Sexual Orientation and Reason:
On the Implications of False Beliefs about Homosexuality*

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Homosexuality in particular, and sexual orientation, sexual identity and sexuality in general, are enormously complex topics, about which religious and social conservatives are prone to believe a number of falsehoods. This reality exposes us to derision in the public arena and weakens our capacity to engage this issue effectively. These false assertions include that:

- homosexuality is properly understood as a mental illness, and all homosexual persons are deeply psychologically disturbed (even if some are capable of hiding their pathology),
- the homosexual condition is fundamentally a choice, and the flurry of research suggesting genetic or biological causation of homosexuality is a fraud foisted upon the public by pseudo-science,
- all homosexual persons could change their sexual orientation and embrace their intrinsic heterosexuality if they simply willed the choice, or were truly open to pursuing psychological maturity, or truly repented, or truly opened themselves to possibilities of spiritual healing, and
- homosexual relationships are always disordered, unstable, emotionally abusive, or worse, and homosexual parenting is always distorted, abusive, predatory, and narcissistic.

But religious and social conservatives are not the only ones embracing false beliefs about homosexuality. We live in a moment of ascendancy of the gay affirming movement, and it is a variety of false beliefs that are being promulgated in the drive for full affirmation of homosexual persons, and indeed for all "sexual minorities," that concern me. The best ecclesiastical, professional, legal and social policy will not be founded on falsehoods

Some of these false beliefs are finding their way into legal arguments and judicial rulings around such volatile and crucial issues as the constitutionality of the Defense of Marriage Act, the grounds for approval of same-sex marriage, and standards for discrimination in hiring related to sexual orientation as a protected characteristic. It is false belief promulgated in the name of science that is my major concern. And so I begin by paying homage to a gay affirming and activist scientist, Dr. Evelyn Hooker, who, in her advocacy, managed to maintain a clearheaded allegiance to proper scientific standards and thus is worthy of emulation.

By the early middle of the 20th century, the longstanding religious and moral disapproval of "sodomy" had given ground to a construal of homosexuality as a mental illness. The instruments of governmental policy embraced and indeed became dependent upon that pathology narrative; whereas "sodomites" might once have been barred or dismissed from the military or from government posts on moral grounds, now they were treated as disordered. Long-standing sodomy laws, regardless of their historical roots in religious teaching, came to be understood and explained in terms of the psychopathology of homosexuality. Government policy, justified with reference to the disease understanding of homosexuality, metastasized into many contexts, affecting employment, housing, and many other aspects of life for homosexual persons.

Later in the middle of the 20th century, social science began to challenge the ubiquitous disease model in the form of the work of celebrated pioneers in the affirmation of homosexuality. Alfred Kinsey's studies of male and female sexuality portrayed homosexual behavior of various kinds as surprisingly common, and explicitly framed such behavior as a normal variant of human sexuality. He also portrayed sexual orientation on a fluid continuum of sexual object choice. Ford and Beach pu-

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lished their famous study of same-sex behavior across a diversity of human cultures and animals species.

But no single study contributed more to the demise of the disease conceptualization than Hooker's. The broader dimensions of the dialogue about homosexuality in the 1940s and 50s in the Western world were framed by the disease concept, and Hooker's research struck at the heart of this conceptualization. Hooker is enshrined deservedly in the hagiography of the gay affirming movement.

Her seminal study is often cited as having established that homosexual individuals are just as psychologically healthy as heterosexual individuals, but this is a profound misunderstanding of her research. In an era in which homosexuality was considered intrinsically pathological, and in which almost all studies of homosexual persons drew on patient or prison populations and thus reinforced the disease concept, Hooker set out to "obtain a sample of overt homosexuals who did not come from these sources [clinics, psychiatric hospitals or prisons]; that is, who had a chance of being individuals who, on the surface at least, seem to have an average adjustment."\(^2\) It is particularly impressive to me, immersed in the context of considerable confusion about scientific standards, that Hooker was remarkably clear about the scientific logic of her study. Implicitly invoking Popperian falsificationism, Hooker recognized that in the face of an absolute claim that all homosexuals are pathological, it only required one disconfirming case to bring the professional consensus crashing down. It was her goal to gather a sample of homosexual men who demonstrably were not mentally ill, and to thus challenge the hegemony of the disease conception.

But how, in the midst of the McCarthy era, could she assemble a sample of psychologically healthy homosexual individuals? Building on initial contacts with the leadership of the highly secretive Mattachine Society, she slowly worked to gain access to and the trust of a cadre of subjects. She "accepted invitations to gay parties, gay organizations, gay after-hours clubs, and gay bars;"\(^3\) she even tells of being invited into the gay baths of Santa Monica. Hooker assembled 30 homosexual and 30 heterosexual males painstakingly matched pairwise for age, IQ, and education. Her homosexual sample was anything but random. She "attempted to secure homosexuals who would be pure for homosexuality; that is, without heterosexual experience,"\(^4\) and she screened out of her homosexual sample individuals who gave evidence of psychological fragility.

Hooker tested her subjects using the gold standard of the day: the projective assessment methods of the Rorschach Ink Blot Test, the Thematic Apperception Test, and a few other tests. Subject responses were transcribed, scored objectively, and then evaluated by premier scholars of the day in each of these projective methods who offered their diagnostic judgments for each of her subject protocols "blind" to the sexual orientation status of each of the subjects.

The results were stunning, even revolutionary. With almost total agreement, the expert diagnosticians rated the psychological adjustment of the homosexual sample as equivalent to the heterosexuals, and could not do better than chance in discriminating the homosexuals from the heterosexuals. It was clear in the data from this select sample that sexual orientation had no direct bearing on psychological adjustment. The prevailing scientific hypothesis had been refuted; in Hooker's terms, "clearly there is no inherent connection between pathology and homosexuality."\(^5\)

Though it took awhile – 15 years between her initial publication and the decision by the American Psychiatric Association to remove homosexuality from its diagnostic manual as a distinct diagnostic category—Hooker had succeeded, with one compelling, well-designed study, in demolishing the reigning consensus of her day. Science had said that homosexual persons were necessarily, inherently, and absolutely pathological. Hooker's subjects and results confounded that claim.

I find in Evelyn Hooker a model of clearheaded thinking about the very logic of science itself, and an admirable adherence to transparent, careful and defensible methodological standards. Sadly, too many gay affirming scholars following in her footsteps have not embodied the same virtues. Hooker's work stands as a testament that researcher's ideological commitments can coexist with good scholarship. There are few ideologically conservative scholars publishing studies relevant to sexual orientation today. Many of the major social and biological researchers and respected authors whose work is cited regularly are gay or lesbian persons, including scholars like Gregory Herek, Simon LeVay, Dean Hamer, Susan


\(^4\) Hooker (1957), "The adjustment;" 20.

\(^5\) ibid., 19.
Cochran, Lee Beckstead, Douglas Haldeman, Lisa Diamond, Jack Drescher, Ritch Savin-Williams, and others. With Ellen Hooker as the prototype, many other esteemed researchers are themselves heterosexual but nevertheless animated by a desire to contribute to the wellbeing of homosexual and other sexual minority persons and to the advancement of their full acceptance in contemporary society. These thoughtful, talented, and dedicated professionals are producing valuable intellectual capital that deserves careful attention. Yet the failure of dissenting voices to appear in the dialogue is striking. One lesson from the Evelyn Hooker narrative is that those who dissent from the dominant professional viewpoint can do good science, can contribute something valuable, and can be agents of change.

As I turn to the mistaken beliefs promulgated in the name of science that are shaping our social dialogue about homosexuality, I must highlight the Achilles' heel of research into the homosexual condition: the difficulty of achieving sample representativeness in this area. To make general characterizations about any population or subpopulation, scientists must know that they have sampled individuals who truly represent the broader group about which they are going to make generalizations. Hooker was able to avoid this problem entirely, because a representative sample is not needed to refute an absolute assertion about all members of a group; it only takes one non-white swan to refute the absolute claim that all swans are white. She noted the problem, even impossibility, of making assertions at the time about "homosexuals in general": "It should be stated at the outset that no assumptions are made about the random selection of either group. No one knows what a random sample of the homosexual population would be like; and even if one knew, it would be extremely difficult, if not impossible, to obtain one." How can we ever make assertions about homosexuals in general until we are assured that we have a representative sample of these persons?

Samples that are not intentionally structured to be representative can fall prey to what is called "volunteer bias," the problem of samples misrepresenting the broader community by the subjective responses of subjects to their perceptions of the themes and focus of the research. Hooker also foreshadowed this issue; as she reflected on the character of her sample, she raised the question of whether there might have been "a spurious factor of competition...since the subjects were friends and talked with one another about their Rorschach performances."7

In several notable examples that I discuss below, it is only now becoming clear that findings of influential earlier studies are severely distorted by volunteer bias resulting from the way unrepresentative samples have been gathered.

Only in the last several decades have the first studies begun to emerge from study populations large enough to generate samples that might be representative of GLB persons. This delay, in turn, is first a function of the surprisingly low prevalence of homosexuality; surprising, that is, in light of the bloated but widely shared belief that "10% or more" of the population is homosexual. A recent research synthesis by Gary Gates8 of the Williams Institute, a think tank at UCLA Law School “dedicated to advancing critical thought in the field of sexual orientation law and public policy,” provides an excellent analysis of the best research on prevalence in the Western world. Gates concludes that “An estimated 3.5% of adults in the United States identify as lesbian, gay, or bisexual.... Among adults who identify as LGB, bisexuals comprise a slight majority (1.8% compared to 1.7% who identify as lesbian or gay).” With remarkable consistency, across multiple high quality studies, male homosexuality tends to be twice as prevalent as female homosexuality. Thus, simplistically, the 3.5% of adults in the United States, Canada and Europe that identify as GLB should be broken down roughly as 1.8% bisexual men and women, 1.1% gay men, and 0.6% lesbians.

Representative samples are difficult to generate, also, because of the difficulty of defining homosexuality, of establishing boundaries of what constitutes homosexuality (with individuals coming in and out of the closet, and also shifting in their experience of same-sex identity and attraction), and of the shifting perceptions of the social desirability of embracing the identity label of gay or lesbian.

With this caution in mind, we may now turn to the topic at hand. The false beliefs about homosexuality that I wish to address include that:

• being gay is just as healthy, both in terms of mental health and physical health, as being straight;
• sexual orientation, just like race, is a biologically determined given to which environmental variables such as family and culture contribute nothing and to which individuals make no voluntary contribution;
• sexual orientation cannot be changed, and thus the attempt to change is intrinsically harmful;

6 ibid; 19.
• homosexual relationships are equivalent to heterosexual marriage in all important characteristics; and
• identity is properly and legitimately constituted around sexual orientation.

**The Mental Health of GLB Persons (and of non-gay-affirming persons)**

In 1957, Evelyn Hooker demonstrated that homosexual persons do not always manifest psychological maladjustment. In 1973, the American Psychiatric Association removed its designation of homosexual orientation per se as a mental illness. But it is frequently asserted today, erroneously, that homosexual persons are just as emotionally healthy on average as heterosexuals. Not infrequently, this claim is attributed to Hooker’s research by psychologists who should know better.

For example, the 1986 APA Supreme Court *Amicus Curiae* brief for Bowers v. Hardwick stated "The first major challenge to the illness model came in 1957 when Dr. Evelyn Hooker determined that homosexual and heterosexual men could not be distinguished from each other on the basis of standard psychological tests, and that a similar majority of the two groups appeared to be free of psychopathology. . . . [E]xtensive psychological research conducted over almost three decades has conclusively established that homosexuality is not related to psychological adjustment or maladjustment." Both of these claims are false. The first sentence claims that Hooker found something she did not by implying that Hooker’s study was representative of all homosexual men, which it was not. The second sentence speaks to subsequent research, and asserts that homosexuality is not related to psychological adjustment.

Similar claims are made even more explicitly in other places. The *website* of the American Psychological Association, for instance, even today declares, after decades of research to the contrary, that "being gay is just as healthy as being straight." This is, sadly, not what the research shows.

A scientific consensus on this issue has emerged, well represented by the conclusions of one of the most exhaustive studies ever conducted: "Homosexual orientation . . . is associated with a general elevation of risk for anxiety, mood, and substance use disorders and for suicidal thoughts and plans." This study, published 10 years ago on data collected almost a decade before that, continues to be replicated with other data sets. Similar findings continue to emerge from one of the most gay affirming social contexts in the world, the Netherlands, where data continues to demonstrate negative mental and physical health correlates with homosexuality.

These patterns are of grave concern for anyone concerned about human suffering, but it must be noted that the statistically significant differences are not gigantic effects. LGB persons may experience more episodes of and greater severity of depression than heterosexuals on average, but there are many LGB individuals who experience no or little depression; the same may be said of other forms of distress. A typical effect size might be to increase the likelihood of particular psychological symptom such as depression or substance abuse by 20% or 30% on average, though the findings with regard to teen suicidal ideation and suicide attempts are particularly alarming, with same-sex attraction or homosexual identification being associated with doubling or tripling the prevalence of these most serious concerns. But it must be said that there are many psychologically resilient and demonstrably healthy GLB persons.

The false assertion that GLB persons are as psychologically healthy on average as heterosexuals has, in turn, morphed in perplexing directions. First, this claim has served as the springboard to a more aggressive claim, the 2009 APA *Task Force* on Appropriate Therapeutic Responses to Sexual Orientation’s assertion of “scientific fact” that “Same-sex sexual attractions, behavior, and orientations per se are normal and positive variants of human sexuality.” It is less clear that this assertion is false than it is obscure how such a statement can be "scientific fact" in the first place. Science tells us, in all its

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complexity, certain realities about the world; it tells us what is the case. It is, for example, an empirical fact that the American Psychological Association, out of its commitment to gay affirming advocacy, has passed a number of resolutions asserting that homosexuality is a "normal and positive variant of human sexuality." But how this assertion of value could be established as a matter of "scientific fact" is truly mystifying. Though a statistically infrequent phenomenon, there are indeed millions of people identifying as gay, lesbian, or bisexual, and perhaps in that sense it is "normal" in that it is something that simply is a reality. As for homosexuality being a "positive" variant of human sexuality, while GLB identification is correlated with a number of outcomes that we typically do not adjudicate as positive, these correlations are not perfect. The assertion that science has established homosexuality as a normal and positive variant of human sexuality is puzzling indeed.

Second comes the question of causation of this brute fact of heightened psychological distress on average among homosexual persons. The possibility that is resisted in the scholarly discussion, indeed omitted from even being mentioned, is that homosexual orientation may somehow cut against a fundamental given of the human condition, thus creating distress. A variety of other possibilities are explored, including "that lesbians and gay men simply lead riskier lives, including higher consumption of alcohol and drugs and higher rates of changing sexual partners." But the favored explanation, across all studies, is the negative impact of stigma.

The reality that stigma exists against GLB persons is undeniable; this is what is right about anti-bullying efforts receiving so much attention today. Violence and persecution against GLB persons is reprehensible, and should be denounced by all fair-minded individuals, particularly by religious conservatives. As I read this literature, however, I encounter a fundamental gap that I cannot conceive how to bridge. Across a multiplicity of studies, the basic methodology is to survey GLB persons to demonstrate that these persons feel the oppressive, cold fist of disapproval and prejudice wielded against them, and further that they attribute their psychological distress to be the result of the disapproval and prejudice they experience. Studies abound showing that GLB persons feel disapproved of and discriminated against, and the greater the perceived stigma, the greater the likelihood the individuals experience negative consequences. The correlation is real, but does the correlation establish causality, particularly exclusive causality? A substantive case that sexual stigma is the primary or unique cause of elevated distress levels for GLB persons has yet to be made.

Once it is believed, however, that sexual stigma is the cause of the elevated distress of GLB persons, it is understandable that the conclusion would be drawn that this suffering could and should be alleviated by the removal the stigma. And so it is that in celebrating the ascendancy of gay affirming psychology, scholars have delighted that this paradigm shift has "shifted the lens of pathology away from the same-sex-attracted individual and toward the individual who holds ill will toward her or him." The call is growing clearer in the professional literature to deliberately and explicitly frame all "anti-gay sentiment" as "a form of prejudice." The pathologizing of those who hold ill will towards GLB persons, of course, demands its own nosological terminology: Such attitudes are a manifestation of homophobia and heterosexism, a symptom of, horror of horrors, "master narratives of normativity (of which heteronormativity is a part)." So in the pursuit of the eradication elevated distress levels for GLB persons, we must eradicate sexual stigma, and to accomplish that, the very idea of norms and particularly of heterosexuality as a norm must be supplanted.

In this light, I am struck again by the scientific modesty of Evelyn Hooker. With precision, she executed a single study that destroyed an absolute claim of the prevailing mental health field that homosexuality was always, absolutely pathological. Perhaps she would have wanted to displace the yoke of pathologization onto stigmatizers, perhaps not. In her wake, though, a) claims that "being gay is just as healthy as being straight" are remarkable in that they are contradicted by all of the best scientific studies, and b) claims that homosexuality is a "normal and positive variant of human sexuality," that the demonstrable negative correlations of homosexuality with psychological distress and diminished physical health are clearly and only the result of sexual stigma, and that anti-gay sentiment is itself a manifestation of pathology, together are remarkable for their expansiveness and their lack of clear rootedness in anything remotely resembling scientific method.

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The Biological Determination of Homosexual Orientation

A pervasive understanding is settling into Western culture that homosexual orientation, indeed any and all sexual orientations, are givens of the human person rooted in biology. We are inundated by the biological argument; I glance across my bookshelf and see such titles as Born Gay: the Psychobiology of Sexual Orientation, Nature’s Choice: What Science Reveals about the Biological Origins of Sexual Orientation, and Gay, Straight, and the Reason Why: the Science of Sexual Orientation. The steady drumbeat of this argument in popular media, journalistic presentations, and so forth drowns out competing understandings.

This is not a mere theoretical issue; crucial matters are at stake in the determination of public policy. Most important is the putative parallel between sexual orientation and race which has become the foundation for the push for nondiscrimination and the expansion of defined rights for sexual minority persons. Much of the public discourse on civil rights and homosexuality hinges on, or at least appeals to, this supposed analogy of sexual orientation and skin color for its persuasiveness and rhetorical power. For example, David Boies, one of the attorneys who successful challenged California’s Proposition 8 and its restrictions on gay marriage, argued in the Wall Street Journal that “in fact, the sexual orientation of gays and lesbians is as much a God-given characteristic as the color of their skin or the sexual orientation of their straight brothers and sisters.”

What are we to make of the biological-determination-at-birth argument? First, it must be said that commentators who argue that there is no biological contribution to the causation of sexual orientation (for instance, that it is all choice) are arguing the indefensible. The research points to a clear contribution of biological factors to sexual orientation. But it must also be noted that there is considerable overestimation of the evidence in support of biological causation at this point in time.

One reason it is generally believed that a biological cause of homosexuality is exclusively true is the supposed lack of any other contributing factors. Two astonishing examples: the 2009 Report of the American Psychological Association Task Force on Appropriate Therapeutic Responses to Sexual Orientation (or Sexual Orientation Change Efforts; SOCE) presents over and over as established “scientific fact” that “no empirical studies or peer-reviewed research supports theories attributing same-sex sexual orientation to family dysfunction or trauma.” Similarly, neuroscientist Simon LeVay is unrelenting and emphatic in his insistence that environmental and psychological variables have no causal influence of any kind on sexual orientation as he asserts “there is no actual evidence to support any of those ideas.” These are dramatic and false claims.

Recent large-scale studies have provided empirical evidence of familial, cultural, and other environmental contributions that point in remarkably similar directions as prior suggestions based upon clinical interactions and less methodologically sophisticated research. Some of the variables that have emerged as statistically associated with homosexual experience of various kinds include broken families, absent fathers, older mothers, and being born and living in urban settings. Even that most despised of hypothesized causal contributors, childhood sexual molestation, has recently received significant empirical validation as a partial probabilistic contributor from a sophisticated 30 year longitudinal study. Of course, all of these findings identify variables that at most contribute to or partially determine later homosexual experience; none of them in isolation, nor any of them together, singularly determine homosexual outcome. The majority of children who experienced any or all of these phenomena still grow up heterosexual.


Biology also clearly appears to play a part, but to what extent? There are three major biological causation paradigms driving conversation and research in the causation of homosexual orientation: the maternal stress theory, the fraternal birth order (“older brother”) theory, and the genetic theory. The maternal stress theory posits that maternal stress during pregnancy causes hormonal disturbances in the womb resulting in incomplete masculinization of male fetuses, which in turn results in homosexuality. Sociologist Lee Ellis developed a full-fledged theory of maternal stress\(^\text{23}\) replete with various hypothesized causal mechanisms, and subsequently\(^\text{24}\) produced survey evidence suggesting that mothers of homosexual persons did indeed report higher stress during pregnancy than mothers of heterosexuals.

This study, though, is contradicted by another well-respected study,\(^\text{25}\) but its bigger problem is methodological. Ellis appears to have gathered sensitive data dependent upon subtle recollection of stress during pregnancy decades before in a manner open to bias. He surveyed mothers of homosexual sons through the organization PFLAG, Parents and Friends of Lesbians and Gays, gathering his data during the very same period that author Cheryl Weill was lecturing these same mothers about Ellis's theory of maternal stress.\(^\text{26}\) This data, dependent on subtleties of memory, was being gathered from mothers at the same moment they were being tutored in the theory under examination. If ever there were an extreme example of volunteer bias, this could be it.

Overall, the maternal stress during pregnancy theory is the weakest of the big three biological theories; Simon LeVay, for example, largely dismisses it.\(^\text{27}\) The fraternal birth order theory, on the other hand, has legs in contemporary discussions. The genesis of the theory was the observation that a nonrepresentative sample of homosexual men seemed to have more older brothers than the broader population. The basic idea is that some mothers have complicated biological responses as they carry male fetuses. Some may develop something akin to an allergic reaction to their body’s encounter with the male hormones generated by their male fetus, resulting in an immunological push-back from the mother’s immune system that fights against the male hormones, and hence against the feminization process in the developing male fetus. The theory proposes that like many allergic reactions, the strength of the mother's immunological response builds with exposure, so the more male children she bears, the more profound the immunological push back against masculine hormones and the greater the likelihood that younger brothers will be gay. The evidence that any such immunological responses exist for mothers is extraordinarily sketchy.\(^\text{28}\) The putative evidence for the theory is the claim that homosexual men in general have disproportionate numbers of older brothers compared to heterosexual men, and the higher the number of older brothers the higher the likelihood of homosexual orientation. But is this so?

Once again, the thorny problem of nonrepresentative samples arises. The early studies claiming to demonstrate a disproportionate presence of older brothers for homosexual men were based upon advertisement-recruited, volunteer samples. As the major proponents of this theory, Anthony Bogaert and Ray Blanchard, multiplied their reports of this phenomenon, their larger and larger samples were created by folding new volunteer samples into a common pool with their original samples, so what they really had were larger and larger nonrepresentative samples. These early, advertisement-recruited samples showed significantly disproportionate frequencies of older brothers for homosexual men. But as research has improved, the effect has begun to disappear. Bogaert\(^\text{29}\) analyzed two smaller nationally representative samples, finding an exceptionally weak “older brother” effect only for same-sex attraction (and no effect for same-sex behavior). This was followed by his analysis\(^\text{30}\) of an independent, enormous, and representative sample eight times the size those of his previous studies, in which he found that the older brother effect had disap-


coverage often reporting a simplistic finding that sexual orientation was caused by one’s genes. What is often not recognized is that the 52% concordance (statistic b) for those who were genetically identical meant that out of 41 monozygotic sibling groups (one monozygotic triplet trio and 40 monozygotic twin pairs), 14 groups (the triplet trio and the 13 identical twin pairs) matched for sexual orientation (statistic a), while the remaining 27 identical twin pairs failed to match, were discordant, on sexual orientation. In other words, in 27 cases, when one twin was gay the other was not, while in only 14 cases when one twin (or triplet) was gay was the other as well.

But the deeper problem with the Bailey study was, yet again, the hoary problem of representativeness of samples. What if, as advertisements were distributed for a study of genetic and familial contributions to homosexuality, individuals were more likely to volunteer if their personal situation was suggestive of genetic contribution, and others less likely to volunteer if their situation was not suggestive of such a contribution? Bailey, to his credit, recognized that his findings might not be representative, and so conducted a follow-up study. This was one of those rare instances where a good researcher has the integrity to publish a refutation of his own earlier findings. Using a much more (if still imperfectly) representative sample from the Australian Twin Registry, Bailey saw the concordance (statistic b) for identical male twins fall from 52% in 1991 to a mere 20% in his Australian Twin Registry sample, and the descriptive matching (statistic a) for homosexual orientation fall to a mere 3 out of 27 (11.1%) identical male twin pairs.

Bailey reported truthfully that the genetic contribution to homosexual orientation failed to reach statistical significance in this new study. The refutation, of course, failed to capture any attention in the popular media, and similarly is often left out the textbook treatments of the subject. In 2010, an impressive and much larger study utilizing the Swedish Twin Registry produced almost identical results to Bailey’s more recent findings: 7 out of 71 (9.8%) identical male twin pairs in which one twin is gay matched such that the second co-twin was also gay, a stunningly low finding also ignored by the media.

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Discussion of a genetic contribution has shifted to yet a more sophisticated statistical estimate, that of "heritability." Heritability (statistic c above) is an estimation of how much of the variability of a particular phenomenon such as sexual orientation, out of a total of 100%, may be attributed to genetic influences versus environmental influences. The higher the heritability estimate, the greater the genetic contribution. Despite the low descriptive frequency in the range of 10% matching for sexual orientation that I described above for identical twins, with some consistency sophisticated statistical analyses generate heritability estimates for male homosexual orientation at around 0.30 to 0.50 (30% to 50% out of 100% total variability). The Längström\textsuperscript{37} study, for instance, produced heritability estimates of "0.34 - 0.39" for male homosexuality for their subject populations. Heritability estimates for female homosexuality are slightly less than for males, but still statistically significant. There is sufficient consistency in these estimates to believe the genetics do indeed play a part among the causal factors that contribute to adult homosexual orientation.

But what do heritability estimates of 30% to 50% mean? Understanding requires context. The broader field of behavior genetics has established a range of heritability estimates for almost all psychological traits; "there is now strong evidence that virtually all individual psychological differences, when reliably measured, are moderately to substantially heritable."\textsuperscript{38} Among the many psychological traits showing this level of heritability are a dizzying array of social attitudes including inclinations towards right-wing authoritarianism, certain measures of inclination towards religiosity or religious fundamentalism, and church attendance. One study by a giant of behavioral genetics, Robert Plomin, even examined the heritability of that most mundane and ubiquitous of behaviors, television watching,\textsuperscript{39} and found an average heritability estimate of .45 for the proclivity to watch television, marginally higher than the typical estimate for the heritability of homosexuality.

It is the rule rather than the exception that psychological characteristics are moderately to substantially heritable. Homosexual orientation is, in fact, on the weak end of these findings of genetic influence. But doesn't the documented evidence of some contribution of genetic heritability mean that individuals who experience homosexual orientation had no choice or control in the development of their orientation, and that any attempt change that sexual orientation is ultimately hopeless? Respected figures in the field of behavioral genetics openly dispute the ideas that substantial heritability means that environmental contexts (such as child-rearing) does not matter, and that change is impossible. Bouchard and McGue argue forcefully that "One of the most unfortunate misinterpretations of the heritability coefficient is that it provides an index of trait malleability (i.e., the higher the heritability the less modifiable the trait is through environmental intervention). Research on IQ provides an effective counter example of this false conception."\textsuperscript{40} Bouchard and McGue go on to suggest that despite the strong heritability of intelligence, intelligence, like adult height, has increased substantially in the general population over several decades in a fashion clearly not explainable by genetic factors. They also indirectly cite the work of Eric Turkheimer\textsuperscript{41} who, despite strong findings of genetic heritability for intelligence, still champions the important role of environment. Why? Because heritability estimates shift in light of other pressures.

Turkheimer and his colleagues have specifically found that heritability estimates for intelligence differ between the rich and the poor, specifically, that among the rich intelligence is almost totally determined by heritability, while among the poor, environmental variables substantially overshadow the power of heritability. Environment appears to matter little among the rich because all of those of us who are advantaged can provide sufficient environmental supports such as music lessons, books, educational puzzles and toys for children to advance their intellectual development such that the heights that they reach are determined almost entirely by their genetic range. Poor children, in contrast, will respond much more powerfully to the environment, because a poor child with no educational opportunities is cheated in actualizing the genetic potentialities she might have for intellectual achievement due to lack of resources, while the poor child that is blessed with that determined parent, or given that scholarship grant to go to a charter school, or happens to be in a neighborhood with an effective Head Start program might capitalize on every God-given cognitive synapse. For the rich, environment

\textsuperscript{37} ibid.
\textsuperscript{38} T. J. Bouchard & M. McGue (2003), “Genetic and environmental influences on human psychological differences,” Journal of Neurobiology, 54 (1), 4-45; quote p. 4.

\textsuperscript{40} Bouchard & McGue (2003), “Genetic and environmental influences,” 17.
averages out, "maxes" out, so to speak, leaving only heritability to determine achievement while for the poor, small differences in environment can have huge impact on the maximization of the potential granted from heritability.

So powerful are these kinds of findings that not another field, that of epigenetics, is emerging to examine the interaction of genes and environment. This approach capitalizes on the recognition that genes are not static, but rather that in the womb and throughout life our genes interact with the environment (including the cellular environment, the physical environment within the body, and, through the experience of the whole physical person, with an external world through such phenomena as stress, illness, and so forth). Genes switch on and off as circumstances dictate. Thus, a respected researcher working with animal models by studying rats argues that genetics has not rendered environment irrelevant, but instead that "Social experiences throughout life influence gene expression and behavior, however, early in development these influences have a particularly profound effect." She argues, declaring the power of environment to activate and energize genetic factors, that although these examples of interactions between genotypes and early environment are striking, we are only starting to fully appreciate the complex interplay between genetic backgrounds, social environments, and brain development… Early rearing environments are clearly capable of exerting neurobiological changes that persist into adulthood, but only recently has the molecular mechanism mediating these long-term effects been explored…. These epigenetic changes, thus, provide a stable mechanism whereby the effects of early social experiences can persist throughout a lifespan.

So even in the face of the power of genetic influence, parenting matters because "early rearing environments are clearly capable of exerting neurobiological changes that persist into adulthood." But it is not just the early childhood environment that exerts a powerful influence; even animal models demonstrate that it may be possible to change heavily genetically-influenced phenomena in adulthood:

"discussions of the impact of early environment often referred to 'programming,' emphasizing the long-term effects of these experiences, and the association of epigenetic modifications with these effects certainly provide support for this notion of stability. However, plasticity exists whereby social experiences later in life can alter the course of development and, in some cases, compensate for early deprivation…. These studies also illustrate that the modulation of behavioral phenotype by the post-weaning environment does not involve the same neural mechanisms that mediate the original deficits…. Thus, social experiences beyond the postnatal period might alter brain development via alternative, yet equally stable mechanisms."

So this researcher, working with animal models of what is too often regarded as unalterable behavioral programming, still must conclude that adult change in some genetic sense may be possible, and this, if not through the alteration of the same fundamental mechanisms that were set in place in childhood, through other "alternative, yet equally stable mechanisms."

Thus, we seem to have established with regard to such genetically influenced, heritable phenomena as sexual orientation, that even when heritability is significant, context still matters in causation and that change may be possible. But what of choice? Gregory Herek, studying what appears to be the most representative sample of GLB persons ever assembled, asked each subject a pivotal question about perceived choice in the formation of their sexual orientation, namely, "how much choice do you feel you had about being [lesbian/gay/bisexual/queer/homosexual; depending on the respondent’s preferred term]?" Gay men saw themselves as having the least choice, with only 5.2% reporting a fair amount or a great deal of choice; 16.4% of lesbians and an average of about 42% of bisexual men and women affirm they had a fair amount or a great deal of choice. Is that the answer on choice?

Unfortunately, there may be political motivations and public policy implications that could have shaped how individuals responded to the question. Furthermore, the question of choice is both subtle and profound. As Timo-

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43 ibid., 706.
44 ibid.
45 G. M. Herek, A. T. Norton, T. J. Allen, C. L. Sims (2010), “Demographic, psychological, and social characteristics of self-identified lesbian, gay, and bisexual adults in a US probability sample,” Sexualities Research and Social Policy, 7, 176-200. In this study, a sample of 719 GLB persons could be extracted from a pool of over 40,000 subjects, which begins to suggest representativeness.
46 ibid., 186.
thy Dalrymple has argued recently, to have any clear sense of these matters, one must distinguish first between something being a choice versus it being voluntary. By "choice" Dalrymple means "a discreet and generally thoughtful and intentional decision between alternatives," while "voluntary" means "a slow migration in one direction that emerges in aggregate from countless minute choices." To illustrate, obesity or emaciation are clearly not matters of momentary choice (I cannot in this moment decide to be 40 pounds heavier or lighter), but there is clearly a voluntary dimension to my physical stature as I make sequential choices that propel me one direction or another. To apply this distinction to homosexuality, we further distinguish between homosexual behavior, inclinations/orientation, and identity. Dalrymple suggests that both homosexual behavior, and in a more complex way homosexual identity, can be meaningfully construed as products of choice. Homosexual inclination/orientation, however, may be a complex outcome driven by many factors beyond an individual's control, yet not without a voluntary element for some.

But those are merely the speculations of a philosopher/theologian. What does science tell us? I return to Eric Turkheimer, who argues first that the statistic of heritability must be taken with a grain of salt given the difficulty of conceptualizing and measuring nonsystematic inputs into development. I mentioned earlier that heritability explains the variance or variations in human behavior, but is construed in such a way as to systematically ignore everything that we hold in common. One of the things we hold in common is idiosyncrasy and variability in our behavior and character. The impact of genes can be measured because it is stable and predictable, while other more personal aspects of character create problems for measurement; as a result, "genotype is in fact a more systematic source of variability environment, but for reasons that are methodological rather than substantive." This creates a methodological problem for the understanding of behavior that emerges not from the core of our humanity, but from the statistical properties of heritability. "The apparent victory of nature over nurture suggested by the first two laws is thus seen to be more methodological than substantive." He also speculates on why, among the three variables of genetics, shared environment, and unshared environment, it is shared environment that consistently shows up having a weak if any measurable impact upon adult behavior. His answer is to remind us that there is a difference between "the objective and effective environment;" by this, he means that something that looks objectively/externally to be a singular family event is never ultimately truly a "shared" event because children (and adults) never experience things in exactly the same way. The same event is unique for each person. No two children ever experience the exact same parenting or familial environment, because they think of it and respond to it differently (this is the effective environment). Turkheimer concludes that "Non-shared environmental variability predominates not because of the systematic effects of environmental events that are not shared among siblings, but rather because of the unsystematic effects of all environmental events, compounded by the equally unsystematic processes that expose us to environmental events in the first place…. We need not conclude that aspects of families children share with siblings are of no causal importance." In other words, the consistent empirical findings that shared environmental influences exert little power is probably an illusion driven by the methodologies by which we measure heritability which fail to reflect how individual children in the same family and culture experience differently that family and culture.

But is there also room for choice? Choices made by children, choices made by adolescents, choices made by adults in shaping fundamental aspects of personhood (such as sexual orientation)? There unquestionably are a variety of factors beyond our choices that influence each of us; we are finite beings subject to the vagaries of embodied existence. We are pushed down the roads we choose. These influences, however, may not render key choices along the way irrelevant. Human choice may be viewed legitimately as one of the factors influencing the development of sexual orientation, but this "is not meant to imply that one consciously decides one’s sexual orientation. Instead, sexual orientation is assumed to be shaped and reshaped by a cascade of choices made in the context of changing circumstances in one’s life and enormous social and cultural pressures;" and, we would add, in the context of considerable predispositions toward certain types of preferences established with input from genes and other biological factors as well as from an array of environmental influences.

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47 T. Dalrymple (June 23, 2011), "Is homosexuality a choice?" is not the right question," http://www.patheos.com/blogs/philosophicalfragments/2011/06/23/is-homosexuality-a-choice-is-not-the-right-question/
49 Turkheimer, E. (2000); quote p. 163.
The problem with Simon LeVay’s argument for an exclusively biological understanding of causation is not only that he overestimate the power of identifiable biological etiological variables, but that he refuses to engage at all the considerable evidence for psychosocial contributors, and that he attributes the unexplained remainder that his biological factors cannot explain only to chance and various types of biological static. He frequently frames the argument as if the only two etiological theories are total biological causation or total environmental causation. At no point does he engage a true interactionist hypothesis where experiential variables (familial, peer, cultural) or human agency can interact with biological influences.

Who can say, in the cascade of influences in human development, what kind of personal choices made by the developing person from infancy through adulthood contributed to the final outcomes experienced? Perhaps in the face of the rocky avalanche of biological dispositions and experience such choices have all of the force of the flap of a butterfly wing. But as chaos theory has taught us, even the flap of a butterfly wing can create a hurricane. What we seek in understanding sexual orientation, and for which there appears to be adequate intellectual grounding, is a true interactionist hypothesis where experiential variables (familial, peer, cultural) and human agency interact with biological influences.

So, is sexual orientation like skin color? At birth, or in the womb for that matter, we know whether a child is a boy or girl (except in those rare aberrant cases where the multivariate phenomenon of sex goes awry) and we know that the child will share the racial characteristics, in some creative mix, of his or her two biological parents. At this point, we know little with clarity about the etiology of homosexual orientation. Given the theoretical and empirical possibilities of genes interacting with environment, the clear evidence of postnatal, sociocultural variables having an influence upon sexual orientation—evidence from studies with the types of representative samples of which Evelyn Hooker could only have dreamed, and the clear evidence of the modest contribution of genetic and other biological factors that has emerged from studies of similar truly representative samples, it is safe to conclude that sexual orientation is disanalogous to skin color, and of mysterious origins indeed.

The Immutability of Homosexual Orientation and Same-Sex Attraction

Attorney General Eric Holder’s 2011 letter to House Speaker Boehner announced the Obama administration’s decision not to defend the Defense of Marriage Act (DOMA, the Congressionally-enacted law that restricts federal recognition of marriage to marriage between one woman and one man) in upcoming lawsuits. Holder mentions repeatedly in his letter the "immutability" (unchangeability) of sexual orientation as a major consideration grounding the administration’s decision, saying "a growing scientific consensus accepts that sexual orientation is a characteristic that is immutable" and that illegitimate arguments supporting DOMA rely on "claims regarding the immutability of sexual orientation that we do not believe can be reconciled with more recent social scientific understandings."51 The recent American Psychological Association Amicus brief for the Proposition 8 Perry v. Schwarzenegger case is forceful on the issue of change; contrary to claims that change is possible, it says "research suggests the opposite."52 The opposite of possible is, of course, impossible.

But the research doesn’t really say that. As my colleague Mark Yarhouse and I53 have documented, literally dozens of professional publications meeting the scientific standards of the times appeared in journals between the 1940s and into the early 1970s reporting change in homosexual orientation, though difficult, was possible for a substantial portion of those pursuing such change. But rarely since 1980 has a professional publication suggested that change of homosexual orientation is possible. Is this reality attributable to science suddenly changing direction and proving the opposite? The best answer, to my mind, is complicated.

The political environment in the mental health professions for the publication of studies of sexual orientation change radically shifted with the 1973 removal of homosexuality from the diagnostic lexicon. Among its many implications, the change undermined grant funding sup

52 American Psychological Association (2010), United States District Court for the Ninth Circuit Amicus Curiae Brief for Perry v. Schwarzenegger (Proposition 8, State of California); quote 8-9; at http://www.apa.org/about/offices/oge/amicus/perry.pdf
port for research on this subject, which for many academics removed any motivation to study this phenomenon. Further, the growing visibility of the gay rights movement has highlighted more and more high-profile testimonies of those who failed in their attempts to change sexual orientation. In Christian contexts, the biography of Mel White speaks movingly and distressingly about the experience of endless counseling sessions, aversion therapy, and the like incurred in an ultimately unsuccessful attempt to change sexual orientation. The accumulated impact of such anecdotes is powerful indeed.

What is often forgotten, however, is that today only one type of anecdote is receiving such high-profile visibility. Those who succeed in changing sexual orientation to some degree often feel hesitant to speak forcefully in defense of the possibility of change because of the ruthless reaction they often engender. Take, for example, the sarcasm and cynicism on display in two recent New York Times articles about persons who are on such a path of change; the trajectory of the first is obvious in its title, "Living the Good Lie," and the second, "My Ex-Gay Friend," drips with condescension towards its subject. Many are also unaware that several organizations exist for the purpose of exposing what they regard as fraudulent claims of change of sexual orientation, whose methods involve the tracking, exposure of the foibles, and humiliation of those who dare to go public about change of sexual orientation. Among these groups, Ex-Gay Watch and Truth Wins Out are notable. I have discussed "going public" for the sake of public education with a number who have successfully attained significant shifts in sexual orientation, and the most frequent response I hear is some variation of "Are you crazy? I have already experienced significant difficulty in my life, and this transition has been deeply challenging and difficult. How can I be asked to weather the vitriol that would be directed towards me if I go public?" I sympathize with this response. But the result is the triumph of anecdotes of failed sexual orientation change.

Finally, the credibility of prior reports of sexual orientation change in the professional literature has been diminished by a steady chorus of criticism of older studies. Their methodological rigor has been assaulted steadily, with the lack of longitudinal studies the most frequent concern. The Public Affairs website of the American Psychological Association stated for many years that "claims [of orientation change] are poorly documented. For example, treatment outcome is not followed and reported over time as would be the standard to test the validity of any mental health intervention." Such criticism took its most comprehensive form in the report of the 2009 APA Task Force studying Sexual Orientation Change Efforts (SOCE). Their criticism of prior research is withering, and, as I have argued elsewhere, unreasonable. Ignoring the fact that the previous scientific literature was found acceptable by the scientific standards of the times, the Task Force set extraordinary standards of scientific rigor for what they regarded as a reasonable scientific demonstration of the possibility of sexual orientation change, a move which resulted in the classification of only six studies out of dozens as merit.

Indeed, prior studies were methodologically limited, often utilizing as they did idiosyncratic measures of sexual orientation change, relying on therapist ratings rather than client ratings, utilizing reports from memory of past feelings rather than sampling participants prospectively and longitudinally, and so forth. But do they deserve utter disregard? No. Note first that the entire mental health field would grind to an stop if the standards articulated for sexual orientation change were applied, for instance, to low self-esteem, depression, anxiety disorders, eating disorders, or personality disorders, or to any of the day-to-day stuff of mental health practice. Further, the internal inconsistency of the 2009 APA Task Force Report was remarkable, in that after dismissing SOCE for its lack of empirical validation, they then had the chutzpah to warmly recommend gay affirming therapy while explicitly acknowledging that it lacked the very empirical validation required of SOCE.

What are you left with when you have eliminated all available evidence? It would seem, by proper scientific standards, only ignorance. At times, this is what is article-

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59 Jones, Rosik, Williams, & Byrd (2010), “A scientific, conceptual, and ethical critique.”
ulated in the report; for instance “We thus concluded that there is little in the way of credible evidence that could clarify whether SOCE does or does not work in changing same-sex sexual attractions.” But this is not the most common way in which the Report states its conclusion. In the Executive Summary and repeatedly throughout the Report, the authors claim their review has established that “enduring change to an individual’s sexual orientation is uncommon” and “that it is unlikely that individuals will be able to reduce same-sex attractions or increase other-sex sexual attractions through SOCE.” These are not modest claims of scientific agnosticism, but confident and positive claims that change is uncommon or unlikely. These claims, congruent as they might be with the popular understanding of sexual orientation today, are a questionable conclusion to draw from the evidentiary base of six studies conducted between 1969 and 1978.

But even more forceful claims have been made. The Public Affairs website of the American Psychological Association for many years stated: “Can therapy change sexual orientation? No. . . . [H]omosexuality . . . does not require treatment and is not changeable.” Various statements from the APA assert emphatically that efforts to change sexual orientation are "not effective," "have been shown to be ineffective," and that there is "no evidence" that sexual orientation can change. For example, the APA Council of Representatives in February, 2011, approved Guidelines for Psychological Practice with Lesbian, Gay, and Bisexual Clients, where Guideline 3 states "Reviews of the literature, spanning several decades, have consistently found that efforts to change sexual orientation were ineffective." Earlier, I quoted the 2010 APA proposition 8 amicus curiae brief stating, "No scientifically adequate research has shown that such interventions are effective or safe. Indeed, research suggests the opposite." It is worth pondering the question, in terms of the scientific logic, what kind of research would be necessary in order to demonstrate that an intervention method was "not effective" or change impossible. This would require an empirical study implementing a good-faith representation of the proposed intervention method with a representative sample, with the findings of that study conclusively showing the ineffectiveness of a method. No such studies have been conducted and published. There is in fact a bias against publishing such "null results" in scientific publications, because it is all too easy to find anything "ineffective." Inert chemists could fail to replicate an important scientific breakthrough because they didn't clean their test tubes properly, or inept medical practitioners fail to implement an innovative surgical procedure correctly. This kind of research is rarely done and almost never published. It is a misrepresentation to report that research has established these interventions ineffective; rather, it is their skeptical dismissal by anecdote, or their judgment as methodologically inadequate by post hoc and artificially stringent standards, that has led to the perception they are ineffective.

Immutable. Not changeable. Not effective. Ineffective. No evidence. Unlikely. Uncommon. These are forceful descriptions. Is sexual orientation in fact immutable? It is remarkable that today's professional context seems analogous to the situation in Evelyn Hooker faced in the 1950s. Professional opinion was and is nearly unanimous in expressing an absolute conviction about sexual orientation; in her day it was the nearly absolute opinion that homosexuality was pathological, while today it is the nearly absolute opinion that homosexual orientation cannot be changed. As in Hooker’s day, logic would dictate that it only takes one case of change to refute the absolute claim of immutability.

Here, with my co-author Mark Yarhouse of Regent University, I have contributed something original to the discussion. We were given the opportunity to study people seeking sexual orientation change through their involvement in the cluster of ministries organized under Exodus International. The study was a longitudinal and prospective study that assessed the sexual orientations and psychological distress levels of 98 individuals seeking sexual orientation change beginning early in the change process, and then followed these participants longitudinally with five additional independent assessments over a total span of 6 to 7 years. We used standardized, respected measures of sexual orientation and of emotional distress to measure the variables of interest in the study. Our original round of findings at the three year mark were published in book form; the final find-

61 APA Task Force Report (2009); 2, 3.
64 APA (2010), Amicus Curiae Brief for Perry v. Schwarzenegger; quote 8-9.
ings at the 6 to 7 year mark were published in the re-spected scientific Journal of Sex and Marital Therapy. 66

Of the original 98 participants in the study (72 men, 26 women), 61 subjects completed the key measures of sexual orientation and psychological distress at the conclusion of the study, and were successfully categorized for general outcome. Of these 61 subjects, 53% were categorized as successful outcomes by the standards of Exodus Ministries. Specifically, 23% of the subjects reported success in the form of “conversion” to heterosexual orientation and functioning, while an additional 30% reported stable behavioral chastity with substantive dis-identification with homosexual orientation. On the other hand, 20% of the subjects reported giving up on the change process and fully embracing gay identity. On the measures of sexual orientation, statistically significant changes on average were reported across the entire sample for decreases in homosexual orientation; some statistically significant change, but of smaller magnitude, was reported in increase of heterosexual attraction. These changes were less substantial and generally statistically non-significant for the average changes of those subjects assessed earliest in the change process, though some of these subjects still figured as “Success: Conversion” cases. The measure of psychological distress did not, on average, reflect increases in psychological distress associated with the attempt to change orientation; indeed, several small significant improvements in reported average psychological distress were associated with the interventions.

We argue that our results do not prove that categorical change in sexual orientation is possible for everyone or anyone, but rather that for some, meaningful shifts along a continuum that constitutes real change appear possible. The results do not prove that no one is harmed by the attempt to change, but rather that the attempt to change does not appear to be harmful on average or inherently harmful. These findings challenge the commonly expressed views of the mental health establishment that change of sexual orientation is impossible or very uncommon, and that the attempt to change is highly likely to produce harm for those who make such an effort.

I conclude from these data and years of study that homosexual orientation is sometimes mutable. "Homosexuality” is a multifaceted phenomenon; there are likely many homosexualities, with some perhaps more malleable than others. Not all interventions are the same; not all practitioners are equally skilled. Perhaps most importantly, those seeking change vary considerably in their intensity of motivation, resourcefulness, and in the contextual factors that surround and support the effort to change. There may be profound reasons why the predominance of individuals seeking change of sexual orientation, and those actually attaining some level of change of sexual orientation, cluster among the highly religiously committed. These individuals believe in a God who intervenes in their lives, and with good reason. Further, they are embedded in communities of support and care that can make crucial differences in their efforts to change. Finally, their motivation runs deep, grounded as it is in the core understanding of who they are as a person before God. It is, perhaps, a wonder that anyone without such resources successfully obtains sexual orientation change.

The Equivalency of Heterosexual and Homosexual Relationships and Parenting

In his ruling overturning Proposition 8, Judge Vaughn Walker argued for the equivalency of homosexual and heterosexual couple relationships, relying heavily on social scientific research to make his point. Walker cited testimony by psychologist Letitia Peplau of UCLA, saying "Peplau pointed to research showing that, despite stereotypes suggesting gays and lesbians are unable to form stable relationships, same-sex couples are in fact indistinguishable from opposite sex couples in terms of relationship quality and stability." 67 The argument that homosexual and heterosexual couples are essentially indistinguishable has been dubbed the "equivalency argument” by gay affirming scholars. 68

Once again we return to the thorny issue of sampling. To make broad assertions about heterosexual couples in general, or about homosexual couples in general, and about their equivalency, we must know that we have representative samples of these populations to compare and from which to make valid generalizations. Evelyn Hooker realized this limitation, was explicit about not having a representative sample of homosexual men, and logically clear that she did not need a representative sample in order to refute the prevailing professional wisdom that


homosexuality was always pathological. Contemporary proponents of the equivalency of heterosexual and homosexual relationships are in an entirely different intellectual context in which they are not merely trying to find disconfirming evidence of some universal assumption but instead are arguing for equivalency and summoning the best empirical research to make this argument. To do so, one must have representative samples.

Gregory Herek and his colleagues, in discussing the importance of sampling in making truthful claims about populations or subpopulations, suggest that studies prior to theirs in 2010, and prior APA amicus briefs in particular, "could not provide definitive population estimates because relevant data were not available from nationally representative samples of self-identified gay, lesbian, and bisexual adults." Their judgment is veridical, especially when it comes to the intimate relationships of LGB persons. Theirs is the first study ever that utilizes data from a "national probability sample" of adults in the US of sufficient size, over 40,000 households, allowing the researchers, arguably for the first time ever, to draw out a statistically significant subsample of 719 "self-identified gay, lesbian, and bisexual adults [from which] to estimate population parameters on a variety of demographic, psychological, and social variables."70

Unfortunately, prior APA amicus briefs and other declarations have not always been characterized by Herek’s judicious caution in making assertions about homosexual couples on average. We see this powerfully in the Proposition 8 brief of the APA: "Empirical research demonstrates," they say, "that the psychological and social aspects of committed relationships between same-sex partners closely resemble those of heterosexual partnerships."71 The brief, in turn, relies and heavily cites the 2007 overview of research on same-sex relationships by Peplau and Fingerhut.72

How did Peplau and Fingerhut handle issues of sample representativeness in that review? I would describe their approach as evasive. They typically launch into discussions about characteristics of homosexual couples in general without ever clearly stating that the studies they cite do not contain representative samples, as when they say that "studies have shown that on standardized measures of love, satisfaction, and relationship adjustment, same-sex and heterosexual couples are remarkably similar."73 To assert that "same-sex and heterosexual couples are remarkably similar" is to assert, or at least imply, that you have representative samples to compare. But we have already established, appealing to Herek, that this is not the case.

Peplau and Fingerhut offer intriguing hints that they recognize that the studies of same-sex couples on which they rely may be biased. They report that researchers have a tendency to "recruit participants who are well educated and generally liberal in their attitudes."74 They raise the provocative possibility that homosexual couples may bias their self-reports in order to look good in a survey, but only apply this insight to the noncontroversial issue of equal sharing of household activities; "same-sex couples’ reports of equal sharing of household activities may reflect their ideals but often mask substantial observable differences between partners’ actual contributions,"75 leaving us to ponder, if survey reports regarding a relatively trivial matter can be biased by a hypothetical ideal, whether it might be possible that studies of couple characteristics of enormous political portent could be biased as well?

Even so, intriguing hints of differences, of nonequivalency, between heterosexual and homosexual couples nevertheless emerge from their review of nonrepresentative samples, though they never highlight these findings. In one prominent, large study, "only a minority of lesbians (28%), wives (21%), and husbands (26%) reporting having engaged in extradyadic sex [sex with one other than one’s dyadic partner], compared with 82% of gay men."76 One would think that such a striking difference between gay male couples and other couples might be a challenge to the equivalency hypothesis.

Another crucial relational variable relevant, for instance, to questions of adoption is relational instability. They summarize one stronger study that reported, over a five-year period, a 7% breakup for married heterosexual couples, but a 14% and 16% breakup percentage for cohabiting gay male couples and cohabiting lesbian couples.

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70 ibid., 178.
71 Amicus Curiae Brief for Perry v. Schwarzenegger, 9-12.
73 ibid., 418.
74 ibid., 409.
75 ibid., 408.
76 ibid., 410-411.
respectively. Later they report that "Data from Norway and Sweden, where registered same-sex partnerships have been available since the 1990s, indicate that the rate of dissolution within five years of entering a legal union is higher among same sex partnerships than among heterosexual marriages, with lesbian couples having the highest rates of dissolution."\(^77\)

It is remarkable that they did not report in their review the actual findings of that latter study from Norway and Sweden. Drawn from the exhaustive demographic records of these two countries, these are arguably the most representative data we have on relational stability. The demographics of same-sex legal unions in Norway and Sweden actually show that gay men are proportionally half as likely to enter into such relationships compared to lesbians, a finding that is clear from statistics showing that despite male homosexuality having twice the prevalence of female homosexuality, male and female homosexuals nevertheless register for legal unions in these two countries at the same rate. The demographic data also shows clearly that in this social context, often characterized as much more supportive of same-sex relationships than the U.S., gay male relationships are 50% more likely to break up than heterosexual marriages, while lesbian relationships are 167% more likely to break up than heterosexual marriages.\(^78\)

Might we reasonably expect experts on homosexual relationships arguing for equivalency and cited throughout Judge Walker's ruling would point out first that we know little about homosexual couples because we have few representative samples from which to draw generalizable conclusions, and second, that at least in two areas, sexual fidelity and relational stability, the best evidence we have from the most representative studies points to non-equivalency?

The new study by Herek and his co-authors, featuring the first near-nationally representative GLB sample, also begins to provide us with important information. Striking differences emerge amongst GLB persons. Fully 60.0% of gay men reported not being in a committed relationship, strikingly less than lesbians who reported 16.1% in a married, civil union, or domestic partnership relationship, 45.3% to be cohabiting, and only 24.2% not in a committed relationship. Among gay men and lesbians that were in a current relationship of some kind (cohabiting or a formally recognized relationship), gay men were strikingly more uncertain about the idea of marriage or said they were unlikely to marry their current same-sex partner than were lesbian women. The overall pattern of findings that emerged is one of both gay men and bisexual men being much less attached to or interested in committed relationships overall compared to lesbians.\(^79\)

Are there other matters of fact from this study directly relevant to the question of the equivalency of heterosexual and homosexual couples? Well, not really. The authors report interesting statistics on whether GLB persons would like to see marriage legalized for same-sex couples, but our interest here is in hard findings relating to the equivalency question. The study is actually remarkable for its failure to ask penetrating questions about relational stability, sexual fidelity, and other matters directly bearing on the equivalency question. To understand why this is so, it is important to recognize that the study was clearly driven by advocacy concerns. Their choices of which questions to include were "Guided mainly by our review of policy studies and amicus briefs from scientific and professional organizations that have addressed topics for which data about the US population of self-identified gay lesbian and bisexual adults would be relevant."\(^80\) Herek and his colleagues appear to have decided that if the goal is to support the public policy interests of the GLB community, only certain questions should be asked.

The brief filed by the American Psychological Association in the Proposition 8 case stated "that large proportions [of the GLB population] are currently involved in such a [committed] relationship (across studies, roughly 40-70% of gay men and 45-80% of lesbians), and that a substantial number of those couples have been together 10 or more years. Recent surveys [citing Herek et al., 2010] based on more representative samples of gay men, lesbians, and bisexuals support these findings." This claim is puzzling in that Herek et al. found that in the case of gay men, 60% were not currently in a relationship at all, and the vast majority of bisexual women and some bisexual men were in a committed relationship with individuals of the opposite sex.

One final obfuscation that consistently appears in this literature deserves special mention, exemplified by the claim by Herek that "Questions about the adult sexual orientation of children raised in a sexual minority household are routinely raised in policy debates. The empirical

\(^77\) ibid., 414


\(^80\) ibid., 178.
data on this topic are limited but are consistent with the conclusion that the vast majority of these children eventually grow up to be heterosexual. Terms such as "many," "a vast majority," or "large numbers" are often used in this literature to obscure probabilistic trends in the data. Peplau and Fingerhut correctly note that "Currently, research on same-sex couples with children is quite limited. Research on gay fathers is rare," The small bit of research that does exist, however, hints at increased rates of same-sex orientation among the children of such couples. My informal synthesis would be that gay parenting is associated with an approximate tripling or quadrupling of the rate of same-sex attraction in these children. How can attention be drawn away from this important statistic showing a probabilistic trend? One strategy is to focus on absolute numbers rather than probabilities emerging from the data. Herek is factually correct in arguing that "the vast majority of these children [raised by gay or lesbian couples] eventually grow up to be heterosexual," because even if the experience of same-sex parenting increases the occurrence of same-sex attraction from 2% to 8%, well over 90% of the children still grow up to become heterosexual. Factually correct, but incomplete.

There is, in fact, good evidence that homosexual couple relationships are unique in some important ways. While there is much that we do not know about same sex couples, a good bit of what we know suggests that they are not equivalent to heterosexual couples. The fact that gay affirming authors are beginning to challenge the normativity of heterosexual relationships is a crucial additional hint that homosexual relationships may be different. Yet our culture seems intent on plunging forward with this grand social experiment in the face of ambiguous and skeletal evidence.

The Legitimacy of Homosexual Identity

Phillip Hammack and Eric Windell argue that "A dramatic shift occurred in the discipline . . . which repositioned the scientific narrative of homosexuality from sickness to species . . . a shift from the idea that same-sex desire is indicative of psychopathology to the idea that it is indicative of a legitimate minority identity akin to race and ethnicity." It is their contention that this shift did not simply occur through some positivistic accumulation of objective facts, but rather was indicative of a Kuhnian paradigm shift within the discipline, a shift to embrace "this minority narrative of homosexuality." Their analysis is correct, and deserves careful attention. To do so, we need to consider the shift to understanding sexual orientation as "a legitimate minority identity akin to race and ethnicity."

This matter of identity, of course, has tangible implications. The APA's Perry v. Schwarzenegger brief argues that sexual orientation “encompasses an individual’s sense of personal and social identity based on those attractions, behaviors expressing them, and membership in a community of others who share them,” a clear declaration of the legitimacy of GLB identity. On what grounds is this declaration made? On the one hand, the descriptive claim must be acknowledged that some individuals organize their sense of personal and social identity around and subsume it under their sexual orientation. It is increasingly obvious that for many individuals, their lives are marked and arranged around their sexual orientation. They are, above and beyond all other identifiers, gay or lesbian. As a general claim about all human persons, however, the assertion that "sexual orientation encompasses an individual's sense of personal and social identity" is remarkable and problematic conceptually and scientifically. Is it in fact the case for all individuals that their sexual orientation encompasses their personal and social identity? Many individuals, if asked who they are at the core, would not volunteer their sexual orientation as their first organizing distinctive, would not say that their sexual orientation encompasses their personal and social identity. From a scientific perspective, it is unclear how we would determine this to be the case as a universal description. It would appear that the burden of proof is on those who would make such an assertion.

Even more challenging, how does science establish that such a grounding of human identity is "legitimate"? Science may be able to contribute valuable evidence about the association of such identity configurations with certain measurable functional or pragmatic realities of life, such as whether such individuals experience heightened levels of emotional distress, report comparable levels of self-esteem, and so forth. But how did science become the arbiter of what is legitimate?

We begin to gather some sense in the 2009 APA Task Force Report that there is a fragmented recognition within the discipline of psychology that such a declaration of

84 Amicus Curiae Brief for Perry v. Schwarzenegger; 5-6.
"legitimate identity" overlaps with the domain of ethics and religion. That Report acknowledges that tension may exist between certain psychological and religious perspectives in this area. The Task Force describes gay affirming therapy as pursuing "congruence" between identity and sexual orientation, but seems to recognize that this affirmation goes beyond the traditional domain of science. The report explicitly notes that this affirmation could conflict with religious belief: "Some religions give priority to telic congruence . . . [while in contrast] Affirmative and multicultural models of LGB psychology give priority to organismic congruence."85

The late theologian Don Browning has argued rightly that psychological science, particularly as it is applied to humans, "cannot avoid a metaphysical and ethical horizon."86 He has argued further87 that psychology and the social sciences must be in dialogue with philosophy and theology, because meaningful consideration of the nature of personhood always involves moving beyond the analysis of molecular human characteristics to the broader valuation of this or that characteristic, this or that phenomenon, this or that outcome. In a moment of extraordinary clarity, the 2009 APA Task Force put their fingers on a core issue: gay affirming psychologies necessarily embody extra-scientific moral and ethical deliberations that raise the potential of conflict with religious beliefs, because the very act of giving priority to organismic congruence is a religious and ethical choice.

George Weigel's summary of the anthropological thought of John Paul II is the perfect case study of the very tension that the APA Task Force is referencing. John Paul II believed that, at the core, "the human person is a moral being as such: morality is not a culturally constructed and historically conditioned appendage to what is, essentially, a cipher. To be human is to be a moral agent. That in turn meant that we live in a human universe the very structure of which is dramatic. And the great drama of any life is the struggle to surrender the 'person-I-am' to the 'person-I-ought-to-be.'"88

The APA’s concept of organismic congruence, of embracing who I am biologically and psychologically, is a direct parallel to John Paul’s ‘person-I-am,’ and John Paul II’s concept of the ‘person-I-ought-to-be’ would be a paradigm example of the person seeking to define identity through the pursuit of telic congruence, congruence with a higher calling in tension with who I am now.

Who is to adjudicate which is the legitimate calling, the person-I-am or the person-I-ought-to-be? Browning was right; the social sciences do not contain within themselves adequate resources to adjudicate among conflicting conceptualizations of the good. This is the domain of religion, theology and philosophy. Again, the thought of John Paul II, as summarized by Weigel, is instructive.

"False humanisms imagine human beings to be infinitely plastic and malleable. A true humanism – and a true freedom – recognizes that, because certain truths are built into the human condition, human flourishing depends on living out those truths. Human sexuality, John Paul insists, unveils some of those truths."89

It is notable that John Paul II does not deny some degree of plasticity or malleability to human character, but rather grounds that plasticity in a deeper truth built into the human person. That truth is that of our created nature as males and females made for each other, with a built in trajectory towards reproduction through families created by monogamous male-female marriage.

The twin claims that science conclusively establishes that sexual orientation grounds human identity, and that psychology as a science establishes the legitimacy of such a claim, are too far a reach. It is a descriptive reality that in the lives of some persons, sexual orientation is the primary ground of identity; clearly, sexual orientation and sexual experience contribute to the grounding of every human’s identity. But the prioritization of and affirmation of the legitimacy of such practice is above the pay grade of social science.

Conclusion:

Public opinion and social policy developments today are being driven by assumptions that cannot stand under rigorous examination. Some of these beliefs are unhelpful simplifications, some simply go beyond what we reliably know, and others are demonstrably false.

The realities that emerge from the considerable research base of the field are complex. That gay and lesbian individuals together constitute less than 2% of the population does not diminish our shared moral obligation to treat them the respect. The evidence suggesting in-

89 Weigel (1999, 2001), Witness to hope; 339.
creased risk for psychological distress and physical health complications of various sorts is associated with being gay or lesbian does not validate construal of homosexuality as a mental illness; further, this increased risk may legitimately be attributed to some degree or partially an entailment of living life contrary to the normative grain of our gendered sexuality. The etiology of homosexuality is mysterious; on average it certainly involves some biological contributors and it certainly involves some socio-cultural contributors, but how these factors contribute in the formation of individual sexual orientations is mysterious, as is the role of childhood, adolescent, and adult choices made, consciously or unconsciously, that contribute to the solidification of orientation. There is sufficient evidence, however, to know that sexual orientation is quite dis-analogous to race.

We know that homosexuality is not immutable, but we have little basis to believe that every individual homosexual person can reorient to heterosexuality, and have many reasons to believe that a process of change is demanding and uncertain. Just as we know from the research of Evelyn Hooker and others that some homosexual persons are just as psychologically strong and resilient as some heterosexuals, so also we know that some homosexual relationships can be admirable in many ways, and remarkably equivalent on certain important dimensions of health and stability compared to heterosexual relationships. But we also know without question that homosexual partnerships do not have the intrinsic capacities for reproduction of male-female pairings, and have good reason to believe that the typical homosexual relationship differs in certain ways from the average heterosexual relationship. We know that some individuals ground their identity in their sexual orientation; we have insufficient resources within the social sciences to determine the legitimacy of this reality.

Our culture is polarized between those relentlessly advancing the full acceptance and normalization of all things homosexual, indeed of all sexual variations, and those resisting those moves in the name of traditional values. There are, of course, many bewildered individuals poised between the polarities, uncertain what the issues are but moved by compassion in response to stories of the sufferings of GLB persons but often equally moved – perhaps by deeply rooted instinct, perhaps by nostalgia –by a deep fear of change. I can propose no easy or innovative third way; the choices before us as a culture indeed appear to be profound and fundamental.

As moral and religious traditionalists face this profound polarization, it is important that we confess our own culpability in creating the mess we are in. We were complicit, even if ignorantly and passively so, in the cultural embrace of the disease conceptualization of homosexuality. We offloaded responsibility for the articulation of a thoughtful, caring, theologically rich and pastorally sensitive understanding of sexual brokenness onto the disease conceptualization, and thus were unprepared for the vacuum created by its timely demise. We have failed to articulate thoughtful understandings of human sexuality in light of evolving scientific findings and cultural developments. Perhaps most importantly, we failed and continue to fail to engage individuals who embrace homosexual identity with compassion, understanding, and love, and to seek to defend them against unjust discrimination and violence.

We know much more now than we did 10 and 30 years ago about the emotional well-being of homosexual persons, the complicated interaction of nature and nurture in the causation of sexual orientation, of the complicated, limited, and difficult possibilities of sexual orientation malleability, of the functional and descriptive characteristics manifest in same-sex partnerships and of the contours of the psychological identities of homosexual persons. The contributions of science to this complicated area, however, remain sketchy, limited and puzzling. It is remarkable how little scientific humility is in evidence given the primitive nature of our knowledge.

Perhaps if our culture can recognize the fluid and incomplete nature of our knowledge of the homosexual condition, if we can recognize the limits of reason, we may be able to create a public space where differing parties agree to disagree and give each other room to live in civility. But the best ecclesiastical, professional, legal and social policy will not be founded on falsehoods or on grotesque and indefensible simplifications, but on a clearheaded grasp of reality in all its complexities, as well as on a humble recognition of all that we do not know.