

BIOLOGICALLY BIASED BENEFICENCE

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INTRODUCTION

After death and after taxes, the laws relating to wills, trusts, and intestate succession determine what to do with a decedent's assets. Much of that body of law is built upon the assumption that the law should help the decedent reach her goals if she has expressed them, or mimic her probable goals if she has not.¹ As put by Daniel Kelly, "The organizing principle of succession law is testamentary freedom."² While the wishes of decedents are certainly relevant, as a normative matter there are other concerns deserving attention.³ This Paper discusses some biological reasons to worry about the behavior of benefactors. Various potential bio-biases in the hearts of donors will be identified, followed in each case by ideas for reforming the law. My main message is that testamentary freedom should be demoted from the organizing principle to an important consideration in the design of the law of succession.

The possible behavioral biases will be identified by examining beneficence from an evolutionary point of view. It is worth noting at the outset that some of the bio-biases discussed in this Paper might or might not exert a real influence on donative behavior. Although I present enough theory and evidence to worry about these biases, the reader should not expect

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1. See, e.g., UNIF. PROBATE CODE § 2-102 cmt. (amended 2010), 8 U.L.A. 81–82 (1998) (citing empirical studies of what testators want as support for its provisions regarding intestate succession).

2. Daniel B. Kelly, *Restricting Testamentary Freedom: Ex Ante Versus Ex Post Justifications*, 82 *FORDHAM L. REV.* 1125, 1184 (2013); see also Robert H. Sitkoff, *Trusts and Estates: Implementing Freedom of Disposition*, 58 *ST. LOUIS U. L.J.* 643, 643 (2014) ("The organizing principle of the American law of succession, both probate and nonprobate, is *freedom of disposition*"). This view is so common that it sometimes seems beyond question. Mary L. Fellows, *Concealing Legislative Reform in the Common-Law Tradition: The Advancements Doctrine and the Uniform Probate Code*, 37 *VAND. L. REV.* 671, 673 (1984) ("The goals of legislation in the area of succession are nondebtable—drafters should design legal rules to achieve the donative intent of individual decedents, but not to require litigation for resolving the issue of intent.").

3. Some of these other normative concerns are already reflected in the law. For example, the law rejects testamentary freedom when it prevents a decedent from leaving nothing to her surviving spouse.

conclusive proof that biased beneficence is pervasive. Nor is there proof that biases infecting donative behavior are attributable to our genes.⁴ For example, paternal beneficence biased toward sons might be due wholly or in part to patriarchal social norms. Many influences interact to generate human behavior; it is not my purpose to disentangle these forces or to specify the degree of causation attributable to each. Nor do I even attempt to set out all of the possible sources of causation. My goal is to examine some potential bio-biases built into and effectuated by our current laws relating to beneficence and to suggest some legal reforms that might mitigate unwanted consequences.

As for the reforms, a number of my suggested legal changes do not depend on a finding that bias exists. Of course, the reforms might help mitigate the bio-bias if it does exist. But, if the particular bias in question does not exist, the proposed reform will not create a new and opposite bias. And, whether benefactors are biased or not, the reforms could help to confirm that the law values fairness.

I. BIAS IN FAVOR OF INCREASING OFFSPRING

We exist because our ancestors were good enough at producing and nurturing offspring to keep their lines of descendants from terminating. Put another way, our ancestors' brains were biased toward choices that increased offspring, not just of the first generation but of succeeding generations as well.⁵ Genes that resulted in no grandchildren or other kin were not passed along to us. As an attribute of living things, this fundamental bias is obvious and essentially beyond contest. Perhaps not surprisingly, this bias toward reproductivity found in individual human behavior also manifests itself in the rules of intestate succession. More nuanced biases will be discussed below, but even this seemingly uncontroversial bias toward reproduction brings up an issue regarding the default rules of estate distribution.

When a person dies, the state allocates some of that decedent's assets to itself in the form of taxes, some smallish amounts directly to surviving spouses and children via various statutory allowances, and the balance of the estate to persons designated by the decedent. However, some people die without making such a designation. To this extent, these decedents have died

4. It is even further from my goal to attribute rules of law to biology.

5. See GEOFFREY MILLER, *THE MATING MIND: HOW SEXUAL CHOICE SHAPED THE EVOLUTION OF HUMAN NATURE* 8–12 (2001).

intestate.⁶ For those assets that the decedent could have allocated but did not, the laws of intestate succession determine the next owners. Under these statutes, the basic order of priority is first to the spouse, then to descendants, then to ancestors and collateral relatives.⁷ Only living persons can take under the laws of intestacy. A relative who predeceased the decedent is out of luck. However, that relative, the person who would have taken if he or she had not died too soon, may be represented by his or her descendants.⁸

The way that this works under the Uniform Probate Code (“UPC”) can be seen in a simple example. *O* has two children, *Child1* and *Child2*. *Child1* has one child, *Grandchild1*. *Child2* has two children, *Grandchild2* and *Grandchild3*. Both of *O*’s children, *Child1* and *Child2*, die. Then *O* dies. Under the UPC, the assets are divided among *O*’s grandchildren, 1/3 for each.⁹ Presumably, the rationale for the law is that we should attempt to approximate the unspoken intent of the decedent, and the decedent would want to give the same amount to all grandchildren. This particular presumed intent is sometimes expressed in the phrase “equally near, equally dear.” The word “dear” obviously refers to the sentiment of the decedent. Thus, we mimic the intent we imagine the decedent to have had. But should we?

Looking through an evolutionary lens, notice the effect of this law if it is applied across many cases. *Child2*’s genes, which were more reproductive for whatever reasons, receive more assets, twice as many assets as *Child1*’s genes. (Of course they share many genes, but that is beside the point here because the shared genes did not lead to a difference in reproductivity.) There are at least two consequences. First, the law creates a small incentive for people to have more children. This marginal incentive is negligible because most people do not anticipate dying before their parents or, even if they do, they usually do not set about having more children in order to get more assets for their branch of the family tree. Second, and more important, the law provides additional assets to those genes that are more reproductive. This effect might not be negligible because it can compound over generations. Those extra assets can help the more reproductive genes in subsequent reproduction by attracting mates and supporting offspring.

We might assume that many decedents-to-be would like this effect because the law advances the replication of their genes. But the preferences

6. If the decedent has no will at all, the decedent is intestate. If the decedent has a will that distributes only some of the decedent’s probate assets, the decedent is partially intestate. *Partial Intestacy*, BLACK’S LAW DICTIONARY (10th ed. 2014).

7. UNIF. PROBATE CODE §§ 2-101–103 (amended 2010). In many cases, spouses share with other relatives.

8. *Id.* § 2-106.

9. *Id.* § 2-103.

of these persons should not alone stand as a sufficient normative justification for the law. Although evolution has inclined individual behavioral choices toward reproduction, society need not adopt that proclivity as its goal because there are factors on the other side. As a matter of policy, we might not want to give more assets to genes that have superior ability to reproduce. Humans are straining global resources as it is. And it's not likely to get better.¹⁰ It is beyond the scope of this paper to examine the question whether to foster human genes that are better at reproduction in the current environment. But we can at least raise the possibility that we should avoid building such a bias into the laws of intestate succession.

A. Possible Law Reform

An obvious potential reform is to distribute the assets per stirpes. If we apply a rule of per stirpes distribution to the example above, the probate assets are conceptually divided between *Child1* and *Child2*, one half to each. But because both children are already dead, *Child1*'s share passes to *Grandchild1* and *Child2*'s share passes to both *Grandchild2* and *Grandchild3*. Using this formula, there is no bias in favor of the superior replicators.

One objection to this reform might be that it results in unequal treatment of grandchildren. One response is that it is more important to society to avoid allocating extra assets to more reproductive genes than it is to treat grandchildren equally. Another response is that, at the gene level, the decedent's more reproductive genes and less reproductive genes are treated equally. An additional response is that current law unfairly treats grandchildren differently depending on whether one of the decedent's children is alive or not. Under the proposed reform, the treatment of the grandchildren does not vary arbitrarily with the survival of their uncles and aunts. The reform treats stocks headed by the decedent's children the same whether the children survive the decedent or not.

II. BIAS TOWARD ONE SEX OR THE OTHER

Although there are many cultural reasons that beneficence might be biased by the sex of the beneficiary, there is also a biological reason, one that is less

10. *Energy Reorganization Act of 1973: Hearing on H.R. 11510 Before a Subcomm. of the Comm. on Gov't Operations*, 93d Cong. 248 (1973) (statement of John S. Steinhart, Professor of Geology and Environmental Studies, University of Wisconsin (quoting Kenneth Boulding, "Anyone who believes that exponential growth can go on forever in a finite world is either a madman or an economist.")).

than obvious. There may be a subtle interaction between the sex of the donee and the donor's attributes and circumstances. To see why a sex-bias might be biological, we need to take a couple steps back.

We often think of gifts as being transfers for the benefit of the donee and not for the benefit of the donor. To see the possibility of sex bio-bias, we will need to view a gift to a donee as a form of investment, a transfer that can redound to the benefit the donor. But it is not exactly the donor and the donee, because we will drop down a level to the donor's and donee's genes. A gift is a transfer from one set of genes to another set of genes. In a gift from a parent to a child, half of the parent's genes are making an investment in replica genes. For each of the parent's genes, there is a 50% chance it is investing in a replica gene. Temporally, these gifts are the second form of investment. These gift-investments in children occur after the earlier investment by parents in creating the child. So there are two investments: the direct investment in making replica genes in the form of children and the indirect investment in helping replicas make replicas. The parents' genes first invest to make copies of themselves and then invest by transferring assets to those copies. The Darwinian payoff for a gene comes in the creation of replicas. The genes that we find around us today are mostly ones that were good at creating copies of themselves in the past.

So the goal of the gene is to make copies of itself by creating more children, grandchildren, or other descendants.¹¹ Since neither our male nor our female offspring can make a grandoffspring without help from someone of the opposite sex, one question for a human gene about to make offspring is which sex is the better investment. For each offspring that might be produced, there is an expected value. That expected value includes the expected cost of producing that offspring, which combines the cost of making the offspring with the cost of nurturing it through reproductive age, and the expected benefit in the number of descendants the offspring will produce.¹² If it were the case for a long enough period of time that investment in offspring of one sex had a higher expected value, genes for generating that sex would reproduce more often in the population until the advantage was

11. For simplicity, I leave out the other relatives, although they also count in "inclusive fitness." See W. D. Hamilton, *The Genetical Evolution of Social Behaviour. I.*, 7 J. THEORETICAL BIOLOGY 1 (1964). I refer to the "goal" of the gene as shorthand for what genes tend to do, notwithstanding that genes do not think and have no goals in the intentional sense.

12. James Edward Baker, *Reducing Bias and Inefficiency in the Selection Algorithm*, in GENETIC ALGORITHMS AND THEIR APPLICATIONS: PROCEEDINGS OF THE SECOND INTERNATIONAL CONFERENCE ON GENETIC ALGORITHMS 14, 14 (John J. Greffentette ed., 1987).

eroded back to equality.¹³ So, across the entire population, the expected value of a female and a male would be equal in the environment of evolutionary adaptedness. Notwithstanding this overall equality, for particular parents in particular situations, it is possible that the expected value of a female offspring was higher, or lower, than the expected value of a male, making it better to have invested in one or the other. If so, a bias may have developed leading parents in those situations to invest more heavily in offspring of one sex. Such a bias could influence either the direct investment a parent makes in creating a child or the indirect investment a parent makes in supporting the child, or both. In other words, a parent might manipulate its birth sex ratio, producing more offspring of one sex than the other, and a parent (or other benefactor) might manipulate its support after birth in favor of one sex over the other.

A. Evidence of Bias from Birth Sex Ratios

Using birth sex ratio as an indicator, there is indeed evidence that some mammals are biased in their direct investment in offspring. Collette Thogerson and her colleagues studied breeding records of mammals in the San Diego Zoo.¹⁴ They reconstructed three-generation pedigrees using ninety years of records of 198 mammalian species.¹⁵ They then examined those pedigrees to see whether parents with biased birth sex ratios had more grandoffspring than those without a bias.¹⁶ They found that a bias in sex ratio did pay off in a greater number of grandoffspring.¹⁷ More specifically, sons of granddams (or grandsires) with male-biased birth sex ratios out-performed their peers, yielding these granddams (or grandsires) more grandoffspring.¹⁸ In addition, daughters of granddams with female-biased birth sex ratios out-performed their peers.¹⁹ They concluded that “sex ratio manipulation is a widespread and highly adaptive evolutionary strategy in mammals.”²⁰

13. See W. D. Hamilton, *Extraordinary Sex Ratios: A Sex-Ratio Theory for Sex Linkage and Inbreeding Has New Implications in Cytogenetics and Entomology*, 156 SCI. 477, 477–78 (1967) (citing R. A. FISHER, *THE GENETICAL THEORY OF NATURAL SELECTION* 158–59 (2d ed. 1958)).

14. Collette M. Thogerson et al., *Winning the Genetic Lottery: Biasing Birth Sex Ratio Results in More Grandchildren*, 8 PLOS 1, 2 (2013), <http://journals.plos.org/plosone/article/asset?id=10.1371/journal.pone.0067867.PDF>.

15. *Id.*

16. *Id.*

17. *Id.* at 3.

18. *Id.*

19. *Id.*

20. *Id.*

We can predict some of the situations in which a sex-biased investment would yield a greater return of offspring than an unbiased investment. One classic prediction was provided by evolutionary biologists Robert Trivers and Dan Willard. The Trivers-Willard hypothesis is that high condition parents invest more in male offspring and low condition parents invest more in female offspring. Why might that be? Looking at the distribution of offspring by sex, in some species it is a story of males to the tails. Here are some estimates of children of male humans whose parents' investments in them, along with lots of luck, produced a big genetic payoff: Moulay Ismael Ibn Sharif, 1700: >800 children;²¹ Sargon of Akkad, 2200 B.C.: ~200; Winston Blackmore, recent: 121;²² Ramses II, 1250 B.C.: >100;²³ Ziona Chana, recent: 94;²⁴ Emperor Meiji, 1900: 87; Ramon Revilla, recent: 72;²⁵ Rulon Jeffs, recent: ~65;²⁶ Warren Jeffs, recent: ~60.²⁷ On the other end of the spectrum were the countless parents whose investment in a male produced a genetic payoff of zero. For those parents, the less they invested in those males, the less they wasted, from a genetic point of view. When offspring are male, there is a large variance in payoff.

21. *The Man with 1000 Children: The Limit of Male Fertility*, PLOS BLOGS (Apr. 5, 2014), <http://blogs.plos.org/neuroanthropology/2014/04/05/man-1000-children-limit-male-fertility/>.

22. Daphne Bramham, *Daphne Bramham: Polygamists Thrive Even Though Polygamy Is Illegal*, VANCOUVER SUN (Apr. 13, 2016), <http://vancouversun.com/opinion/columnists/daphne-bramham-polygamists-thrive-even-though-polygamy-is-illegal>.

23. John Noble Wilford, *Tomb of Ramses II's Many Sons Is Found in Egypt*, N.Y. TIMES, May 16, 1995, at A1.

24. Terrence McCoy, *Indian Politicians Court Man with 'World's Biggest Family': 39 Wives, 127 Offspring*, WASH. POST (Apr. 14, 2014), <https://www.washingtonpost.com/news/morning-mix/wp/2014/04/14/indian-politicians-court-man-with-worlds-biggest-family-39-wives-127-offspring/>.

25. Dino Crescini, *Ramon Revilla Sr. Has 72 Kids*, PHILIPPINE TRIB. (Dec. 3, 2011), <http://www.philippinesentinel.org/2011/12/ramon-revilla-sr-has-72-kids/>.

26. Wade Goodwyn et al., *Warren Jeffs and the FLDS*, NPR (May 3, 2005), <http://www.npr.org/templates/story/story.php?storyId=4629320>.

27. Yanan Wang, *Federal Food Stamp Fraud Charges Could Topple Warren Jeffs's Polygamous Utah Sect*, WASH. POST (Feb. 24, 2016), <https://www.washingtonpost.com/news/morning-mix/wp/2016/02/24/federal-food-stamp-fraud-charges-could-topple-warren-jeffss-flds-church-utahs-largest-polygamous-sect/>. The numbers of children indicated are merely estimates. Biology and parental investment are not the only components in these stories of reproductive success, of course. These males were aided and abetted by social norms. U.S. Presidents might be persons who biologically could have many children, but political norms probably prevent them from being at the top in reproduction. Moreover, their ultimate status is often not achieved until they are past their primary reproductive years. As will be seen below with rich men, whether they have wealth at an early age seems to make a reproductive difference.

We can imagine the contexts in which the investment in males paid off. Various sorts of resources have contributed to the creation of reproductively successful males, many of which could have been observed by the parents. Those resources include genes of the self; the parent might recognize traits in itself that could make sons that would be attractive to potential mates. Similarly, the parent might recognize traits in the mate that could help make reproductively successful male offspring. The resources would also include physical assets and social position available from the parent and from the mate.²⁸ If the parent or the mate is a king, the offspring have a good chance of using the king's resources to attract mates. The parent might also recognize that physical and social resources will be available from other sources to help make reproductive successes out of male offspring. In addition, parents might recognize traits in the offspring that might make it possible for them to become a success.²⁹ On the other hand, the parent might recognize that such resources are not available to the offspring, and that an investment in a male has little chance of paying off.

Parents or other relatives who invested highly in what turned out to be unsuccessful males tended not to pass their genes along. Parents who failed to invest highly in males when their investments would have paid off handsomely were also at a genetic disadvantage. Adaptations for recognizing, subconsciously, when a male might be reproductively successful had an evolutionary advantage.

On that same scale of grandoffspring, compare the historical returns from parental investments in female offspring. On the one hand, for females, healthy survival to the age of reproduction was enough to create a good chance of producing grandoffspring. It did not take a huge investment to have some reproductive success. However, an investment beyond that needed to sustain the health of a female would not necessarily have brought much marginal payoff,³⁰ and certainly would not have made the female as

28. Rosemary Hopcroft reported that income has a positive effect on frequency of sex for men and that high-income men have more biological children than low-income men and high-income women. Rosemary L. Hopcroft, *Sex, Status, and Reproductive Success in the Contemporary United States*, 27 *EVOLUTION & HUM. BEHAV.* 104, 111–13 (2006) (also providing a list of studies finding a positive relationship between male status and surviving offspring in a number of animals and preindustrial human populations).

29. This is obviously not a factor in birth sex ratio, but could be a factor in investment after birth.

30. Indeed, today the genetic payoff may be negative. Rosemary Hopcroft found that women of higher occupational status and prestige have fewer children than women of lower status. Hopcroft, *supra* note 28, at 113. It seems unlikely that, in the environment of evolutionary adaptedness, the reproductive payoff to additional resources would have been negative for

reproductive as the most reproductive males.³¹ So, if a parent could create a highly reproductive male, creating that male was a better investment than creating a female. On the other hand, most females had more offspring than the zero offspring brought by the many unsuccessful males. For that reason, if a parent did not see enough resources to afford an adequate chance of making a successful male, the better bet was to invest in female offspring. In some intermediate cases, the chances of a successful male could be just enough to equalize the expected value of male and female offspring. But in many cases, perhaps the majority, the expected genetic value of a female and male would not have been the same. In such cases, whether the chances of producing a successful male were good or were bad, for reproductive maximization the investment in males and females would have been different. Any genes inclined to invest fairly in females and males would have been out-reproduced by those playing by a contingent strategy based on the resources available to the offspring.

The Trivers-Willard hypothesis predicts that high condition parents will have more surviving sons, while low condition parents will have more surviving daughters.³² There is evidence that this biological strategy exists in humans. Charles Darwin noticed that “the proportion [of male births] is also mysteriously affected by the circumstance of the births being legitimate or illegitimate.”³³

females. But if it was, genes could have evolved to impose a limit on parental support for female children.

31. For many mammalian species, including humans, biology limits the maximum offspring for females more than for males. Social constraints may place additional limits on reproduction, and in theory could eliminate or reverse the difference in variances. For example, if men and women were limited to one mate each, there would be no difference in variance. But human social constraints are usually not so narrow and the difference in biological potential seems to result in a parallel difference in actual reproduction. So, practically speaking, the limit on human reproduction is imposed by females. As a result, for each additional child born to a reproductively successful male, there is one less child born to other males. *See generally* Gillian R. Brown et al., *Bateman's Principles and Human Sex Roles*, 24 *TRENDS ECOLOGY & EVOLUTION* 297 (2009).

32. Thogerson et al., *supra* note 14.

33. CHARLES DARWIN, *THE DESCENT OF MAN, AND SELECTION IN RELATION TO SEX* 264 (1871). The mystery is being investigated. Stress might be the mechanism by which parental condition affects sex of a child. Paternal stress could change sperm motility. Or maternal stress could change conditions in the womb, which would change sex ratios if Y-bearing sperm are faster but less robust than X-bearing sperm. *See* Kathreen E. Ruckstuhl et al., *Mother's Occupation and Sex Ratio at Birth*, 10 *BMC PUB. HEALTH* 269, 269 (2010). Or conditions in the womb could affect the fetus differently. Ralph Catalano and his colleagues found that birth of males fell about four months after the terrorist attacks on September 11, 2001, indicating that stress on the mother during the second trimester may have a disproportionate effect on males in utero. Ralph Catalano et al., *Exogenous Shocks to the Human Sex Ratio: The Case of September 11, 2001 in New York City*, 21 *HUM. REPROD.* 3127, 3130 (2006). *See generally* Satoshi Kanazawa, *Violent Men Have More Sons: Further Evidence for the Generalized Trivers-Willard*

Douglas Almond and Lena Edlund examined records of births to white mothers and infant deaths in the United States during a period of close to two decades.³⁴ With data covering 48,000,000 births and 310,000 deaths, they found that married and better educated mothers had more surviving sons.³⁵ Married mothers had 0.2% higher chance of having a son than an unmarried mother.³⁶ Mothers without high school degrees were 0.6% less likely to have a boy than mothers with some college.³⁷ A mother's being married lowered the probability that the deceased child was male.³⁸ The mother being married and over thirty-five years old reduced the chances that the post-neonatal decedent was male by 10% compared to unmarried teenage mothers.³⁹ The authors concluded that these generally small effects are "strongly supportive of the TW hypothesis."⁴⁰

Kathreen Ruckstuhl and her colleagues found that when mothers' partners have high income, the mothers have more sons.⁴¹ In addition, they found that when mothers' partners do not have high income, the birth sex ratio varies in part according to the stress of the mother's occupation, with mothers in high stress jobs giving birth to more daughters.⁴² Rosemary Hopcroft found from data in the General Social Surveys that fathers having high occupational prestige, high socioeconomic status, and high vocabulary have a higher percentage of boy children than fathers having low status.⁴³ Ohto Kanninen

Hypothesis (gTWH), 239 J. THEORETICAL BIOLOGY 450, 457 (2006) (suggesting that testosterone may be the proximate mechanism for biasing sex ratio).

34. Douglas Almond & Lena Edlund, *Trivers-Willard at Birth and One Year: Evidence from U.S. Natality Data 1983–2001*, 274 PROC. ROYAL SOC'Y B: BIOLOGICAL SCI. 2491, 2495 (2007). To avoid confounding factors, it could be important to study white mothers separately from African American mothers because the latter have slightly fewer sons, see Catalano et al., *supra* note 33.

35. Almond & Edlund, *supra* note 34.

36. *Id.* at 2493.

37. *Id.*

38. *Id.* at 2495.

39. *Id.*

40. *Id. But c.f.*, Karen Norberg, *Partnership Status and the Human Sex Ratio at Birth*, 271 PROC. ROYAL SOC'Y B: BIOLOGICAL SCI. 2403, 2403, 2405, 2407 (2004) (concluding that mothers living with opposite-sex partners gave birth to significantly more sons (51.5%) than mothers not living with partners (49.9% sons); when comparing only siblings, sons were about 14% more likely for mothers living with partners, supporting the "partnership-status hypothesis" rather than the "narrow-sense" Trivers-Willard hypothesis).

41. Ruckstuhl et al., *supra* note 33.

42. *Id.*

43. Rosemary L. Hopcroft, *Parental Status and Differential Investment in Sons and Daughters: Trivers-Willard Revisited*, 83 SOC. FORCES 1111, 1125 (2005) (not finding the same factors in mothers to increase birth of sons); see also Satoshi Kanazawa, *Big and Tall Parents Have More Sons: Further Generalizations of the Trivers-Willard Hypothesis*, 235 J. THEORETICAL BIOLOGY 583, 588 (2005) (stating the "generalized Trivers-Willard hypothesis")

and Aleksi Karhula recently found that a change of one standard deviation in disposable income in OECD countries is associated with an increase of one male birth per 1,000 female births.⁴⁴

Rather than studying birth sex ratios across the whole range of wealth, Sebastian Schnettler focused on the extreme end of the wealthiest parents, studying billionaires.⁴⁵ Distinguishing men who inherited from men who earned their billions, he found a higher male birth sex ratio for fathers that had inherited their wealth while the self-made men had a ratio about the same as the general population.⁴⁶ Although the study found that evidence for the Trivers-Willard effect in a subgroup of male billionaires, the female billionaires who inherited their wealth had a male birth sex ratio below that of the general population.⁴⁷

B. Evidence of Sex Bias in Support After Birth

The studies above focused on the number of male and female children or the ratio of the two. Fewer, but more germane, studies have investigated the investment in indirect production of gene copies, that is to say, investment of resources in children after they are born. In her 2005 study, Rosemary L. Hopcroft correlated various measures of American fathers' occupational status with education levels of their children.⁴⁸ Sons of high-status fathers attain a slightly higher level of education than daughters; and daughters of low-status fathers attain a slightly higher level of education than sons.⁴⁹ An increase in an American father's occupational status thus produces a greater educational increase for sons than for daughters.⁵⁰ One interpretation of this relationship is that an increase in available resources increases the chances of producing a reproductively successful male and therefore justifies, as a

(gTWH) and finding that taller parents have fewer surviving daughters and heavier parents have more surviving sons); Kanazawa, *supra* note 33, at 455–56 (stating that women who have had arguments with a partner that ended in physical violence have more sons).

44. Ohto Kanninen & Aleksi Karhula, *Changes in Income at Macro Level Predict Sex Ratio at Birth in OECD Countries*, 11 PLOS 1, 4 (2016), <http://journals.plos.org/plosone/article?id=10.1371/journal.pone.0158943>.

45. Sebastian Schnettler, *Revisiting a Sample of U.S. Billionaires: How Sample Selection and Timing of Maternal Condition Influence Findings on the Trivers-Willard Effect*, 8 PLOS 1, 1 (2013), <http://journals.plos.org/plosone/article/asset?id=10.1371/journal.pone.0057446.PDF>.

46. *Id.*

47. *Id.* at 3–4.

48. Hopcroft, *supra* note 43, at 1111.

49. *Id.*

50. *Id.* at 1120.

genetic matter, a higher investment in the males.⁵¹ Conversely, a decrease in available resources increases the chances of producing an unsuccessful male and justifies a lower investment in males.⁵² In 2008, Gordon Dahl and Enrico Moretti reported that, in the United States, mothers whose first child is a girl have a slightly lower chance of ever marrying.⁵³ They also found that when unmarried fathers find out by ultrasound that their child is a girl they are less likely to marry the mother before delivery.⁵⁴ And they found that parents whose first child is a girl have a higher chance of divorcing.⁵⁵ If marrying and staying married are forms of extra investment by the parents, these observations might fit with the Trivers-Willard hypothesis. When the baby is a girl, a single mother may be sufficient to sustain her life. When the baby is a boy, the extra resources made available by marrying might improve his reproductive opportunities, or the opportunities he would have had in the ancestral environment. Although societal sexism could be responsible for the results, our evolved psychology might play a role without our being aware of it.

From one point of view, it could be argued that the Trivers-Willard strategy is not a bias in favor of males, it is a contingency plan that sometimes favors males and sometimes favors females. It is obvious that a Trivers-Willard inclination would work to create a gap between some males who get huge support and other males who get little. And across the sexes, it is quite possible that more females than males benefit from the strategy. Marianne Bertrand and Jessica Pan found single mothers, unlike married mothers, invest more in their girls and feel closer to them.⁵⁶ But even if the girl beneficiaries of the Trivers-Willard strategy are more numerous than the boy beneficiaries, the conditions in which females get more resources will tend to be ones in which there are fewer resources available to the offspring as a group. Females get more when there is less and males get more when there is

51. *Id.* at 1114–15.

52. *Id.*

53. Gordon B. Dahl & Enrico Moretti, *The Demand for Sons*, 75 REV. ECON. STUD. 1085, 1086 (2008) (not mentioning Trivers-Willard).

54. *Id.* at 1091.

55. *Id.* at 1086; *see also* Kristin Mammen, *The Effect of Children's Gender on Living Arrangements and Child Support*, 98 AM. REV. ECON. 408, 412 (2008) (Boys are more likely to live in a household with access to a man's income.). *But see* Amar Hamoudi & Jenna Nobles, *Do Daughters Really Cause Divorce? Stress, Pregnancy, and Family Composition*, 51 J. DEMOGRAPHY 1423, 1444 (2014) (finding that half of the difference in divorce may be attributable instead to stress).

56. Marianne Bertrand & Jessica Pan, *The Trouble with Boys: Social Influences and the Gender Gap in Disruptive Behavior*, 5 AM. ECON. J. APPLIED ECON. 32, 34–35 (2013) (explaining that single mothers tend to invest less emotionally, financially, and time-wise in their sons than in their daughters).

more. Depending on what it takes for parents to perceive themselves to be in low or high condition, the net effect of the bias could be that a subgroup of males within each generation receives a large majority of the total resources provided by the previous generation.

The types of support that parents provide are many and varied. One form of support could be financial; another could be educational; yet another could be providing child care to offspring of the daughter freeing her up from the second shift at home and allowing her more time for professional work. Perhaps this is a small part of the explanation of the glass ceiling: females are sometimes not supported by their families to that last degree necessary to reach the highest levels of business.⁵⁷

The Trivers-Willard hypothesis does not predict that all animals will behave in accordance with it. Some species might have the bias as a part of their strategy and some might not. Moreover, within a species that does invest according to Trivers-Willard, some individuals might not have the bias within their genes while others do. Finally, even within the individual animals that have a sex-bias strategy in their genes, not all of their behavior will be governed by the bias. Consider the taste for eating sweets. Some animals do not have the preference. Some humans have a stronger preference than others. And within those who have the preference, many resist the preferences, overcoming it with rational, deliberative behavior. As with sweets, some people might harbor stronger preferences than others do for contingently supporting male or female relatives. And some people might override those preferences by deliberate consideration of fairness. Not all genetic predispositions are universally shared and behaviors do not always follow genetic proclivities.

It has not been proved that Americans harbor a sex bias in their preferences for donation or behave in accordance with it. But there is enough theory and evidence to think that we might do so. And if we do, then we should try to do something about it by reforming the law. To come at the point from another direction, suppose that we *did* have conclusive evidence that wealthy parents gave substantially more resources to sons at death.⁵⁸ If we knew wealthy

57. This is especially likely if parents today somehow take into account the likelihood that there is a negative payoff to additional support for females. See Hopcroft, *supra* note 28, at 113 (higher occupational status and prestige for women correlates with fewer children.).

58. See Martin S. Smith et al., *Inheritance of Wealth as Human Kin Investment*, 8 ETHOLOGY & SOCIOBIOLOGY 171, 175–76 (1987) (finding support for Trivers-Willard in that wealthy Canadians left larger bequests to sons than to daughters, while poorer Canadians left more to daughters). But see Debra S. Judge & Sarah Blaffer Hrdy, *Allocation of Accumulated Resources Among Close Kin: Inheritance in Sacramento, California, 1890–1984*, 13 ETHOLOGY & SOCIOBIOLOGY 495, 515 (1992) (not finding a Trivers-Willard bias).

parents were biased toward sons, would we then think it appropriate to adopt reforms giving sons more under the laws of intestacy? Of course not. What is natural and feels right might be wrong. The laws relating to support and succession should balance justice and efficiency rather than simply implementing or attempting to mimic the intentions of potentially biased benefactors. The intention of the decedent should not be “the organizing principle” for the laws of succession.

C. *Possible Law Reforms*

1. Statutes Prohibiting Discrimination in Support of Issue

What might be done? One way to level the playing field for males and females would be to create a civil cause of action for unjustifiable discrimination in financial support. By making it illegal to discriminate on the basis of sex, the law could help to equalize the family assets available to women and men. This is admittedly a radical idea. Note however that, at one unenlightened time in the past, it was a radical idea to prevent employers and innkeepers from discriminating against people on the basis of the color of their skin. Closer to the point, it was once a radical idea to prevent employers from paying women less than men. In some places today, it may be a radical idea to intervene in parent-child relationships by making child abuse a crime. Prohibiting unfair sex discrimination in beneficence could be considered merely a refinement of the parent’s obligation to provide for the child. Making donative discrimination illegal would create a remedy for cases in which it could be proved. It would also set a social norm that says that children of both sexes are to be supported equally, helping parents to override their own discriminatory inclinations.

Exceptions would allow donors to give more to those who need it more. Parents could provide support to disabled children of one sex while not providing support to the non-disabled children of the other sex. More broadly, on grounds of both justice and utility, donors should be allowed to help those who are poorer without also helping those who are wealthier. In addition, a safe harbor would allow parents to discriminate after they execute a contemporaneous statement of reasons that one child needs more help. Another safe harbor would allow gifts that are low enough in level that they are not required to be reported under the federal gift tax.

In addition to cases in which a child needs extra support, there are cases in which the parent needs support, the child provides support, and the parent wants to reciprocate. An exception allowing discrimination should be

established to give parents freedom to reward their caregiving children. Such an exception would help to reach just results and would also allow parents enough control to create incentives for children to pay them some attention in their dotage. In addition to the general exception, perhaps various safe harbors could be created to allow parents to give more support to children who provide more support. As above, a safe harbor might allow discrimination after a parent's execution of a contemporaneous statement of reasons for reciprocating. Other safe harbors could be for gifts by parents who have reached age seventy, or gifts to a child into whose home the parent has moved, or gifts to a child who is providing full-time caregiving.

As with all legal reforms, there would be costs. One is the obvious cost of preventing people from acting in accordance with their preferences. However, sometimes a legal constraint shapes preferences and the reshaped preferences fit the constraint. Seat-belt requirements are an example. That requirement causes less annoyance now that people's preferences have changed than it did when first imposed. Rules against racial discrimination may be similar. A study by evolutionary psychologists Robert Kurzban, John Tooby, and Leda Cosmides found that categorization by race can be diminished by providing cues for other systems of social alliance and concluded that race can be overwritten by new circumstances.⁵⁹ However, we ought not be confident that a rule against discriminating in the provision of support to children would be similarly absorbed into donors' preferences. The argument here, in contrast to that regarding race discrimination, is that contextual sex discrimination may be built into our genes. A Trivers-Willard contingent preference might have been adaptive in the environment of evolutionary adaptedness. When behaviors are rooted in preferences that are honed by evolution we should expect that those preferences will not easily be reshaped or unlearned and that the reins used to constrain the behavior will continue to chafe.⁶⁰ If people have a taste for Trivers-Willard discrimination, rules against discriminating will annoy them.

Another consideration against a rule prohibiting discrimination is that it would generate litigation. The cost of that litigation would depend on the cost

59. Robert Kurzban et al., *Can Race Be Erased? Coalitional Computation and Social Categorization*, 98 PROC. NAT'L ACAD. SCI. 15,387, 15,391 (2001).

60. This is related to Owen Jones's "Law of Law's Leverage," which I interpret to say that, generally, the more adaptive a behavior was in the past, the harder it will be for law to change it. See Owen D. Jones, *Time-Shifted Rationality and the Law of Law's Leverage: Behavioral Economics Meets Behavioral Biology*, 95 NW. U. L. REV. 1141, 1190 (2001) ("The magnitude of legal intervention necessary to reduce or to increase the incidence of any human behavior will correlate positively or negatively, respectively, with the extent to which a predisposition contributing to that behavior was adaptive for its bearers, on average, in past environments.").

of each suit and the frequency of suits. The cost of each suit would not be trivial, as it would require investigation into both the question of disparate treatment and the possibility of legitimate grounds for treating one beneficiary better than another, all of which would allow a fair degree of fact development and disputation. Because the discriminatory behavior may be based on deeply held preferences, it seems likely that there would be many suits and that the frequency of suits might not diminish with time. Safe harbors could reduce the costs, but we can hardly expect costs to fall to the point of negligibility. In the end, efficiency concerns might outweigh the fairness benefits of allowing suits for equal treatment. But the relative importance of efficiency to the public should not be overestimated. Elites in the business of legal reform ought to consider the possibility that the public generally may be more willing to pay for fairness than they are. Using dictator-game experiments, Raymond Fisman and his colleagues found that average Americans care more about fairness than legal elites do.⁶¹

A third cost of a ban on sex discrimination in donation would be the cost to the legal system itself. If the desire to discriminate among children by sex is innate, unlike race discrimination appears to be, it might seem quite wrong to prevent people from doing it. Imposing effective constraints could contribute to a loss of legitimacy for the legal system in the eyes of the public. If the public sees the legal system as illegitimate, the law has diminished capacity to coordinate behavior and set norms without high costs of monitoring and punishment. All in all, the case is mixed for constraining parental discrimination by individual lawsuits.

2. Judicially Determined Limits on the Degree of Discrimination

An intermediate approach would be to limit the degree of discrimination. England, Australia, New Zealand, and some Canadian provinces protect children with a system of family maintenance,⁶² which allows courts to make distributions from an estate to spouses, children, and other dependents of the decedent.⁶³ The authority of the courts comes from statutes, but those statutes leave the discretion as to how to apportion the decedent's assets in the hands

61. See generally Raymond Fisman et al., *The Distributional Preferences of an Elite*, 349 SCIENCE aab0096-1 (2015) (comparing students at Yale law school to people in the American Life Panel).

62. Elizabeth Travis High, *The Tension Between Testamentary Freedom and Parental Support Obligations: A Comparison Between the United States and Great Britain*, 17 CORNELL INT'L L.J. 321, 330 n.56 (1984).

63. *Id.* at 321.

of judges.⁶⁴ Such an approach has the obvious disadvantages of increasing administrative costs, including litigation, and diminishing the predictability of the law. Indeed, such costs might be higher than they would be for a rule against discrimination. In addition, there is no certainty that the judges would treat children fairly. They might harbor the same sorts of systematic biases found in donors.

3. Statutorily Specified Limits on Discrimination

To avoid the high costs of litigation under a discretionary rule or an action for equal treatment, the difference in treatment of children or their issue could be limited by a statutory formula. One approach would be to impose a maximum ratio (say 3/2) or a maximum dollar limit on the difference in treatment of children, including lifetime and testamentary gifts. For this purpose, lifetime gifts would include only those that must be reported under the federal or state gift tax. The federal gift tax does not require individuals to report gifts of less than \$14,000 or payments by parents for tuition or medical expenses.⁶⁵ This exclusion would eliminate the vast majority of gifts, leaving only gifts that might create large dollar differences in treatment. Another approach would be to require minimum net gifts for each child.

For the most part, the law in the United States has not imposed substantial limits on the freedom of donors to discriminate between their children. The notable exception is the State of Louisiana, which protects children by automatically giving them a share of the decedent's assets, unless the parent has just cause to disinherit the child.⁶⁶ If there are one or two children, the share is one-fourth; and if there are more than two children, they divide one-half.⁶⁷ Originally, this protection was given to all children, but it has now been dramatically narrowed to those children either under twenty-four years of age or with a specified disability.⁶⁸ Another exception is the unusually generous homestead protection in Florida, which reserves some of the decedent's estate to the children.⁶⁹

The idea of expanding state protection of children is not new. For decades, American academics have argued to no avail that states should do more to

64. *Id.* at 328–29.

65. *Frequently Asked Questions on Gift Taxes*, IRS, <https://www.irs.gov/businesses/small-businesses-self-employed/frequently-asked-questions-on-gift-taxes> (last updated Oct. 31, 2016).

66. LA. CIV. CODE ANN. art. 1494 (2014).

67. *Id.* art. 1495; *see also* Succession of Pratt, 704 So. 2d 310, 313 (5th Cir. 1997) (“As one of two children of the decedent, [the heir] is entitled to 25% of the estate of the decedent.”).

68. CIV. CODE art. 1493.

69. FLA. CONST. art. X, § 4.

protect children from disinheritance.⁷⁰ Those favoring protection often note that many jurisdictions outside the United States have seen fit to protect children from unfair treatment by parents.⁷¹ France, to take one example, has since 1804, effectively limited discrimination between children by protecting each with a share of the decedent's assets.⁷² If there are two children, they each take one-third of the decedent's estate.⁷³ If there are three or more children, they share three-fourths of the estate.⁷⁴ Lifetime gifts are included in calculating the children's shares, and heirs can bring suit against recipients of inter vivos gifts if those assets are needed to fulfill their shares.⁷⁵ Despite 2006 amendments relaxing the restrictions on testators, French law continues to offer children substantial protection from discrimination.⁷⁶

A collateral benefit of the automatic share approach of Louisiana or France is that persons who succeed in exercising undue influence receive less reward from their malfeasance. Reducing the reward for overreaching increases fairness and decreases incentives for bad behavior. In addition, and interestingly, establishing an automatic share might reduce litigation over estates. John Langbein has suggested that allowing total disinheritance of issue has created a class of plaintiffs, dissatisfied with their inheritance, who can bring plausible challenges to the probate of a will. Like many other academics, he is willing to pay that price for a "liberal testamentary freedom to disinherit children who turn out to be . . . disappointing and unsavory."⁷⁷ There may be many cases, however, where the disinherited children did nothing to deserve it and disinheritance is arbitrary and unfair. Moreover, as indicated above, human biases that lead to systematically unfair differences in distribution will often make the discrimination seem to be deserved. The unfairness that results from deeply held biases must be added to the side of the balance weighing against uncanalized testamentary freedom.

70. See, e.g., Deborah A. Batts, *I Didn't Ask to Be Born: The American Law of Disinheritance and a Proposal for Change to a System of Protected Inheritance*, 41 HASTINGS L.J. 1197, 1197–201 (1990); Ralph C. Brashier, *Protecting the Child from Disinheritance: Must Louisiana Stand Alone?*, 57 LA. L. REV. 1, 2 n.8 (1996) (citing articles dating back to 1928 criticizing the failure of American law to protect children against disinheritance). It is somewhat puzzling that rules of succession that would reinforce the family as a unit have generated so little support in the United States.

71. For a list of these countries, see Brashier, *supra* note 70, at 1 n.3.

72. Ray D. Madoff, *A Tale of Two Countries: Comparing the Law of Inheritance in Two Seemingly Opposite Systems*, 37 B.C. INT'L & COMP. L. REV. 333, 342–44 (2014).

73. *Id.* at 343.

74. *Id.*

75. *Id.* at 342–43.

76. *Id.* at 343.

77. John H. Langbein, *Book Review: Will Contests*, 103 YALE L.J. 2039, 2042 (1994).

4. An Elective Share for Children

The idea of the spousal elective share embodied in UPC §2-202 could be modified to protect each of the decedent's children with a fair level of support. The child's elective share would allow each child to waive the will and take a proportional distribution from the gifts given by the decedent to all issue. The portion could be determined by the number of children of the decedent minus the number of the decedent's children that have died without leaving issue surviving. That proportion would be multiplied by the amount of assets given to the decedent's issue. For purposes of determining equality, the gifts given to all issue would be added up by the stocks, giving each line of issue a right to the same portion. Issue of a child could make the election on behalf of a deceased child. To prevent the decedent from circumventing the minimum, the decedent's probate estate would need to be augmented with other gift-tax-reportable gifts made to issue during life. As with the cause of action proposed above, exceptions could be made for justifiable discrimination.⁷⁸ Devises to other issue would be abated pro-rata to make up the child's elective share. The UPC already provides some relief to children accidentally omitted from a will under UPC §2-302. Establishing a child's elective share would, to a degree, protect children against intentional discrimination between children.

Compared to the automatic percentage approach of other countries, one disadvantage of an elective share for children is that the conceptual starting point is the decedent's will. By defaulting to the decedent's will unless the child elects otherwise, the law creates an impression that the decedent should continue to control and that the heir needs, morally although not legally, some reason to override that control. The automatic devolution of a percentage to children starts instead with the assumption that the right thing to do is to give children some of the decedent's estate. If a child would prefer not to take, of course, the child can disclaim his or her automatic interest. The argument here is parallel to one that might be made in favor of community property over the spousal elective share. Community property says that justice is served by splitting the marital property, whereas the elective share starts with decedent control and requires the surviving spouse to set aside the decedent's will by making a timely election.

78. The augmented estate could also include the assets of the children, so as to prevent circumvention by giving assets with more earning potential to some children, but the administrative cost of doing that might be too high.

5. The Doctrine of Advancements

Rules limiting what donors can do are one approach to the problem of discriminatory treatment by parents. A softer approach is to change the default rules that apply when donors have not effectively specified their desired results. In other words, the law could assume, unless a donor specifies otherwise, that donors do not want their gifts to be biased by the sex of the donee. One example of changing the default rules was suggested above in the proposal to use a rule of per stirpes distribution rather than the rules of representation set out in the current UPC. To mitigate sex bias, we might change the default rule regarding the doctrine of advancements.

The advancements doctrine incorporated into the 1670 English Statute of Distribution says that gifts made during the donor's life count against the recipient's intestate share of the estate at the donor's death.⁷⁹ Suppose *O* gives son *A* \$10,000 during life and then dies intestate leaving \$20,000. *O*'s heirs are son *A* and daughter *B*. *A*'s gift is considered an advancement and is brought into "hotchpot," which includes the probate estate along with advancements. The total to be divided is now \$30,000, so *A* and *B* each receive a total of \$15,000. *A* takes \$5000 from the estate and *B* takes \$15,000 from the estate. This is only a default rule and would not apply if *O* said that the \$10,000 gift to *A* is not an advancement. Thus, there is no strong constraint preventing *O* from discriminating in favor of *A* if *O* desires to do so. But, if *O* does not want to discriminate, the doctrine balances *O*'s total giving so that he does not favor his son over his daughter, or vice versa.

Compared to the common law doctrine of advancements, the UPC has dramatically narrowed the application of the doctrine by requiring some writing for the creation of an advancement.⁸⁰ Thus, the UPC has changed the default rule for an inter vivos gift from being an advancement to *not* being an advancement. Because few people know of this rule, it will be a rare donor who will execute the writing required and the default rule will usually take effect. By this change, the UPC has undermined the common law

79. Statute of Distribution Act 1670, 22 & 23 Car. 2 c. 10 (Eng.) (there was an exception to hotchpot for land given to the heir at law).

80. "[P]roperty the decedent gave during the decedent's lifetime to an individual who, at the decedent's death, is an heir is treated as an advancement against the heir's intestate share *only if* (i) the decedent declared in a contemporaneous writing or the heir acknowledged in writing that the gift is an advancement or (ii) the decedent's contemporaneous writing or the heir's written acknowledgment otherwise indicates that the gift is to be taken into account in computing the division and distribution of the decedent's intestate estate." UNIF. PROBATE CODE § 2-109(a) (2008) (emphasis added). Some states have not adopted this UPC approach. *See* KY. REV. STAT. ANN. § 391.140 (2006). The comments to UNIF. PROBATE CODE § 2-109 explain, "the common law relating to advancements is altered by requiring written evidence of the intent that an inter-vivos gift be an advancement."

advancement doctrine's ability to combat unintentional donative discrimination on the basis of sex.

The reason given for the UPC's default rule on advancements is, unsurprisingly, grounded in the intent of the decedent. "Most inter-vivos transfers today are intended to be absolute gifts or are carefully integrated into a total estate plan."⁸¹ Perhaps the UPC's assumption about intent is wrong and decedents who die intestate do not intend to favor some relatives over others. Perhaps the UPC does not actually reach results the decedent would have intended more often than the common law would do. But even if the UPC is right about the decedent's unspoken, and probably unthought, intent, that intent is not the only consideration that should play a role in determining the applicable rules of descent and distribution. Justice requires that we consider whether people treat their beneficiaries fairly. If there is a substantial chance that sex bias pervades private giving, the law should attempt to reduce the pernicious effects of that bias. Changing back to the common law approach on advancements could reduce the effects of sex bias without interfering substantially with donors that, for good reasons or bad, really want to treat some relatives worse than others.⁸²

It is necessary to consider what it would take to override the default rule. The usual approach is that the requirements for a will must be satisfied for an instrument to displace the rules of intestate succession. The current UPC's advancements provision deviates from this approach by allowing instruments that would not qualify as wills to change the distribution.⁸³ One possibility is to require the donor to do more to break out of the default rule than is required by current law. For example, the rule might be that a gift qualifies as an advancement unless the decedent says otherwise in an instrument executed in compliance with the wills formalities. The document could be either a properly executed statement that the advancements doctrine does not apply, or a more complete will. In other words, the only way out of the

81. UNIF. PROBATE CODE § 2-109 cmt. (2008).

82. A collateral benefit of retreating on advancements is that it could reduce potential bias in favor of some children on the basis of birth order. Mary Fellows argued that it is consistent with the probable intent of the decedent and the general scheme of intestacy rules to treat children equally by considering substantial gifts to be advancements. Mary L. Fellows, *Concealing Legislative Reform in the Common-Law Tradition: The Advancements Doctrine and the Uniform Probate Code*, 37 VAND. L. REV. 671, 705-07 (1984).

83. See *id.* at 701. That deviation, relaxing formalities, is just one of many modern exceptions to the wills requirements. Many of the other exceptions, however, such as deeds of joint tenancy and transfers in trust, are made in instruments that are usually delivered to third parties. The involvement of third parties reduces the chances of fraud and mistake. The UPC advancements doctrine gives testamentary effect to documents that do not qualify as wills and do not have the safeguard of third party involvement.

advancements doctrine, as with other rules of intestacy, is to execute a will.⁸⁴ This approach would give the advancements doctrine the widest scope of application.

Another possibility would be to continue the UPC approach for avoiding the default rule, allowing any writing by the decedent to change the treatment of the gift, in this case to take the gift out of hotchpot. There are some dangers in being so informal. One, of course, is that the advancements doctrine would apply less often and cure less of any bias based on sex. Another danger is that it is often not clear whether informal instruments were intended to be effective, so they generate litigation. Resolving the question of intent imposes costs on both the estate and the rest of society. It is wasteful to spend thousands of dollars' worth of lawyer and judge time to resolve disputes that could have been avoided by investing a few hundred dollars in making a will. Another danger is misbehavior by heirs. After a decedent has died, an heir that finds a document that says that gifts to another heir were not advancements would have an incentive to destroy that document, bringing those gifts into hotchpot. Or an heir that receives a gift would have an incentive to forge a document that says the gifts were not advancements. (Of course, the current UPC has the same problems in reverse. The incentive to destroy the document now falls on the person who received the inter vivos gift rather than the other heirs and the incentive to forge a document falls on the heirs that did not receive the gift.) Requiring a writing that is in compliance with wills formalities or that has been filed with a third party would reduce problems of proof and reduce opportunities for misbehavior.

When choosing the method for overriding the default rule on advancements, it is also important to consider the situations in which a parent wants to reward a child for providing support to the parent. If, for example, daughters provide more support to elderly parents than sons do and if parents reward those daughters, then equalizing gifts after death could reduce parental giving to daughters. Therefore, one advantage of allowing informal instruments to prevent gifts from being advancements is that they are easier to execute than a formal will, making it easier for a parent to reward a child. If, however, it is determined that a formal document should be required in order to avoid fraud and litigation, safe harbors of various sorts should be created to allow some reciprocity by parent to child without execution of a formal document. Some of the safe harbors suggested above, such as for gifts by parents that have reached age seventy, could be relevant here as well. Another possibility could be to allow the supporting child, or other relative, to prove that she provided far more support to the parent. Although that would

84. *See id.* at 707–08.

entail some litigation, such opportunities for proof would not open the door to fraud as widely as would the recognition of informal instruments.

Reversing the current UPC's default rule on advancements would raise questions of scope. It would be highly impractical to bring into hotchpot all the gifts the decedent made during life to heirs. Fortunately, increasing justice does not demand inclusion of all gifts. It would be sensible to limit the advancements doctrine to only those gifts that must be reported under the federal or state gift tax. Excluding gifts of less than \$14,000 and payments for tuition or medical expenses would eliminate the vast majority of gifts, leaving only gifts that might create large dollar differences in treatment. For the relatively few gifts that must be reported, there would be little additional administrative cost to bringing those gifts into hotchpot. An additional way to reduce the administrative burden would be to exempt all gifts smaller than a certain portion of the decedent's estate. Or the additional exclusion could be based on the intestate shares of the decedent's heirs. If the share of each decedent is \$2,000,000, a 1% exclusion would keep gifts of less than \$20,000 out of hotchpot and even twenty years of favoritism would make a difference of only 20% in net support.

One way or another, advancements can be defined to avoid raising substantial new bookkeeping costs. Once that is done, there are many ways to construct a limit on the difference in beneficence toward children, to prevent favoritism from going too far. As suggested above in the context of a limit on wills and trusts, the difference could be limited by a ratio of net gifts. Or the difference could be limited by a maximum dollar amount. Or the difference could be mitigated by minimum net gifts for each child.

Another question of scope is whether the advancements doctrine ought to be expanded to apply in the context of wills or trusts. The law could state that gifts made after the execution of a will would be subject to the advancements doctrine unless the will indicated otherwise. A narrower expansion would be to apply the advancements doctrine to gifts made after execution of the will, but only if the will gave equal treatment to all children. Such an approach might reduce unintentional unfairness in support without interfering with justifiable differentiation.

III. BIAS BASED ON BLOOD

Human generosity is biased in favor of donees that are related by blood. Given that our offspring are not able to survive on their own for years after

birth, it is no surprise that we have evolved to support them.⁸⁵ Two potential manifestations of blood-bias are easy to identify, a bias against stepchildren and a bias against adopted children.

A. Bias Against Stepchildren

The bias against stepchildren has been called the “Cinderella effect,”⁸⁶ after Lady Tremaine’s mistreatment of her stepdaughter Cinderella, but we also recall David Copperfield’s mistreatment at the hands of his stepfather, Edward Murdstone. There is evidence that these fictional characters capture a slice of reality.⁸⁷

Child abuse research had not addressed the question of whether mistreatment by stepparents was more likely than mistreatment by biological parents until evolutionary psychologists Martin Daly and Margo Wilson, inspired by William Hamilton, examined the question in the late 1970s.⁸⁸ In the ‘80s and ‘90s, they published studies finding that stepchildren in Canada, Great Britain, and the United States incurred a greatly elevated risk of child abuse, including fatal beatings.⁸⁹ For Canadian preschoolers between 1974 and 1990, the rate per year of fatal beatings per million children at risk was 2.6 for putative genetic fathers and 321.6 for stepfathers.⁹⁰ That is a rate of fatal beatings of stepchildren one hundred times higher than fatal beatings of non-stepchildren.⁹¹ Consider also sexual abuse. Leslie Margolin and John Craft found that blood relationships make a difference here too.⁹² They studied a total of 2,372 Iowa cases of child sexual abuse involving a caretaker during the years 1985 and 1986.⁹³ The Iowa Department of Human Services

85. See generally Martin Daly & Margo Wilson, *The Darwinian Psychology of Discriminative Parental Solicitude*, 35 NEB. SYMP. ON MOTIVATION 91 (1987).

86. Martin Daly & Margo Wilson, *The ‘Cinderella Effect’ is No Fairy Tale*, 9 TRENDS COGNITIVE SCI. 507, 507 (2005).

87. *Id.* at 507–08.

88. Martin Daly & Margo Wilson, *An Assessment of Some Proposed Exceptions to the Phenomenon of Nepotistic Discrimination Against Stepchildren*, 38 ANN. ZOOLOGICI FENNICI 287, 288 (2001).

89. *Id.*

90. Daly & Wilson, *supra* note 86.

91. For more on child abuse from an evolutionary perspective, see Owen D. Jones, *Evolutionary Analysis in Law: An Introduction and Application to Child Abuse*, 75 N.C. L. REV. 1117, 1120–26 (1997).

92. Leslie Margolin & John L. Craft, *Child Sexual Abuse by Caretakers*, 38 FAM. REL. 450, 452 tbl.2 (1989).

93. These cases came to the attention of the Iowa Department of Human Services from several sources. The most prominent among them were parents (20%), social workers (20%), police (11%), and schools (10%). *Id.* at 451.

had substantiated these cases, devoting an average of 17.2 hours to investigating each case. There were 612 cases of abuse by biological fathers and 181 cases of abuse by biological mothers.⁹⁴ Margolin and Craft determined the risk ratio for biological parents and stepparents, comparing the distribution of sexual abuse to the distribution that would be expected if abuse were proportional to the number of children living with each parent.⁹⁵ For male stepparents the risk ratio was 4.08, meaning that they were four times as likely to commit sexual abuse as would be expected if sexual abuse were evenly distributed across male parents.⁹⁶ For male biological parents, the risk ratio was 0.67.⁹⁷ Thus, stepfathers were six times more likely to commit sexual abuse. For females, the risk ratios were 3.67 and 0.94, abuse being about four times more likely for children being cared for by stepmothers than for those cared for by biological mothers.⁹⁸

Thus there is evidence of increased risk of both homicide and sexual abuse by stepparents. An absence of protective feelings that would self-constrain these abusers could also explain a failure to nurture stepchildren. In Frank Marlowe's report on the Hadza foragers in east Africa, men were not seen playing with their stepchildren.⁹⁹ In Mark Flinn and his colleagues' report on Dominican children, male and female stepchildren grew less than children living without a father in the household.¹⁰⁰ In Keith Zvoch's report on educational opportunity, children living with a stepparent were less likely to graduate from high school and less likely to plan to go to college, and their families put aside less money for college.¹⁰¹ Stepchildren all too often seem not to have been able to fully activate the impulse to be generous that is activated in parents by their genetic children.

94. *Id.*

95. *Id.* at 452.

96. *Id.*

97. *Id.* at 452 tbl.2.

98. *Id.*

99. Frank Marlowe, *Showoffs or Providers? The Parenting Effort of Hadza Men*, 20 *EVOLUTION & HUM. BEHAV.* 391, 396-97 (1999) (lending support to the proposition that providing support to children is not just a matter of mating effort).

100. Mark V. Flinn et al., *Growth and Fluctuating Asymmetry of Stepchildren*, 20 *EVOLUTION & HUM. BEHAV.* 465, 475 (1999).

101. He used survey data to compare post-secondary education opportunities for children living with two genetic parents to opportunities for children living with a genetic parent and a stepparent. Keith Zvoch, *Family Type and Investment in Education: A Comparison of Genetic and Stepparent Families*, 20 *EVOLUTION & HUM. BEHAV.* 453, 456, 459, 461 (1999).

Kermyt Anderson and his colleagues interviewed men living in Albuquerque New Mexico about their support for children.¹⁰² They divided the children into four classes based on the connections between the subject being interviewed and the children.¹⁰³ One of the binary factors for grouping was whether the children were genetic children or stepchildren of the subject.¹⁰⁴ The other binary factor for grouping was whether the children were children of the subject's current mate or children of a previous mate of the subject.¹⁰⁵ The groups were: class 1, genetic children of the subject who were also children of the subject's current mate; class 2, genetic children of the subject who were children of the subject's previous mate; class 3, stepchildren of the subject who were children of the subject's current mate; and class 4, stepchildren of the subject who were children of a previous mate.¹⁰⁶ Comparing class 1 to class 3, the genetic children were treated better than stepchildren on five measures of support: odds of attending college (61% versus 39%), odds of receiving financial support for college (75% versus 52%), financial expenditures on children of age 0–17 (\$2,570 versus \$1,861), financial expenditures on children of age 18–24 (\$4,293 versus \$1,828), and time of involvement (20.1 hours per week versus 16.2).¹⁰⁷ Comparing class 2 to class 4, the genetic children were again treated better than the stepchildren on all five measures of support: odds of attending college (43% versus 13%), odds of receiving financial support for college (55% versus 29%), financial expenditures on children of age 0–17 (\$1,888 versus \$156), financial expenditures on children of age 18–24 (\$1,535 versus \$483), and time of involvement (9.5 hours per week versus 0).¹⁰⁸ The numbers show that men provided more support to genetic children up through college age.¹⁰⁹ (The numbers also show that men gave more support to the children of women with whom they lived.) The traditional law of intestate succession follows the likely intent of the decedent, treating stepchildren much worse than genetic children. But, again, that might not be fair.

102. Kermyt G. Anderson, Hillard Kaplan & Jane Lancaster, *Paternal Care by Genetic Fathers and Stepfathers I: Reports from Albuquerque Men*, 20 *EVOLUTION & HUM. BEHAV.* 405, 405–06 (1999).

103. *Id.* at 410–11.

104. *Id.*

105. *Id.*

106. *Id.*

107. *Id.* at 416.

108. *Id.* at 411, 416.

109. *Id.* at 416.

B. Possible Law Reforms

1. Reforming the Stepchild's Share in Intestacy

Until 2008, under the UPC, stepchildren were not included at all in the distribution of an intestate's estate. Though the UPC has now been reformed to include stepchildren as potential takers of an intestate decedent's estate, many states have not adopted that reform.¹¹⁰ Even under the UPC, stepchildren take only if there is no surviving grandparent of the decedent and no surviving descendant of the decedent's grandparents.¹¹¹ So, for example, if a married couple is living together with their two minor stepchildren, one a stepchild of one spouse and the other a stepchild of the other spouse, and the couple die at the same time, each child inherits only from his or her parent rather than both children sharing the assets of both parents. Whether or not the parents would not have wanted to support those stepchildren, it would be fairer to treat them equally. Put generally, the default rule should allow at least those stepchildren that lived as minors with their stepparents to qualify as children of those stepparents.¹¹² Given that the rules of intestacy are only default rules, perhaps the UPC reform should be extended even further to elevate all stepchildren to equal priority with other children rather than including them only if there is no other relative surviving the decedent.

One counter-argument to raising the status of stepchildren is that they already have an advantage over non-stepchildren because they can benefit from inter vivos and testamentary gifts from three parents. If they do receive support from two biological parents, then adding support from the stepparent increases their total support to a level above that for non-stepchildren. One response to this is that not all stepchildren get support from the absent genetic parent. For example, the missing genetic parent may have died without leaving anything to the child. Second, the evidence presented above on educational opportunity suggests that the benefit of a third parent does not outweigh the cost of living with a stepparent. Third, even when a stepchild

110. Lewis Rice Fingersh, *Uniform Probate Code (UPC) Adoption by the States*, A.B.A., http://www.americanbar.org/content/dam/aba/publications/litigation_committees/trust/50-state-probate-code-survey.authcheckdam.pdf (last visited Jan. 5, 2017).

111. UNIF. PROBATE CODE § 2-103(b) (amended 2008).

112. California has already taken a small step in this direction, but it is too narrow because it requires that there be "clear and convincing evidence that the foster parent or stepparent would have adopted the person but for a legal barrier." See CAL. PROB. CODE § 6454 (1993); see also, Danaya C. Wright, *Inheritance Equity: Reforming the Inheritance Penalties Facing Children in Nontraditional Families*, 20 CORNELL J.L. & PUB. POL. 1, 53 (2015).

does receive gifts from or through three parents, it is not clear that the extra support is adequate compensation for the lesser treatment the stepchild might have received during the life of the stepparent. In other words, extra help in some cases might bring the net expected support to the same level as for non-stepchildren. Finally, increasing intestate inheritance from stepparents is not terribly dangerous because those stepparents who do not like the result would have the power to avoid the default rule by executing a will.

2. Reforming the Spouse's Share in Intestacy

For situations involving stepchildren who lived as minors with their stepparents, there is another provision in the intestacy rules that should be reformed. In states following the UPC, when a decedent leaves a surviving spouse and descendants, and all of the descendants of either spouse are descendants of both, all of the decedent's assets go to the surviving spouse.¹¹³ However, if there are surviving stepchildren of either the decedent or the surviving spouse and the estate is large enough, the surviving spouse gets less and some assets go directly to the decedent's children.¹¹⁴

UPC section 2-102(4) applies when some of the decedent's surviving descendants are not descendants of the surviving spouse.¹¹⁵ In that case, the surviving spouse takes the first \$150,000 plus one half of the balance of the intestate's estate, leaving some assets directly to the surviving spouse's stepchildren.¹¹⁶ This provision assumes that the surviving spouse might not treat his or her stepchildren (or their issue) equally with his or her genetic children, and protects those stepchildren (and issue) to a degree. The UPC comments invoke the Cinderella effect in the justification: "the decedent's descendants who are not descendants of the surviving spouse are not natural objects of the bounty of the surviving spouse."¹¹⁷ This provision is supported by the studies cited above.

The other provision, UPC section 2-102(3), applies when some of the surviving spouse's surviving descendants are not descendants of the decedent.¹¹⁸ In that case, the surviving spouse takes the first \$225,000 plus one-half of the balance of the intestate's estate.¹¹⁹ This provision can obviously be explained by assuming that the decedent had preferences like

113. UNIF. PROBATE CODE § 2-102(1)(B) (amended 2010), 8 U.L.A. 81 (1998).

114. § 2-102(3)–(4).

115. § 2-102(4).

116. *Id.*

117. § 2-102 cmt.

118. § 2-102(3).

119. *Id.*

those of Lady Tremaine or Edward Murdstone. But, we should not assume that the decedent's preferences should govern. If the stepchildren lived with the decedent as minors, we ought to treat them equally with other children. That could be accomplished by a separate provision saying that such children are considered to be children of the decedent, as suggested above. Or the goal could be accomplished by leaving all assets to the decedent's surviving spouse on the assumption that those assets will eventually benefit the decedent's children and stepchildren equally, either by the survivor's equal support for all his or her children (which include the decedent's stepchildren) or by equal distributions if the survivor dies intestate.

C. *Bias Against Adopted Children*

Like stepchildren, many adopted children are not related by blood to their adopting parents. As a matter of biology, we might expect them to receive poorer treatment by their adopting parent. In the Iowa study of sexual abuse, Margolin and Craft found that the risk ratio for caretakers who were adoptive fathers was 3.22, somewhat lower than the 4.08 for stepfathers but still more than four times higher than the 0.67 for caretakers who were biological fathers.¹²⁰ Adoptive mother caretakers had a risk ratio of 1.34, less than half of the risk ratio of 3.67 for stepmothers and not too far from the 0.94 for biological mothers.¹²¹ The number of cases expected for female adoptive mothers was 3 and the actual result was 4, so the number of observations is extremely small on this point.¹²²

1. Possible Legal Reform

Adopted children have already been given equal status with biological children under the UPC,¹²³ but that does not exhaust the possibilities for reforms designed to protect adoptees from inferior treatment. It is probable that adoptees were given less support during the life of the decedent. Two of the reforms suggested above might be considered here as well. First, a cause of action for unequal treatment might be created. In this context, however, there is an additional factor cutting against giving adoptees a claim. If adoptees can sue, they might not be adopted. Presumably, if the choice were

120. Margolin & Craft, *supra* note 92.

121. For foster fathers, the relative risk was 1.50 and for foster mothers it was 7.50. *Id.*

122. The number of observations of abuse for stepmothers was eleven when three were expected, so these numbers are very small too. *Id.*

123. UNIF. PROBATE CODE § 2-118(a) (amended 2010).

left up to them, in most cases potential adoptees would rather suffer the increased chances of unequal treatment than the reduced chances of adoption. If that is the case, even though equal treatment would advance justice, it should probably not be forced upon the adoptees.

Second, as discussed above, we could retreat on the law of advancements. Unfair treatment during life is mitigated at the parent's death to the extent that gifts during life are advancements. Once again, this is only a default rule and can be avoided by the donor, so it falls far short of complete protection against unfair treatment. Even though benefactors can avoid the presumption of an advancement, the doctrine ought to be limited further. To avoid creating a disincentive for adoption and in the interests of fairness as well, only those gifts that were made after the adoption should be brought into hotchpot.

2. Other Approaches to Diminishing Unfairness in the Treatment of Children

We have seen reasons to believe that donors will not treat potential donees fairly. The discussion above suggests a few ways to reduce the unfairness by changing the rules relating to gifts. There are other alternatives for mitigating the problem of unfair differences in the opportunities available to children. One such alternative is the provision of education, from early childhood to post-secondary, at a cost affordable by everyone. When high-quality public education is available to all, it makes less difference whether parents support their children even-handedly.¹²⁴ Of course there are many ways to fund education, but one possibility would be to tax decedents' estates more heavily and use the revenues to provide fair educational opportunities to all children. At this time, however, the country does not appear to be moving in that direction and some children, through no fault of their own, will have few opportunities to realize their potential.

124. This reform, if it is to be called such, would complement the change in the advancements doctrine proposed above because the advancements reform would not apply to differences in gifts of college tuition.

IV. BIAS TOWARD PARENTAL CERTAINTY (BEWARE OF PATERNITY
UNCERTAINTY)

A. *Support From Fathers*

As noted above, genes that bias their bodies toward helping other bodies that contain copies of themselves are more likely to be evolutionary winners than genes in bodies that randomly cast benefits on other bodies. A body may have good reasons to suspect that another body contains copies of its genes. During the time that human genes have been evolving, mothers have known that their children are their children. A mother's genes could do themselves some good by inclining her to help her children, focusing her beneficence on them. On the other hand, during most of human evolution, fathers did not have similar certainty that persons alleged to be their children were indeed their children. Because of this paternity uncertainty, the expected payoff from investment in children after they are born would not be as high for the genes of the purported father as for the genes of the mother.¹²⁵ Thus, whether the transfers be during life or at death, we might expect fathers to invest less heavily in their children than mothers do. Fathers might be inclined to invest a bit more in themselves, in their own status, wealth, and income potential, on the chance that it will bring them more offspring, rather than investing in the offspring they already have.

If there is such a sex difference in the natural inclination to support family members, perhaps it is not worth addressing. Maybe it is not unfair because it is random. After all, some children get nothing from their parents because the parents have nothing, while other children get colossal support. Many Americans have long accepted, even defended and perpetuated, vast disparities in inheritance. Estate taxes mitigate the differences, but huge differences remain because the estate and gift taxes affect only a small portion of the population.¹²⁶ The fact that even those taxes remain under siege

125. Kermyt Anderson and his colleagues found that men who were less certain of their paternity were half as likely to report that they were extensively involved in the education of their children. Kermyt G. Anderson, Hillard Kaplan & Jane B. Lancaster, *Confidence of Paternity, Divorce, and Investment in Children by Albuquerque Men*, 28 *EVOLUTION & HUM. BEHAV.* 1, 5–6 (2007) (also finding men with more paternity uncertainty more likely to get divorced). These comparisons were not between men and women, but they do lend support to the proposition that paternity uncertainty matters to male investment in children.

126. See Chye-Ching Huang & Chloe Cho, *Ten Facts You Should Know About the Federal Estate Tax*, *CTR. ON BUDGET & POL'Y PRIORITIES*, <http://www.cbpp.org/research/federal-tax/ten-facts-you-should-know-about-the-federal-estate-tax> (last updated Sept. 8, 2016).

indicates that many Americans are not bothered by differences in the luck of the draw when it comes to acquiring parents.

It could also be argued that a sex difference in parental support is not unfair because paternity uncertainty is grounded in reality. The purported father might not be the real father. If we accept that fairness is not offended when people support non-relatives less than relatives, it could be appropriate to reduce the obligation of a father to support children in proportion to the chances that he is not the father. On the other hand, modern genetic testing can take the uncertainty out of paternity. Such testing is not emotionally costless, but it does allow some prospective donors to check paternity if it matters enough to them. Because of that advance in science, it is more reasonable now to impose on fathers an obligation to support their children than it was in the past. This is not to say that mothers should be free of an obligation to support their children. Both parents have an equal obligation to support their children, and however the obligation is made legal, it ought to apply to both. It might be expected, however, that a legally enforced obligation will be less consistent with the inclinations of fathers than with the inclinations of mothers. In other words, the effect of law reform might be to pry relatively more support out of fathers.

1. Possible Legal Reform

If it is unfair for fathers to be less generous to their children than mothers are, a couple of the legal reforms suggested above might be employed here as well. One approach would be to create a cause of action for support during life. One downside of this could be that more security would undermine incentives for children to be productive. Another approach would be to create a limiting rule that automatically transfers some of each parent's estate at death to his or her children, with no opportunity for the decedent to override that requirement. As mentioned above, France and many other foreign nations do this to some degree.¹²⁷ If the child's share were large enough, it would reduce the potential inequality between paternal and maternal support.

B. Bias in Favor of Children of Female Relatives

Just as fathers in the past were not certain their children were their children, father's relatives were not certain that the father's children were really their relatives. A woman could be quite confident that her daughter's

127. See Madoff, *supra* note 72, at 343.

children were her children. A person could be fairly confident that his sister's children were his nieces and nephews. However, the same person would usually have less confidence that his brother's purported children were his relatives. Given a choice between investing in the child of a sister and the child of a brother, all else equal, the child of the sister was a better genetic bet. Likewise, the better bet for grandparents was the child of a daughter rather than the child of a son.

1. Possible Legal Reforms

As suggested above, one might say that this bias is not unfair because it does not create a systematic benefit for either males or females, and because expected gifts should be discounted by the degree of relationship between the donor and donee. On the other hand, if it is unfair, perhaps the law could be reformed to require certain levels of support to relatives beyond children. The idea of the forced share might be extended beyond the decedent's spouse and children to relatives with lower degrees of consanguinity.

Perhaps it would be better to deal with this unfairness by use of a default rule rather than a limiting rule. The proposal above to expand the advancements doctrine could have the benefit of reducing unfairness due to paternity uncertainty without doing much harm in cases of well-deserved differences in treatment.

V. BIAS FOR REMOTE GENERATIONS

There is declining marginal utility to any support a donor might confer upon a donee. At some point, more wealth does not increase odds of survival by much and, at a high enough level, more wealth does not add much to the attractiveness of the donee as a mate. On the other hand, although the donee is likely to pass resources on to relatives of the donee and therefore relatives of the donor, there is no guarantee of that. As a result, it could be in the interest of one's genes to pass assets directly to more remote descendants rather than relying on intermediate generations to get the resources to the future generations.¹²⁸ This could be true even though the remote generations are less genetically related than the intermediate generations. Perhaps this explains part of the inclination of the rich to make gifts to generations in the distant future. Or maybe there is some other reason. Whatever the cause,

128. See Jeffrey E. Stake, *Darwin, Donations, and the Illusion of Dead Hand Control*, 64 TUL. L. REV. 705, 729 (1990) (“[F]or the very wealthy, it is genetically natural to attempt to provide life sustaining wealth to distant, unborn descendants and other gene carriers.”).

decedents in the past allocated assets to distant generations via the fee tail¹²⁹ and decedents today do so by creating dynasty trusts and other perpetuities. More than \$100 billion has been placed in perpetual trusts.¹³⁰

However sensible this is from a gene's point of view, it is possible that the assets saved for remote generations would generate more societal fairness and utility if reallocated to more immediate generations. Long ago, Lewis Simes identified the intergenerational unfairness of allowing the testamentary freedom of the present generation to interfere too much with the testamentary freedom of generations in the future.¹³¹ As to utility, there are a couple of problems created by perpetuities. Perpetuities may be used to make gifts contingent on specified behaviors. As a result, the dead hand of the past may reach out from the grave to control behaviors of the living. In addition, some perpetuities restrict immediate consumption in favor of more remote consumption. Assuming wealth continues to grow into the future, and that marginal utility declines, the consumption delayed by those perpetuities may generate less well-being for those remote generations than the same consumption would generate for those in the closer generations.

A. Possible Legal Reforms

As this social utility problem stems from deliberate intent, it is not one easily prevented with a default rule; a limiting rule is needed. For centuries the law has supplied such a limiting rule in what is known as the Rule against Perpetuities (“the Rule”). In some jurisdictions, there is also a related rule against accumulations which prevents a trust from accumulating income for more than the period of the Rule against Perpetuities.¹³² Unfortunately, in a race to the bottom, many states have limited the scope of the Rule against Perpetuities.¹³³ A potential solution is to reverse direction and expand the scope of the Rule back to near its original form. Doing so would reduce the

129. Jeffrey Evans Stake, *Evolution of Rules in a Common Law System: Differential Litigation of the Fee Tail and Other Perpetuities*, in *THE EVOLUTION OF EFFICIENT COMMON LAW* (Paul H. Rubin ed. 2007).

130. Daniel B. Kelly, *Trust Term Extension: An Economic Analysis*, 67 FLA. L. REV. F. 85, 85 (2015); Max M. Schanzenbach & Robert H. Sitkoff, *Perpetuities or Taxes? Explaining the Rise of the Perpetual Trust*, 27 CARDOZO L. REV. 2465, 2466–67 (2006).

131. See Lewis M. Simes, *The Policy Against Perpetuities*, 103 U. PA. L. REV. 707, 723 (1955) (“[W]e must strike a fair balance between unrestricted testamentary disposition of property by the present generation and unrestricted disposition by future generations.”).

132. See Robert H. Sitkoff, *The Lurking Rule Against Accumulations of Income*, 100 NW. U. L. REV. 501, 502 (2006).

133. See Robert H. Sitkoff & Max M. Schanzenbach, *Jurisdictional Competition for Trust Funds: An Empirical Analysis of Perpetuities and Taxes*, 115 YALE L.J. 356, 373–76 (2005).

problem of intergenerational unfairness and the grip of the dead hand. It could also reduce the problem of declining marginal utility of consumption if the constraints of the Rule were to cause donors to spread their beneficence across a wider group of beneficiaries in the closer generations. Of course, some recent reforms of the Rule are beneficial, such as granting immunity to commercial options.¹³⁴ And others may be justified. But the wholesale immunization of beneficial interests in trusts runs contrary to important public interests.¹³⁵

VI. BIAS ON THE BASIS OF RELIGION, AND OTHER MEMES

Our brains may be genetically inclined toward the kinds of beneficence that result in greater reproduction of our genes. But our bodies do not always operate to increase replication of our own genes. Sometimes our bodies advance the reproduction of other organisms, other replicators. Like viruses hijacking our bodies to promote their genes, ideas sometimes hijack our brains to promote their memes.¹³⁶ Religion is one type of meme that uses humans to replicate, passing from person to person, sometimes directly and sometimes indirectly via media such as books, songs, and movies. One example of a religious idea using humans to propagate the religion's memes is a provision in a will or trust that makes a gift contingent on marriage to a person whose parents belong to that religion.¹³⁷ Although provisions prohibiting marriage generally are not enforced, provisions fostering marriage within a religion have been upheld.¹³⁸ Whether this advancement of religion is good for humans and, if not, what might be done about it are beyond the scope of this paper. However, it can be noted that the preservation of the Rule against Perpetuities could help to prevent the dead hand of the past from imposing religion on generations in the distant future.

134. See Jeffrey Evans Stake, *Upper West Side Story: The Symphony Space, Inc. v. Pergola Properties, Inc.*, 669 N.E.2d 799 (1996), in PROPERTY STORIES 265, 292–95 (Gerald Korngold & Andrew P. Morriss eds., 2d ed. 2009) (discussing the absence of reasons to apply the Rule as well as reasons not to apply it).

135. See *id.* at 290–92.

136. See Jeffrey Evans Stake, *Are We Buyers or Hosts? A Memetic Approach to the First Amendment*, 52 ALA. L. REV. 1213, 1221 (2001).

137. Perhaps this memetic bias or evolutionary bias should be called an evo-bias rather than a bio-bias.

138. *Shapira v. Union Nat'l Bank*, 315 N.E.2d 825, 828 (Ohio Ct. C.P. Mahoning Cty. 1974).

VII. CONCLUSION

In drafting rules of succession, law reformers ought to be wary of the assumption that the law should be designed to accomplish the goals of decedents. Bio-biases in beneficence, while evolutionarily rational, could be socially undesirable. In other words, decedents' intentions might run contrary to interests in efficiency or justice. The possibilities of sex bias and blood bias in beneficence are just two situations in which society ought to consider overriding, at least in some contexts and to some degree, the intent of the decedent. Especially when the decedent has not even expressed an intent, the law ought to aim more directly at goals of fairness and efficiency rather than the imagined intent of the decedent. However, reformers ought also to recognize that, if a default rule is too far from what decedents would want, it can increase costs of drafting documents to override the default, can generate litigation, and can undermine respect for law. Those costs and others will in some situations make it the better course to approximate the probable intent of the decedent. But that is not to say that the intent of the decedent defines fairness or automatically trumps justice. Our genes may not always care about fairness and justice, but our legal system should always do so.