

Chapter 1. Charles Darwin and Thomas Malthus

In 1838 Charles Darwin was contemplating marriage. His thoughts on the subject are revealed to us in intimate detail by the chance survival of a scrap of paper. Darwin was now aged twenty-nine, having made his famous voyage round the world after leaving Cambridge. Without a regular job, yet with a small private income, marriage to his cousin Emma Wedgwood was both an attractive and a worrying prospect. In order to help him resolve the question of whether to marry, Darwin; decided to set out a balance sheet of the advantages and disadvantages. In pencil on a blue sheet he drew up a cost-benefit analysis.(1) The very setting out of such a sheet is extraordinary. First, at twenty-nine Darwin was quite old by the standards of many societies to be contemplating his first marriage. Secondly, he clearly assumed that the decision was in his own hands. Above all, he saw marriage like some trading venture - as a choice. It was a decision involving costs and benefits which could, as in classic accounting, be balanced against each other. Equally interesting are the 'arguments Darwin put forward on each side. His sheet was laid out as follows:

This is the question

Marry

Not Marry

Under 'Marry', moving almost immediately from the subject of children to that of a possible wife, and underlining, inserting brackets and crossing out (see the phrase below), he wrote:

Children - (if it please God) - constant companion, who will feel interested in one (a friend in old age) - object to be beloved and played with - better than a dog anyhow - Home, and someone to take care of house - Classics of Music and female Chit Chat - These things good

1. Darwin Papers, Cambridge University Library, DAR.210.10.

for ones health - (forced to visit and receive relations - [crossed out]) but terrible loss of time - My God, it is unthinkable to think of spending one's whole life, like a neuter bee, working, working, and nothing after all No, no won't do - Imagine living all one's days solitarily in smoky dirty London House - Only picture to yourself a nice soft wife on a sofa with good fire, and books and music perhaps - compare this vision with dingy reality of Grt Marlborough Str.

Marry. Marry. Marry. QED.

Thus the arguments for marriage were that there might be children, about whom nothing more is said, and then, basically, the advantages of companionship with a wife. a wife would be useful in keeping away loneliness, particularly in old age; she would be a superior pet, 'better than a dog anyhow'. Furthermore, life would not have been entirely wasted, for propagation would also produce something more than a 'neuter bee' would - an apt thought for Darwin in the year that he discovered the mechanism of the origin of species through natural selection.

Under 'Not Marry' Darwin started by elaborating further some arguments which would more logically have come under 'Marry'. Not to marry would mean 'No children (no second life) no one to care for one in old age - what is the use of working without sympathy from near and dear friends - who are near and dear friends to the old except relatives.' Hence, again, there is stress on old age and loneliness and on leaving a reminder of one's existence.

He then listed the advantages of not marrying and remaining a bachelor:

Freedom to go where one liked - choice of Society and little of it.
Conversation of clever men at clubs - Not forced to visit relatives, and to bend in every trifle - to have the expense and anxiety of children - perhaps quarrelling - Loss of time - cannot read in the Evenings - fatness and idleness - anxiety and responsibility - less money for books etc - if many children forced to gain one's bread (But then it is very bad for one's health to work too much). Perhaps my wife won't like London, then the sentence is banishment and degradation with indolent. idle fool.

Real costs - the costs of children, the costs of a wife - were therefore set in Darwin's mind against the advantages of companionship and comfort. Such disadvantages would possibly make life less

comfortable and there would certainly be a loss of time and leisure. On the reverse side of the sheet is the following:

It being proved necessary to Marry. When? Soon or Late.

The Governor says soon for otherwise bad if one has children - one's character- is more flexible - one's feelings more lively and if one does not marry soon, one misses so much good pure happiness - But then if I married tomorrow: there would be an infinity of troubles and expense in getting and furnishing a house - insisting about no Society - morning calls - awkwardness - loss of time every day (without one's wife was an angel, and made one keep indentures) - Then how should I manage all my business if I were obliged to go every day walking with my wife - Ehem!! I never should know French, or see the continent, or go to America, or go up in a Balloon, or take solitary trip in Wales - poor slave - you will be worse than a negro - And then horrid poverty (without one's wife was better than an angel and had money) - Never mind my boy - Cheer Up - One cannot live this solitary life, with growing old age, friendless and cold, and childless staring one in one's face, already beginning to wrinkle - Never mind, trust to chance
Keep a sharp look out - There is many a happy slave -

Having summed up the costs and benefits, Darwin made his choice. On 29 January 1839, just before his thirtieth birthday, the marriage with Emma was solemnized.

In the same year that he came to balance the advantages and disadvantages of marriage and reproduction, Darwin succeeded in solving the problem of how species evolved through natural selection. The key was provided by an accidental reading of Thomas Malthus' *Essay on Population*, which showed him how high mortality could lead to the survival of only the fittest. Malthus' work may also have been helpful to Darwin when considering his feelings about his individual decision to reproduce. For what Malthus provided was an elegant theoretical model of the marriage system in England in the early nineteenth century, of which Darwin's ruminations are such an enlightening illustration. The *Essay on Population* explains why so many people weighed up the costs and benefits in ways similar to Charles Darwin.

Malthus drew attention to four facts. The first is that mankind is very strongly motivated by a desire for sexual intercourse, or, in his words, 'the passion between the sexes is constant' and very strong. All else being equal, men and women will mate as soon as possible. If

mating is only allowed within marriage, 'such is the disposition to marry, particularly in very young people, that, if the difficulties of providing for a family were entirely removed, very few would remain single at twenty-two.(2) The second fact is that, given low mortality, such early mating will lead to rapid population growth. We know of human groups that have doubled their population every fifteen years. Rapid doublings, mean that by geometrical or exponential growth, vast numbers of human beings can be created very quickly. It would have taken 32 doublings of an original couple to raise world population from the original two to our present four thousand million plus. A few more doublings now, and every square inch of the earth would be covered. The third fact is that economic resources cannot keep pace with such growth. This is largely due to the law of diminishing marginal returns, which is implicit in his work. There are periods when rates of three or four per cent per annum economic growth, equivalent to a population doubling in twenty or fifteen years, have been sustained for a few decades. Yet we now know again that these are exceptions to the rule that economic growth tends to be much slower. The final fact is that there is a tendency for any growth in resources to be quickly absorbed by mounting population. A rise in affluence will decrease mortality and also enable people to give freer expression to the 'passion between the sexes'. Population will rise rapidly. It will then meet the inevitable control - namely, the positive checks of 'misery', specifically death by war, famine and disease.

In this theory, as he himself admitted, Malthus was only putting more clearly and with much documentation, the arguments of the political economists of the eighteenth century. In Adam Smith's *Wealth of Nations*, for example, we have a very similar set of assumptions. At the heart of the argument is the statement that 'every species of animal naturally multiplies in proportion to the means of their subsistence, and no species can ever multiply beyond it.' Mankind was included, for, 'men, like all other animals, naturally multiply in proportion to the means of their subsistence.' Furthermore, Smith pointed out that an improvement in wealth would lead to a decline in mortality among the common people, hence more children would survive and the population increase. Likewise, increased wealth through increased wages would lead to increased propagation. 'The liberal reward of labour, therefore, as it is the

2 Malthus, *Population*, ii, 52.

effect of increasing wealth, so it is the cause increasing population, or, as it is glossed in a marginal note, 'high wages increase population.'⁽³⁾

Smith, however, was not appalled by this prospect, for he took the argument one stage further. He argued that it was not food or technology as such which regulate population, but the demand for labour. 'If this demand is continually increasing, the reward of labour must necessarily encourage in such a manner the marriage and multiplication of labourers, as may enable them to supply that continually increasing demand by a continually increasing population.' For 'the demand for men, like that for any other commodity, necessarily regulates the production of men; quickens it when it goes on too slowly, and stops it when it advances too fast.' In other words, the laws of supply and demand could account for population growth and retraction. 'It is this demand which regulates and determines the state of propagation in all the different countries of the world, in North America, in Europe, and in China; which renders it rapidly progressive in the first, slow and gradual in the second and altogether stationary in the last. (4) Now this rosier picture - although it fails to go into the ways in which population is held stationary, which may include high mortality and misery and hence conform to Malthus' predictions - is not so far from Malthus' own thinking. Similar views to those we shall analyse for Malthus were also advanced by the Scottish political economist Dugald Stewart. He read and approved of the first *Essay on Population* and undertook a very similar analysis to that of Malthus! He placed primary stress on fertility as the major determinant of changes in rates of population growth, and on the effects of ideology and social structure on people's attitudes to marriage and childbearing. (5)

Malthus' arguments were revised in the almost totally new second edition of the *Essay* published in 1803, and there was a substantial alteration. Previously he had elaborated the premises as laws; now he spoke of them as hypothetical tendencies which would naturally work themselves out if all else was equal - or, as we would call it nowadays, a model. The new dimension that altered the whole situation was the 'preventive check', an idea which was in some ways merely an application of Smith's optimism. For Malthus had noticed that while

3 Smith, *Wealth*, i, 89, 163, 90

4. *Ibid.*, I, 89-90

5 Stewart, *Works*, viii, 95-104.

many great civilizations encouraged marriage at as early an age as possible - for example, India or China - this was not the case in Western Europe. (6) During travels in Norway between the first and second editions of the Essay he had witnessed various pressures which led to the postponement of marriage, or a moral 'preventive check' (as opposed to contraception and infanticide which he termed 'vice'). In Norway, recruitment to the army so that a man could not marry without producing a certificate of army service, and the informal refusal of certain ministers to perform the marriages of people who were unable to support a family, as well as the absence of employment and housing for the peasantry, all tended to delay marriage. In fact, speaking of Europe as a whole, Malthus wrote that '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 [i.e., late age at marriage] than in past times and among uncivilized nations.' Thus a delay in marriage, he believed, was 'the most powerful of the checks which in modern Europe keep down the population to the level of the means of subsistence'. In other words, Europe was on the way to escaping from 'misery'. (8)

Malthus did not need to travel to Norway to find an exception to his earlier 'laws' or tendencies. As subsequent historians have pointed out; and as Malthus was fully aware, the most extreme case of the preventive check, through late marriage and non-marriage, was England itself. (9) 'The most cursory view of society in this country must convince us, that throughout all ranks the preventive check to population prevails in a considerable degree.' 'the preventive check to population operates with considerable force throughout all the classes of the community'.(10) Having located the restrained fertility caused by an unusual marriage pattern, Malthus proceeded to provide a fascinating analysis of how, uniquely, the link between growing resources and growing population was transformed.

He looked at each of the four major groupings in English society - the wealthy, the middling, the wage-earners and the servants. The wealthy were reluctant to get married because they would be unable to maintain the standard of living to which they had been accustomed when single. They could not 'afford' to get married. The analysis is so central that we will quote his explanations fully:

6 Malthus, *Population*, i, 116, 119, 129.

7. *Ibid.*, I, 155-7

8. *Ibid.*, I, 315

9 Flinn, *Industrial Revolution*, 66; Chambers, *Population*, 59

10 Malthus, *Population*, ii, 236, 238.

a man of liberal education, with an income only just sufficient to enable him to associate in the rank of gentlemen, must feel absolutely certain that, if he marry and have a family, he shall be obliged to give up all his former connections. The woman, whom a man of education would naturally make the object of his choice, is one brought up in the same habits and sentiments with himself, and used to the familiar intercourse of a society totally different from that to which she must be reduced by marriage. Can a man easily consent to place the object of his affection in a situation so discordant, probably, to her habits and inclinations? Two or three steps of descent in society, particularly at this round of the ladder, where education ends and ignorance begins, will not be considered by the generality of people as a chimerical, but a real evil ... These considerations certainly prevent many in this rank of life from following the bent of their inclinations in an early attachment. (11)

Thus, in Malthus' analysis, there is a combination of economic and social pressure: a mixture of fear of poverty, of loss of social status, of loss of leisure and pleasure, Which will hold back the wealthy of both sexes from marriage. Furthermore, 'among the higher classes, who live principally in towns' people 'often want the inclination to marry, from the facility with which they can indulge themselves in an illicit intercourse with the sex. And others are deterred from marrying by the idea of the expenses that they must retrench, and the pleasures of which they must deprive themselves, on the supposition of having a family. (12) Put very broadly, marriage was viewed as something which bore considerable social and economic costs, which had to be weighed against its advantages.

The pressures on the middling wealthy, the very large group of farmers and tradesmen for which England had always been conspicuous, were a little different, Malthus believed.

The sons of tradesmen and farmers are exhorted not to marry, and generally find it necessary to comply with this advice, till they are settled in some business or farm, which may enable them to support a family. These events may not perhaps occur till they are far advanced in life. The scarcity of farms is a very general complaint; and the competition in every kind of business is so great, that it is not possible that all should be successful. Among the clerks in counting-houses, and the competitors for all kinds of mercantile and professional

11 Ibid., i, 236.

12 Idem.

for labour were so structured that while a single person could manage, the rearing of a family was very difficult.

But what happened, then, to all the young people who, in many societies, would have been married off at, or soon after, puberty? These were the people who would be under the most severe biological pressure to seek a mate and hence to marry. In England many of them were servants; once again, as Malthus points out, they found the economic and social pressures against marriage very strong.

The servants who live in the families of the rich have restraints yet stronger to break through in venturing upon marriage. They possess the necessaries, and even the comforts of life, almost in as great plenty as their masters. Their work is easy and their food luxurious, compared with the work and food of the class of labourers ... Thus comfortably situated at present, what are their prospects if they marry? Without knowledge or capital, either for business or farming, and unused and therefore unable to earn a subsistence by daily labour, their only refuge seems to be a miserable alehouse, which certainly offers no very enchanting prospect of a happy evening to their lives. The greater number of them, therefore, deterred by this uninviting view of their future situation, content themselves with remaining single where they are. (16)

Like celibate fellows of Oxford and Cambridge colleges in the past, or monks, they would lose the advantages of security and assured income if they married. If they were apprentices, rather than servants, they would lose their apprenticeships if they broke their contract and married.

What Malthus was in fact describing was a situation where those contemplating marriage had to make a choice. Marriage was not something automatic and universal, arranged by others and occurring like any natural event. It was something to be chosen, a conscious decision which could be made early or put off, and there were costs and benefits in any solution. Godwin agreed with Malthus that people calculated in this way. He thought that early marriages were infrequent in England because

every one, possessed in the most ordinary degree of the gift of foresight deliberates long before he engages in so momentous a transaction. He

asks himself, again and again, how he shall be able to subsist the offspring of his union. I am persuaded, it very rarely happens in England that a marriage takes place, without this question having first undergone a repeated examination. (17)

Malthus was aware of some of the benefits that pulled a person into marriage. Apart from the assuaging of that 'passion between the sexes', the biological urge, there was the desire to live 'with the woman he loves'. Marriage could also bring social advantages, of which, incidentally, he disapproved. He described as 'little better than legal prostitutions' those marriages between fair young women and unattractive older men which had resulted from the 'superior distinctions which married women receive, and the marked inattentions to which single women of advanced age are exposed'. These forced women through 'the fear of being an old maid, and of that silly and unjust ridicule, which folly sometimes attaches to this name' into 'the marriage union with men whom they dislike'. (18) Such costs must be explained to people before it could be fairly said that 'with regard to the great question of marriage, we leave every man to his own free and fair choice.'(19) Yet against these biological, social and occasional economic advantages must be weighed the costs.

The cost at one level was an economic one. In essence, it was more expensive to be married with children than to be single. 'We must on no account do anything which tends directly to encourage marriage, or to remove, in any regular and systematic manner, that inequality of circumstances which ought always to exist between the single man and the man with a family. (20) Malthus agreed with the judge who claimed 'that the growth and increase of mankind is more stunted from the cautious difficulty people make to enter on marriage, from the prospect of the trouble and expenses in providing for a family, than from anything in the nature of the species.'(21) This economic cost was mixed up with social costs, hence trouble and expenses.

In an assessment of the preventive check, Malthus isolated various considerations., which would drive an ordinary man to hold back from marriage:

[A man] cannot look around him and see the distress which frequently presses upon those who have large families; he cannot contemplate his

17 In Place, *Population*, 162. 18 Malthus, *Population*, ii, 184. 19 Ibid., ii, 185.

20 Ibid., ii, 223.

21 Ibid., i, 238.

present possessions or earnings, which he now nearly consumes himself, and calculate the amount of each share, when with very little addition they must be divided, perhaps, among seven or eight, without feeling a doubt whether, if he follow the bent of his inclinations, he may be able to support the offspring which he will probably bring into the world.'(22)

The cost is also social. In a stratified society such as England, Malthus observes, 'will he not lower his rank in life, and be obliged to give up in great measure his former habit ? I it not true that the utmost effort he may make will not be able to save his family, if he should have a large one, 'from rags and squalid poverty, and their consequent degradation in the community'? A man will have to work much harder. 'Will he not at any rate subject himself to greater difficulties, and more severe labour, than in his single state?' Furthermore, his children may be downwardly mobile: 'will he not be unable to transmit to his children the same advantages of education and improvement that he had himself possessed? (23) In effect, a mixture of social and economic arguments was balanced against the psychological and biological pressures towards marriage.

In such a situation, Malthus had no doubt that most people would act in an economically rational way and delay their marriages. Hence, there was no necessity to make laws against early marriages. I have distinctly said that, if any person chooses to marry without having a prospect of being able to maintain a family, he ought to have the most perfect liberty so to do ... I am most decidedly of opinion that any positive law to limit the age of marriage would be both unjust and immoral. (24) As contraception was both 'vice' and unnecessary, so was such a law both immoral and ultimately unnecessary. But how could Malthus be so sure that people in England would behave in a way which so conspicuously differed from that elsewhere? It appears that he saw the key in the combination of four features, all of which were developed to a very considerable degree in the England of his day.

These four things were a general acquisitive ethic which encouraged people to pursue economic and social gain; a ranked and unequal society which meant that people were constantly striving to move up a ladder and not to sink down; the institution of private property, secured by a just and powerful government, which would enable people to hold on to their gains; and a general standard of

22 Ibid., 23 Ibid., 12-13. 24 Ibid., ii,64.

living well above subsistence so that people would have grown to appreciate the comforts and advantages of civilization. It was this combination which made the situation uniquely propitious for the preventive check to work in England. England, a 'nation of shopkeepers', was famed for its pursuit of gain and wealth through trade and industry. It was noted for having infinite gradations of status and easy mobility between them, whereby wealth could be turned into status. It was the bastion of private property and had long enjoyed powerful government and law in support of such property. It was notably the most affluent country in Europe, and the comforts and luxuries were spread widely through the population in a way unparalleled in the world. Malthus presumed and documented these things as the background to the preventive check.

He saw the acquisitive ethic as the central feature.

'The desire of bettering our condition, and the fear of making it worse, like the *vis medicatrix naturae* in physics, is the *vis medicatrix reipublicae* in politics, and is continually counteracting the disorders arising from narrow human institutions ... it operates as a preventive check to increase.' (25)

Despite exhortations on the duties to marry,

'each individual has practically found it necessary to consider of the means of supporting a family before he ventures to take so important a step. That great *vis medicatrix reipublicae*, the desire of bettering our condition, and the fear of making it worse, has been constantly in action ... Owing to this powerful spring of health in every state the prudential check to marriage has increased in Europe.' (26)

This force operates most powerfully where it is relatively easy to climb or fall. For labourers there was the easy slide to pauperdom. (27)

It was private property and political security which kept the ladder upright and ensured that an individual's efforts to better his condition would not be wiped away. 'That this natural check to early marriages arising from a view of the difficulty attending the support of a large family operates very widely through all classes ... cannot admit of the slightest doubt. But the operation of this natural check depends exclusively upon the existence of the laws of property and succession.'

25 Ibid., ii, 53.

26 Ibid., ii, 257.

27 Ibid., i, 12-13.

Abolish inequality, abolish private property, and one would revert to those natural tendencies which could then only be controlled by 'vice' or 'misery'. The 'strong desire of bettering the condition (that master-spring of public prosperity)' led to a 'most laudable spirit of industry and foresight', included in which was the foresight to postpone marriage. 'These dispositions, so contrary to the hopeless indolence remarked in despotic countries, are generated by the constitution of the English government and the excellence of its laws, which secure to every individual the produce of his industry. (28) Such past security, combined with the desire to better one's condition, had created the final precondition for the preventive check - widespread affluence. 'Above all, throughout a very large class of people, a decided taste for the conveniences and comforts of life ... are observed to prevail. (29) It was a circular process. A widespread taste for 'decencies and comforts', for good food, good housing, good clothes and leisure would develop; people would become accustomed to that pleasant cushion between mere subsistence and their present lifestyle and wish to increase it. Such a wish would act as a further incentive to civilization and delayed marriage, and would prevent increased wealth being put straight back into reproduction. People would be forced to choose and would grow to prefer their raised standard of living. 'In a civilized country, such as England, where a taste for the decencies and comforts of life prevails among a very large class of people', (30) people would be less prepared to risk all by early marriage. This is what intervened between rising wages and population and broke the vicious spiral. 'It is under these circumstances, particularly when combined with a good government, that the labouring classes of society are most likely to acquire a decided taste for the conveniences and comforts of life. (31)

Malthus believed that once a circular process had begun, then it would continue and benefit all. He was concerned about the poor, but believed that the solution to their plight was not charitable hand-outs, as in the old Poor Laws. Such indiscriminate charity encouraged early marriages. 'A poor man may marry with little or no prospect of being able to support a family without parish assistance', and this merely led to a situation where the laws 'create the poor which they maintain.'(32) Much better, he argued, to encourage the taste for other things than children and hence improve the bargaining position of the poor. 'This

28. Ibid ii 206-7

29 Ibid., ii, 206.

30 Ibid., ii, 185.

31 Ibid., ii, 135.

32 Ibid., ii, 48.

prudential restraint if it were generally adopted, by narrowing the supply of labour in the market, would, in the natural course of things, soon raise its price.' The delay in marriage would also allow people to save for their marriages, so that when they did marry they had enough to support themselves. Thus 'all abject poverty would be removed from society.'⁽³³⁾ Yet Malthus added one further refinement. He argued that it might well be necessary for economic growth that population did grow, possibly rapidly. This he believed was possible under such a regime.

Elaborating on the framework of Adam Smith, he argued that the forces of supply and demand were bound to operate in the end - and the demand for labour would finally produce labour. The crucial thing, however, was the way in which this occurred and the delay in achieving the increased labour. 'The operation of the preventive check in this way, by constantly keeping the population within the limits of the food, though constantly following its increase, would give a real value to the rise of wages and the sums saved by labourers before marriage.'⁽³⁴⁾ But how, exactly, did a rise in wealth get delayed in this way; what exactly was the connection between the market and marriage? Here Malthus provided further insights.

His main point was that in a complex market economy such as England, the determining pressure was not simply the level of wages as such, let-alone the cost of grain. More important was a heavier demand for labour within the economy. A single man's wages, for example, might be relatively high, but if they were not coupled with a demand for women and children's labour, they might not be conducive to a drop in the age at marriage: 'it will evidently be the average earnings of the families of the labouring classes throughout the year on which the encouragement to marriage, and the power of supporting children, will depend, and not merely the wages of daylabour estimated in food. (35) It was the total earnings over the whole year that were important. 'An attention to this very essential point will explain the reason why, in many instances, the progress of population does not appear to be regulated by what are usually called the real wages of labour. (36) A combination of factors prevailed, including the possibility of parish relief, the presence of cheaper foodstuffs, and the availability of piece-work.

Malthus drew on the history of eighteenth - century England to

33 Ibid., ii, 161 .

34 Idem.

35 Ibid., ii, 139.

36 Idem.

describe the intervening mechanisms that meant that one had to think of total real income, rather than merely the wages of labour.

'In our own country, for instance, about the middle of the last century, the price of corn was very low; and, for twenty years together, from 1735 to 1755 a day's labour would, on an average, purchase a peck of wheat. During this period, population increased at a moderate rate; but not by any means with the same rapidity as from 1790 to 1811, when the average wages of day-labour would not in general purchase so much as a peck of wheat. In the latter case, however, there was a more rapid accumulation of capital, and a greater demand for labour; and though the continued rise of provisions still kept them rather ahead of wages, yet the fuller employment for everybody that would work, the greater quantity of task-work done, the higher relative value of corn compared with manufactures, the increased use of potatoes, and the greater sums distributed in parish allowances, unquestionably gave to the lower classes of society the power of commanding [i.e., purchasing] a greater quantity of food, and will account for the more rapid increase of population in the latter period, in perfect consistency with the general principle.' (37)

Thus, in a society where people were well above subsistence level, it was no longer the supply of food which determined population. In Ireland, where the standard of living was much lower, with the widespread use of potatoes and with low expectations, population would rise rapidly as the food supply increased.(38) But it was the demand for labour combined with people's expectations that would affect the situation in England, and one might even get the curious situation of population rising while the food supply shrank.

'When the demand for labour is either stationary, or increasing very slowly, people not seeing any employment open by which they can support a family, or the wages of common labour being inadequate to this purpose, will of course be deterred from marrying. But if a demand for labour continue increasing with some rapidity, although the supply of food be uncertain, the population will evidently go on.'(39)

Malthus was very aware that it was aspirations and attitudes that determined the effects of economics. Two principal examples of this were the attitudes to the purposes and functions of marriage, and the

37 Idem.

38 Semmel, Papers of Malthus, 44.

39 Malthus, Population, ii, 140.

attitude to what was considered an acceptable life. The former was interrelated with the religious and mental systems. The Chinese, Malthus suggested, 'acknowledge two ends in marriage; the first is that of perpetuating the sacrifices in the temple of their fathers; and the second the multiplication of the species ... In consequence of these maxims, a father feels some sort of dishonour, and is not easy in his mind, if he do not marry off all his children.'⁴⁰ In India (quoting from a translation of the ancient Indian Laws of Manu), 'marriage is very greatly encouraged, and a male heir is considered as an object of the first importance.' By a son a man obtained victory over all people; by a son's son he enjoys immortality; and afterwards by the son of that grandson he reaches the solar abode.'⁴¹ Such views of marriage 'cannot but have a very powerful influence'.

'The man who thinks that, in going out of the world without leaving representatives behind him, he shall have failed in an important duty to society, will be disposed to force rather than to repress his inclinations on this subject; and when his reason represents to him the difficulties attending a family, he will endeavour not to attend to these suggestions, will still determine to venture, and will hope that, in the discharge of what he conceives to be his duty, he shall not be deserted by Providence.'⁴²

Religion and social pressure combined with the 'passion between the sexes', Malthus believed, could well overwhelm economic prudence.

The force of the economic arguments would again depend very heavily on what was considered an acceptable living standard. If a person was prepared to put up with absolutely basic food and accommodation, and the humiliation of parish relief, then a population could marry early for a long time before it hit the absolute levels of starvation and pestilence. But if a person expected a few of the comforts of life, like some leisure, privacy, warmth, food above and beyond rice, potatoes or black bread, then he or she might be held back from early reproduction. This was a contrast between the English and Irish poor, as Malthus observed it, a difference arising from the fact that the English had grown to think of certain minor comforts as necessities. 'One of the most salutary and least pernicious checks to the frequency of early marriages in this country is the

⁴⁰ Ibid., i, 129.

⁴¹ Ibid, i, 116.

⁴² Ibid., ii, 184-5.

difficulty of procuring a cottage, and the laudable habits which prompt a labourer rather to defer his marriage some years in the expectation of a vacancy, than to content himself with a wretched mud cabin, like those in Ireland.'⁽⁴³⁾ Thus we see that a consideration of why the preventive check had become so powerful in England led Malthus deep into a consideration of politics and law, of private property, equality and inequality, of religion and views of the ancestors and after-life, of aspirations and 'habits'.

The applicability of Malthus' analysis to Darwin's case is obvious. What has been less clear until very recently is the great importance of the marriage mechanisms which Malthus outlines. Their significance in explaining the nature of English economic and demographic development has been obscured by a problem which has only recently been overcome. The solution to that problem places Malthusian marriage at the centre of the historical investigation

43 Ibid., ii, 250.