

Homosexual Mating Tastes Go Mainstream

Proposed biological and genetic influences on homosexuality have churned up plenty of controversy lately. But a new study suggests that, whether gay or not, men and women evaluate potential dates and mates in sex-specific ways that transcend any traits possibly unique to homosexuality.

"Biological theories have to account for how gay men in many respects remain typically masculine and lesbians remain typically feminine," asserts J. Michael Bailey, a psychologist at Northwestern University in Evanston, Ill. Bailey has helped to promote such theories through twin studies that find a substantial genetic influence on homosexuality in both sexes (SN: 8/22/92, p.117).

Bailey suspects that the groundwork for homosexuality occurs in the womb, when hormonal changes subtly alter brain development. Evidence for this contention sparks much debate (SN: 8/31/91, p.134).

The Northwestern researcher's latest study uses evolutionary theory to examine sexual motivations of heterosexuals and homosexuals. In previous investigations of people attracted to the opposite sex, scientists found that, compared with women, men want more casual sex, prefer younger and more physically attractive partners, and get most jealous over real or perceived sexual infidelities; women prefer slightly older men who appear

industrious and economically successful, and they get most jealous over the loss of a partner's emotional commitment (SN: 10/12/91, p.232).

Bailey's group gave questionnaires on these and related issues to 69 homosexual women, 71 heterosexual women, 72 homosexual men, and 65 heterosexual men. Participants, ranging in age from 20 to 40, responded to advertisements placed in a free urban newspaper and in several gay and lesbian publications.

Both gay and heterosexual men expressed a greater desire than their female counterparts for casual sex, the researchers report in the June *JOURNAL OF PERSONALITY AND SOCIAL PSYCHOLOGY*. Yet gay men cited an average of about 10 previous one-night stands, compared to three for heterosexual men. Other data suggest that this disparity was greater before the onset of AIDS, Bailey says.

As suggested in 1979 by anthropologist Donald Symons of the University of California, Santa Barbara, gay men may have more sexual partners than heterosexual men not because of greater interest in casual sex, but because their opportunities for liaisons rest on men's likeminded inclinations rather than women's more cautious sexual approach, Bailey holds.

Gay and heterosexual men assigned much importance to a partner's physical

attractiveness, he points out; social and economic status assumed heightened importance only for heterosexual women.

Gay men showed a somewhat weaker penchant for younger partners than heterosexual men, although they still valued youth more than the women did.

Homosexual women reported slightly more sexual jealousy than heterosexual women, indicating that lesbians take a somewhat masculine approach to this issue, Bailey contends. Similarly, gay men noted more concern about emotional jealousy than heterosexual men, representing a somewhat feminine approach.

Finally, gay and heterosexual men, as well as lesbians (but not heterosexual women), cited a comparably large interest in visual sexual stimuli, such as pictures and movies of attractive people having sex. Homosexuals' interest in this material challenges the argument of some feminists that pornography stems from the desire of heterosexual men to maintain social dominance over women, Bailey asserts. The purported merits and dangers of pornography currently generate much disagreement among lesbians, he adds.

Some women may opt for homosexuality out of exasperation with men, asserts Symons, whereas others are lesbian from the start. Symons suspects only the latter group would favor visual erotica.

—B. Bower

Fossils widen range of biological burst

Nicholas J. Butterfield's discovery started with a mistake. The paleontologist had planned on studying 1-billion-year-old rocks drilled recently from Canada's Northwest Territories. But when he sent away for the samples, Butterfield wrote down the wrong order number.

While analyzing the rocks under a high-powered microscope, Butterfield was surprised to find a tiny scale from a *Wiwaxia*, an odd creature from the Cambrian period (545 million to 510 million years ago) that he had previously studied.

"It happened utterly by chance, if only because I'm one of the few people in the world who would recognize a *Wiwaxia* sclerite when it floated by," says Butterfield, a researcher at the University of Cambridge in England.

From that initial foul-up, Butterfield found a range of exquisitely preserved fossils that filled the seas soon after the so-called Cambrian explosion — when the first complex animals evolved. He reports his discovery in the June 9

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Scientists had previously found well-preserved fossils from this period in only a handful of sites worldwide, most notably the Burgess Shale in southern Canada. Butterfield's happenstance now opens the door to new, high-quality finds.

"The type of preservation that we know from the Burgess Shale and thought was relatively limited might be much more widespread than we previously presumed," comments Stefan Bengtson of Uppsala University in Sweden.

The rocks Butterfield studied come from flat-lying deposits near Great Bear Lake that escaped the tremendous heat and pressures generated when mountains form. As a result, the fossils entombed there have held up remarkably well over the past half-billion years.

After dissolving away the stone with hydrofluoric acid, Butterfield found an array of different animals, including parts of small crustaceans, which would have measured about 1 centimeter long.

Like many modern crustaceans, these Cambrian examples sported tiny bristles for filtering out pieces of plant material in the ocean.

In the past, researchers have suggested that Cambrian animals were jacks-of-all-trades, lacking the specialized features seen among animals today. But the new discovery refutes that idea, Butterfield says. Apparently, crustaceans evolved the apparatus for filter feeding as far back as the early Cambrian.

In today's oceans, filter-feeding crustaceans form a critical link in the food chain by consuming tiny yet abundant phytoplankton. According to Butterfield, the newly found Cambrian crustaceans played the same pivotal role, serving as prey for larger ocean creatures.

These animals may also help explain what sparked the Cambrian explosion. Perhaps the development of filter feeding, he speculates, lit the fuse by expanding the food chain. Butterfield hopes to address such issues this month when he prospects near Great Bear Lake for more of the Cambrian fossils.

—R. Monastersky