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### "IS GENDER A SOCIAL CONSTRUCT OR A BIOLOGICAL IMPERATIVE?"

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The nature vs. nurture debate on whether it is biology or environment that causes human beings to choose certain roles and lifestyles is a perennial controversy in sociobiology, but since the seventies the debate has been extended to whether nurture, i.e. culture, can override biology and be a determinant of sex itself. This paper critiques the "gender agenda" of contemporary feminism and the politicization of the word "gender" as a substitute for the sex of a person.

This issue reached high drama at the June **2000 Beijing + 5 United Nations Women's Conference** in New York when the development agencies of the Scandinavian countries and Germany threatened to withhold development money from Nicaragua unless the Nicaraguan Government sacked the head of their delegation from his Cabinet post as Minister for the Family. His offence, on-going from the 1999 Cairo + 5 Conference on Population and Development, was to refuse to accept the European Union definition of "gender" as an arbitrary social construct which could include several "genders"; he insisted that "gender" be defined in its common meaning of two sexes, male and female. The hapless Max Padilla was duly recalled - Nicaragua is a poor country vulnerable to economic coercion. <sup>(1)</sup> The only consolation for those of us who harbour lingering doubts that economic blackmail provides insights into issues of gender and destiny was that his replacement also held the old-fashioned belief that humans come in two kinds, male and female.

Liberal feminists of the 60s or what Christina Hoff Sommers author of *"Who Stole Feminism"* <sup>(2)</sup> refers to as "equity feminists", believed that women should have as much freedom and opportunity as men and that discriminatory laws should be eliminated. However, within a decade, liberal feminism was overtaken by the far more radical "gender feminism", which, building on Marxist ideology, requires the elimination not only of economic classes but of sex classes, i.e. the division of humans into male and female.

Hence the substitution of the word "gender" for sex. "Gender" is primarily a grammatical term, which may be determined by a distinguishing characteristic, i.e. sex, but gender can also be arbitrary like the gender of some nouns in Spanish and French - table in Spanish is feminine (la mesa), in French it is masculine (le table). This malleable view of gender and the expansion from two sexes to five genders was most clearly expressed in the writings of Mexican Marta Llama at the Regional Conference and Non-Government Organisations Forum (prelude to the UN's 1995 Beijing Conference on Women) at Mar del Plata, Argentina, in September 1994. According to Sra Llama:

**"Biology shows that outwardly human beings can be divided into two sexes; nevertheless, there are more combinations that result from the five physiological areas which, in general and very simple terms, determine what is called the biological sex of a person: genes, hormones, gonads, internal reproductive organs and external reproductive organs. These areas control the five types of biological processes in a continuum.... a quick but somewhat insufficient classification of these combinations obliges us to recognize at least five biological sexes:**

**men (persons who have two testicles)**

**women (persons who have two ovaries)**

**hermaphrodites or herms (in which there are at the same time one testicle and one ovary)**

**masculine hermaphrodites or merms (persons who have testicles, but present other feminine sexual characteristics)**

**feminine hermaphrodites or fermes (persons with ovaries but with masculine sexual characteristics).**

**"This classification functions only if we take into account the internal sexual organs and the "secondary" sexual characteristics as a unity, but if we imagine the multiple possibilities that could result from a combination of the five physiological areas that we already mentioned, we see that our dichotomy man/woman, more than a biological reality, is a symbolic and cultural reality"**  
(3)

According to Sra Llama man/woman, masculine/feminine are merely cultural constructions, and thinking that heterosexuality is the "natural" sexuality is only another "example of a 'biological' social construction". As a further development of Sra Llama's theme, at the UN Women's World Conference in Beijing in 1995 feminists claimed that the sexuality of multiple genders found expression as heterosexual, homosexual, bisexual, asexual, hermaphrodite, transvestite and transgendered, the latter group being further sub-divided into those who were awaiting surgery, those who had surgery, and those who had surgery but now wished to revert back to their original condition.

The views of Sra Llama and other gender feminists from New York has dominated the United Nations agencies for the past decade, requiring the UN and member States to "mainstream the gender perspective" in all documents and Plans of Action. According to a booklet published by the UN **International Research & Training Institute for the Advancement of Women (INSTRAW)**:

**"To adopt a gender perspective is ....to distinguish between what is natural and biological and what is socially and culturally constructed, and in the process to re-negotiate the boundaries between the natural - and hence relatively inflexible - and the social - and hence relatively transformable".** (4)

An article, part of the resource material from a course on "Re-Imagining Gender" at Hunter College, New York, by Lucy Gilbert and Paula Webster states:

*" Each infant is assigned to one or the other category on the basis of the shape and size of its genitals. Once this assignment is made, we become what culture believes each of us to be - feminine or masculine. Although many people think that men and women are the natural expression of a genetic blueprint, gender is a product of human thought and culture, a social construction that creates the 'true nature' of all individuals".* <sup>(5)</sup>

In a chapter from a book by Kate Bornstein <sup>(6)</sup>, a man who underwent a "sex change" argues that the way to liberate women is to deconstruct gender:

**"Women couldn't be oppressed if there was no such thing as 'women'.....doing away with gender is key to the doing away with patriarchy.....Gender fluidity is the ability to freely and knowingly become one or many of a limitless number of genders, for any length of time, at any rate of change. Gender fluidity recognizes no borders or rules of gender"** (Bornstein p. 52).

The congenital malformations referred to by Sra Llama are comparatively rare and it is the contention of this paper that they do not prove there are more than two sexes and do not prove that heterosexuality is not natural any more than the fact that some babies are born blind proves that it isn't natural for human beings to see. Biological sex is not determined by external organs but by genetic structure. Every cell of the human body is clearly marked male or female, and the human brain, which is the primary sex organ, is masculinized or feminized in the fetal stage of development by the presence or absence of testosterone.

Furthermore, human beings do not exist on a continuum between male and female. Those rare cases of infants born with anomalous genitals deserve sympathy and treatment on the basis of their chromosomal sex, the presence of a "Y" chromosome indicating a male, and its absence denoting a female. The occurrence of some rare abnormalities do not require the re-assignment of the entire human race. Women often have difficulty deciding what to wear, and it seems unduly burdensome to also compel them to decide what "gender on the continuum" they belong to for the day.

In Australia the nature vs. nurture debates predated the appearance of "mainstreaming the gender perspective" in UN policy and Plans of Action. In 1975 I was appointed a member of the Victorian Committee on Equal Opportunity in Schools. Of the 12 members, I was the only one with a background in science. Because I disagreed with the underlying premise of the other members that most, if not all, of the observable differences in the educational outcomes for girls and boys were due to "discrimination" or "social conditioning", in 1977 I wrote a Minority Report.<sup>(7)</sup> While culture and parental influence obviously played a part, it seemed that many of the subject choices and the future career paths of girls and boys were based on their **innate preferences**, and the aggressive social engineering recommended by the Committee was not justified.

A survey of the literature on sex differences - many of which are acknowledged by feminist scholars - yielded a rich harvest. Sex differences are apparent not only before birth but even before conception. Perhaps I was the only member of the Committee who had looked into a microscope and had seen the difference in appearance and behaviour between androsperm, the boy-producing sperm, and gynospem, the girl-producing sperm. Obviously social conditioning and "sexism" were not the cause.

Time here does not permit a full review of sex differences, but I did summarize them in a resource paper in 1981. <sup>(8)</sup> I continued to be troubled by the belief of the other Committee members - and of feminists in general - that human nature is completely malleable, and that babies arrive as lumps of soft playdough on which society, i.e. parents and teachers, can imprint whatever they choose. Having four daughters and four sons myself, I knew from experience that girls and boys are different and that one can give them "counter-sexist" toys, but they will not necessarily play in the politically correct manner. A family crisis once occurred when my son took the head off a bride doll which had been treasured by his older sister - he wanted to know how it was made.

Although not recorded in the Majority Report, a recurring name in our discussions at the Victorian Committee on Equal Opportunity in Schools was that of New Zealand born Dr. John Money, who received his Ph.D. in psychology from Harvard and then specialized as a researcher at the John Hopkins Hospital in Baltimore. Credited with coining the term "**gender identity**" to describe a person's inner sense of himself or herself as male or female, Money established the world's first Gender Identity Clinic at John Hopkins, devoted solely to the practice of converting adults from one sex to the other. Money became known as the world's undisputed authority on the psychological ramifications of ambiguous genitalia, and adviser on the pioneering practice of transsexual surgeries. Money's influence throughout the academic and scientific world would define the scientific landscape for decades to come. To the present day many of his students and proteges, trained in his theories of psychosexual differentiation, occupy top positions in some of the most respected universities, research institutions and scientific journals in the USA. His theories on the psychosexual flexibility at birth of humans forms the cornerstone of an entire medical specialty - pediatric endocrinology - and his influence even reached the Victorian Committee on Equal Opportunity in Schools.

Bruce and Brian Reimer, normal identical twin boys, were born in Winnipeg, Canada, in 1965. Due to a circumcision procedure which went terribly wrong, Bruce's penis was burnt and destroyed. Eventually doctors at the Mayo Clinic in Minnesota emphasising the difficulties of reconstructing the organ, suggested to the parents, Ron and Janet Reimer, the possibility of raising Bruce as a girl. They were referred to Dr. John Money at John Hopkins. He gave the parents reassurance that Bruce's sex re-assignment as a girl had every chance of success.

The parents did not realise that Money's previous infant cases of sex re-assignment had been hermaphrodites and that the procedure he recommended - castration and the construction of external female genitalia, followed by hormone treatment when the

child was eleven - was experimental. It had never been attempted on a child born with normal genitals and nervous system. Fate had delivered into Money's hands the opportunity for the perfect experiment, complete with the perfect "control", the identical twin, essential if results are to be validated.

The Reimer's pediatrician in Winnipeg advised against the procedure and recommended that they wait until the child was of pre-school age before starting the long process of phalloplasty, i.e. surgical reconstruction of the penis. However, Money wanted a quick decision - according to one of the finer points of his theory, the "*gender identity gate*" - his term for that point after which a child has locked into an identity as male or female - comes at two and a half to three years of age. Bruce was now nineteen months. Money wrote: "The child was still young enough so that whichever assignment was made, erotic interest would almost certainly direct itself toward the opposite sex later on, but the time for reaching a final decision was already short". <sup>(9)</sup> In July 1967, aged 22 months, Bruce was surgically castrated at John Hopkins by surgeon Dr. Howard Jones, the co-founder of Money's Gender Identity Clinic. The main procedure was a bilateral orchidectomy, removal of both testicles. Dr. Jones fashioned a rudimentary vagina with the remains of the scrotal skin.

The baby was renamed "Brenda". In making their drastic decision, Ron and Janet Reimer were no doubt influenced by the prospect of the teasing and humiliation their child would endure as a boy at school and elsewhere. As a baby they could not even leave him with a baby-sitter because any nappy change would reveal his terrible injury.

At that time plastic surgery was in its infancy, and it was considered much easier to construct a vagina than restore a penis, so at the Gender Identity Clinic hermaphrodite infants were often assigned as female and routinely castrated. However, Bruce Reimer was not hermaphrodite.

His parents made every effort to follow Dr. Money's instructions scrupulously and raise Brenda as a girl. For the twins' second birthday, Janet made her a dress from the white satin of her own wedding gown. "It was pretty and lacy", Janet recalls. "She was ripping at it, trying to tear it off. I remember thinking Oh my God, she knows she's a boy and she doesn't want to be a girl. But then I thought, well maybe I can teach her to want to be a girl. Maybe I can train her so that she wants to be a girl". <sup>(9)</sup>

The experiment was a failure from the outset - Brenda showed no signs of femininity and every sign of masculine behaviour, including rough and tumble and fighting games, and standing up in the toilet to urinate. She failed to bond with her female school mates, and despite several changes of school, and referral to counselling and psychiatrists, had disciplinary and academic problems; she just did not fit in. She was kept back in first grade; her identical twin was promoted.

At the time of Brenda's castration, Dr. Money had stipulated that the parents with both Brenda and her twin, Brian, pay follow-up yearly visits to his Psychohormonal Research Unit at John Hopkins in Baltimore. These trips were an ordeal for the Reimer family and exacerbated the fear and confusion Brenda was experiencing.

Without their parents being present, the twins were subjected to detailed questioning, some of it mundane, some of it designed to persuade Brenda to accept her "femininity"; other questions were of a more explicit sexual nature. The twins were also coaxed into sex play, somewhat reminiscent of Kinsey's experiments on infants, which in our more enlightened era we now regard as child abuse.

Besides the yearly visits, the Reimer parents also corresponded with Dr. Money about the many difficulties they were having with Brenda, but were reassured by Money and his colleagues that Brenda was just going through a "tomboyish" phase. Despite all the indications that the experiment was a massive failure and that Brenda was having major psychological and behavioural problems, in December 1972, four months after Brenda began her second attempt at first grade, Dr. Money unveiled his famous twins' case. In a two-day series devoted to "**Sex Role Learning in Childhood and Adolescence**" at the annual meeting of the American Association for the Advancement of Science in Washington DC, Money's was the first paper delivered to a capacity crowd of over one thousand scientists, feminists, students and reporters. He mentioned that a fuller account of the twins case could be found in his book "*Man & Woman, Boy & Girl*", which was promotionally marketed the same day.

Culling data from the hermaphrodites who had passed through Money's Psychohormonal Research Unit, the book dealt with genetics, embryology, neuroendocrinology, neurosurgery, social, medical and clinical psychology and social anthropology. It is a complicated work, but the theme was clear: **the primary factors driving human psychosexual differentiation are learning and environment, not biology.**

Money wrote that as planned experiments on humans are ethically unthinkable, one can only take advantage of unplanned opportunities such as when a normal boy baby loses his penis in a circumcision accident, and how he had taken advantage of just such an opportunity. From his description the case was a great success - he contrasted Brian's interest in "cars, gas pumps and tools" with Brenda's avid interest in "dolls, a doll house and a doll carriage", Brenda's cleanliness was characterised as different from Brian's disregard for such matters, Brenda was interested in kitchen work, Brian disdained it.

Money did describe Brenda as always the "dominant twin", though by age three he reported her dominance over Brian had become "that of a mother hen". The twins seemed to embody an almost miraculous division of taste, temperament and behaviour along gender lines, and seemed the ultimate proof that boys and girls are made not born. <sup>(9)</sup>

The importance of the twins' case cannot be underestimated. It was seized on by the feminist movement which had been arguing for years against a biological basis for sex differences (except when they were also arguing that research on sex differences should be completely stopped because it might be misused - presumably by the fundamentalist religious right).<sup>(10)</sup> Money's papers from the 1950s on the psychosexual neutrality of newborns had already been used as one of the main

foundations of modern feminism. Kate Millet in her 1970 definitive feminist tome, "*Sexual Politics*", had quoted Money's papers as scientific proof that the differences between men and women reflect not biological imperatives but societal expectations and prejudices. The twins' case offered apparently irrefutable proof to support that view.

Over the next few years Money continued to present Brenda's case as a success - even when on her yearly visits to him she was frowning, sullen and answered his questions in monosyllables, and was so reluctant to see him that her parents had to bribe her with promises of trips to Disneyland. At a time when the Reimer parents, because of the behavioural problems Brenda was exhibiting at school, had been forced to break confidentiality and inform counsellors and her psychiatrist of her medical history, Money wrote: "Her behaviour is so normally that of an active little girl, and so clearly different by contrast from the boyish ways of her twin brother that it offers nothing to stimulate anyone's conjectures". <sup>(9)</sup> Based on Money's reports, reviewer Linda Wolfe wrote in the *New York Times Book Review* of May 1975 of "the identical twin boy whose penis was cauterized at birth and who, now that his parents have opted for surgical reconstruction to make him appear female, has been sailing contentedly through childhood as a genuine girl". <sup>(9)</sup> The reality was that Brenda at age eleven was developing certain physiological changes - her shoulders had started to widen and grow more muscular, her neck and biceps began to thicken, and sometimes her voice would crack. She was rebellious about taking the estrogen pills intended to make her develop breasts, and she was totally resistant to the planned second stage of her vaginal reconstruction surgery.

On her visit in 1978 to Dr. John Money when he arranged for a transsexual to talk to her, Brenda became so terrified she ran away from the Clinic, and on being re-united with her parents at their hotel she told them that if they ever again forced her to see Dr. Money she would kill herself. Her parents still hoped that her metamorphosis as "Brenda" would occur, but in May of 1980 when Brenda insisted to her Winnipeg endocrinologist and psychiatrist that she did not want to be a girl, they advised her father to tell her the truth about what had happened to her as an infant. Brenda's feelings were of anger, amazement, but overwhelmingly of relief. She said "Suddenly it all made sense why I felt the way I did. I wasn't some sort of weirdo. I wasn't crazy". <sup>(9)</sup>

Although Money's views on psychosexual neutrality or the malleability of gender identity was the established wisdom of the scientific community and particularly of the feminist movement, there was at least one researcher who had been questioning his conclusions. With a pioneering team of endocrinologists at the University of Kansas in the 1950s, working on guinea pigs, biophysics researcher Dr. Milton Diamond and colleagues established that prenatal sex hormones played a significant role not only on the development of the reproductive system and external genitalia of a fetus, but also on the masculinization or feminization of the brain.

The results were published in a 1959 issue of *Endocrinology*.<sup>(11)</sup> In a follow-up paper entitled "**A Critical Evaluation of the Ontogeny of Human Sexual Behaviour**"

Diamond rejected outright the John Hopkins team's theory. Reporting on the guinea pig findings, Diamond stated that prebirth factors set limits on how far culture, learning and environment can direct gender in humans. Citing evidence from biology, psychology, psychiatry, anthropology and endocrinology, he argued that gender identity is hardwired into the brain virtually from conception. Later confirmation of the guinea pig experiments was to come from effects observed in girls who had been exposed to testosterone in utero - either accidentally or as medication given to their mothers.

Diamond's 1959 paper was a direct challenge to the scientific authority of John Money, who had become one of the gurus of the feminist movement. A long and acrimonious academic debate spanning decades ensued. It may explain why when fate delivered to Money the opportunity for the "perfect" experiment on the identical twins, he seized it so eagerly and why he was so reluctant to acknowledge the signs of failure.

The media inevitably became interested in the famous twins' case which stood as the most compelling evidence to prove the primacy of rearing over biology in the formation of gender identity. However, when a BBC reporter began investigating, he heard rumours that the case was not all it seemed to be. A BBC documentary was produced, entitled "*The First Question*" in reference to the first query by parents at birth, "Is it a boy or a girl?". There were other media articles as well as the on-going debate in the scientific literature. Psychiatrist Keith Sigmundson's "John/Joan" article on Brenda's case was published in the *Archives of Pediatrics and Adolescent Medicine* in March 1997 and journalist John Colapinto's article in *Rolling Stone* in December 1997 has now been expanded to a 279 page book, "**As Nature Made Him**". [\(9\)](#)

The real hero of this story is not Milton Diamond or John Colapinto - it is Brenda, or as she was renamed "David", who having learned the truth, wasted no time in reclaiming his sexual identity. By his fifteenth birthday he was living socially as a male. He began receiving injections of testosterone, and in 1980 underwent an intensely painful double mastectomy. In 1981 he had surgery to construct a rudimentary penis from muscle and skin from the inside of his thighs. Before his twenty-second birthday he had a second more successful phalloplasty in a 12-stage operation. In September 1990 David Reimer married Jane Fontane, a single mother of three children.

His new name was symbolic of his struggle against the Goliath represented by John Money and the medical establishment, and of his courage in giving permission for his personal identity and medical details to be revealed. Until David Reimer spoke publicly about his ordeal the medical establishment was reluctant to admit the dangers of current practice in treating intersex babies, their reluctance no doubt underpinned by their deference to the feminist movement, which, still stuck in a time warp, believes that one can produce an androgynous society by adopting "counter-sexist" educational practices.

Thus in Australia, **Accreditation Guidelines for Child Care Centres** forbid carers from telling a girl her dress is pretty. <sup>(12)</sup> "Counter-sexist" educational practice is to encourage boys to play with dolls and the dolls' house, eerily reminiscent of John Money's euphoric reports about "Brenda". On the other hand feminist ideology on the primacy of rearing over biology is being undercut by homosexual lobbies, who in the quest for civil rights insist they are "born that way", not made.

A dose of reality eventually pervaded the medical establishment, at least in the USA. The Gender Identity Clinic at John Hopkins was closed, and Money's controversial evening course in human sexology was cancelled in the late seventies. Urologist William Reiner from John Hopkins reported that despite hormone treatment and surgery, 25 baby boys born with no penis but normal testicles, castrated and raised as girls, all retained "strong male characteristics" and most switched back to male. <sup>(13)</sup> In a 1992 article in the *American Scholar*, <sup>(14)</sup> Dr. Paul McHugh, Chairman of the Psychiatry Department at John Hopkins, criticized transexual surgery as "the most radical therapy ever encouraged by 20th century psychiatrists", and likened it to the once widespread practice of frontal lobotomy. Dr. Jon Meyer, a Hopkins psychiatrist and former director of the Gender Identity Clinic, produced a long-term follow-up of fifty post-operative and pre-operative adult transexuals treated at John Hopkins and reported that none showed any measureable improvement in their lives and concluded that "sex re-assignment surgery confers no objective advantage in terms of social rehabilitation". <sup>(15)</sup>

One wonders whether this reality has reached Australian shores. - legislation on "**Gender Identity and Sexual Orientation**" is pending in the Victorian Parliament and surgery on transexuals and the transgendered continues. In the meantime normal boys are being seriously disadvantaged by the feminization of education, a problem which is just beginning to attract the attention of Australian politicians.

In the US urologist Dr. William Reiner has laid down his scalpel and has retrained as a child psychiatrist specializing in intersexual conditions. He is convinced that surgery steering intersexual babies at birth into one sex or the other is wrong. <sup>(16)</sup> My own view is that children should be reared, and adults should live in the sex that matches their chromosomes - XX or XY. The brain is the primary sex organ, and our brains are programmed before birth to be male or female <sup>(17)</sup>. To paraphrase Cassius in *Julius Caesar*, "The fault, dear Brutus, is not in our stars but in ourselves - it is in our genes".

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(13) William Reiner MD: "**Psychosexual Dysfunction in Males with Genital Anomalies: Late Adolescence, Tanner Stages 1V TO VI**"; Journal of the American Academy of Child and Adolescent Psychiatry, Vol. 38(7) July 1999. pp 865-872

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(15) Jon Meyer & Donna Reter: "**Sex Re-Assignment**"; Archives of General Psychiatry, 1979. Vol. 36, pp. 1010-1015.

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(17) Personal communication from Dr. Joel Brind, Professor of Endocrinology, Baruch College, City University of New York: "There is one, fairly rare condition in which people who are XY have a mutation which renders all cells in the body insensitive to testosterone. Thus, people with the complete form of so-called Androgen Insensitivity Syndrome (AIS, also known as Testicular Feminization Syndrome) are female in external appearance, and are normally raised as girls. Typically, the abnormality is only detected upon their mothers' questioning their failure to begin menstruating by age 16. Of course, people with complete TFS are infertile, since internally, they have testes, not ovaries, and no female internal reproductive organs. However, since their androgen insensitivity renders their brains as well as other organs incapable of being masculinized by testosterone, and since the 'default' adult body shape and external genitalia are female, they function quite naturally in adult life as women, often marrying and raising (adopted) children successfully. Incomplete forms of AIS yield a spectrum of disorders, including mildly feminized males and various degrees of 'intersex'. The appropriate medical and/or surgical treatment of patients with these intermediate forms of the disorder is properly handled on a case-by-case basis. See also 'Androgen insensitivity syndrome in the era of molecular genetics and the Internet: A point of view', author Warne GL, Zajac JD; McLean HE, Center for Hormone Research, Royal Children's Hospital, Parkville, Vic., Australia, source: J.Pediatr.Endocrinol.Metab, 1998, Jan. 11: 1, 3-9, and 'Abornmal sexual development and psychosexual issues', author Hines, M., Department of Psychology, City University, London UK, source: Bailheres Clin.Endocrinol.Metab, 1998, April 12: 1, 173-89."

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