

Preliminary Draft¹

**Robert Malthus, the Developmental Paradigm, Reading History Sideways,
and Family Myths**

by

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In my book *Reading History Sideways* (Thornton 2005a), I document the creation of the belief that marriage was young and universal in the Northwest European and North American past. It was also believed that this marriage system was transformed sometime before the early 1800s into a system of older marriage and many people never marrying. This belief was later discovered to be a myth by scholars in the 1960s as they discovered that the Northwest European pattern of late marriage and extensive celibacy had existed for centuries in Northwest Europe.

The myth about young and universal marriage in the Western European and North American past contains no information about its origins. Unlike the myth of the extended family, which is generally traced to Frederick Le Play (see Thornton 2005a, 2005b), the marriage myth is not associated with any particular individual.

The importance of marriage and its role as a central determinant of fertility and population growth have long been recognized. The early Greeks and Romans recognized the centrality of marriage, and marriage behavior played a role in the thought of Western European scholars in the eighteenth century (Eversley, 1959; Smith, K. 1951:1-33). Nevertheless, I believe that the work of Robert Malthus on marriage at the beginning of the 1800s marked a milestone in the formulation of the ideas that marriage was young and universal in the Western European past and that age at marriage and celibacy had increased across time. Subsequent scholars adopted the tenets of Malthus concerning marriage change in Western European societies and strengthened his ideas by providing a fuller and more elaborate theory of the reasons for trends in marriage. Consequently, this paper will be devoted to the ideas and methods of Malthus and

those scholars who were directly motivated by his provocative conclusions concerning marriage and population growth.

Identifying Robert Malthus as one of the key actors in the creation of the myth about young and universal marriage in the Western European past will probably come as a surprise to some readers. While Malthus's An Essay on the Principle of Population, published in 1798, is probably the single most influential work ever written concerning population growth and its interrelationships with human well being, Malthus is primarily seen today as a demographic theorist and public policy advocate. His theoretical statements about the growth of population and its role in increasing vice and misery are well known today—as are his pleas for the postponement of marriage in order to reduce fertility. Much less known is Malthus's important empirical work, which led him to important conclusions about how population dynamics had changed over European history.

In this paper I focus on the empirical work of Malthus concerning marriage, fertility, and mortality. I demonstrate that Malthus was a major producer and consumer of empirical data. He traveled widely in Europe and amassed an impressive array of European data concerning population dynamics. He was also a reader of the contemporary literature concerning demographic and social life in many societies outside of Europe (Wrigley and Souden, 1986, Vol. 1: 14-15; Godelier, 1983: 131).

Malthus's empirical research led him to conclude that there were dramatic differences in vital demographic rates between the societies of Northern and Western Europe and those outside of Europe. He reported that all of the important demographic parameters—marriage, fertility, and mortality—were substantially higher in what he referred to as the less civilized parts of the world than they were in modern Europe. Using the developmental paradigm that societies grow

from having little civilization to modernity Malthus transformed this comparative empirical generalization into a historical statement that marriage, fertility, and mortality had declined in Western societies as they had gone through their developmental trajectories. This is an empirical method that I refer to elsewhere as reading history sideways (Thornton 2005a). He also believed that this generalization from the comparative record was consistent with the very scanty information he had from Europe's actual historical experience.

Motivation for Writing

Malthus's original essay was published anonymously in 1798 as a reaction to recent progressivist publications, including those of Godwin and Condorcet, which he believed were painting an overly positive view of the future prospects of mankind. Malthus believed that the propensity of human beings to multiply their numbers beyond their economic capabilities suggested a much more pessimistic scenario. Believing strongly in the importance of his beliefs and their impact in the marketplace of ideas, he published his ideas in a pamphlet form before he was able to provide the full documentation for those ideas.

Then, between 1798 and 1803, Malthus embarked upon a major study of population and its growth. He gathered an extensive array of empirical evidence both through travel on the European continent and through wide reading in the contemporary comparative literature. The result of Malthus's extensive research was the production of a thoroughly rewritten and vastly expanded volume in 1803, which went through four more editions by 1826.

The full title of the revised publication, which required two volumes in 1826, will help make clear the many scholarly and political purposes Malthus had for writing his book: An Essay on the Principle of Population; or a View of its Past and Present Effects on Human Happiness; with an Inquiry into Our Prospects Respecting the Future Removal or Mitigation of

the Evils which it Occasions. The volume was designed as a work in science which laid out principles about the growth and decline of population, along with the various factors, such as mortality, marriage, and fertility, producing population change. The book was also offered as a work in history, providing information about population processes, both in the past and the present. Finally, Malthus had a political agenda that would, according to him, help to alleviate some of the negative effects of population growth in the future.

Conceptual and Methodological Approaches

Unfortunately, while Malthus was a powerful writer, he was not always clear about his methods and assumptions (Eversley, 1959). For example, like many other writers, he did not clearly differentiate his scientific, historical, and political writings. In addition, while he was quite clear about the assumptions underlying his analysis of the principles of population growth, he was not at all explicit about the assumptions and methodology of his historical analyses. Consequently, the lines of reasoning that led Malthus to his conclusions about historical trends and their causes were not always clearly made.

Nevertheless, a careful reading of the writings of Malthus make it very clear that he was writing within the dominant developmental paradigm of social development (for additional commentary on this point, see Nisbet 1975/1969; Coleman, 1988/1986; Kreager, 1986; Eversley, 1959; Godelier, 1983; Bejin, 1983). Malthus began the revised essay saying that it was “an inquiry concerning the improvement of society” and that it would be “an investigation of the causes that have hitherto impeded the progress of mankind towards happiness” (Malthus, 1986/1803, Vol. 2: 7). As Teggart (1925:83-84) pointed out, this approach placed Malthus squarely within the mainstream of studies using the developmental paradigm and its assumptions. He also frequently applied the metaphor of growth and progress to human affairs

and explicitly referred to the stages or ages of societies. He also used the standard language of social developmental thought current at his time, referring to the main stages of human development as savagery, barbarism, and civilization.

While Malthus referred frequently to historical experience, particularly in the later editions of his work, he also recognized the scarcity and deficiencies of information available in the actual historical record (Malthus, 1986/1798:78; 1986/1803, Vol. 2: 18-19; Wrigley and Schofield, 1981; Flinn, 1983: 86-93). It is also clear, as Nisbet argued (1975/1969:154), that Malthus' essay is a work of natural or theoretical history. Malthus, for example, wrote about the "natural progress" of population (1986/1798:113). He also referred to the need for understanding the "natural law" of population (1986/1830:267-268). Kreager (1986:146) also referred to the work of Malthus as comparative history.

In preparing his natural or comparative history of population Malthus made use of an extensive body of empirical data. Even the first essay published in 1798 contained some comparative empirical data, and he spent the greater part of the five years between 1798 and 1803 collecting and integrating vast quantities of empirical information into the revised essay.² Some appreciation of the breadth of information used by Malthus can be gained from understanding that he divided his two-volume work into four sections, or books, and the first two sections or books were composed almost entirely of empirical descriptions of many of the world's societies and their population processes.

Malthus interpreted the large amounts of empirical data he accumulated through consistent and pervasive use of the comparative method for studying social change, what I call reading history sideways (Kreager, 1986:146-149; Wrigley and Souden, 1986, Vol. 1:24). This

² During this time Malthus made two trips to Continental Europe, where he visited Norway, Sweden, Finland, Baltic Russia, France, and Switzerland. He also read widely in the comparative non-European literature.

fact is made clear by Malthus's organization of his empirical data. Book I (of four) was entitled "Of the checks to population in the less civilized parts of the world and in past times". In this book twelve chapters described population processes in many societies, including: those in the presumed lowest stage of human society; the American Indians; the islands of the South Sea; the ancient inhabitants of the North of Europe; modern pastoral nations; Africa; Siberia; Turkish dominions and Persia; Hindustan and Tibet; China and Japan; the Greeks; and the Romans.

A careful reading of Malthus reveals that he lumped together in Book I those societies he believed to be less civilized, people of past times, and ancient inhabitants because he believed that they represented similar stages of the developmental societal life cycle. Together, this group of societies could be used as examples of what life was like at an early stage of societal development. This interpretation is consistent with his concluding paragraph in the discussion of Rome where he summarized population processes to be operating "as we would naturally expect among less civilized nations" (1986/1803, Vol. 2:154).

Book II was entitled "Of the checks to population in the different states of modern Europe". This book was devoted to contemporary information about Norway, Sweden, Russia, the middle parts of Europe, Switzerland, France, England, Scotland, and Ireland. It is also clear that Malthus grouped these societies together to represent a more advanced or developed stage of societal growth. Social life in these modern nations was viewed by Malthus as being developmentally subsequent to social circumstances in the less civilized or ancient societies.

With societies categorized into less civilized and more modern nations, Malthus could use information about marriage and other social processes in these two types of societies to describe the natural history of population and demographic processes. By comparing population processes in the less civilized populations of Book I with such processes in the nations of modern

Europe described in Book II, Malthus believed that he could determine the natural history of population processes as societies become more civilized or advanced. That is, he read the history of the modern nations of Europe sideways by using the data from the less civilized nations as proxies for the European past.

This interpretation of Malthus' methodology is consistent with his introduction and summary of the descriptive data in Books I and II. Just before turning to the descriptive data in Book I, Malthus said that the demonstration of his major propositions within specific countries would "evidently require more minute histories than we possess". He went on to say that the propositions "will be sufficiently established by a review of the immediate checks to population in the past and present state of society" (1986/1803, Vol. 2:20-21). That review, he said, would take place in the chapters to follow. After presenting in Books I and II all of the descriptive data about the various societies, both from within and from outside of Europe, he began Book III by noting that "the past and present states of mankind" can be viewed "in the light in which they have appeared in the two preceding books" (Malthus, 1986/1803, Vol. 3:319).

In thinking about the methodology used by Malthus it is important to note how he did and did not treat the three European societies of the past that he discussed in Book I: ancient North Europe; Greece; and Rome. Of course, since he presented no information about contemporary Greece or Rome, there was no opportunity for him to link data from ancient Greece or Rome explicitly with contemporary Greek or Italian data to form an actual longitudinal data series. While it may have been conceivable for Malthus to try to link ancient North Europe with a contemporary European population to form an actual longitudinal data series, there is no evidence that he tried to do so. Thus, there is no reason to believe that Malthus planned to link any of these European populations into an actual time series of historical data. In fact, in his

later summary treatment of his views concerning population he makes clear he was referring to “ancient nations” when he talked about populations of past time and had no intention of linking them in a longitudinal or actual historical way to contemporary nations of Europe (Malthus, 1986/1830, Vol. 2: 253). Instead, ancient North Europe, Greece and Rome were merely part of a large grouping of societies that represented life at an early stage of development. These societies were to be used as a general proxy for patterns of life preceding the social patterns observed in the modern states of Europe.

The Principles of Population

In his first essay Malthus offered the simple assertion that continues to dominate and haunt debates about human population: “the power of population is indefinitely greater than the power in the earth to produce subsistence for man” (Malthus, 1986/1798:71). He accepted the view advocated by others before him, including Hume (1825/1742:376), that human beings had the reproductive potential to grow at a geometrical rate, multiplying their numbers every few years. He used data from the United States to estimate that the American population was doubling approximately every twenty-five years exclusive of migration. Malthus used this number as his conservative estimate of human population growth if there were no external checks to that expansion (Malthus, 1986/1830:226-234).

Malthus also believed that human beings had the potential to expand food supplies, but that the productive potential of mankind was substantially less than its reproductive capacity. Whereas human populations could grow multiplicatively, food supplies could only be expanded additively. The major factor limiting the expansion of food, according to Malthus, was the finiteness of land available for cultivation.

Malthus also observed that food supplies ultimately set upper bounds on the size of a population. Given the discrepancy between the potential of mankind to multiply its numbers and its food supplies, there was a persistent tendency for the growth of population to outrace the expansion of food. And, while allowing for some exceptions, Malthus generally believed that population would grow when the means of subsistence increased (1986/1803, Vol. 2:20). Unless this geometric growth of population were preventively checked by mankind in some way, the limitation of food supplies would, of necessity, positively check population growth. Also, since food supplies could only grow slowly, Malthus believed that population growth could not be rapid, except in areas where settlement was recent or following a period of abnormally high mortality.

Of course, while Malthus recognized that famine was the ultimate positive check limiting the growth of population, he suggested that there were other positive checks which develop naturally from the inability of food supplies to keep pace with mankind's reproductive potential. Malthus noted that the "positive checks to population are extremely various, and include every cause...which in any degree contributes to shorten the natural duration of human life." Included under the category of positive checks were such things as exposure, poverty, diseases, war, bad nursing of children, insufficient food and clothing, infanticide, and excesses of all kinds. While some of these positive checks were also the result of human vices, all were associated with misery (Malthus, 1986/1803, Vol. 2:16).

Malthus also believed that the reproductive potential of mankind could be checked by the deliberate intervention of societies and individuals in the reproductive process with the goal of limiting the number of children born. Such preventive checks, according to Malthus, could result from the realization that marriage and childbearing would cause the family's consumption

needs to outpace its productive capabilities, with the result being a reduced standard of living and ultimately misery. With such realization people could take action to limit the rapidity of family formation.

Malthus recognized that preventive checks could take many forms and divided them into moral restraints and vice. By moral restraint, Malthus meant “a restraint from marriage, from prudential motives, with a conduct strictly moral during the period of this restraint” (1986/1826, Vol. 2:16). Malthus believed that the limitation of fertility within sexual unions, both in and out of wedlock, constituted vice and was to be avoided. In addition to thinking that delayed or foregone marriage was the only moral preventive check, Malthus also believed that it was, by far, the most important of the preventive checks in practice. In fact, the Malthusian system equated the preventive check so closely with marriage that Malthus sometimes used the two concepts interchangeably in his discussions—sometimes using marriage rates as indicators of fertility rates (1986/1803, Vol. 2:14-17, 198, 290).

One of the most important components of the Malthusian framework was the substitutability of the various kinds of checks to population growth. Malthus wrote that “The sum of all these preventive and positive checks, taken together, forms the immediate check to population; and it is evident that, in every country where the whole of the procreative power cannot be called into action, the preventive and the positive checks must vary inversely as each other; that is, in countries either naturally unhealthy, or subject to a great mortality, from whatever cause it may arise, the preventive check will prevail very little. In those countries, on the contrary, which are naturally healthy, and where the preventive check is found to prevail with considerable force, the positive check will prevail very little, or the mortality be very small. In every country some of these checks are, with more or less force, in constant operation; yet,

notwithstanding their general prevalence, there are few states in which there is not a constant effort in the population to increase beyond the means of subsistence. This constant effort as constantly tends to subject the lower classes of society to distress” (Malthus, 1986/1803, Vol. 2:17).

The Empirical Operation of the Checks

One of the major purposes of the revised essay was the demonstration of how these principles of population had actually operated in various populations. As I have already mentioned, he turned first to the “checks to population in the less civilized parts of the world and in past time”. One crucial theme dominated this section of the essay: in these populations preventive checks—reduced marriage and low fertility—operated weakly, if at all, and positive checks, human misery, and suffering were ubiquitous.

In Book I, focusing on what Malthus called less civilized nations, he consistently emphasized the presence of young and universal marriage³. Among one group, he noted that “the union of the sexes takes place at an early age” (Malthus, 1986/1803, Vol. 2:25). In one African community, he noted the existence of polygamy and commented that its effect “in increasing the number of married women and preventing celibacy is beyond dispute” (Malthus, 1986/1803, Vol.2:94). He observed that women in another community marry and “begin to bear children at eleven years old” (Malthus, 1986/1803, Vol. 2:95). In another area, he noted that “few or no women lead a life of celibacy” (Malthus, 1986/1803, Vol. 2:96).

Malthus was particularly intrigued by the young and universal marriage that had been reported for India, Japan, and China (Malthus, 1986/1803, Vol. 2:116-138). For these populations

³ He did note instances where this was not true, but these were clearly seen as exceptions with no bearing on the overall theme.

he noted the importance of having a male heir. He also indicated that marriage was considered to be a religious duty. He thought the encouragement to marriage in China was particularly extraordinary. Especially important in China, according to Malthus, was the necessity of having children to venerate the ancestors. Consequently, failure to marry and have offspring was a social dishonor and a personal catastrophe. Malthus believed that this cultural pressure led many to marry when they had little prospects for supporting a family. Thus, he believed that China was “more populous, in proportion to its means of subsistence, than perhaps any other country in the world” (Malthus, 1986/1803, Vol.2:128).

It is useful to note that Malthus was not the first to notice early and universal marriage among non-European populations. For example, Hume (1825/1742: 392) had written that in China “...every man is married before he is twenty.” Like Malthus, he had also linked China’s early marriage to it being the most populous country.

While Malthus believed that these less civilized populations made little use of the preventive check, he perceived that positive checks and misery were ubiquitous in these populations. The severities of life in these societies were summarized in great detail throughout Book I. He drew vivid pictures of resource deficiencies, malnutrition, disease, famine, infanticide, and war. In his summary statement he wrote that “from the accounts we have received of ancient nations, and of the less civilized parts of the world, that war and violent diseases were the predominant checks to their population. The frequency of wars, and the dreadful devastations of mankind occasioned by them, united with the plagues, famines, and mortal epidemics of which there are records, must have caused such a consumption of the human species that the exertion of the utmost power of increase must, in many cases, have been insufficient...” Thus, “under these circumstances, it is not to be supposed that the prudential

restraint on marriage should have operated to any considerable extent” (Malthus, 1986/1830: 253-254).

In Book II of his revised essay Malthus moved the reader geographically and historically to the states of Europe, which he labeled as modern to indicate their more advanced position in societal development. While Malthus recognized differences in fertility, marriage, and mortality levels within the populations of Europe, he was also impressed by the important similarities he perceived across European societies that contrasted with his descriptions of these population processes in other parts of the world. He argued that while less civilized non-European populations were generally characterized as having low prevalence of preventive checks and high levels of positive checks and misery, in general the strength of the checks to population growth in modern Europe were reversed. This comparison of modern Europe with other populations was consistent with the expectations of Malthus concerning an inverse correlation between the strength of preventive and positive checks.

Malthus devoted a considerable part of Book II describing a marriage system in Western European countries dominated by late marriage. According to Malthus, many men and women in European countries delayed marriage until they had the economic resources necessary to support families at their desired standard of living. Malthus believed that these delayed marriages prevented individual men and women from experiencing a reduced standard of living when they married and prevented the population from growing to the extent that positive checks and misery would result. Malthus noted that delayed marriage and the exercise of its preventive check were particularly marked in Norway, Switzerland, and England (1986/1803, Vol. 2:238). He believed that marriage rates in England were sufficiently low that a substantial fraction of English reproductive capacity was not being used (1986/1803, Vol. 2:239).

Just as Malthus believed that the preventive check was very strong in modern Europe, he also believed that the positive check was less operative there than elsewhere. Compared to his discussion of societies outside of contemporary Europe, his comments about Europe contained relatively few references concerning the miseries of positive checks such as war, famine, and disease. Of course, the deficiencies of quantitative data, which Malthus was very aware of, prevented him from making precise comparisons across the different societies.

The conclusions that Malthus reached from his comparative analysis are compressed nicely in his summary volume. There he wrote that “In a review of the checks to population in the different states of modern Europe, it appears that the positive checks to population have prevailed less, and the preventive checks more, than in ancient times, and in the more uncultivated parts of the world. The destruction occasioned by war has unquestionably abated...And although in the earlier periods of the history of modern Europe, plagues, famines, and mortal epidemics were not infrequent, yet, as civilization and improvement have advanced, both their frequency and their mortality have been greatly reduced, and in some countries they are now almost unknown. This diminution of the positive checks to population, as it has been certainly much greater in proportion than the actual increase of food and population, must necessarily have been accompanied by an increasing operation of the preventive checks; and probably it may be said with truth that, in almost all the more improved countries of modern Europe, the principal check which at present keeps the population down to the level of the actual means of subsistence is the prudential restraint on marriage” (Malthus, 1986/1830:254).

While this summary statement confirms the importance of Malthus’s use of comparisons between the societies of modern Europe and the societies he termed as less civilized or ancient, it also suggests that he did not limit his analysis to such comparative methods. He was aware of

the need to understand the European historical record and made efforts to evaluate the history of demographic processes within actual European populations. In addition, he made comparisons across various European societies using the data that were available to him.

Unfortunately, both the quantity and quality of the historical and contemporary data available to Malthus were extremely deficient. The first census in England, for example, was not conducted until 1801, three years after the publication of his first essay. Among other things, this census demonstrated that Malthus had seriously underestimated the size of the English population—by the nontrivial amount of 56 percent (Wrigley and Souden, 1986, Vol. 1:22).

Malthus did have a time series of vital events data for England and various other European countries. He recognized, however, that this information was seriously deficient because vital events were seriously underreported. He tried valiantly to estimate the degree of underreporting in England so that he could adjust the series of births and deaths appropriately. Nevertheless, in the end he suggested that any data before 1780 in England are so deficient that they cannot be used reliably (Malthus, 1986/1803, Vol. 2:249-261). Of course, without accurate records of vital events and estimates of the size of the population, it was impossible for him to assemble a time series of vital rates in England before the 1800s, a problem that was to plague generations of demographers to come (Wrigley and Schofield, 1981; Macfarlane, 1986).

Despite his awareness of the enormous data deficiencies, Malthus did report actual historical data suggesting that mortality had declined in the recent European past. He cited one study showing that mean age at death in Geneva, Switzerland had increased steadily from less than nineteen years in the sixteenth century to more than 32 years in the eighteenth century. He went on to conclude that it was very likely that a similar reduction of mortality had occurred throughout Switzerland, although no supporting data were presented (Malthus, 1986/1803, Vol.

2: 202-204). He also presented data suggesting recent declines in mortality in Sweden (Malthus, 1986/1803, Vol. 2:177).

Later, when writing about France, Malthus extrapolated the Swiss experience to all of Europe. He said that “if we give any credit to the best authorities that can be collected on the subject, it can scarcely be doubted that the rate of mortality has diminished, during the last one or two hundred years, in almost every country in Europe” (Malthus, 1986/1803, Vol. 2:231; 1986/1803, Vol. 3:575). Later in his writings he attributed this decline to “the gradual diminution and almost total extinction of the plagues, which so frequently visited Europe in the seventeenth and beginning of the eighteenth centuries” (Malthus, 1986/1803, Vol. 3:571; also see 466-467).

Thus, it appears from Malthus’s accounts that he used both the comparative method and the reading of the actual European historical record as evidence for mortality trends in the European past. The data from both methodologies, as Malthus read them, converged in suggesting that mortality had been declining in Europe during the one or two centuries preceding his writing.

While Malthus believed that the European historical record was adequate for use as direct support of his conclusion about declining European mortality, he was more cautious about data relevant to marriage and childbearing trends. In fact, as far as I can tell from his writings, it was only for the time period after 1800 that he organized and presented a series of data to indicate actual secular time trends in family formation rates.⁴

Instead of using direct indicators of historical trends in marriage and childbearing rates, Malthus resorted to an indirect procedure based on his theoretical ideas concerning population

⁴ That series was for England from 1801 through 1821. It showed that marriage was declining consistent with Malthus’ conclusions. However, it is important to note that these data were clearly not available for the 1803 edition when he reached his conclusions about marriage trends (Malthus, 1986/1826, Vol. 2:261-266).

processes. Since he believed that sluggishness in the expansion of food supplies would severely restrict the rate of growth of the population in settled areas, he had strong reasons to believe, as we have already seen, that the preventive and positive checks were, of necessity, inversely correlated. Thus, if mortality was falling in Western European populations, it followed that both marriage and fertility would also be declining. His comparative analysis had certainly produced evidence consistent with this theoretical expectation, and he devoted considerable effort to confirmation of the proposition in contemporary Europe.

Malthus noted that within the continent of Europe those communities with the highest marriage and birth rates also had the highest death rates. For example, he reported that Sweden, Russia, and Holland had higher rates of both mortality and family formation than did Norway, England, and Switzerland (Malthus, 1986/1803, Vol. 2:167, 194-198, 247).

Malthus also used longitudinal data to demonstrate the inverse correlation between the positive and preventive checks. Using information collected by Susmilch, Malthus concluded that after a population had been decimated through a great mortality, the marriage and birth rates increased (Malthus, 1986/1803, Vol. 2:194-198; 295-303; 307-310).⁵ He reported similar inverse correlations across time in the operation of the preventive and positive checks in Switzerland (Malthus, 1986/1803, Vol. 2:202-205). Malthus was also impressed that population had not declined in France following the Revolution, despite the heavy losses from mortality. He believed that this occurred because marriage and fertility increased, and then all three population parameters, marriage, fertility, and mortality declined (Malthus, 1986/1803, Vol.

⁵ It should be noted that in this analysis Malthus presented marriage data covering a fairly extensive period of time. Furthermore, the data suggest that marriage may have been declining over the periods covered. Nevertheless, it is clear from the context of Malthus's discussion that he was using the data to support his argument of the linkages of marriage and mortality rather than arguing for a secular time trend in marriage. Also see his summary discussion (Malthus, 1986/1830: 255-257).

2:216-232). Furthermore, he saw this over time linkage of the three population parameters as applying more generally to “almost every country in Europe” (Malthus, 1986/1803, Vol. 2:231).

Malthus concluded Book II of his revised essay with a chapter entitled “General deductions from the preceding view of society.”

He concluded that:

In comparing the state of society which has been considered in this second book with that which formed the subject of the first, I think it appears that in modern Europe the positive checks to population prevail less, and the preventive checks more than in past times, and in the more uncivilized parts of the world.

War, the predominant check to the population of savage nations, has certainly abated...and plagues, violent diseases and famines have been certainly mitigated, and have become less frequent.

With regard to the preventive check to population...I am strongly disposed to believe that it prevails more than in those states which were first considered; and it can scarcely be doubted that in modern Europe a much larger proportion of women pass a considerable part of their lives in the exercise of this virtue, than in past times and among uncivilized nations (Malthus, 1986/1803, Vol. 2:315).

In Book IV Malthus made the geographical focus of his conclusions more precise and included England directly. “It cannot be doubted that throughout Europe in general, and most particularly in the northern states, a decided change has taken place in the operation of this prudential restraint...And in this country it is not to be doubted that the proportion of marriages has become smaller since the improvement of our towns, the less frequent returns of epidemics, and the adoption of habits of greater cleanliness” (Malthus, 1986/1803, Vol. 3: 571).

And, in the Appendix to the essay, Malthus became even more precise and definite, although without adding more empirical data. “With regard to the expression of later marriages, it should always be recollected that it refers to no particular age but is entirely comparative. The

marriages in England are later than in France...The marriages in this country now are later than they were before the revolution..." (Malthus, 1986/1826, Vol. 3:593).

Theoretical Mechanisms Leading to Delayed Marriage

What would lead individuals to want to postpone or even forego marriage? What would lead whole populations to have a marriage system of late marriage and large numbers never marrying? While Malthus did not work out a systematic theory of delayed marriage, the ingredients for such a theory were clear in his writings. Furthermore, the locus of forces operating to delay or forego marriage rested in the psyche of individual women and men.⁶

For Malthus, aspirations for a reasonable standard of living were central determinants of the desire to delay marriage. Postponing marriage, according to Malthus, requires an unwillingness to be patient with pain and misfortune. Whereas expectations and acceptance of future suffering might lead to early marriage, the hope of enjoying life would cause people to postpone marriage (Malthus, 1986/1803, Vol. 2:59). The hope of bettering one's self and the fear of misery and being without the necessities of life would be motivations to emphasize the preventive check (Malthus, 1986/1803, Vol. 3:453-454).

Another key element for Malthus was foresight, seeing the difficulties that would attend an early marriage and the rearing of numerous children (Malthus, 1986/1798: 99). Foresight, according to Malthus, requires the ability to look around and recognize the distress and poverty that frequently affects those with large families. It requires concern about one's ability to rear and support children without first being firmly established economically (Malthus, 1986/1803, Vol. 2:14).

⁶ See Eversley 1959, Smith 1951, and Macfarlane 1986 for detailed discussions of Malthus's ideas and their historical roots and context.

Finally, there is the issue of deferred gratification. Delayed marriage, according to Malthus, requires the ability to postpone the immediate satisfactions of marriage with the expectation of receiving even more benefits in the future. By delaying gratification, individuals could assure for themselves and their children the resources for respectability and happiness. The comforts and conveniences of life were even possible with delayed marriage (Malthus, 1986/1830: 251-252).

Malthus believed that aspirations for a respectable standard of living, foresight, and the ability to defer gratification were associated with higher levels of civilization. Like others before him, including Ferguson (1980/1767), Malthus believed that earlier in the developmental cycle of societies human beings had lower aspirations and less ability to perceive and act upon the distant consequences of their actions. As societies advanced along their developmental trajectories, their aspirations, foresight, and ability to delay gratification increased (also see Eversley, 1959). In fact, he even suggested that as individuals and societies accumulated more resources, they also internalized the habits and expectations associated with opulence and luxury (Malthus, 1986/1803, Vol. 2:261).

This brings us to two crucial questions in Malthus's thinking and the debate he helped to generate about marriage and population growth. How strongly was economic expansion related to increases in consumption aspirations and the desires of people for the finer things of life, and how closely linked were expanding living standards to the desire and ability to postpone marriage. If Malthus had been an optimistic believer in continued progress and not decay, he might have concluded that these two effects were very large, so substantial, in fact, that they would lead to continuing expansions of delayed marriage and the preventive check. If so, societies might translate expanded economic productivity into increasingly higher standards of

living rather into population growth. Malthus, however, was not an optimist and took the pessimistic road saying that the growth of population would keep pace with the expansion of economic production (Malthus, 1986/1803, Vol. 2:261). The optimistic scenario was left to others who not only parted company with Malthus on the future of population and the standard of living, but who also elaborated further his theory of marriage (See Eversley, 1959, for more details).

Other scholars took this more optimistic view of the population issue and argued that there was a tendency for economic resources to grow faster than population. Lecturing at the University of Oxford in 1828, Nassau Senior used comparative information to establish this positive scenario of social change (see Thornton 2005c for his methodological statement). He argued that what he labeled savage nations were in “a state of habitual poverty and occasional famine.” They had scanty populations, he argued, but their means of subsistence were even scantier. On the other hand, he argued that in every civilized country “there is now less poverty than is universal in a savage state.” He suggested that the higher standard of living in the civilized countries meant that “the means of subsistence have a greater tendency to increase than the population” (Senior, 1831: 47-48).

Archibald Alison came to a similar conclusion. He argued that “the rapidity of increase is in the inverse ratio of the means which are afforded of maintaining a family in comfort and independence: it is greatest when these means are the least, and least when they are the greatest” (Alison, 1840, Vol. 1: 112).

Consumption aspirations played a key role in these non-Malthusian conclusions (Eversley, 1959). Senior, Alison, and others believed that consumption aspirations increased very rapidly with economic growth. They also believed that delayed marriage was so closely

tioned to consumption aspirations that economic expansion would ultimately lead to the increased postponement of marriage and a reduction in the rate of population increase.

Actually, the essential idea of consumption aspirations increasing with economic resources had preceded Malthus's publication of his essay on population. Writing in 1767 in Scotland, Adam Ferguson said that what is necessary in life is vague and relative. According to him, "it is one thing in the opinion of the savage; another in that of the polished citizen: it has a reference to the fancy, and to the habits of living" (Ferguson, 1980/1767: 142).

Ferguson went on to argue that there is apparently no limit to the expansion of consumption aspirations. "No ultimate remedy is applied to this evil, by merely accumulating wealth; for rare and costly materials, whatever these are, continue to be sought; and if silks and pearl are made common, men will begin to covet some new decorations, which the wealthy alone can procure. If they are indulged in their humour, their demands are repeated: For it is the continual increase of riches, not any measure attained, that keeps the craving imagination at ease" (Ferguson, 1980/1767: 143).

Several nineteenth century writers endorsed the idea that the advancement of civilization and the expansion of economic resources brings forth increases in the expected and desired standard of living. Senior said that "as wealth increases, what were the luxuries of one generation become the decencies of their successors. Not only a taste for additional comfort and convenience, but a feeling of degradation in their absence becomes more and more widely diffused" (Senior, 1831: 35). In a similar way Alison discussed the "extension of artificial wants among the people." He wrote that "the acquisition of one comfort, or the indulgence of one gratification, not only renders its enjoyment necessary, but excites the desire for another. No sooner is this additional comfort attained and become habitual, than a new object of desire begins

to be felt. To the succession of such objects there is no end. From the time that mankind first pass the boundary of actual necessity, and begin to feel the force of acquired wants, they have entered on a field to which imagination itself can affix no limits. The highest objects of luxury in one age become comforts to the one which succeeds it, and are considered as absolute necessities in the lapse of a few generations” (Alison, 1840, Vol. 1:102-104). Similar views were offered by Richard Jones (1859).

Alison even offered an intergenerational mechanism for increasing artificial wants. He said that “each succeeding generation is bred up in the habits of indulgence to which the preceding one only attained by the result of many years of successful exertion. The parent who has raised himself from the middling to the higher ranks of life, or from the lower to the middling by a laborious industry, communicates to his children the habits and the wants to which he latterly succeeded. The gratifications which were considered as the highest objects of ambition, or the last step of luxury during the best years of his life, are regarded as mere necessities by his posterity” (Alison, 1840, Vol. 1: 104).

An anonymous 1868 article in *The Nation* took the expansion of consumption aspirations a step further—arguing that aspirations increased even more rapidly than did the standard of living. The article stated:

Commerce, labor-saving machines, the discovery of new sources of wealth, have made the world wealthier, have made luxuries before rare cheap, and gratifications before unknown common. Increase in wealth increases desires still faster. The more they are gratified, the further they are from being satisfied. Each new gratification brought within reach becomes not only a daily necessity but creates a taste for a dozen out of reach. He who rises a little in the social scale desires to rise still higher... In cities, people are exposed more constantly to public view. They are brought more often in contact with wealth and luxury. They see more show. Every change of fashion is displayed before them. The new luxuries solicit

them everywhere. The modern improvements force themselves upon every one's notice. One must do what others do, and have what others have. One must keep up with the times or get laughed at and lose position. Rivalry is excited, ambition sharpened; emulation whets emulation" (The Nation, 1868: 191).

Rising consumption aspirations were important to all of these writers because they linked marriage and population growth to desired living standards. In an 1829 letter to Malthus, Senior wrote that he considered "the desire of bettering our condition as natural a wish as the desire of marriage" (Senior, 1831: 58). Alison took this point a step further when he said "the strongest desire in the human mind in civilized life is that of bettering one's condition; of rising, by prudence or exertion, above the situation in which the individual was born" (Alison, 1840, Vol. 1: 93).

Like Malthus, these writers suggested that the desire to better one's condition and to prevent deterioration in living standards was a strong incentive to delay marriage. Senior wrote "that abstinence from marriage is almost uniformly founded on the apprehension of a deficiency of necessaries, decencies, or luxuries, or, in other words, on prudence" (1831: 25). He went on to say that "the hope to acquire, by a longer accumulation during celibacy the means of purchasing the decencies of a higher social rank" may be even more important than the "fear of losing decencies" (page 26). Through the exercise of self constraint and delayed gratification, high consumption aspirations would result in delayed marriage.

With their beliefs that consumption aspirations were increasing so rapidly in England and other Western societies, these scholars also believed that the postponement of marriage would increase as well. Ferguson argued in the eighteenth century that "while arts improve, and riches increase; while the possession of individuals, or their prospects of gain, come up to their opinion of what is required to settle a family, they enter on its cares with alacrity. But when the

possession, however redundant, falls short of the standard, and a fortune supposed sufficient for marriage is attained with difficulty, population is checked, or begins to decline. The citizen, in his own apprehension, returns to the state of the savage; his children, he thinks, must perish for want; and he quits a scene overflowing with plenty, because he has not the fortune which his supposed rank, or his wishes, require” (Ferguson, 1980/1767: 142-143).

Alison wrote that the increase in artificial wants was the “great and important change” that provided the “principal counterpoise which Nature has provided to the principle of population. The indulgence of artificial wants is incompatible with a rapid increase of the human species. If the labourer finds himself burdened early in life with a wife and children, he must forego many enjoyments which otherwise would be within his reach...Strong as the principle of population is, experience proves that these prudential considerations, when suffered to develop themselves, are still stronger, and are perfectly sufficient to restrain the rate of human increase” (Alison, 1840, Vol. 1: 109-110).

Richard Jones also wrote about the self-restraint involved in delaying marriage. He said that “this self-restraint is so far exercised that there is no record of the customary age of marriage having at any time, in any country, coincided with the age of puberty. Its strength increases, and its sphere of operation enlarges, with the advance of civilization” (Jones, 1859: 245). Jones went on to provide an extensive analysis of the social and economic conditions that would facilitate the translation of economic growth and expanding consumption aspirations into delayed marriage.

The 1868 anonymous article in The Nation addressed the question, “Why is Single life Becoming More General?” The article concluded:

This cause...is nothing less than the higher development of civilization and the new form which modern progress has given

to modern life. The decrease in the frequency of marriage is exhibited in the countries—France, England, and the United States—which have advanced the most in the path of modern civilization. The decrease is proportional to the respective height of social development in each. By general diffusion of education and culture, by the new inventions and discoveries of the age, by the increase of commerce and intercourse and wealth, the tastes of men and women have become widened, their desires multiplied, new gratifications and pleasures have been supplied to them. By this increase of the gratifications of existence the relative share of them which married life affords has become just so much less. The domestic circle does not fill so large a place in life as formerly. It is really less important to either man or woman. Married life has lost in some measure its advantage over a single life. There are so many more pleasures, now, that can be enjoyed as well or even better in celibacy... While a less proportion of the enjoyments of life at the present day are to be sought in matrimonial life, the cost of it has come to be much greater. Not that its absolute cost is more; not that the necessaries of life for a family are greater in price than formerly—they are probably less—but that they are greater in number. Matrimonial life costs more than formerly because there are so many other gratifications, bodily, mental, and aesthetic, which demand satisfaction as well as the affectional impulses, and because so many more of these must be sacrificed by one of moderate means on entering matrimonial life (pp. 190-191).

The Nation author went on to say that “the widening and heightening of men’s and women’s tastes have acted in another way to increase the number of those who remain single. As in the process of civilization man’s desires grow faster than his productive power, so it is the action of education to develop the sensibility and the critical faculty more than character or executive ability. By the diffusion of a finer culture throughout the community, men and women can less easily find any one whom they are willing to take as a partner for life; their requirements are more exacting; their standards of excellence higher; they are less able to find any who can satisfy their own ideal and less able to satisfy anybody else’s ideal. Men and women have, too, a livelier sense of the serious and sacred character of the marriage union, and of the high motives

from which it alone should be formed. They are less willing to contract it from any lower motives” (page 191).

As a result of the scholarship of Malthus, Ferguson, Senior, Alison, Jones, and others, there was a substantial body of literature available by the fourth quarter of the 1800s reporting that age at marriage increased with economic growth and the advancement of civilization. This conclusion was consistent with the comparative empirical evidence that Malthus had generated. It also was buttressed by the theoretical arguments that Malthus presented and by the stronger versions of those arguments made by others.

Two Centuries of Hindsight

We have seen in this paper that Malthus collected and analyzed considerable data concerning population processes in the Europe of his day, in ancient societies of Europe, and in countries outside of Europe. One of his major conclusions was that contemporary European societies had different demographic patterns from those observed outside of Europe and in the ancient European past. More specifically, he believed that mortality was lower in contemporary Europe and people married later and had fewer children. With the method of using comparative information to read social change sideways it was very easy for Malthus to conclude that these cross-cultural comparisons reflected the natural history of population processes. As societies proceeded across the developmental life cycle, they experienced a demographic transition from young and universal marriage, high fertility, and low life expectancies to the postponement of marriage, low fertility, and increased life expectancies.

Malthus also believed that this natural history of mortality decline was evident in the actual history of Europe, since the best evidence available suggested to him that mortality had declined during the one or two centuries preceding his own research. With his strong belief in

the inverse relationship between the positive and preventive checks and the evidence from the comparative data it was also easy for him to conclude that over the same historical period Europeans had increasingly come to postpone their marriages and have fewer births. This line of reasoning suggested that an important demographic transition had occurred before the beginning of the nineteenth century with Europe changing from high mortality and fertility to low mortality and fertility. In Malthus's model the transformation of the two vital processes of death and reproduction were causally linked, and the proximate determinant of the fertility decline was increasing postponement of marriage.

Here we ask whether Malthus's conclusions have stood the test of time in his home country, England. In considering the correspondence of Malthus's conclusions to the actual English record it is useful to note that the same data problems that plagued him have frustrated several generations of subsequent historical scholars. Consequently, definitive answers concerning the direction of English vital rates from the seventeenth through the nineteenth centuries have been very elusive and at the center of intense controversy for nearly the entire two centuries following the publication of Malthus's first essay (Wrigley and Schofield, 1981; Macfarlane, 1986). In fact, it was only in the early 1980s that the monumental study of Wrigley and Schofield (1981) has provided a more reliable picture of England's demographic history during this important period.

The life expectancy data documented by Wrigley and Schofield certainly do not suggest any consistent improvement in survival during the two and one-half centuries preceding the publication of Malthus's essay (Wrigley and Schofield 1981, page 235, Figure 7.8). In fact, life expectancy deteriorated during most of the 1600s in England. However, it does appear that Malthus's impressions of improving mortality were basically accurate during the last three-

quarters of the 1700s. Nevertheless, the mortality improvement during those years only returned England to the levels of the 1600s.

Malthus was also wrong on at least two counts relative to fertility trends (Wrigley and Schofield 1981, page 235, Figure 7.8). First, the data are not consistent with Malthus's central belief that fertility and mortality are directly related. Instead, there was a tendency for fertility and life expectancy to move together through the years preceding Malthus's writing. Second, while Malthus's beliefs of declining fertility were basically accurate for the century prior to 1650, they were essentially incorrect after that period. In fact, after 1650, England experienced a rather dramatic increase in fertility rates that extended through Malthus's main publications.

Finally, Malthus was basically right in his belief that marriage and fertility were linked. That means, of course, that the overall marriage trends were similar to those for fertility. Consequently, the actual marriage trends are also contrary to the conclusions reached by Malthus, particularly during most of the 1700s when marriage rates were generally increasing rather than declining. During this time period both age at marriage and the proportion of the population never marrying declined rather than increased as Malthus believed (Wrigley and Schofield, 1981: 253-269). In fact, Wrigley and Schofield concluded that increasing levels of marriage were more important determinants of English population growth across this time period than the decline in mortality.

Thus, Malthus's conclusions about the increasing reliance on the preventive check in his own native England were contrary to what had actually happened during the preceding centuries. Nevertheless, his conclusions went generally unchallenged by several subsequent generations of scholars.

From the evidence presented in this paper it seems clear that two lines of reasoning converged to lead Malthus to come to the wrong conclusion about European marriage trends. First, and in my opinion foremost, was his acceptance of the developmental paradigm and his use of comparative data for making historical conclusions. From the evidence that he collected and analyzed it was clear to him that as societies developed across their life cycles the preventive check increased. The second line of reasoning centered on his belief that the actual European historical record indicated that mortality had been declining for a century or two. This belief, in conjunction with his theoretical expectations that marriage and mortality rates were positively related and that population growth had to be slow in settled communities, provided additional reasons for him to believe that there was a tendency towards later marriage in Europe.

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