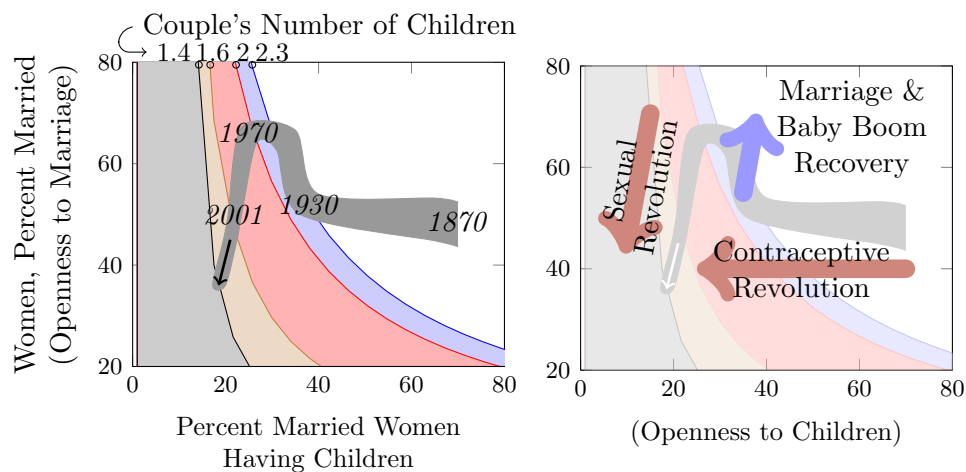


## Marriage, Contraception & The Future of Western Peoples

Henry Potrykus, Patrick Fagan

### Timeline of Western Family Size & Cultural Transitions



- The peoples of the West are self-depleting because of the adoption of extra-marital sexual norms coupled with a rejection of fertility: Negative trends in the openness to marriage and the openness to children drive an exponential decrease in the generations to come in Europe.
- A projected further decline in family size is a direct translation of declining trends of fertility and declining desires and expectations for having children, both individually among the present fertile generation and intergenerationally.
- The contraceptive mindset (x-axis, fewer children) is of one cloth with the West shifting its economic orientation from family enterprise to individualist labor activity while simultaneously moving from religious to secular social values.
- Remediation lies in a re-adoption of stable marriage as a societal norm and the rejection by governments and peoples of this non-sustainable model of society—areligious, sexually polymorphous, serial polygamy—and its replacement by a less secular, more traditional, family-oriented life.

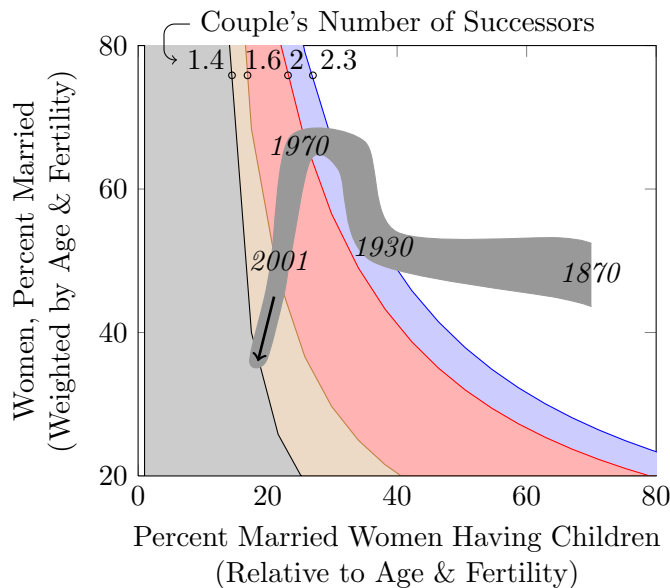
## Marriage, Contraception & The Future of Western Peoples

Henry Potrykus, Patrick Fagan\*

November 30, 2011

Chart 1: Timeline of Western Family Size by Openness to Children & Openness to Marriage

Sources: Princeton European Fertility Project (—1970);<sup>1</sup> Sobotka,<sup>7</sup> Eurostat (2001, 2008), MARRI projection



### Overview

We show in Chart 1 how cultural trends in marriage and family planning actions<sup>1</sup> drive an exponential decrease in the generations to come in the West. Remediation of this lies in a re-adoption of stable marriage as a societal norm and the rejection by governments and peoples of a non-sustainable model of society—elaborated herein—and its replacement by a less secular, more traditional family-oriented life in our steering of ourselves as a people.<sup>2</sup>

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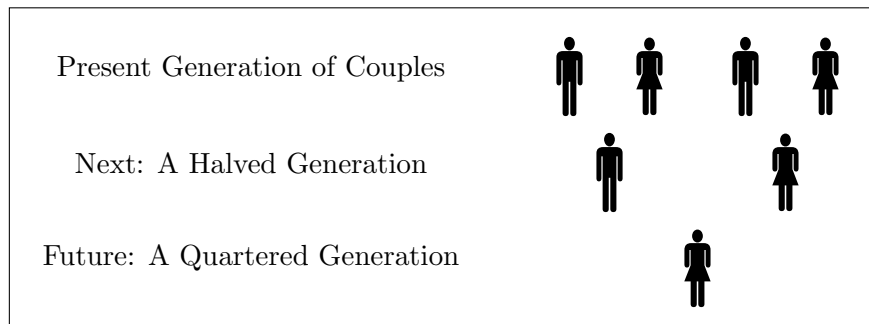
<sup>1</sup>Family planning has worked uniformly against the openness to children, see Chart 5, Footnote 10, the Discussion section and Footnote 29.

<sup>2</sup>On the final point, see the Discussion section and Footnote 27.

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In the last 150 years, the West has moved from a cultural norm of intact married religious family life to, increasingly, a norm of areligious, sexually polymorphous, serial polygamy. This model of human sexuality contains within its very conception both the erosion of the stable married family and the erosion of an openness to children. We demonstrate through a quantitative analysis of Europe that the abandonment of this model is necessary for the continuance of Western nations and peoples.

Chart 2: Elementary Depiction of Exponential Decline in Fertile Individuals—Generation over Generation



### Population Replacement

If in an otherwise stable, modern population the average woman has 1.05 children instead of 2.1—the minimum required for the population’s continuance—generationally the population halves:  $1.05/2.1 = 50\%$  (see Chart 2). That is, if the population has a stable average lifespan of over 70 years—the long average lifespan necessary to assure that most women pass through their fertile years—then one can see a well-described exponential shrinking of the population over the generations.

Regardless whether this lifespan increases,<sup>3</sup> the child-bearing heart of the people—that fertile subpopulation of women between 15 and 45 years of age—still follows this exponentially decreasing trend. Further, increased lifespans and decreased fertility accelerate the aging of the population, as there are less and less young people and more and more elderly, the latter to be supported by that smaller, younger cohort. This is known as an inverted population ‘pyramid,’ and may be termed the “Hong Kong model,” for Hong Kong has already achieved the “total fertility rate”<sup>4</sup> of 1.05 high-

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<sup>3</sup>This has been the case throughout the twentieth century in the West.

<sup>4</sup>Tomas Sobotka and Wolfgang Lutz. *Misleading Policy Messages from the Period TFR: Should We Stop Using It?* Tech. rep. European Demographic Research Papers 4. Vienna

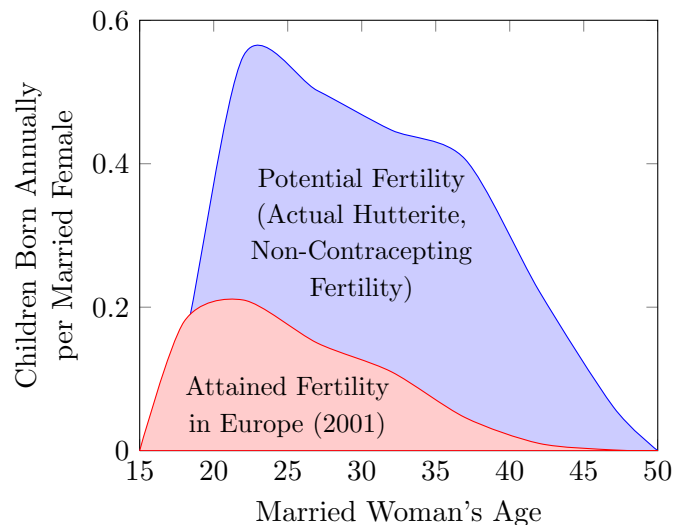
lighted above.<sup>5</sup>

Europe is trending towards this Hong Kong model.<sup>6</sup> And, with the low fertility rates depicted in Chart 1,<sup>7</sup> it has entered a new phase of exponential decrease of its fertile 15-45 year-old women—the part of its population which will decide its future.

## Decomposition of Family Fertility in The West

Chart 3: Married Female Fertility

*Princeton European Fertility Project, 11 Eurostat Census 2001*



### Potential Achievable Fertility

The gray curve of Chart 1 is derived from the age-distribution of married and unmarried women in Europe (summarized on its y-axis), across different

Institute of Demography of the Austrian Academy of Sciences, 2009—cf. with our more stable rate estimate depicted in Chart 3, which matches *adjusted total fertility rate* calculations described therein when calculated for Europe, *viz.*: Tomas Sobotka. “Does persistent low fertility threaten the future of European populations?” In: *Demographic challenges for the 21st Century. A state of art in demography*. Ed. by J. Surkyn, P. Deboosere, and J. van Bavel. Brussels: VUBPRESS, 2008, pp. 27–89.

<sup>5</sup>[http://www.censtatd.gov.hk/hong\\_kong\\_statistics/statistical\\_tables/index.jsp?subjectID=1&tableID=004](http://www.censtatd.gov.hk/hong_kong_statistics/statistical_tables/index.jsp?subjectID=1&tableID=004)

<sup>6</sup>According to this analysis (Chart 1 and its explanation in the Western Fertility Trends section), Europe will halve not *each* generation but *every other* generation, cf. again Chart 2.

<sup>7</sup>Sobotka, *op. cit.*

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epochs. It also summarizes the age-distribution of married women having children (the x-axis). On both axes every age-cohort is weighted by its potential relative fertility depicted by the large blue area in Chart 3. A newly formed marriage of a 20 year-old woman receives nearly a full weight (100 percent) on the y-axis, as that marriage has the *potential*<sup>8</sup> to bring many children into the world. A new marriage formed by a 50 year-old woman would receive no weight (0 percent) as that marriage statistically will not bring children into the world.

### Actual Attained Fertility

Given this age-determined *potential* for bringing children into the world, marriages may be indexed by how many children are, on average, *actually* being brought into the world. When each is averaged over the population, the smaller red area in Chart 3 (actual children born) is some percent of the larger blue area (potential children).<sup>9,10</sup> It is this percent that is plotted on the x-axes of Chart 1 above and Chart 5 below.

The two percentages (that on the x-axis, contraceptive characteristics, and that on the y-axis, marriage propensity) combine via a simple formula which describes how many successors the couple *will have* on average.<sup>11,12</sup>

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<sup>8</sup>i.e. if contraceptive means are not employed, which most probably *will not* obtain.

<sup>9</sup>The upper, blue curve in Chart 3 is a *sociologically—not biologically—determined* potential fertility. It is the fertility achieved by an Anabaptist sect settled in the north-central United States which adhered to a religious prohibition of contraceptives. This depiction of high fertility also represents with some faithfulness the traditional delay of marriage (and fertility in marriage) seen in Western societies. In particular this index of relative fertility has the effect of correcting for a bias, as described in Footnotes 4 and 15 and in the section on Western Fertility Trends. The actual biological potential of women is higher yet than is indicated by that curve.

<sup>10</sup>Further analysis of what type of fertility profile is actually obtained in marriage (that is, in what way the lower, red curve is *not* following the higher, blue curve in Chart 3) proves the massive degree of active contraceptive behavior present society-wide in the mores of the European couple since 1870. (See Ansley Coale. “The Decline of Fertility in Europe since the Eighteenth Century as a Chapter in Demographic History.” In: *The Decline of Fertility in Europe*. Ed. by Ansley Coale and Susan Cotts Watkins. Princeton: Princeton University Press, 1986. Chap. 1.)

<sup>11</sup>Ansley Coale and Roy Treadway. “A Summary of the Changing Distribution of Overall Fertility, Marital Fertility, and the Proportion Married in the Provinces of Europe.” In: *The Decline of Fertility in Europe*. Ed. by Ansley Coale and Susan Cotts Watkins. Princeton: Princeton University Press, 1986. Chap. 2

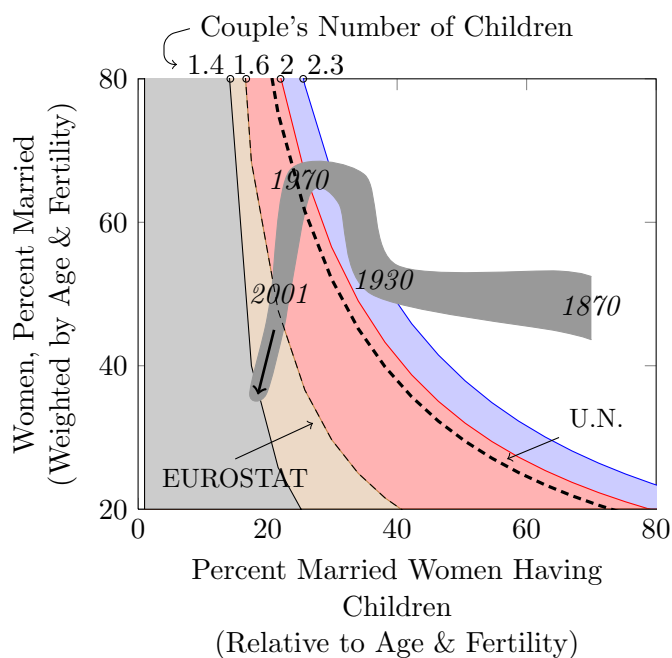
<sup>12</sup>As these percentages are fertility-weighted, and out-of-wedlock unions produce very few children (historically roughly 10% that of married unions), the actual formula is straightforward:

$$\begin{aligned}
 (\# \text{ successors}) = & 11 \cdot \frac{(\% \text{ married})}{100} \cdot \frac{(\% \text{ having kids})}{100} \\
 & + 11 \cdot (\% \text{ unmarried})/100 \cdot \text{OWB},
 \end{aligned}$$

## Western Fertility Trends

Chart 4: Fertility Trends in the West vs. U.N./Eurostat Estimates  
(2005)

*Princeton European Fertility Project; U.N. Population Division; EUROSTAT; MARRI projection*



As depicted in Chart 4, U.N. and Eurostat projections of fertility in the West have assumed expansion, or at worst, stasis of couples' openness to children and marriage. The assumptions going into such important medium-term demographic modeling have not been in touch with humanity in its individual, familial, sociological, or economic concerns relating to fertility,<sup>13</sup> especially the aspects of marriage and fertility in marriage highlighted in this paper.<sup>14</sup>

where the number 11 is obtained by summing from Chart 3 the (large) number of children a mother following the upper, blue fertility curve would have. Of course, the theoretical per-mother fertility is higher than this number, but at an aggregate, sociological level this number seems not to be exceeded, *ibid.*, and rarely obtained. 'OWB' is a correction term for the (growing) population having out-of-wedlock births, as they contribute to overall population change.

<sup>13</sup>Wolfgang Lutz, Vegard Skirbekk, and Maria Rita Testa. "The low fertility trap hypothesis: Forces that may lead to further postponement and fewer births in Europe". In: *Vienna Yearbook of Population Research* (2006), pp. 167–192.

<sup>14</sup>Coale and Treadway, *op. cit.*, the baseline of our analysis.

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Part of the erroneous reasoning driving such projections is the belief that the delaying of childbirth<sup>15</sup> *does not* affect the eventual, achieved number of children a woman will have.<sup>16,17</sup> Such assertions and consequent projections not only ignore the behavior of women (see Chart 3—with its declining, later-in-life *exhibited* fertility)<sup>18</sup> they also neglect the strong general trend for men and women to reduce their desired number of children over time, individually, and intergenerationally,<sup>19</sup> in part anchored in sociological and economic concerns.<sup>20</sup> Uncertain economic growth<sup>21,22</sup> and the existence of the welfare state bias couples' decisions as they enter their fertile years. They likely put off having children as they believe having children is not in the interest of (household) wealth formation.<sup>23</sup> Sociologically, social pressures and couples' own experiences change, for them, the attractiveness of a family with children.<sup>24</sup>

The arrow in Chart 1 is a projection of the number of children a couple will have in the future. It results from the *direct translation* of declining trends of achieved fertility and of *declining desires and expectations for having children*.<sup>25,26</sup> These are the declines experienced by the present fertile generation as they age through their fertile years.

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<sup>15</sup>The demographic phenomenon is known as the *tempo effect*.

<sup>16</sup>Peter McDonald. "Low Fertility and the State: The Efficacy of Policy". In: *Population and Development Review* 32.3 (2006), pp. 485–510.

<sup>17</sup>That is, they do not allow that the couples may have simply *revealed a preference* for fewer children. See what follows, and also Footnote 27.

<sup>18</sup>Note also how the red curve (actual practice) falls off *faster* than the blue curve (life-course potential, which falls off nonetheless) in Chart 3.

<sup>19</sup>Maria Iacovou and Lara Patricio Tavares. "Yearning, Learning, and Conceding: Reasons Men and Women Change Their Childbearing Intentions". In: *Population and Development Review* 37.1 (2011), pp. 89–123.

<sup>20</sup>Lutz, Skirbekk, and Testa, op. cit., but see also the reasoning in the Discussion section and Footnote 27.

<sup>21</sup>Henry Potrykus and Patrick Fagan. *Decline of Economic Growth: Human Capital and Population Change*. Tech. rep. available at marri.frc.org/human-capital. MARRI, 2011.

<sup>22</sup>Henry Potrykus, Patrick Fagan, and Robert Schwarzwald. *Our Fiscal Crisis: We Cannot Tax, Spend, and Borrow Enough to Substitute for Marriage*. Tech. rep. available at marri.frc.org/fiscal. MARRI, 2011.

<sup>23</sup>Gary Becker. *A Treatise on the Family*. Cambridge: Harvard University Press, 1981.

<sup>24</sup>Caroline Berghammer. "Family life trajectories and religiosity in Austria". In: *European Sociological Review* (2010). Online first.

<sup>25</sup>Iacovou and Tavares, op. cit.

<sup>26</sup>Joshua Goldstein, Wolfgang Lutz, and Maria Rita Testa. *The Emergence of Sub-Replacement Family Size Ideals in Europe*. Tech. rep. European Demographic Research Papers 2. Vienna Institute of Demography of the Austrian Academy of Sciences, 2003.

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## Discussion

Chart 5: Cultural Transitions & The Evolution of Family Size in The West

Sources: Princeton European Fertility Project (—1970); Sobotka, Eurostat (2001, 2008), MARRI projection

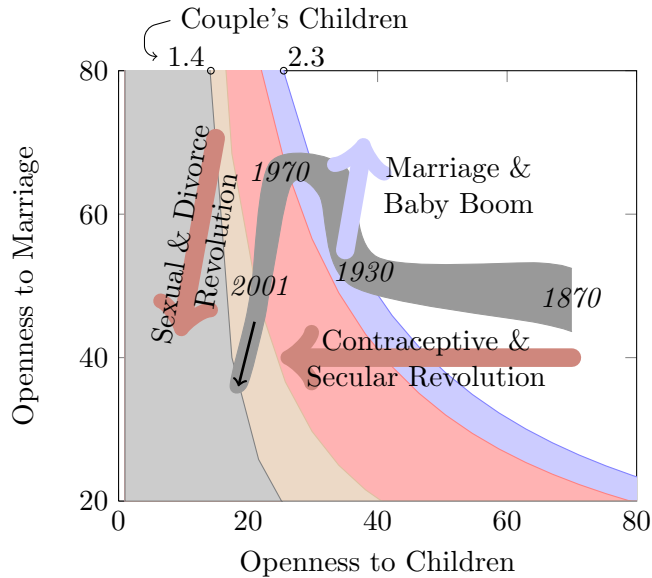


Chart 5 (later broken into three sub-charts) depicts how the evolution of views on marriage and contraception in the West has resulted in fertility levels far below the needed replacement number of successors. It now approaches 1.5 children per couple, which is much less than the required 2.1.

Taking hold after the on-set of industrialization in the West, the contraceptive mind-set (fewer children) is of one cloth with the West shifting its economic orientation from family enterprise to individualist labor activity while simultaneously moving from religious to secular social values.<sup>27,28</sup>

The marriage trend has been less consistent. Current sexual-revolution norms have deeply reduced the propensity to marry.<sup>29,30</sup> Governments, the

<sup>27</sup>Ron Lesthaeghe and Chris Wilson. “Modes of Production, Secularization, and the Pace of the Fertility Decline in Western Europe, 1870–1930.” In: *The Decline of Fertility in Europe*. Ed. by Ansley Coale and Susan Cotts Watkins. Princeton University Press, 1986. Chap. 6. The authors, examining European provinces, find the speed of transition along the lower arrow in Chart 5 corresponds to socialistic (political) movements, an industrial labor market-orientation, or both taking hold in the people.

<sup>28</sup>Theresa Notare. “A Revolution in Christian Morals: Lambeth 1930, Resolution 15—History and Reception”. PhD thesis. Catholic University of America, 2008.

<sup>29</sup>See Mark Regnerus. “Sex is Cheap”. In: *Slate* (Feb. 2011), and research quoted therein.

<sup>30</sup>Joseph Burke and Catherine Pakaluk. *The Contraceptive Revolution and the Second Demographic Transition: An Economic Model of Sex, Fertility, and Marriage*. Tech. rep.



U.N., International Planned Parenthood, Marie Stopes and other foundations, as well as all who have adopted the new model of how society is to function, continue to work to establish these polymorphous sexual norms. In the past, and especially during the marriage boom of the 1950s (center panel, Chart 6),<sup>31</sup> there was a tendency toward earlier and long-lasting marriage. This tendency and its appreciation of the importance of the family allowed for replacement rates of fertility,<sup>32</sup> seen especially in the ‘baby boom’ of the marriage boom. In Chart 6 we depict these three major cultural transitions—the Contraceptive and Secular Revolution, the Marriage and Baby Boom Recovery, and the Sexual and Divorce Revolution.

Chart 6: Major Cultural Transitions’ Effects

Sources: Princeton European Demographics Project (–1970); Sobotka, Eurostat (2001, 2008), MARRI projection

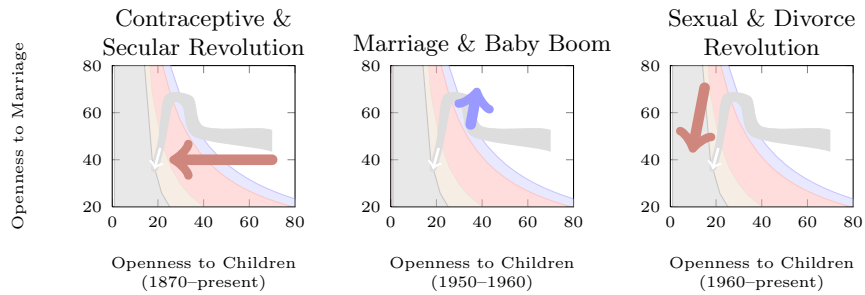
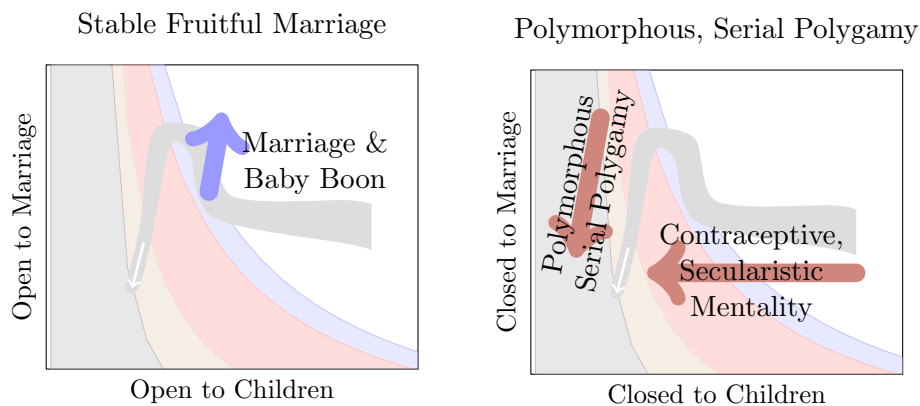


Chart 7: Two Models of Society; Their Effect

Sources: Princeton European Demographics Project (–1970); Sobotka, Eurostat (2001, 2008), MARRI projection



Collecting these cultural transitions into their natural groupings, we have the two competing models of society and their population effects, as depicted in Chart 7.

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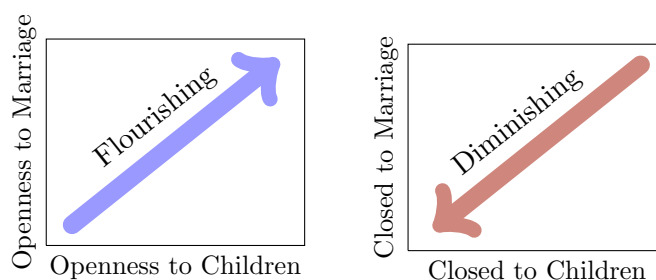
<sup>31</sup>John Hajnal. “The Marriage Boom”. In: *Population Studies* 7.2 (1953), pp. 111–136.

<sup>32</sup>Cf. Chart 2 and associated text.

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## Conclusions

Chart 8: The Two Models of Society



There are two pathways to the future, one flourishing, the other decreasing exponentially (Chart 8).

The peoples of the West are self-depleting because of the adoption of extra-marital sexual norms coupled simultaneously with a rejection of fertility (Chart 3).

If a society is to continue, stable fertile marriage is necessary.<sup>33</sup> Obviously, this ideal is deeply contrary to the current norms of most of Western society,<sup>34</sup> and its reestablishment depends upon a reversal of a historically unique project that has been countered just once at the macro-level—in the Marriage and Baby Boom of the 1950s (Chart 5).

A recovery will be possible only when there is a realignment of masculine and feminine ideals, recalibrated to embrace fertile motherhood and dedicated masculinity.

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<sup>33</sup>See [marri.frc.org/fertility](http://marri.frc.org/fertility) for a study on factors affecting fertility.

<sup>34</sup>Paul R. Amato et al. *Alone Together: How Marriage in America is Changing*. Cambridge: Harvard University Press, 2007.