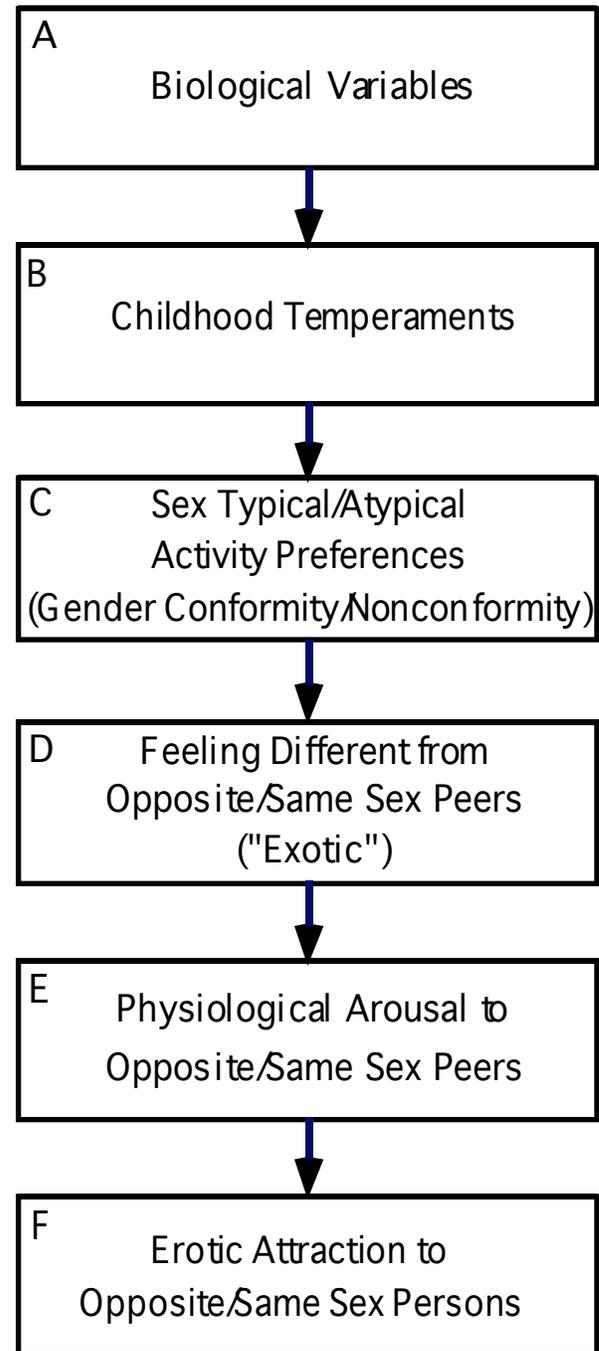
**A**  $\square$  **B**. According to the theory, biological variables such as genes or prenatal hormones do not code for sexual orientation per se but for childhood temperaments (e.g., aggression, activity level).

**B**  $\square$  **C**. A child's temperaments predispose him or her to enjoy some activities more than others. One child will enjoy rough-and-tumble play and competitive team sports (male-typical activities); another will prefer to socialize quietly or play jacks or hopscotch (female-typical activities). Children will also prefer to play with peers who share their activity preferences; for example, the child who enjoys baseball or football will selectively seek out boys as playmates. Children who prefer sex-typical activities and same-sex playmates are referred to as gender conforming; children who prefer sex-atypical activities and opposite-sex playmates are referred to as gender nonconforming.

**C**  $\square$  **D**. Gender-conforming children will feel different from opposite-sex peers, and gender-nonconforming children will feel different from same-sex peers.

**D**  $\square$  **E**. These feelings of being different produce heightened physiological arousal. For the male-typical child, it may be felt as antipathy or contempt in the presence of girls ("girls are yucky"); for the female-typical child, it may be felt as timidity or apprehension in the presence of boys. A particularly clear example is provided by the "sissy" boy who is taunted by male peers for his gender nonconformity and, as a result, is likely to experience the strong physiological arousal of fear and anger in their presence. The theory claims, however, that every child—conforming or nonconforming—experiences heightened, nonspecific physiological arousal in the presence of peers from whom he or she feels different. For most children, this arousal is neither affectively toned nor consciously felt.

**E**  $\square$  **F**. Regardless of the specific source or affective tone of the childhood arousal, it is subsequently transformed into erotic attraction. Steps **D**  $\square$  **E** and **E**  $\square$  **F** thus encompass specific psychological mechanisms that transform exotic into erotic (**D**  $\square$  **F**).



*Figure 1.* The temporal sequence of events leading to sexual orientation for most men and women in a gender-polarizing culture.

It is important to emphasize that Figure 1 is not intended to describe an inevitable, universal path to sexual orientation but the modal path followed by most men and women in a gender-polarizing culture like ours—a culture that emphasizes the differences between the sexes by pervasively organizing both the perceptions and realities of communal life around the male-female dichotomy (1993). Biological universality is claimed only for the central proposition itself—exotic becomes erotic.

### Evidence for the Theory

#### *Exotic Becomes Erotic (D ≠ F)*

The proposition that individuals can become erotically attracted to a class of individuals from whom they felt different during childhood is very general and transcends erotic orientations that are based on biological sex. For example, a light-skinned person could come to eroticize dark-skinned persons through one or more of the processes described by the theory. To produce a differential erotic attraction to one sex or the other, however, requires that the basis for feeling different must itself differentiate between the sexes; that is, to arrive at a sex-based erotic orientation, an individual must feel different for sex-based or gender-related reasons. 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.

Empirical support for this analysis comes from the San Francisco study, which found that 71% of the gay men and 70% of the lesbians in the sample had felt different from their same-sex peers during childhood. When asked in what ways they had felt different, they overwhelmingly cited gender-related reasons. Gay men were most likely to say that they had not liked boys' sports; lesbians were most likely to say that had been more masculine than other girls. In contrast, fewer than 8% of heterosexual men or women said that they had felt different from same-sex childhood peers for gender-related reasons. Those who had felt different from their peers tended to cite such reasons as having been

poorer, more intelligent, or more introverted. (All statistical comparisons between gay and heterosexual respondents were significant at  $p < .0005$ .)

The study also showed that feelings of being different from same-sex peers was not a fleeting early experience for gay men and lesbians but a protracted and sustained feeling throughout childhood and adolescence. This is, I believe, why sexual orientations display such strong temporal stability across the life course for most men and women in our society.

*Gender Conformity and Nonconformity: The Antecedents of Feeling Different (C□ D)*

Feeling different from one's childhood peers can have any of several antecedents, some common, some idiosyncratic. The most common antecedent is gender polarization. Virtually all human societies polarize the sexes to some extent, 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 the theory, is why biological sex is the most common criterion for selecting sexual partners 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. As noted above, the most common reasons given by gay men and lesbians in the San Francisco study for having felt different from same-sex peers in childhood was gender nonconformity. In fact, childhood gender conformity or nonconformity was not only the strongest but the only significant childhood predictor of later sexual orientation for both men and women in the study (Bell et al., 1981a). As Table 1 shows, the effects are large and significant. For example, compared with heterosexual men, gay men were significantly less likely to have enjoyed boys' activities (e.g., baseball and football) during childhood, more likely to have enjoyed girls' activities (e.g., hopscotch, playing

Table 1  
*Percentage of Respondents Reporting Gender-Nonconforming Preferences and Behaviors During Childhood*

Response	Men		Women	
	Gay ( <i>n</i> = 686)	Heterosexual ( <i>n</i> = 337)	Lesbian ( <i>n</i> = 293)	Heterosexual ( <i>n</i> = 140)
Had not enjoyed sex-typical activities	63	10	63	15
Had enjoyed sex-atypical activities	48	11	81	61
Atypically sex-typed (masculinity/femininity)	56	8	80	24
Most childhood friends were opposite sex	42	13	60	40

*Note.* Percentages have been calculated from the data given in Bell, Weinberg, and Hammersmith (1981b, pp. 74–75, 77). All chi-square comparisons between gay and heterosexual subgroups are significant at  $p < .0001$ .

house, and jacks), and less likely to rate themselves as having been masculine. These were the three variables that defined gender nonconformity in the study. Additionally, gay men were more likely than heterosexual men to have had girls as childhood friends. The corresponding comparisons between lesbian and heterosexual women are also large and significant.

It is also clear from the table that relatively more women than men had enjoyed sex-atypical activities and had had opposite-sex friends during childhood. As these data confirm, being a tomboy is common for a girl in our society, implying that it is probably not sufficient by itself to cause her to feel different from other girls. In fact, we see in the table that the difference between the percentages of lesbians and heterosexual women who enjoyed boys' activities during childhood (81% vs 61%, respectively) is dwarfed by the difference in their childhood aversions to girls' activities (63% vs 15%). Moreover, this latter difference is virtually identical to that between gay men and heterosexual men in their childhood aversions to boys' activities (63% vs 10%).

The San Francisco study does not stand alone. A meta-analysis of 48 studies confirmed that gay men and lesbians are more likely than heterosexual men and women to recall gender-nonconforming behaviors and interests in childhood (Bailey & Zucker, 1995). As the authors observed “these are among the largest effect sizes ever reported in the realm of sex-dimorphic behaviors” (p. 49). Prospective longitudinal studies come to the same conclusion. In the largest of these, 75% of gender-nonconforming boys became bisexual or homosexual in later years compared with only 4% of gender-conforming boys (Green, 1987). In six other prospective studies, 63% of gender-nonconforming boys later had homosexual orientations (Zucker, 1990). (At this time, there are no prospective studies of gender-nonconforming girls.)

*How Does Exotic Become Erotic? (D → E → F)*

EBE theory proposes that exotic becomes erotic because feeling different from a class of peers in childhood produces heightened nonspecific physiological arousal (D → E) which is subsequently transformed into erotic attraction (E → F). To my knowledge, there is no direct evidence for the first step in this sequence beyond the well-documented observation that “exotic” stimuli produce heightened physiological arousal in many species, including our own (Mook, 1987); filling in this empirical gap in EBE theory must await future research. In contrast, there are at least three mechanisms that can potentially effect the second step, transforming generalized arousal into erotic attraction (Bem, 1996). Only one of these, the extrinsic arousal effect, is discussed here.

In his first-century Roman handbook, *The Art of Love*, Ovid advised any man who was interested in sexual seduction to take the woman in whom he was interested to a gladiatorial tournament, where she would more easily be aroused to passion. He did not say why this should be so, however. A contemporary version of Ovid’s claim was introduced by Walster (Berscheid & Walster, 1974, 1971), who suggested that it constitutes a special case of Schachter and Singer’s (1962) two-factor theory of emotion. That theory states that the physiological arousal of our autonomic nervous system

provides the cues that we feel emotional but that the more subtle judgment of *which* emotion we are feeling often depends on our cognitive appraisal of the surrounding circumstances. According to Walster, then, the experience of erotic desire results from the conjunction of physiological arousal and the cognitive causal attribution (or misattribution) that the arousal is elicited by a potential sexual partner.

And indeed, there is now extensive experimental evidence that an individual who has been physiologically aroused will show heightened sexual responsiveness to an appropriate target person. In one set of studies, male participants were physiologically aroused by running in place, by hearing an audiotape of a comedy routine, or by hearing an audiotape of a grisly killing (White, Fishbein, & Rutstein, 1981). No matter how they had been aroused, these men reported more erotic interest in a physically attractive woman than did men who had not been aroused. This effect has also been observed physiologically. In two studies, preexposure to a disturbing (nonsexual) videotape subsequently produced greater penile tumescence in men and greater vaginal blood volume increases in women when they watched an erotic videotape than did preexposure to a non-disturbing videotape (Hoon, Wincze, & Hoon, 1977; Wolchik et al., 1980).

In other words, generalized physiological arousal, regardless of its source or affective tone, can subsequently be experienced cognitively, emotionally, and physiologically as erotic desire. At that point, it *is* erotic desire. My proposal, then, is that an individual's protracted and sustained experience of feeling different from same- or opposite-sex peers throughout childhood and adolescence produces a correspondingly sustained physiological arousal that gets eroticized when the maturational, cognitive, and situational factors coalesce to provide the defining attributional moment.

#### *The Biological Connection (A $\square$ F) vs (A $\square$ B)*

In recent years, researchers, the mass media, and segments of the lesbian/gay/bisexual community have rushed to embrace the thesis that a homosexual orientation is coded in the genes or is determined by prenatal hormones and brain neuroanatomy. In contrast, EBE theory proposes that biological factors influence sexual

orientation only indirectly, by intervening earlier in the chain of events to determine a child's temperaments and subsequent activity preferences.

*Genes and homosexuality.* The studies that have drawn the most public attention are those suggesting a correlation between an individual's genotype and his or her sexual orientation. For example, in a sample of 115 gay men who had male twins, 52% of identical twin brothers were also gay compared with only 22% of fraternal twin brothers and 11% of adopted brothers (Bailey & Pillard, 1991). In a comparable sample of 115 lesbians, 48% of identical twin sisters were also lesbians compared with only 16% of fraternal twin sisters and 6% of adopted sisters (Bailey, Pillard, Neale, & Agyei, 1993). A subsequent study of nearly 5,000 twins who had been systematically drawn from a twin registry confirmed the significant heritability of sexual orientation for men but not for women (Bailey & Martin, 1995). Finally, an analysis of families in which there were two gay brothers suggested a correlation between a homosexual orientation and the inheritance of genetic markers on the X chromosome (Hamer & Copeland, 1994; Hamer, Hu, Magnuson, Hu, & Pattatucci, 1993).

But these same studies also provided evidence for the link proposed by EBE theory between an individual's genotype and his or her childhood gender nonconformity. For example, in the 1991 study of male twins, the correlation on gender nonconformity between gay identical twins was .76, ( $p < .0001$ ) compared with a nonsignificant correlation of only .43 between gay fraternal twins (Bailey & Pillard, 1991). This implies that even when sexual orientation is held constant, there is a significant correlation between the genotype and gender nonconformity. Similarly, the 1993 family study, found that gay brothers who shared the same genetic markers on the X chromosome were more alike on gender nonconformity than were gay brothers who did not (Hamer & Copeland, 1994; Hamer et al., 1993). Finally, childhood gender nonconformity was significantly heritable for both men and women in the large twin registry study—even though sexual orientation itself was not heritable for the women (Bailey & Martin, 1995).

EBE theory further specifies that this link between the genotype and gender nonconformity (**A**  $\square$  **C**) is composed of two parts: a link between the genotype and childhood temperaments (**A**  $\square$  **B**) and a link between those temperaments and gender nonconformity (**B**  $\square$  **C**). This implies that the mediating temperaments should possess three characteristics: First, they should be plausibly related to those childhood activities that define gender conformity and nonconformity. Second, because they manifest themselves in sex-typed preferences, they should show sex differences. And third, because they are hypothesized to derive from the genotype, they should have significant heritabilities.

One likely candidate is aggression and its benign cousin, rough-and-tumble play. Gay men score lower than heterosexual men on a measure of childhood aggression (Blanchard, McConkey, Roper, & Steiner, 1983), and parents of gender-nonconforming boys specifically rate them as having less interest in rough-and-tumble play than do parents of gender-conforming boys (Green, 1976). Second, the sex difference in aggression during childhood is one of the largest psychological sex differences known (Hyde, 1984). Rough-and-tumble play in particular is more common in boys than in girls (DiPietro, 1981; Fry, 1990; Moller, Hymel, & Rubin, 1992). And third, individual differences in aggression have a large heritable component (Rushton, Fulker, Neale, Nias, & Eysenck, 1986).

Another likely candidate is activity level, considered to be one of the basic childhood temperaments (Buss & Plomin, 1975, 1984). Like aggression, differences in activity level would also seem to characterize the differences between male-typical and female-typical play activities in childhood. Moreover, gender-nonconforming boys and girls are lower and higher on activity level, respectively, than are control children of the same sex (Bates, Bentler, & Thompson, 1973; Bates, Bentler, & Thompson, 1979; Zucker & Green, 1993). Second, the sex difference in activity level is as large as it is for aggression. Even before birth, boys in utero are more active than girls (Eaton & Enns, 1986). And third, individual differences in activity level have a large heritable component (Plomin, 1986).

*Genes and heterosexuality.* Perhaps EBE theory's most radical suggestion is that heterosexuality, too, is a consequence of childhood experience. As noted earlier, the theory implies that heterosexuality is the modal outcome across time and culture because virtually every human society ensures that most boys and girls will grow up seeing the other sex as exotic and, hence, erotic.

I am certainly willing to concede that heterosexual behavior is reproductively advantageous, but it does not follow that it must therefore be sustained through genetic transmission. As long as an environment supports or promotes a reproductively successful behavior sufficiently often, it will not necessarily get programmed into the genes by evolution. For example, it is presumably reproductively advantageous for ducks to mate with other ducks, but as long as most baby ducklings encounter other ducks before they encounter an ethologist, evolution can simply implant the imprinting process itself into the species rather than the specific content of what, reproductively speaking, needs to be imprinted. Analogously, because most cultures ensure that boys and girls will see each other as exotic, it would be sufficient for evolution to implant exotic-becomes-erotic processes into our species rather than heterosexuality per se. In fact, an exotic-becomes-erotic process is actually a built-in component of sexual imprinting in some species. For example, both male and female Japanese quail reared with their siblings later preferred their slightly different-appearing cousins to their own siblings (Bateson, 1978). This has been interpreted as a mechanism that prevents inbreeding—a biologically-promoted incest taboo.

*Other biological correlates.* In addition to the genotype, prenatal hormones and brain neuroanatomy have also been shown to be correlated with sexual orientation (for summaries and reviews, see Bem, 1996; Byne & Parsons, 1993; Zucker & Bradley, 1995). But these correlations, too, do not necessarily controvert the EBE account. Any biological factor that correlates with one or more of the intervening processes proposed by EBE theory could also emerge as a correlate of sexual orientation. For example, any neuroanatomical feature of the brain that correlates with childhood aggression or activity

level is likely to emerge as a difference between gay men and heterosexual men, between women and men, and between heterosexual women and lesbians. Even if EBE theory turns out to be wrong, the more general point—that a mediating personality variable could account for observed correlations between biological variables and sexual orientation—still holds.

Like all well-bred scientists, biologically-oriented researchers in the field of sexual orientation dutifully murmur the mandatory mantra that correlation is not cause. But the reductive temptation of biological causation is so seductive that the caveat cannot possibly compete with the excitement of discovering yet another link between the anatomy of our brains and the anatomy of our lovers' genitalia. Unfortunately, the caveat vanishes completely as word of the latest discovery moves from *Science* to *Newsweek*. The public can be forgiven for believing that we are but one government grant away from pinpointing the penis preference gene.

### Sex Differences and the Fluidity of Sexual Orientation

As a social psychologist by training and a 1970's feminist by temperament, I approach claims of sex differences with skepticism. Nevertheless, there is substantial evidence that men and women differ from one another on several aspects of sexuality, irrespective of their sexual orientations (Peplau, Garnets, Spalding, Conley, & Veniegas, 1998). 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. But most of these differences have to do with the primacy or intensity of erotic desire, the relative emphasis on the physical attributes of potential partners, and the willingness to engage in impersonal sex without romantic involvement. Such differences are not pertinent to EBE theory's account of how erotic orientations develop (Bem, 1998)

There is, however, one sex difference that *is* pertinent to EBE theory: Women's sexual orientations are more fluid than men's. Many studies, including a national random survey of Americans (Laumann, Gagnon, Michael, & Michaels, 1994), 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). For example, men who come out as gay after leaving heterosexual marriages or relationships often describe themselves as having “finally realized” their “true” sexual orientations. Similarly situated lesbians, however, 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. As noted earlier, Figure 1 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*. This qualification is key, because women in our society grow up in a phenomenologically less gender-polarized world than do men. Compared with boys, girls are punished less for being gender nonconforming, and, as the data in Table 1 reveal, they 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.

Accordingly, 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 who, instead of using biological sex as the overriding criterion for selecting a partner, might base their erotic and romantic choices on a more diverse and idiosyncratic variety of attributes. In the future some gentlemen might come to prefer blonds of any sex.<sup>1</sup>

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<sup>1</sup>That day may be a while in coming. Of the 3,159 respondents in the national random survey, only two (0.06%) said that they did not select sexual partners on the basis of sex.

## The Politics of Explaining Homosexuality

### *The Prevention & Cure Agenda*

Because EBE theory proposes that an individual's sexual orientation is more directly the result of childhood experiences than of biological factors, it has prompted concerns that it could aid and abet an antigay agenda of prevention and "cure." In particular, the theory appears to suggest that parents could prevent their gender-nonconforming children from becoming gay or lesbian by encouraging sex-typical activities and discouraging sex-atypical activities.

Of course our society hardly needed EBE theory to suggest such a strategy. The belief that childhood gender nonconformity leads to later homosexuality is already so widely believed that many parents (especially fathers) already discourage their children (especially sons) from engaging in gender-nonconforming behaviors lest they become homosexual. And, if EBE theory is correct that both homosexuality and heterosexuality derive from the same childhood processes, then it is clear that a gender-polarizing society such as ours is already spectacularly effective in producing heterosexuality: 85–95% of all men and women in the United States are exclusively heterosexual.

But this same figure suggests that children who persist in their gender nonconformity despite such pressures must have their sex atypicality strongly rooted in their inborn temperaments—as EBE theory proposes. Requiring such children to engage in sex-typical activities and to avoid sex-atypical activities is unlikely to diminish their feelings of being different from same-sex peers—it may even enhance such feelings—and, hence, is unlikely to diminish their later erotic attraction to those peers.

Empirical support for this conjecture emerges from the longitudinal study of gender-nonconforming boys, cited earlier (Green, 1987). About 27% of these boys had been entered by their parents into various kinds of therapy, including behavioral therapy specifically designed to prevent a homosexual orientation from developing. Interviews with these parents revealed that they were more anxious about their sons' later sexuality than were

parents of other gender-nonconforming boys in the sample, and they had probably tried to actively discourage their sons' gender nonconformity in other ways as well. All of this effort was for naught: 75% of these boys emerged as homosexual or bisexual, slightly more than the percentage of boys who had not undergone therapy. In the context of our society's current gender-polarizing practices, then, EBE theory would not seem to provide a successful strategy for preventing gender-nonconforming children from becoming homosexual adults.

Because contemporary debates about the causes of race and sex differences have so familiarized the public with the nature-nurture issue, it is commonly assumed that the public debate about homosexuality is a replay of that same issue. It is not. The nature-nurture issue concerns the respective roles of biological and environmental factors in the determination of some trait or behavior and is debated within the usual deterministic framework of science. In contrast, the public debate about homosexuality concerns the deterministic assumption itself: Is homosexuality determined by factors beyond the individual's control or is it freely chosen? Because the public tends to equate uncontrollable factors with biological determinants and to overlook environmental determinants (other than seduction), the only alternative to biological causation that currently enters the public discourse is free choice. (The public is generally unaware of the debate between biological essentialists and social constructionists over the concept of sexual orientation itself.)

In the context of the public debate, then, both the EBE and the biological explanations are equivalent because they are equivalently deterministic. Both refute the claim that individuals simply choose their sexual orientations; both are consistent with the data showing that individuals cannot be "seduced" into a homosexual orientation by same-sex sexual encounters or by positive role models who happen to be gay (Bell et al., 1981a; Bem, 1996); and, neither suggests an available strategy for changing a person's sexual orientation.

*Are Biological Explanations of Homosexuality Politically Benign?*

Biological explanations of homosexuality have become more popular with the public over the past several years: In 1983, 16% of Americans believed that “homosexuality is something that people are born with”; by 1993, that figure had nearly doubled to 31% (Moore, 1993). Many members of the lesbian/gay/bisexual community welcome this trend. For example, *The Advocate*, a national gay and lesbian newsmagazine, reported that 61% of its readers believed that “it would mostly help gay and lesbian rights if homosexuality were found to be biologically determined” (1996).

Several supporting reasons for this expectation are frequently cited: Evidence for biological determination would convince the public that gays and lesbians do not simply choose their sexual orientations; it would calm fears that gays and lesbians (or even positive representations of them in the media) could prompt young people to adopt homosexual orientations; it would discourage the pursuit of strategies designed to prevent or “cure” homosexuality; and finally, it would strengthen the rationale for treating sexual orientation like race and sex in civil rights legislation.

Survey data are consistent with this reasoning. A 1993 Gallup poll found that Americans who believe that homosexuality is caused by “something that people are born with” were almost twice as likely as other Americans to oppose the ban on gays serving in the military and to believe that civil rights protection should be extended to gays (Moore, 1993). Similarly, a cross-national study in the United States, the Philippines, and Sweden found that those who believed that “homosexuals are born that way” held significantly more positive attitudes toward homosexuality than those who believed that “homosexuals choose to be that way” and/or “learn to be that way” (Ernulf, Innala, & Whitam, 1989; see also Whitley, 1990).

But I don’t believe it. That is, I do not believe that beliefs about causality substantially influence most citizens’ attitudes toward homosexuality. Rather, I believe the reverse, that attitudes toward homosexuality often influence beliefs about causality: Individuals are likely to find most plausible those beliefs that best rationalize their

attitudes. For example, in the Gallup poll cited above, political liberals—who have historically been the most resistant to biological explanations of race and sex differences—were almost twice as likely as conservatives to endorse biological explanations of homosexuality (Moore, 1993). Surely their political liberalism preceded their beliefs about the causes of homosexuality. And, of course, this same statistic implies that the political conservatives arrived at their beliefs about causality in the same way.

Consequently, I suspect that widespread public acceptance of a biological explanation for homosexuality would leave attitudes pretty much unchanged. Those who hold progay attitudes would conclude that being gay is like being left-handed, no big deal. Those who hold antigay attitudes would conclude that being gay is like having a congenital physical disability or an inborn tendency toward schizophrenia or alcoholism—better to be pitied than scorned. (For some antigay individuals, I suppose that this would reflect progressive change.) In fact, whenever the media announce evidence for a “gay” gene, the researchers receive inquiries about detecting pregay children in utero, presumably so that they could be aborted. Better to be prevented than spawned.

This should disabuse us of the optimistic notion that biological explanations of homosexuality necessarily promote progay attitudes and policies. Historically, of course, biological theories of human differences have tended to produce the least tolerant attitudes and the most conservative, even draconian, public policies—as in Nazi Germany.

I also believe that it is short-sighted of those who seek to bring sexual orientation under the protection of civil rights statutes to argue for the biological basis of homosexuality as a way of strengthening the rationale for treating sexual orientation like race and sex. Most civil rights statutes protect against discrimination on the basis of race, creed, color, and sex. But if race, color, and sex are protected because they are based in biology—and, hence, not freely chosen—then what is the rationale for including creed? Surely Jews, Catholics, Jehovah’s Witnesses, Seventh-Day Adventists, and Mormons—to mention some who have historically sought protection under this provision—have never had to argue that their religious beliefs were biologically determined before earning the

right to be protected against arbitrary discrimination. And surely there must be a nobler and more militant call for justice than “it isn’t my fault.” It is also dangerous to base arguments for equal rights on empirical evidence of causality because the evidence might change. Surely the moral argument should not.

Finally, it is sometimes argued that the biological explanation of sexual orientation should be politically attractive to gays and lesbians because it “naturalizes” homosexuality, thereby refuting the argument that it should be seen as sin or sickness. But if that is a desideratum, then I believe that EBE theory does an even better job of treating homosexuality and heterosexuality symmetrically. Most biological theories of homosexuality are based on the evolutionary argument that heterosexuality is the natural consequence of reproductive advantage and, accordingly, homosexuality is a relatively rare evolutionary anomaly that requires additional theorizing to account for it. In contrast, EBE theory “deprivileges” heterosexuality completely, viewing it as no more biologically natural than homosexuality. Ironically, it accomplishes this by *denaturalizing* both homosexuality and heterosexuality, by insisting that they are social constructions, not hardwired properties of the human species.

But in the final analysis, I believe that the causes of sexual orientation are, and ought to be, irrelevant to both public policy and private pride. Indeed, my deepest motivation for hoping that EBE theory turns out to be correct is embarrassingly apolitical: I’ve always found it more fun to be right than wrong.

## References

- Bailey, J. M., & Martin, N. G. (1995, September). *A twin registry study of sexual orientation*. Paper presented at the twenty-first annual meeting of the International Academy of Sex Research, Provincetown, MA.
- Bailey, J. M., & Pillard, R. C. (1991). A genetic study of male sexual orientation. *Archives of General Psychiatry*, *48*, 1089-1096.
- Bailey, J. M., Pillard, R. C., Neale, M. C., & Agyei, Y. (1993). Heritable factors influence sexual orientation in women. *Archives of General Psychiatry*, *50*, 217-223.
- 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.
- Bates, J. E., Bentler, P. M., & Thompson, S. K. (1973). Measurement of deviant gender development in boys. *Child Development*, *44*, 591-598.
- Bates, J. E., Bentler, P. M., & Thompson, S. K. (1979). Gender-deviant boys compared with normal and clinical controls boys. *Journal of Abnormal Child Psychology*, *7*, 243-259.
- Bateson, P. P. G. (1978). Sexual imprinting and optimal outbreeding. *Nature*, *273*, 659-660.
- Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981a). *Sexual preference: Its development in men and women*. Bloomington: Indiana University Press.
- Bell, A. P., Weinberg, M. S., & Hammersmith, S. K. (1981b). *Sexual preference: Its development in men and women. Statistical appendix*. Bloomington: Indiana University Press.
- Bem, D. J. (1996). Exotic becomes erotic: A developmental theory of sexual orientation. *Psychological Review*, *103*, 320-335.
- Bem, D. J. (1998). Is EBE theory supported by the evidence? Is it androcentric? A reply to Peplau et al. *Psychological Review*, *105*, 395-398.
- Bem, S. L. (1993). *The lenses of gender: Transforming the debate on sexual inequality*. New Haven, CT: Yale University Press.
- Berscheid, E., & Walster, E. (1974). A little bit about love. In T. Huston (Ed.), *Foundations of interpersonal attraction* (pp. 355—381). New York: Academic Press.
- Blanchard, R., McConkey, J. G., Roper, V., & Steiner, B. W. (1983). Measuring physical aggressiveness in heterosexual, homosexual, and transsexual males. *Archives of Sexual Behavior*, *12*, 511-524.
- Buss, A. H., & Plomin, R. (1975). *A temperament theory of personality development*. New York: Wiley.
- Buss, A. H., & Plomin, R. (1984). *Temperament: Early developing personality traits*. Hillsdale, NJ: Erlbaum.

- Byne, W., & Parsons, B. (1993). Human sexual orientation: The biologic theories reappraised. *Archives of General Psychiatry, 50*, 228-239.
- De Cecco, J. P., & Elia, J. P. (1993). *If you seduce a straight person, can you make them gay? Issues in biological essentialism versus social constructionism in gay and lesbian identities*. Binghamton, NY: Harrington Park Press.
- DiPietro, J. A. (1981). Rough and tumble play: A function of gender. *Developmental Psychology, 17*, 50-58.
- Eaton, W. O., & Enns, L. R. (1986). Sex differences in human motor activity level. *Psychological Bulletin, 100*, 19-28.
- Ernulf, K. E., Innala, S. M., & Whitam, F. L. (1989). Biological explanation, psychological explanation, and tolerance of homosexuals: A cross-national analysis of beliefs and attitudes. *Psychological Reports, 65*, 1003-1010.
- Freud, S. (1905/1962). *Three essays on the theory of sexuality*. New York: Basic Books.
- Fry, D. P. (1990). Play aggression among Zapotec children: Implications for the practice hypothesis. *Aggressive Behavior, 17*, 321-340.
- Green, R. (1976). One-hundred ten feminine and masculine boys: Behavioral contrasts and demographic similarities. *Archives of Sexual Behavior, 5*, 425-426.
- Green, R. (1987). *The "sissy boy syndrome" and the development of homosexuality*. New Haven, CT: Yale University Press.
- Hamer, D., & Copeland, P. (1994). *The science of desire: The search for the gay gene and the biology of behavior*. New York: Simon & Schuster.
- Hamer, D. H., Hu, S., Magnuson, V. L., Hu, N., & Pattatucci, A. M. L. (1993). A linkage between DNA markers on the X chromosome and male sexual orientation. *Science, 261*, 321-327.
- Hoon, P. W., Wincze, J. P., & Hoon, E. F. (1977). A test of reciprocal inhibition: Are anxiety and sexual arousal in women mutually inhibitory? *Journal of Abnormal Psychology, 86*, 65-74.
- Hyde, J. S. (1984). How large are gender differences in aggression? A developmental meta-analysis. *Developmental Psychology, 20*, 722-736.
- 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.
- Moller, L. C., Hymel, S., & Rubin, K. H. (1992). Sex typing in play and popularity in middle childhood. *Sex Roles, 26*, 331-353.
- Mook, D. B. (1987). *Motivation: The organization of action*. New York: Norton.
- Moore, D. W. (1993). Public polarized on gay issue. *The Gallup Poll Monthly, 30-34*.

- 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.
- Plomin, R. (1986). *Development, genetics, and psychology*. Hillsdale, NJ: Erlbaum.
- Rushton, J. P., Fulker, D. W., Neale, M. C., Nias, D. K. B., & Eysenck, H. J. (1986). Altruism and aggression: The heritability of individual differences. *Journal of Personality and Social Psychology*, *50*, 1192-1198.
- Schachter, S., & Singer, J. E. (1962). Cognitive, social, and physiological determinants of emotional state. *Psychological Review*, *69*, 379-399.
- The Advocate (Eds.). (1996). *Advocate Poll Results*. p. 8
- Walster, E. (1971). Passionate love. In B. I. Murstein (Ed.), *Theories of attraction and love* (pp. 85-99). New York: Springer.
- Whisman, V. (1996). *Queer by choice*. New York: Routledge.
- White, G. L., Fishbein, S., & Rutstein, J. (1981). Passionate love and the misattribution of arousal. *Journal of Personality and Social Psychology*, *41*, 56—62.
- Whitley, B. E., Jr. (1990). The relationship of heterosexuals' attributions for the causes of homosexuality to attitudes toward lesbians and gay men. *Personality and Social Psychology Bulletin*, *16*, 369-377.
- Wolchik, S. A., Beggs, V. E., Wincze, J. P., Sakheim, D. K., Barlow, D. H., & Mavissakalian, M. (1980). The effect of emotional arousal on subsequent sexual arousal in men. *Journal of Abnormal Psychology*, *89*, 595-598.
- Zucker, K. J. (Ed.). (1990). *Gender identity disorders in children: Clinical descriptions and natural history*. Washington, DC: American Psychiatric Press.
- Zucker, K. J., & Bradley, S. J. (1995). *Gender identity disorder and psychosexual problems in children and adolescents*. New York: Guilford Press.
- Zucker, K. J., & Green, R. (1993). Psychological and familial aspects of gender identity disorder. *Child and Adolescent Psychiatric Clinics of North America*, *2*, 513-542.