
THE NATURE OF GENDER: GENDER IDENTITY IN PERSONS WHO ARE INTERSEXED OR TRANSGENDERED

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We usually take for granted a harmony between our gender identity and our biological sex. However, persons who are intersexed or transgendered often experience this relationship as ambiguous or completely contradictory. They wonder whether they are female or male, neither or both. Their struggle raises important questions for all of us about the nature of gender. To what extent is our gender identity innate? Embodied? Is ambiguity in gender identity a relatively rare deviation from a dichotomous norm, or a reflection of a broader multiplicity of genders? The existence and experience of persons who are intersexed or transgendered challenge Christians to reflect seriously on our theologies of gender, and their implications for our understanding of what it means to be male and female. They also call us to consider how we might, in Christian community, seek to minister with persons who are intersexed or transgendered.

Barbara was born and raised a girl, content and happy. However, by age 14, she began to realize that something was wrong. She was not menstruating and her breasts were not growing. To her amazement, her voice began to deepen, her clitoris enlarged greatly, testes descended into her labia, and she started experiencing sexual interest in girls. Gradually, Barbara realized that she was turning into a boy (Diamond, 1992).

When Halle was two years old, she refused to wear dresses and felt uncomfortable playing with girls. At three, she asked her parents if God could turn her into a boy. By the time she was six, she was

depressed and suicidal. Her frantic parents took her to a psychiatrist, who eventually told them that Halle was transgendered. Halle is convinced that she is really a boy, living in a girl's body (Van Heukelem, 2004).

Most of us take for granted a harmony between our biological sex and our psychological experience of being female or male, our gender identity. We just *are* women and men, and the relative effortlessness of this identity can lead us to reify a simple, dichotomous view of gender. People are meant to be either female *or* male, both physically and psychologically. However, for many persons who are intersexed like Barbara, or transgendered like Halle/Hal, things are not so simple. They struggle with their gender identity, wondering whether they are female or male, neither or both. Their struggle raises important questions for all of us about the nature of gender. To what extent is our gender identity innate? Embodied? Is ambiguity in gender identity simply a relatively rare deviation from a dichotomous norm, or a reflection of a broader multiplicity of genders?

Because Genesis 1:26-31 says our creation as image-bearers of God took the form of male and female, most Christians believe that sex is fundamentally dichotomous. Many believe further that gender identity should also be dichotomous; there is an essential female and male mind and spirit that complement and complete one another. The existence and experience of persons who are intersexed or transgendered demands that Christians seriously consider whether this taken-for-granted understanding is, in fact, what the Bible is telling us about gender. The answers we give to those questions affect what characteristics and behaviors we expect from one another, what gender roles we ideally hold one another accountable to, and how we treat those whose experience of gender is different from our own.

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TABLE 1
Human Sexuality: Sex & Gender

SUBCATEGORIES		“FEMALE”	“INTERSEX”	“MALE”
biological sex	chromosomes	XX	XX, XO, XXY, XYY XX/XY mosaicism	XY
	genitals, external	clitoris, labia, vagina	female<->ambiguous<->male	penis, testes/scrotal sacs
	genitals, internal	ovaries, oviducts, uterus, cervix, upper vagina	female<->ambiguous<->male	vas deferens, seminal vesicles, bulbourethral glands, prostate gland
	hormones*	higher estrogen & progesterone, low testosterone	variable hormone levels & responsiveness	higher testosterone, dihydroxytestosterone
	reproductive functioning	menses, ovulation, (fertile)	absent or variable	ejaculation, semen (fertile)
	orientation	heterosexual homosexual bisexual asexual		
gender	gender	femaleness/femininity	intersexness/intersexinity?	maleness/masculinity
	transgendered (Gender Identity Disorder)	self-perception as male ----- reconstructed as male		self-perception as female ----- reconstructed as female

*The influence of hormones (presence of particular hormones, levels of hormones, and ability to respond to hormones) upon sexual development and identity appears to be very significant and complex, being influenced exogenously by maternal levels during gestation (and perhaps even during post-natal development through nursing), and endogenously by variations occurring during gestation, childhood, adolescence and adulthood. See, for example, M. Hines (2004, p. 83).

In this article, we will describe the nature of intersexuality and transgenderism, with a particular focus on the implications of these conditions for gender identity. We will integrate these scientific perspectives with Christian theological perspectives on gender, and explore how this integration might affect our view of humankind as gendered and our ministry to persons who are intersexed and transgendered.

WHAT IS IT TO BE A PERSON WHO IS INTERSEXED OR TRANSGENDERED?

Intersexuality

Already during fertilization, biological processes begin which influence sex and gender (MacLaughlin & Donahoe, 2004). Usually an X or a Y chromosome-bearing sperm fertilizes the X-bearing egg. Initially, primitive gonadal tissue, visibly identical in males and females, forms adjacent to the rudimentary kidneys. Influenced by genes and hormones, particularly towards the beginning of the second

trimester, the gonadal tissue and other related structures differentiate and migrate, forming ovaries, oviducts, the uterus and upper region of the vagina in females, to merge with the forming external genitalia of clitoris, an independent urethra, labia, and the lower vagina. In males, the same basic gonadal tissue and other related structures differentiate and migrate, but now form the testes that descend into scrotal sacs, interconnected with the vas deferens, related glands, and a urethra encased in a penis. Like an orchestra playing one of Beethoven’s great symphonies, numerous genes, hormones, myriads of cells and tissues, all need to come together in the proper amount, sequence and timing, or the outcome may leave much to be desired, or at least, contemplated. The wonder is not that it sometimes does not emerge in reproductively fertile form; the true marvel is that it usually does.

On occasions when one or more of the processes of sexual development diverge from the norm, the various facets (see Table 1) of our biological and

psychological sexual identity may not be in full agreement and may even strongly disagree.

For some newborns, the ambiguity of their external genitalia may preclude identifying and naming the infant as female or male. One inherited condition causing ambiguous genitalia is known as 5- α -reductase deficiency. When this enzyme is non-functioning, male infants are unable to convert testosterone into the more highly active dihydroxytestosterone necessary for male external genitalia development before birth. Cases range from mild to severe, with the latter presenting as an infant with male internal reproductive organs but female external genitalia that undergo virilization at puberty. This was Barbara's experience. Persons with complete androgen insensitivity syndrome (CAIS) have female external genitalia, develop in all outward appearances as female, but lack the female upper reproductive tract, may have undescended testes or ovotestes, and have the XY male chromosomal makeup. Their condition is caused by one of numerous mutations in the gene for the androgen receptor, rendering it incapable of responding to androgens. Other infants may have congenital adrenal hyperplasia (CAH), a condition caused by problems in any one of five enzymes critical for the production of cortisol that causes an overproduction of dihydroxytestosterone. In the most severe cases of CAH, infants born with the XX chromosomal makeup seem to have male external genitalia but also have all the female internal organs and are lacking the hormone aldosterone, the latter presenting a severe and life-threatening condition requiring diagnosis and treatment within weeks of birth. And some individuals are conceived and born with Klinefelter syndrome, possessing an extra sex chromosome, XXY. Identified as males at birth, the XXY is usually unidentified as outward symptoms are absent or subtle. As persons with XXY mature, they may experience breast enlargement, a lack of body and facial hair, be rotund, slightly taller than the male average, with undersized testes, experience speech and language difficulties, and be infertile (Money, 1994). There are numerous other intersex conditions, including several for which the cause is unknown.

In our sexually dimorphic society, the above categories of individuals not clearly identifiable as male or female present awkward issues for the affected individuals, parents, healthcare practitioners, and society. One consequence is a hesitancy to report such occurrences, making it difficult to ascertain the

frequency with which these conditions occur. Estimates are that instances of all persons with the varying identities within the category of intersexuality represent 0.06%-1.7% of our communities.¹

Transgenderism

When individuals have no evidence of an intersex condition, but believe that they in fact are a gender different from that suggested by their biological sex, they are called transgendered (Meyer-Bahlburg, 1994). That is, the genetic, gonadal, hormonal, and genital aspects of sex appear to be consistently female or male. The only inconsistency is in gender identity, and, as a result, in desired gender role. Thus, a biological male who is transgendered may consistently express a desire to be, or claim that he already is, a girl, prefer to play with other girls, and long to adopt a stereotypical female gender role. Transgendered persons who find this apparent contradiction between sex and gender identity a source of intense discomfort, or experience disgust with their bodies, or have difficulty functioning socially as a result of their gender dysphoria, may be diagnosed with Gender Identity Disorder (GID; formerly called Transsexualism; American Psychiatric Association, 1994). However, not all transgendered persons are disgusted with their bodies, although unhappiness can increase at puberty when secondary sex characteristics emerge. Some are indifferent to their biological sex, and others express some enjoyment with their inherent duality. Only some transgendered persons seriously pursue sex-reassignment surgery and hormone treatments.

GID can emerge in early childhood, as it did for Halle/Hal, or later in adolescence. When symptoms

¹The incidence of persons with intersexed conditions is unclear, in part because of the awkwardness of acknowledging and reporting such births but also because some of the conditions are highly variable and the demarcations between female-intersexed and intersexed-male are unclear. The higher incidences are reported by Fausto-Sterling (2000, p. 53) and Blackless et al. (2000) and is achieved by identifying all hypospadias as intersexed. Dreger (1998) initially defined intersexed conditions less inclusively and estimated the incidence to be 1 in 1,500 live births or 0.06%, though she later acknowledged (1999, p. 14) "coming around to the data" of Fausto-Sterling. Preeves (2003, p. 2) suggests 1 or 2 in two thousand newborns are sexually ambiguous but also cites earlier reports from the 1960s and 1970s estimating the incidences of intersexed conditions to be in the 2-4% range. Without citing specific evidence, Hines (2004, p. 21) suggests 1 in 12,000 (0.008%) newborns have genitalia so ambiguous as to make sex assignment difficult, but 1 in 100 (1%) of all newborns may be termed intersexed if all the "less extreme aberrations" including all hypospadias are included.

of GID emerge in childhood they often diminish with time; however roughly 75% of boys with GID grow up to have a homosexual or bisexual orientation (American Psychiatric Association, 1994). It is primarily men who have experienced GID from childhood through adulthood who are most interested in, and satisfied with, sex reassignment surgery. Of those who do not opt for surgery, some enjoy taking on the desired gender role, including dress (transvestism). However, not all transvestites are transgendered; some are men with a male gender identity who enjoy playing with female roles and with the sex/gender contradictions.

People who are transgendered can be heterosexual, homosexual, bisexual, or asexual. However, it is often difficult to apply these categories. A biological male with a female gender identity who is sexually attracted to men may appear homosexual to others when psychologically he is in fact heterosexual (female gender identity attracted to males).

It is difficult to get an accurate picture of the prevalence of transgenderism. It is less common than intersex conditions, with one study suggesting a rate of 8 per 100,000 persons (Wilson, Sharp, & Carr, 1999). While some believe the prevalence is increasing, others argue that it is relatively stable across time and cultures (Landen, Walinder & Lundstrom, 1996). It is three to four times more common in biological men than women (Landen et al.).

WHAT ARE THE IMPLICATIONS OF INTERSEXUALITY AND TRANSGENDERISM FOR GENDER IDENTITY AND ROLE?

Are gender identity and gender role related to biological sex? If so, what happens when biological sex is ambiguous? A consensus is emerging that a key predictor of gender identity in intersexes is the ratio and amount of hormones, especially androgens, present during sensitive periods of brain development. In some cases, the presence, amount, or functioning of receptors for the relevant hormones are also factors. Precisely when the relevant sensitive periods for gender identity occur is unclear, but probably include the latter part of prenatal development and at least the first several months after birth.

For example, persons with complete AIS, who are insensitive to androgens, virtually always have a female gender identity and adopt female gender roles. Women with CAH, exposed to elevated androgens during fetal development only, show

much higher than normal rates of gender-atypical or nonconforming behavior from childhood on. However, the majority of these women become adults with a female gender identity and role. Children with 5- α -reductase deficiency generally seem to have little difficulty adopting a male gender identity and role when their external genitals masculinize at puberty, as happened to Barbara. This is consistent with the view that their bodies were responsive during prenatal development to one form of androgens, testosterone, that shapes the internal organs and the brain. Their intersexuality is due to the lack of another androgen, dihydroxytestosterone, that is primarily responsible for the development of the external genitals. Thus, we theorize that their brains were exposed to sufficient levels of androgens during the sensitive periods to make a male gender identity more likely. Today, an understanding of an intersexed child's prenatal hormonal history is increasingly a deciding factor in decisions about whether to raise the child as a boy or a girl. (Diamond & Sigmundson, 1997a).

However, the notion that gender identity is always either female or male, and the task in the case of a person who is intersexed is simply to determine which gender identity is likely to emerge, is far too simplistic. Persons who are intersexed do not always clearly identify with just one gender. For example, Deborah Brown, founder of the evangelical Christian Intersex Support Group International (see <http://www.xyxo.org/isgi/index.html>) is a true hermaphrodite. She was raised as a boy, married a woman and, with difficulty, fathered two children. In adulthood she increasingly felt she was denying a key part of her identity, her femininity. After Deborah's wife died, she decided to live as a woman, and had her male organs removed. Another person—a pastor—who did not realize he had an intersex condition (Klinefelter's syndrome) until later in life, said that realizing he was both male and female explained years of puzzlement about his gender identity, and helped him to feel *whole* for the first time. He now experiences his gender identity as *both* male and female, as "pansexual" (personal communication). Other persons who are intersexed also feel that the female/male categories of gender identity do not work for them; they argue for a 'third' gender or a genderless state.

Whether an ambiguous gender identity is a result of intermediate or ambiguous patterns of hormone exposure during prenatal development is at present

unclear. We only know that, even with basic knowledge of a person's prenatal hormonal history, we cannot always reliably predict that person's gender identity (Zucker, 1999). There is a dearth of long-term follow-up studies of persons who are intersexed. Such studies that exist are confounded by the fact that people who are intersexed are normally given gender assignments early in life. These assignments are implemented through surgery, hormone treatments, therapy and 'gender-consistent' rearing. However, despite such strenuous efforts to produce a clear female or male body and gender identity, a number of intersexed persons request reversals in adolescence (Money, 1986a; 1987; Reiner & Gearhart, 2004; Slipher, Drop, Molenaar & Keizer-Schrama, 1998). This suggests that gender identity is at least in part rooted in innate or early developing physiological systems, and may be less flexible than many medical and mental health professionals have long believed.

Transgendered persons also have diverse experiences that make it difficult to draw general conclusions about biology and gender identity. The fact that many people diagnosed with childhood GID expressed, from as young as age two, a conviction that they were the other gender, preferred to play with members of the other gender and to take on those gender roles, suggests that gender identity can form extremely early in development. Whether that identity is responsive to experience is difficult to determine. There is some evidence that transgendered persons are more likely to have experienced childhood trauma than people with other psychiatric diagnoses (Kersting et al., 2003). However, transgendered persons are not more likely to have other psychiatric disturbances than 'healthy' adults (Brems, Adams, & Skillman, 1993; Haraldsen & Dahl, 2000; although see McHugh, 2004). People with childhood GID often adopt a gender identity and role consistent with their biological sex by the time they complete adolescence. However, many of them have nonheterosexual orientations. Others retain a gender identity inconsistent with biological sex throughout their lives.

Recent research begins to clarify the role of biology in gender identity. Studies of neural development suggest that prior to the third trimester of gestation, the brain lacks receptors for the 'sex' hormones— androgens and estrogens (Abramowich, Davidson, Longstaff & Pearson, 1987). If gender identity is indeed a reflection of the effects of sex hormones on brain organization, then the earliest such an identity could develop its biological substrate would be during

the third trimester. Two case studies in the literature of attempts to alter the gender identity of children born as boys but suffering irreparable damage to the penis suggest that, prior to seven months of age, such transitions may be successful (Bradley, Oliver, Chernick & Zucker, 1998), while after 17 months, they are unlikely to succeed (Diamond & Sigmundson, 1997b). Finally, direct examination of the brain has revealed that a region known to be related to orgasm, the central subdivision of the bed nucleus of the stria terminalis (BSTc), contains about one and a half times more neurons in heterosexual males as in heterosexual females. In transgendered men (biological males who have a female gender identity), the BSTc is similar to that of heterosexual, nontransgendered women. For the one transgendered woman studied (a biological female with a male gender identity), the BSTc had neuron numbers in the male range (Kruijver, Zhau, Pool, Hofman, Gooren & Swaab, 2000; Zhau, Hofman, Gooren & Swaab, 1997). Whether or not the BSTc is related directly to gender identity, the observation that transgendered persons have at least one brain structure that is more similar to the gender with which they identify than their biological sex is certainly suggestive. Further study is needed to determine precisely when the BSTc is organized, whether that structure is responsive to experience, and what role it might play in gender identity.

Research on gendered behavior in other species also suggests that (a) biological factors play a significant role in gendered behavior, and (b) the biological systems underlying gendered behavior can sometimes be responsive to experience or to particular environmental conditions. A number of fish species can shift from female to male, and vice versa, in both physical and behavioral traits (Policansky, 1982). Many mammalian species regularly produce intersexed individuals, in some cases at high rates (more than 10% of a local population). These intersexed mammals also behave in ways that reflect combinations of female/male gender roles, or 'third gender' states (Roughgarden, 2004).

Although we should be cautious about extending research on other species to humans (Zuk, 2002), the evidence does suggest that gender identity and gender role are not merely human social constructions. In many species, including humankind, they are clearly linked to biological structures and functions. Alterations in biology produce alterations in gender identity and role. This does not necessarily

mean, however, that gender identity is immutably 'set' within the first few months of life. Ambiguities of gender identity experienced throughout the lifespan, and shifts in gender identity observed in some persons who are transgendered or intersexed, suggest that whatever the roles of biological processes in gender identity, they are complex, and possibly, to some unknown extent, dynamic (Zucker, 1999). It remains distinctly possible that particular experiences may be a means by which biology is altered in gender-relevant ways.

EFFECTS OF A GENDER-DICHOTOMOUS CULTURE

One question that is regularly raised by intersexed and transgendered persons, and by some feminist scholars, is whether it is our strongly gender-dichotomized culture that *creates* 'disorders' of gender identity. In a context where everything from pronouns to dress to expected interests and roles is defined as *either* female or male, people who do not feel comfortable in either of the two available categories indeed have a problem. But is the problem the context or the person? Is it possible that gender is, both biologically and psychologically, a much more varied phenomenon than human cultures generally allow?

Certainly intersexed and transgendered conditions are not, in themselves, normally a threat to physical health. Instead, since 1955, the standard approach to intersexuality and transgenderism is based on two main theoretical pillars. The first is that gender identity and role are malleable at least during the first two years of life. Socialization matters. The second is that a person cannot be psychologically or psychosexually healthy unless their biological sex is unambiguous (that is, their genitalia look 'normal') and their gender identity and role are in harmony with that body (Money, 1986b; 1994). As a result, persons with these conditions are expected to fit their bodies, gender identities and gender roles into either the female or the male categories expected and prescribed by their culture. In many cases, these goals are not easy to achieve. They may require extensive surgery to remove the organs and secondary sex characteristics of one sex and create those of the other, lifelong hormonal treatments, strenuous efforts on the part of parents to raise their child 'unambiguously' in the assigned gender role, and often regular psychotherapy. These painful, invasive treatments and minute examinations of the

'gender-appropriateness' of their sexuality and behavior may actually create the gender dysphoria they are intended to cure (Kessler, 1990).

Whether intersexed or transgendered persons would experience disconnection, disgust with their body, or dysphoria associated with their psychological and physical identity in the absence of a cultural gender dichotomy is unclear. Prior to modern diagnoses and medical and surgical interventions, there is very little information about how intersexed and transgendered persons experienced themselves and how they managed to find a place for themselves in their societies. We do know that, for thousands of years, human cultures have reacted with fear and horror at the birth of a sexually-ambiguous child: "When a woman gives birth to an infant that has no well-marked sex, calamity and affliction will seize upon the land, the master of the house will have no happiness" (quote from a 1700 B.C.E. Babylonian stone tablet, cited in Freedman, 1967). We can only presume that such infants were exposed to die, as was normal practice in many historical cultures. On the other hand, gender ambiguity and intersexuality were sometimes attributes of powerful, divine beings, as in the case of the ancient pagan goddess Cybele, the 'Bearded Aphrodite' (whose child with the god Hermes, Hermaphrodite, gives us the word used to describe a form of intersexuality), the Hindu Shiva and Shakti, and possibly ancient Neolithic divinities. It is therefore difficult to know for certain the various ways in which intersexed and transgendered persons were treated historically.

Historically and to the present, we have viewed the size of external genitals at birth and thereafter to be of paramount importance, deeply concerned about large clitorises ("clitoromegaly") and undersized penises (Kessler 1998, p. 35). One study of boys born with "micropenis," literally a penis considered too small for normal sexual function, showed that, even though after puberty their penises were still below the 10th percentile in size, these males had no difficulty having satisfying sexual intercourse. They also all had a male gender identity and were all heterosexual (Reilly & Woodhouse, 1989). There is another, unfortunately unpublished, study of the experiences of a large sample (over 250) of both treated and untreated intersexed persons. This study showed that rates of psychological problems and difficulties adjusting were extremely low, comparable to or even lower than in the general population, and the state of their genitalia played "a strikingly

insignificant part in the way a person develops a stable and healthy gender identity, not to mention a secure and confident self-image" (Colapinto, 2000, p. 234). These data suggest that the relationship of gender identity to the state of the body, especially the external genitals, is complex and poorly understood. It is theoretically possible that one could function as a fully healthy individual with an untreated intersex or transgendered condition. However, now that these conditions are identified and treated early in development, it will be difficult to obtain the relevant data.

Perhaps the most promising source of such data is the study of persons who are intersexed or transgendered in other cultural contexts. While in North America such persons are viewed as disordered, in some contexts they may have unique social roles consistent with a "third gender". For example, among some traditional Native North American cultures, such as the Zuni, Navajo and Crow, transgendered persons are considered "two-spirited" and may be highly regarded, especially in religious roles. Occasionally cultures have a ritual designed to publicly acknowledge a two-spirited person. Central and South America, Polynesia, and India (among others) all have documented third-gender or reversed-gender roles for transgendered or intersexed persons (Herdt, 1994). These roles do not always have a high status, and persons in these roles may be objects of ridicule, fear, or pity, but nevertheless there is an open cultural acknowledgement of their existence and their gender ambiguity, and rarely attempts to alter or treat them (Roughgarden, 2004). It is in such contexts that we may have our best opportunity to study the relations between biological sex and gender identity, and cultural influences.

MEDICAL APPROACHES TO INTERSEXUALITY AND TRANSGENDERISM

Throughout North America, persons who are intersexed or transgendered have been perceived as disordered by their families, healthcare practitioners, and society—sufficiently disordered to warrant prompt medical attention. Until fairly recently, the birth of an infant not clearly male or female initiated an urgent diagnosis, occasionally for the well-being of the infant but more frequently to allay the concern and embarrassment of the parents and healthcare practitioners (Lobe, Woodall, Richards, Cavallo, & Meyer, 1987; Quattrin, Aronica, & Mazur, 1990).

This occurred in the context of the firm belief that gender identity is malleable during the first two years of life, and therefore doctors could normalize the genitalia and parents could rear their child in the corresponding gender with confidence that the child would be both physically and psychologically comfortable in their gender assignment. The occurrence of an intersexed condition was a correctable birth defect necessitating assignment to a particular sex and surgery (Kessler, 1998). But as Kessler points out (p. 34), surgical interventions (a) may be lifesaving (rerouting a urethra to enable the infant to urinate), (b) may improve the quality of life (repair a urethral opening to facilitate a controllable stream of urine rather than an uncontrollable spray), or (c) may be aesthetic (reducing a clitoris perceived as too large or supplementing a penis perceived as too small). Many of the surgeries done in the postnatal period on intersexed infants were in the last category, done more for the benefit of parents, healthcare practitioners, and society, than for the infant. However, evidence of harm comes from the fact that nerve damage and scarring from such surgeries remain substantial risks that are likely to significantly and adversely affect the individual, desensitizing sexual intimacy or rendering it painful. At worst, the assignment of genital sex with anatomical surgery during infancy is incorrect, leaving those with intersex conditions struggling as their sexual identities emerge during childhood and adolescence, creating transgendered persons.

The assumptions about and treatments performed upon persons who are intersexed have been far ranging. For some individuals, particularly those with the mildest (least challenging to our dimorphic sense of sexual identity) of conditions and least extensive treatments, it is hoped that things have gone as well as can be expected. The overall lack of long-term follow-up studies with persons who are intersexed combined with our reluctance to be open about these matters precludes estimating for how many people interventions have been satisfactory. In contrast, a growing number of recent studies and books are detailing the difficult and troubling consequences of interventions, particularly surgical interventions in infancy and childhood, over the past several decades (Dreger, 1998; Kessler, 1990). Whether and to what extent these reflect widespread dissatisfaction and failure for most individuals or the experiences of the most dissatisfied and vocal minority may be debatable. But this much

is clear, in our efforts to meet the needs of parents, healthcare practitioners, and society upon the birth of an intersexed infant, we have significantly harmed individuals, and unnecessarily so. The experiences of these individuals, expressed now as adults, are characterized by stigmatization, shame, and secrecy. Sharon Preeves, reflecting on her extensive interviews with thirty-seven adult persons who are intersexed, notes that these persons “conveyed tales of pain, sorrow, bewilderment, and anger” (2003, p. 60). The case is made that these non-emergency interventions during infancy fall short of truly informed consent on the side of the parents on behalf of their child (Dreger, 1998), and there is a growing consensus that our assumptions and treatments have been harmful. Far less harm is likely to be incurred by individuals who are intersexed if we await treatments until they can participate in the decision-making processes, convey their psychological perceptions of their sexual identity, and grant their consent.

At the other end of the spectrum are transgendered persons. Without an intersex diagnosis, medical practitioners are reluctant to intervene with surgery and hormone treatments. Initial responses to transgenderism consist of psychotherapeutic attempts to make the person’s gender identity consistent with their biological sex. Altering biological sex to be more consistent with gender identity is considered a last resort. Before a transgendered person can undergo sex reassignment, they must first be diagnosed with GID, and undergo a rigorous psychiatric assessment process, normally following the Benjamin Standards of Care (Meyer et al., 2001). They must demonstrate a complete and enduring gender identity at odds with their sex, a persistent desire for sex reassignment, and the psychological maturity to handle the transformation process and its consequences. They must also demonstrate their commitment to the change by undergoing hormone treatments and consistently taking on the desired gender role for a period of time prior to surgery.

Thus persons with intersex or transgendered conditions find themselves in a social context that demands both gender dichotomy, and harmony between biological sex and psychological gender identity and gender role. It is almost surprising that gender dysphoria persists in the face of such strong socialization pressures.

BIOLOGICAL AND CULTURAL INTER-ACTIONS IN THE DEVELOPMENT OF GENDER IDENTITY AND ROLE

Historical, cross-cultural, and developmental variation in gender *roles* are a powerful testimony to the significant role of culture in communicating expectations about how persons who identify as female or male should behave. But does culture also shape gender *identity*? Are we born truly malleable, fully bipotential, and it is experience and social context that give our gender identity form? This is the view of the social constructionists, and also provides one of the key pillars for the medical profession’s approach to intersexuality and transgenderism (Looy, 2002). We suggest, in contrast, that the biological data point to an innate and possibly immutable foundation on which gender identity is built. However, the nature of that foundation does not *directly* produce an internal sense of “I am female” or “I am male,” in a clearly dichotomous manner. What is more likely is that the brain is organized to produce various orientations toward the world, certain ‘response tendencies’ and predispositions. For example, overall people who develop a female gender identity may be more predisposed to respond to cues signalling emotional states, intentions and desires in others than those who develop a male gender identity (Baron-Cohen, 2004; Kimura, 1999).

Suppose that a biologically male person nevertheless has a brain that is partly organized in a manner more common among females. In North America, this boy would be born into a context where his predispositions and response tendencies would make him more comfortable associating with, imitating, and ultimately identifying with the people labelled girls and women. At the same time, because of his biological sex, his parents, teachers, and peers would expect him to have the predispositions and preferences of the people labelled boys and men. From the very beginning, then, this child would be learning (a) that the world is divided into two genders; and (b) that, of these two options, the one he identifies with most is the one that everyone is telling him he must not identify with. There is very little room for variation within each category, and certainly no options beyond these two categories. This is an obvious source of conflict and distress. A person who is intersexed, whose brain has been organized to produce predispositions and preferences that do not nicely fit either of the available gender categories, is forced to

fit a Procrustean bed that is either too long or too short; neither produces a good fit, but there is no bed of the right size available. This too is often a source of considerable distress.

Therefore, we suggest that social context provides the gender categories and rules about category membership into which people must find a place. The fact that the vast majority of us are generally comfortable in one of the two available categories suggests that this dichotomous system, which is found in one form or another in most—but not all—human societies, is a reasonably functional one. It may also “carve nature up at the joints;” that is, reflect a genuine dichotomy present within the human species, at a biological as well as cultural level. People with intersex or transgendered conditions are relatively uncommon; despite the arguments of some scholars, we believe that, while there does exist a continuum of sexes and genders, most people find themselves near one extreme or the other of the continuum. Perhaps the continuum itself would be better called ‘bipolar’ (Nelson, 1978).

However, there are significant consequences to *absolutizing* this bipolar structure. First, it by definition stigmatizes persons who are intersexed or transgendered as abnormal or disordered. While there is evidence that many intersex and at least some cases of transgenderism are the result of abnormal developmental processes (congenital or experiential), it is unclear whether *all* such persons can reasonably be classified as abnormal in more than a statistical sense. Whether or not the conditions reflect an underlying abnormality, why should we stigmatize the *gender* experience of such persons when that gender identity is resistant to change and is not, in and of itself, a psychological problem? Such a system leaves no truly comfortable place for them, especially for those who are unable to strongly identify with one of the two available genders. Second, it may create a situation in which transgendered persons internalize a pressure to make their bodies ‘fit’ their gender identity, because they are told that both bodies and genders come in only two versions, and if yours do not match, you have a disorder. Third, it reduces our ability to perceive and to appreciate the tremendous diversity *within* gender categories present among all of us. All the research on gender differences in various personality traits, cognitive abilities, and preferences consistently shows that, even when there are statistically significant differences between women and men,

these differences pale in magnitude beside the variations among women and among men. Yet we focus on the difference between categories and effectively ignore or even deny the difference within. This sets up such narrow definitions of what it is to be female or male that virtually all of us fall short of the “ideal” or the prototype.

CHRISTIAN CONCERNS

At this point readers may be asking, “Didn’t God in fact create humankind to be a gender-dichotomous species? Are not female and male bodies, minds and spirits intended to be complementary? Is not the image of God made complete when a woman and a man become one? And what is wrong with viewing persons who are intersexed or transgendered as abnormal, in the same way that we view the deaf, the blind and the lame as suffering the effects of a broken creation?” These are important questions, and, at a very general level, they can be answered affirmatively. However, it is also important to listen to what science and the stories of intersexed and transgendered people are teaching us about bodies and genders, and to consider carefully how to integrate those stories with our faith.

Does Scripture in fact *prescribe* a clear-cut gender dichotomy? Many theologians understand the Genesis 1:26-31 passage, in which humankind is created in God’s image as male and female, to reveal God’s internal relationality (the persons of the Trinity). Further, it reflects a fundamental human incompleteness that finds its fulfillment in physically, emotionally and spiritually intimate relationships with others (Grenz, 1998; Smedes, 1994). The focus is on our relational character, and not on a detailed scientific description of the biological and psychological character of gender. The fact that our relational God is understood as *trinitarian*, while humankind appears to have been created *bipartite*, seems to bolster the conclusion that we image God as people called into relationship, not primarily as two sexes/genders. When we give priority to the *gender* of persons over the more basic need and gift for *relationship*, we isolate not only intersexed and transgendered persons, but all of us, from possibilities for communion that extend beyond gender.

Scripture also acknowledges, without any condemnation or concern, the existence of individuals who do not fit the gender dichotomy. Isaiah 56:3-5,

Matthew 19:11-12, and Acts 8:26-40 all make reference to the existence of eunuchs, males who, by castration, illness, or birth (i.e., intersexed), were 'feminized' and infertile. Eunuchs had social roles in the early Middle Eastern context, and there is absolutely no indication that the gospel calls us to erase such roles in bringing in the kingdom of Christ. Indeed, in the Matthew passage, it is Jesus who urges acceptance of eunuchs, however they were born or came to be eunuchs, even as others accept singleness.

The Bible speaks from within and to a culture that, like ours, takes for granted a gender dichotomy. But, just as science taught us that the earth revolves around the sun, and thus profoundly changed our theology of the cosmos, so science has helped us become more aware of intersex and transgendered conditions, calling us to consider what they mean for our theological understanding of gender. Using science (general revelation) to help us understand more deeply God's special revelation must be done with great care. The mere observation that a phenomenon exists in nature does not by definition mean that it is part of God's intended good creation order. It may well reflect the consequences of the fall into sin. Neither the physical-biological world nor our cultural worlds are exempt from this brokenness, and this may include both intersexed and transgendered conditions as well as our cultural—including theological—beliefs about gender. One theological interpretation of the gender diversity we observe is that, instead of viewing gender as dichotomous, we should understand it as a *polarity* (Nelson, 1978). Rather than sharp distinctions that divide, polarities draw us inexorably into communion, as the north and south poles of a magnet are drawn together. The language of polarity creates space for people who experience the polarity to greater or lesser degrees, and this vision may help us to include people who are intersexed or transgendered in a rich view of gender. Gender as a polarity does not suggest that people are spread evenly across a continuum, but rather that the majority will find themselves at either pole, while a few will lie between the poles. However, the image suggests that such persons would be included or embraced, rather than isolated in a vacuum, shut out of the only legitimate categories.

Integrating persons with intersex or transgender conditions into our understanding of gender will have several implications. For one, when gender is a criterion for participation in certain cultural and ecclesial

roles, intersexed and transgender persons provide an interesting challenge, requiring us to consider whether it is gender per se, or particular gifts and strengths (which may occur more frequently in one gender) that should be our primary concern. This is a reminder that our insistence on certain gender roles, our expectation that one gender is inherently more competent at particular tasks is at least sometimes a consequence of the Fall (Van Leeuwen, 1990).

Are persons with intersexed and transgender conditions part of the diversity God calls forth from creation, or a reflection of the pervasive effects of sin? Science tells us that intersexed and transgendered conditions are often (but not always) abnormal in the sense that they interfere with procreation. Also the fact that most transgendered persons eventually develop a gender identity consistent with their biological sex, that they are more likely than others to have experiences of trauma and/or other emotional difficulties (Brems et al., 1993; Haraldsen & Dahl, 2000; McHugh, 2004), and that they deeply and specifically desire their bodies to *match* their gender identity (Cohen-Kettenis & Gooren, 1999), all seem to support the argument that transgenderism reflects a distressing condition that calls for some form of healing. However, we also know that most intersex conditions are not inherently pathological and no threat to the physical health or integrity of the person. Further, the distress that many intersexed and all transgendered persons experience with regard to their gender identity is surely significantly influenced by their attempts to fit into a culture that insists on a very strong and clear gender dichotomy and gender consistency at biological and psychological levels. The fact that there are three to four times more male-to-female transgendered persons than female-to-male may be a function, in part, of the greater value our culture places on masculinity, and the resulting condemnation of men for expressing femininity, while women are far more free to express masculinity (Gottschalk, 2003). It is difficult to imagine that the diversity of gender and gendered behaviors across species, and the diversity of traits within genders among humans, are all consequences of sin, that God's creational intent was monolithic females and males. Perhaps intersexed and transgendered persons are a powerful reminder that gender, while itself a good gift of God, contains within it great diversity that we tend to forget or ignore in our focus on definitions or prototypes for gender categories.

Finally, we need to consider the role of the eschatological passages in Scripture that point toward some kind of transformation or transcendence of gender and sex when the redemption of creation is complete (Luke 20:34-36; Galatians 3:28; Revelation 14:4). These imply that we should not absolutize or reify gender in and of itself.

There are also relationships between gender and sexuality that are revealed in part through a study of the intersexed and transgendered, and that have implications for our understanding of the nature and causes of variations in sexual identity. While these are also important questions, they are beyond the scope of this paper. For a more in depth discussion of this topic, see Looy (in press).

In sum, it is our view that God is relational, within God's self (the Trinity), with creation, and especially with humankind. God created us with a deep need to express our humanity most fully in relationship, and made us gendered in order to draw us into the deepest human intimacy and for procreation. Thus, gender is a good and vital aspect of human nature, but it is not *all* of human nature. Gender also does not reflect a *straightforward* division of humankind into two subspecies. Both within and transcending gender is much psychological, behavioral, and even physical diversity. We are called to celebrate this diversity, as reflected in Paul's repeated reminders that it is necessary for us to be unique contributors to the body of Christ (e.g., Rom 12:4-6; I Cor 12: 4-11, 27-31; Eph 4:11-12). Further, we believe that sin has distorted both physical experiences and cultural expressions of gender. We believe that intersexed and transgendered persons exist in, and create for all of us, a tension between healthy diversity and the distortions of sin, and call us to reflect on how we should understand gender in light of the essential Christian motifs of creation, fall, and redemption.²

Another important question for us is: How might we, in Christian community, seek to minister with persons who are intersexed and transgen-

dered? Even as we puzzle and strive to integrate the understandings of gender that science has deepened with our theologies of gender, we can be confident that Scripture calls us primarily to welcome the marginalized and the alien, to "do justice, love mercy, and walk humbly with God" (Micah 6:8). In our time and cultural context, persons who are intersexed or transgendered are indeed alienated and marginalized, and it is the task of the body of Christ to embrace and nurture them. They and their families need support so that these conditions are no longer associated with shame and secrecy. They need us to be willing to live with gender ambiguity and uncertainty, so decisions about treatment are not based on a desire to avoid marginalization and ridicule, but solely on what would be most healing, what would most contribute to the flourishing, of the person involved (Intersex Support Group International; Preeves, 1999). In such an accepting climate, it would be of interest to discover whether, and how, gender identity and role are experienced and expressed by people with these conditions.

This does not mean, however, that it is realistic to expect that our culture would quickly, if ever, adopt a 'third gender' category as do some other cultures, nor, even if that did occur, that intersexed or transgendered persons would feel comfortable in that space. Living with gender ambiguity and uncertainty is more likely to mean an increased willingness to recognize that gender assignments for such persons, which are socially and psychologically necessary in our cultural context, are tentative and may be subject to change.

As Halle/Hal's story unfolds, we may begin to find some answers. His parents and church community have strongly supported his desire to live as a boy. They call him Hal, use male pronouns in reference to him, and have accepted him into the church boy's club. Hal's parents have been welcomed into a small group at church, and they are prepared to support them as they journey with Hal, who is currently (in 2004) nine years old, through puberty and into adulthood. However, there are members of Hal's extended family who find it difficult to understand, and are unwilling to support, his switch to a male gender identity (Winfrey, 2004). This is not an easy situation. No one knows for certain what will happen to Hal's gender identity and role in the future. What appears certain is that he will not travel that journey alone.

²As Christians, our positions on issues related to persons who are intersexed or transgendered are informed and guided by scripture (special revelation), science, and experience (general revelation). We must acknowledge that our expertise is as a psychologist and biologist, drawing on science and experience. Our search of the theological literature to understand creation norms for human sexuality and gender has uncovered little in depth or well-developed material. It is our hope that this article may stimulate conversations and promote the theological scholarship needed to help address these issues further.

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