This paper considers conceptions of the human body in four reports from the Swedish government inquiry commissions published between 1968 and 1976. The reports deal with subjects directly connected to the body: legal assignment of sex in cases of transsexualism and intersexuality, abortion, sterilization and sexual abuse. The focus of interest is the manifold and often contradictory conceptions of the relations between body, mind, sex and sexuality in the report on legal assignment of sex (SOU 1968:28). The report asserts four factors essential in assignment of sex: genetic, gonadal, genital and psychosocial. It emphasizes that the juridical sex has to be coherent with the sex the individual identifies as. The Swedish sociologist Ann Kroon has shown that the transsexual’s ability to enact the sex he or she identifies as, in terms of reflecting the gender identity on the body in appearance and behaviour, is crucial. In this interconnection between body and mind, sexuality plays an important role. The authors of the report seem to perceive sexual desire and sexual practice as that which connects the sexed body with the sexed mind. Their reasoning follows what Judith Butler has called the heterosexual matrix. But sexuality might also be that which distinguishes body from mind. Heterosexual desire is an implicit criterion in the diagnosis “transsexualism” (and thus crucial for the outcome of an application for sex change). Transsexuals are being judged on their ability to show off a sexuality that complies with what is expected of person of the sex they feel they belong to. And the future ability to perform heterosexual intercourse is a crucial factor when assigning sex to intersexual children. When the sexed body is incomprehensible, as in the case of intersexuality, or contrary to the sexed mind, as in the case of transsexualism, (hetero)sexuality legitimates the assigned sex.