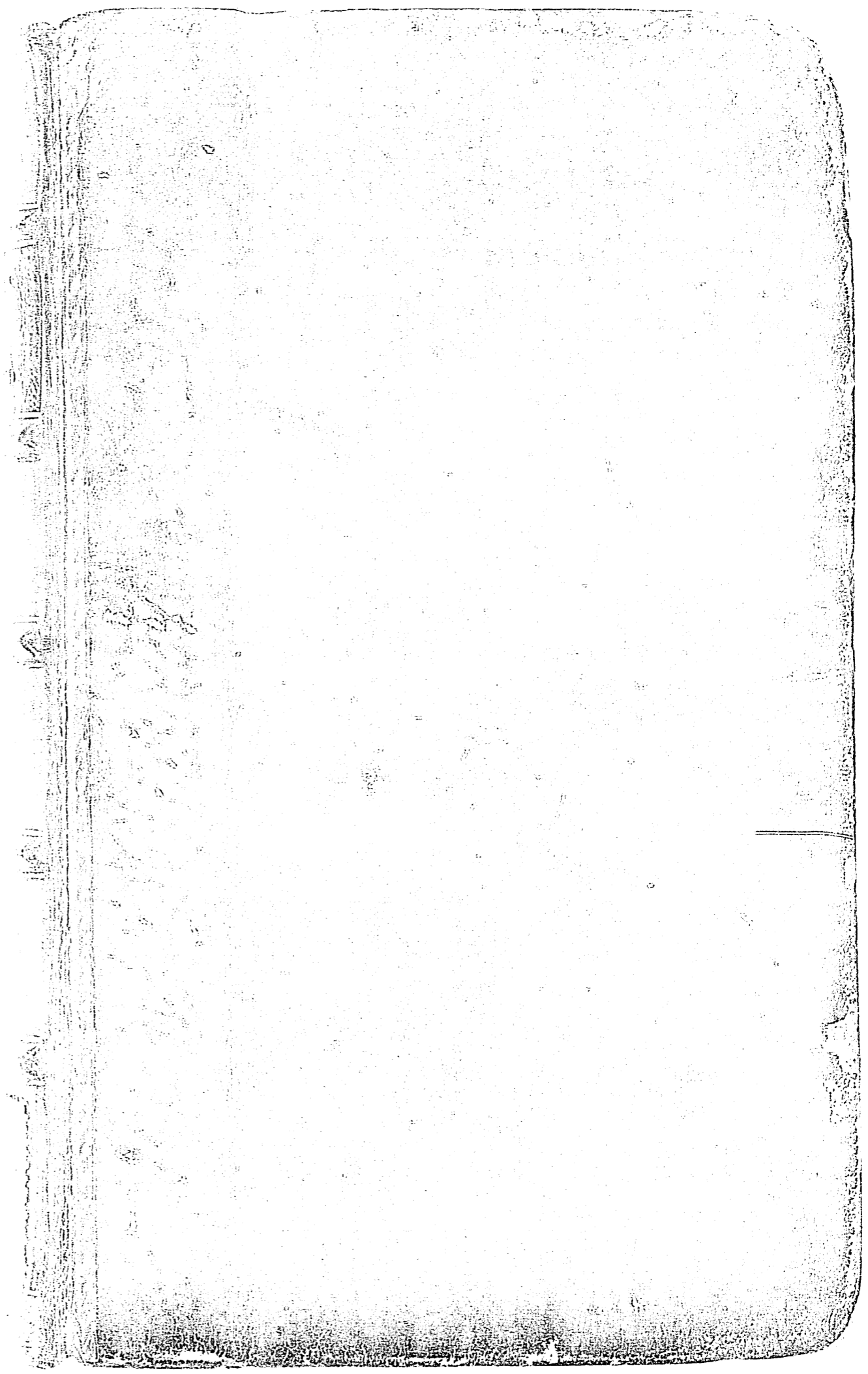


**A Dissertation on the numbers  
of mankind in antient and  
modern times.**

Wallace, Robert 1753

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Vol.

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A  
DISSERTATION  
ON THE  
NUMBERS of MANKIND  
in antient and modern Times:

IN WHICH  
The superior Populoufness of Antiquity is  
maintained.

WITH  
AN APPENDIX,  
Containing ADDITIONAL OBSERVATIONS on the  
same Subject,

And  
Some REMARKS on Mr. *Hume's Political Discourse, Of  
the Populoufness of antient Nations.*

*Terra antiqua, potens armis atque ubere glebae.*

EDINBURGH:  
Printed for G. HAMILTON and J. BALFOUR. 1753.

A D V E R T I S E M E N T.

**T**HE Author of this Differtation on the Numbers of Mankind, is desired by the PHILOSOPHICAL SOCIETY at EDINBURGH, to acquaint the Public, that it was composed several Years ago, and was read before them.

FOR his own part, as he has the Honour to be a Member of this SOCIETY, he had no Thoughts of publishing it, till it should have had a Place among their Works. However, as they had not determined when they were to publish their Transactions, he was advised to embrace an Opportunity of publishing his Differtation at a Time, when he might hope for the Attention of the Learned, which had been already directed towards the Subject, by the Publication of Mr. HUME's Political Discourse, Of the Populoufness of antient Nations. He has therefore published it in its original Form; only some inconsiderable Additions have been made to it, since it was presented to the PHILOSOPHICAL SOCIETY.

THE Differtation is followed by an Appendix on the same Subject, which was not read before the PHILOSOPHICAL SOCIETY. The Author thought he should not have done Justice to his Argument, if he  
had

iv A D V E R T I S E M E N T.

had omitted to subjoin those Observations, with which he was furnished by a Review of the Subject, and by a careful Perusal of Mr. HUME's Political Discourse.

HE thinks himself obliged to own, what indeed every one, who is in the least acquainted with him, must have immediately perceived, That the Observations on Law, inserted in the Appendix, are the Work of another Hand.

THE first Edition of Mr. HUME's Discourse is quoted in the Appendix. However, this can be no Inconvenience to such as have the second; since the Pages of both Editions almost every where coincide.

A

A  
D I S S E R T A T I O N

O N T H E

N U M B E R S O F M A N K I N D.

**A**S there is nothing in the form and condition of this Earth, or in any of the appearances of Nature, to excite in us the idea of their necessary existence, or make us believe that this our globe was from eternity; it is not only agreeable to the sacred Records, but also confirmed by other antient monuments, as well as the most authentic history and tradition; that mankind had a beginning on this earth\*, and were not raised up at first in all its regions

A

\* *Praeterea, si nulla fuit genitalis origo  
Terrae et coeli, semperque aeterna fuere:  
Cur supra bellum Thebanum et funera Trojae,  
Non alias alii quoque res cecinere Poetae?  
Quo tot facta virum toties cecidere? nec usquam  
Aeternis famae monumentis insita florent?  
Verum (ut opinor) habet novitatem summa, recensque  
Natura est mundi, neque pridem exordia cepit.*

LUCRET. lib. 5.

Thus even the irreligious Poet, contemplating the appearances on the earth.

gions at once; but that, springing originally from a few, and increasing by propagation, they gradually removed from their original seats, as force, or necessity, or choice, or accidents determined them; and in a course of years or ages, spread themselves far and wide, till at length the more fertile soils, and more temperate climates, and even the more barren and less mild were replenished with inhabitants.

WHETHER we should receive any instruction, it would, surely, be curious and entertaining, had we a distinct and compleat view of the various migrations of mankind, and could form an accurate scheme of the times in which they happened, the leaders of these early colonies, the different regions towards which they directed their course, with other circumstances concerning the first peopling of the world. But no such entertainment can be expected. For, as in fact history affords only imperfect hints; so, according to the natural order of things, and without inspiration, it could not possibly be otherwise. Before the affairs of mankind could have been so firmly settled, as to give them leisure or inclination to write history, the memory of the most antient facts must have been in a great measure forgotten and destroyed\*.

IN

\* Had this been duly considered, many authors, more remarkable for their various reading, and fanciful application of names, than solidity of judgment, had given themselves and the world much less unnecessary trouble, in tracing up nations to their original.

IN what length of time all the habitable parts of the earth might have been peopled, as fully as they ever were at any period, 'tis impossible to determine with precision. However, this may be calculated according to any suppositions which shall be laid down; and as we comprehend all circumstances more fully, and our suppositions are more just, we shall approach nearer to the truth.

IN attempting such a calculation from a single pair, let us suppose, that all marry who attain to maturity, and that every marriage produces six children, three males, and as many females; two of whom, *viz.* one male and one female die in the more early seasons of life, or before marriage: according to which, four will remain to marry, and replenish the world: That, in  $33\frac{1}{3}$  years from the time when this original pair began to propagate, they shall have produced their six children; and that within the second period of  $33\frac{1}{3}$  years, each of the succeeding couples shall have produced six children; and this to take place continually. On these suppositions, at the beginning of the scheme, the original pair are only in life; at the end of the first period of  $33\frac{1}{3}$  years, there are six persons living, *viz.* the original pair, and four others; at the end of  $66\frac{2}{3}$  years, there will be 12; against 100 years there will be 24 living; and the number of persons in the succeeding periods of the scheme, according to these suppositions, will be found as in the following table.

A 2

Periods

33 1/3  
100 - 12  
1 1/2

Periods of the scheme.	Years of the scheme.	Born since the last period.	Of whom died since the last period.	And remain in life to propagate.	Died since last period, at an advanced age.	The sum of all who are alive at the respective periods.	The sums of the last column collected.
Col. 1.	Col. 2.	Col. 3.	Col. 4.	Col. 5.	Col. 6.	Col. 7.	Col. 8.
0	1	0	0	0	0	2	2
1	$33\frac{1}{3}$	6	2	4	0	$2 + 4$	6
2	$66\frac{2}{3}$	12	4	8	2	$6 + 8 - 2$	12
3	100	24	8	16	4	$12 + 16 - 4$	24
4	$133\frac{1}{3}$	48	16	32	8	$24 + 32 - 8$	48
5	$166\frac{2}{3}$	96	32	64	16	$48 + 64 - 16$	96
6	200	192	64	128	32	$96 + 128 - 32$	192

THIS table is divided into 8 columns, which are each explained at the top; and + in the 7th column signifies the addition, and — the subtraction of the following number, as in *Algebra*.

To take an example.

AT the first year, or the beginning of the scheme, none but the original pair are in life, as they have not as yet begun to propagate.

AT

AT the end of  $33\frac{1}{3}$  years, from the time the original pair began to propagate, six have been born, of whom two are dead, and four are left alive to propagate; and as the original pair are supposed to be still living, there are in whole six persons on the earth.

AT the end of  $66\frac{2}{3}$  years, 12 have been born since the end of the last period, of whom four are dead, and eight left alive to propagate; and the original pair being by this time supposed to be dead, it being 66 years since they began to propagate, or about 100 since we must suppose they might have been born, (for we suppose they began to propagate in full vigour); there are only 12 in life, *viz.* 6 who were alive at the end of the first period deducting the original pair: and 8 younger, who are alive at the end of the second period.

AGAIN, at the end of 100 years, or the third period, 24 have been born since the end of the second or last period, of whom 8 are dead, and 16 left alive; and the generation, which succeeded the original pair, being by this time dead, there are 24 in life, *viz.* the 12 who were alive at the end of the second or last period, deducting 4 who died since the end of this second period: and 16 younger, born since that time.

AND thus we shall find mankind to double themselves in each period of  $33\frac{1}{3}$  years, as will be evident from the composition of the table.

FOR, take any number in the third column, and call it  $a$ ; then the number on the right hand is

$$\frac{a}{3}$$



$\frac{2a}{3}$ , and the next to that on the right hand is  $\frac{2a}{3}$ ; and multiplying this last by 3, the product is  $2a$ , or the double of  $a$ ; and this double of  $a$  is the number immediately below  $a$ : so to find out the third column, you double the numbers from 6.

AGAIN, one third part of  $2a$  is  $\frac{2a}{3}$ , which is the double of  $\frac{a}{3}$ : Hence to find out the fourth column, you double the numbers from 2.

AGAIN, two thirds of  $2a$  is  $\frac{4a}{3}$ , which is the double of  $\frac{2a}{3}$ : so to find the fifth column, you double the numbers from 4.

AGAIN, the sixth column is the same with the fourth, beginning one row lower, or rather the same with the fifth, beginning two rows lower.

AND as to the seventh column, it consists of 3 numbers, of which the number to the left hand (after the second row) is evidently equal to all in the row immediately above; and the other two numbers in the third row, *viz.*  $8-2$  is equal to the first number on the left hand, or 6: so the third is double of the second row. Thus  $16-4$  in the fourth row is double of  $8-2$  in the third row, and  $32-8$  in the fifth row is double of  $16-4$  in the fourth; and this will always be the case, as will be evident from considering the fifth and sixth columns, of which this part of the seventh column is composed.

THIS table may be continued to any number of years or periods; but it is sufficient to continue the first, the second, and the 8th columns, as follows:

Periods of Years of the scheme.	Years of the scheme.	The sum of all who are alive at the respective years or periods.
7	233	384
8	266	768
9	300	1536
10	333	3072
11	366	6144
12	400	12,288
13	433	24,576
14	466	49,152
15	500	98,304
16	533	196,608
17	566	393,216
18	600	786,432
19	633	1,572,864
20	666	3,145,728
21	700	6,291,456
22	733	12,582,912
23	766	25,165,824
24	800	50,331,648
25	833	100,663,296
26	866	201,326,592
27	900	402,653,184
28	933	805,306,368
29	966	1,610,612,736
30	1000	3,221,225,472
31	1033	6,442,450,944
32	1066	12,884,901,888
33	1100	25,769,803,776
34	1133	51,539,607,552
35	1166	103,079,215,104
36	1200	206,158,430,208
37	1233	412,316,860,416

Thus

Thus we may see to what a prodigious multitude mankind must have increased in 1200 years; and that, according to this rate, they must have overstocked the earth long before the deluge. Such a consequence, therefore, quite inconsistent with fact, as well as the experience of the world concerning the proportion between births and marriages, must convince us, that mankind cannot be supposed to propagate at so high a rate. 'Tis certain, however, every marriage must produce more than one couple; else, reckoning the period of human life to be 100 years, there could never be a dozen of persons alive at any one time. Every couple, therefore, produces more than one, but fewer than two couples, at a medium; and it is easy to institute a calculation according to any assumed hypothesis\*.

FROM tables of this kind, framed according to any stated rule, we may see the number of persons, who may be supposed to descend from a single pair, and how they increase in proportion to their distance from the root. The table, according to strict truth, does not shew the number of persons who are alive at the respective periods, but more properly the number of persons, sprung from the original pair, who

\* It is not owing to the want of prolific virtue, but to the distressed circumstances of mankind, that every generation does not more than double themselves; for this would be the case, if every man were married at the age of puberty, and could sufficiently provide for a family.

who are at the same distance from the root, according to the several generations. Thus, in the 19th generation, there are above one million and a half; in the 24th, above fifty millions of people: and in the same manner the calculation may be extended to any generation whatever.

AND tho' all of the same generation, or at the same distance from the root, may not be alive at the same time, (for we may conceive, that persons at the same distance from the original stock, may not be contemporary, but distant from one another by many years, nay even by ages); yet as irregularities of this kind may be generally supposed to correct and compensate one another, the table will shew, nearly, the number of persons who are in the world at the respective periods of time\*.

'Tis impossible to determine the number of inhabitants on our globe in the present, or in any preceding age. But we may fix, perhaps, certain limits, to direct us a little in such an uncertain subject. And if we make Mr. *Templeman's* observations, in his *survey of the globe*, the foundation of our calculations, we may form various conjectures about the number of mankind at present.

B

THUS,

\* Tho' mankind do not actually propagate according to the rule in our tables, or any other constant rule; yet tables of this nature are not entirely useless, but may serve to shew, how much the increase of mankind is prevented by the various causes which confine their number within such narrow limits.

Thus, if we suppose the whole habitable earth to be as well peopled in proportion as *England*, it contains more than 4960 millions of people.

OR supposing it peopled in the same proportion as *Scotland*, it contains more than 1655 millions.

OR if in proportion as *Spain*, it contains more than 1055 millions.

AND as *Holland* is thought to be near seven times as populous as *England* in proportion to its extent, if the whole habitable earth be peopled in the same proportion as *Holland*, it contains about 34720 millions of inhabitants.

IF it is peopled as ill as the Empress of *Russia's* dominions, it contains about 475 millions.

FROM whence we may conclude, that as it must be much better peopled than *Russia*, and much worse than *Holland*, it must contain many more than 475, and many fewer than 34720 millions.

AND, upon the whole, it cannot be supposed to be so well peopled as *England*; perhaps scarce so well as *Spain*; and does not really contain more than 1000 millions.

Thus, according to the preceding table, there might have been many more inhabitants, than are on the earth at present, long before the deluge. For, in the 966th year of the world, we find more than 1610 millions: and as, from the deluge to the reign of *Alexander the Great*, there passed about 2000, and to the reign of *Cyrus* the founder of the *Persian* empire,

empire, about 1800 years; according to the formerly supposed rate of propagation, or even a much lower, the earth might have been better peopled, than it is at present, before either of those periods.

This holds especially with respect to the times since the deluge; as it appears from sacred history, that there were at least three couples for multiplying, the three sons of *Noah* and their wives, instead of one; which is the supposition in the tables. On which account, the inhabitants of the earth must have increased much quicker than in the tables; and the earth might have been well peopled in times which we account very antient.

INDEED, whatever law of propagation we suppose, which is not altogether improbable, we shall find, that, calculating according to this law, mankind must have been much more numerous at a certain period already past, than they have ever been; and after that period, as well as before it, they must continually increase. But we ought not from hence to conclude, that the earth is actually peopled in this manner; that mankind are always increasing, and are most numerous in the ages most distant from the beginning; or that they multiply regularly, according to any stated law: on the contrary, it is

\* If we consider the longevity of the Patriarchs, both before and after the deluge, mentioned in sacred Scripture, the argument for the more speedy increase of the world will appear stronger.

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is certain, that they multiply irregularly, and may have been more numerous in some preceding, than some subsequent ages; and that, thro' various causes, there has never been such a number of inhabitants on the earth at any one point of time, as might have been easily raised by the prolific virtue of mankind.

THE causes of this paucity of inhabitants, and irregularity of increase, are manifold. Some of them may be called *physical*, as they depend entirely on the course of nature, and are independent on mankind. Others of them are *moral*, and depend on the affections, passions, and institutions of men. Among the *physical* causes, some are more constant; as the temperature of the air, the extreme heat or cold of some climates, the barrenness of some regions of the earth, and the unfavourableness of the climate or natural product of some soils to generation. Other causes of this kind are more variable; such as, the inclemency of particular seasons, plagues, famines, earthquakes, and inundations of the sea; which sweep off great numbers of men, as well as other animals, and prevent the quicker replenishing of the earth.

THAT these natural causes have had a baneful influence, cannot be doubted; yet it is probable, that this might be prevented in some degree, perhaps even in a great measure, by the skill and industry of men, and by wholesome laws and institutions; at least, that all these natural causes

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taken together, excepting perhaps the incurable barrenness or unwholesomeness of some particular regions, have not so bad an effect as the *moral* causes, which arise from the passions and vices of men, and have a more constant and powerful influence on the world.

To this last article we may refer so many destructive wars which men have waged against one another; great poverty, corrupt institutions, either of a civil or religious kind, intemperance, debauchery, irregular amours, idleness, luxury, and whatever either prevents marriage, weakens the generating faculties of men, or renders them negligent or incapable of educating their children, and cultivating the earth to advantage. 'Tis chiefly to such destructive causes we must ascribe the small number of men. Indeed, had it not been for the errors and vices of mankind, and the defects of government and education, the earth must have been much better peopled, perhaps might have been overstocked, many ages ago: and as these causes operate more or less strongly, the earth will be better or worse peopled at different times. Hence likewise, as has been already remarked, we may suppose that the earth was much better peopled in some antient ages, than it has been in modern times, or is at present. Nor is there any necessity to suppose, that the number of men upon the earth must have continually increased,

creased; and that, in the present age, their number is greater than at any preceding period. UPON a more exact inquiry, perhaps, we shall find reason to conclude, that the reverse is the truth. And as the illustration of this subject is of very great importance, and is closely connected with the deepest policy and most intimate constitution of human society,\* an accurate examination must be useful and interesting; and tho' we may not give perfect satisfaction, yet any tolerable prospect can scarce be unacceptable. To say truth, 'tis but a very imperfect prospect we dare promise on this occasion. The subject itself is so involved in obscurity, the accounts of antient authors are so incomplete, the matter has either not been handled at all, or handled so superficially, that much cannot be expected in a first essay; nay, after the most accurate search, it will perhaps be found impossible to determine precisely at what rate mankind have either increased or decreased, in particular ages or countries; or from what particular causes such variations have happened. Exact registers of such things have never been kept, and indeed could never have been preserved

\* The question concerning the number of mankind in antient and modern times, under antient or modern governments, is not to be considered as a matter of pure curiosity, but of the greatest importance; since it must be a strong presumption in favour of the customs or policy of any government, if, *ceteris paribus*, it is able to raise up and maintain a greater number of people.

preserved in such an unsettled state of human affairs. However, some light may, surely, be struck out, which will illustrate this subject.

BUT ere we proceed to inquire more particularly, it will be proper to lay down some general maxims taken from nature and constant observation, which may be useful to guide us in a more particular comparison.

I. A rude and barbarous people, living by hunting, fishing, or pasturage, or on the spontaneous product of the earth, without agriculture, commerce and arts, can never be so numerous as a people inhabiting the same tracts of land, who are well skilled in agriculture and civilized by commerce: since uncultivated can never maintain so many inhabitants, as cultivated lands. In every country, there shall always be found a greater number of inhabitants, *ceteris paribus*, in proportion to the plenty of provisions it affords, as plenty will always encourage the generality of the people to marry.

HENCE it is evident, that the world could not be best peopled in rude and ignorant ages, while men lived chiefly on the spontaneous fruits of the earth, and were neither instructed in agriculture, nor polished by arts or commerce; and that in whatever age we find a country grossly ignorant of agriculture, we may be assured, it must have been but thinly inhabited.

FROM which we may justly conclude, that, notwithstanding the numerous swarms which the northern

northern nations sent forth into southern climes, at different times, those northern regions might have, and if barbarous and without agriculture, must have, been ill peopled; for it is easy to overstock an uncultivated country: nay, such a country, in the common course of things, if it does not meet with some extraordinary calamities, must necessarily be obliged, at certain times, to disburden itself of the mouths it cannot sustain.

2. As the earth could not be well peopled in rude and barbarous ages, neither are all countries, climates and soils, equally favourable to propagation. There must therefore be a great difference in respect of inhabitants, notwithstanding the best culture, discipline and constitutions.

FOR cold and barren heaths, rocky mountainous tracts, marshes which cannot be drained, inhospitable sands, and many other sorts of unfruitful soils; cannot produce equal quantities of food, and, by consequence, *ceteris paribus*, cannot be so well stored with people, as softer and more fertile climes. We may also suppose, that, in certain countries, the air, or the most common food may be more or less favourable to generation; or that there is not an equal proportion between the births of males and females; and that the males abound too much. Circumstances of this sort may lay a foundation for great variety in the numbers of mankind.

3. BESIDES the nature of the climate or soil, the number of people in every country depends greatly on

on its political maxims and institutions concerning the division of lands.

FOR if there is very nearly an equal division of the lands, and into such small shares, that they can yield little more than what is necessary to feed and clothe the labourers in a frugal and simple manner; tho', in such a situation, there is little room for commerce with strangers, and none but the most simple and necessary arts can be in use; yet if the country be naturally fertile, it must of necessity be well stored with people.

HENCE we may conclude, that when any antient nation divided its lands into small shares, and when even eminent citizens had but a few acres to maintain their families, tho' such a nation had but little commerce, and had learned only a few simple and more necessary arts, it must have abounded greatly in people. This was in a particular manner the case in *Rome* for several ages, as we shall see afterwards.

BUT if the lands be divided into very unequal shares, and, in general, may produce much more than will decently support such as cultivate them, the country may, notwithstanding, be well peopled, if arts be encouraged, and the surplus above what will support the labourers of the ground be allotted for such as cultivate the arts and sciences.

FURTHER, where the lands are very unequally divided, and are capable of maintaining many more than those who cultivate them, that country must

be thinly peopled, unless elegance is studied, and proper encouragement given to the arts which conduce to it.

IN every country where nothing is known but agriculture and pasturage, and a few more simple arts, such as those of building and cloathing in a frugal taste, without ornament; of necessity there must be few inhabitants, unless the lands are nearly equally divided, and into small portions. And in a fertile soil, the shares of land must be extremely small, if they are not able to support many more than are necessary for cultivating them. Hence in every such soil, where a great extent of property is allowed, there is room for elegance, sumptuousness, and the encouragement of arts; and in whatever country industry prevails, about what subject soever it is employed, provided the produce of it gives a price either at home or abroad, such a country may abound in people, and flourish by arts and commerce: it may even flourish tho' agriculture is not encouraged to the full, and several tracts of land are much neglected. Nay such is the force of industry and commerce, that by means of them many more inhabitants may be maintained in a country, than the produce of the lands can possibly support, as their food may be brought from a distance.

AT the same time, if the lands of any country be neglected, the world in general must suffer for it, and the earth must contain a smaller number of inhabitants,

habitants, in proportion to the numbers which might be supported by these uncultivated lands.

4. As the number of people in every nation depends most immediately on the number and fruitfulness of marriages, and the encouragement that is given to marry; where-ever the greatest care is taken in this respect, the number of the people, *ceteris paribus*, shall be greatest; and a bad policy in this article must give a considerable check to propagation.

HENCE, in a debauched nation, addicted to sensuality and irregular amours, and where luxury and a high taste of delicate living prevails, the number of the people must be proportionally small, as their debauchery will hinder many from marrying, and their luxury and delicacy will render them less able to maintain families.

FOR the same reason, a nation shall be more populous in proportion as good morals and a simplicity of taste and manners prevail, or as the people are more frugal and virtuous.

5. As mankind can only be supported by the fruits of the earth and animal food, and it is only by agriculture, fishing and hunting, that food can be provided, to render the earth as populous as possible, these arts must be duly cherished, especially agriculture and fishing.

HENCE, the more persons employ themselves in agriculture and fishing, and the arts which are necessary for managing them to greatest advantage, the

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the world in general will be more populous ; and as fewer hands are employed in this manner, there will be fewer people. 'Tis of no consequence in this argument, how the people are employed otherwise, nay tho' they are employed in arts which may increase the riches and numbers of particular nations, if they are not employed in such as are necessary for providing food.

AMONG arts of this latter kind, we include not only such as are immediately, but such likewise as are absolutely necessary for this purpose, tho' perhaps more immediately subservient to other ends; such as, the arts of preparing all necessary tools of the best sort, and even cloaths and houses, and whatever tends to preserve health and strength for labour. But we exclude all those arts which tend wholly to ornament and delicacy: and tho' perhaps it is impossible (nor is it necessary in the present argument) to distinguish precisely, which art is for ornament, and which for use; yet we can easily distinguish *en gros*. And in proportion as the arts for ornament or those for use do most prevail, there shall be, in general, fewer or more inhabitants in the world.

FOR if 10,000, or any other determinate number, be employed merely in works of ornament, and their labour does not serve for multiplying food, there must be a certain number, by whose labour, in providing food, these 10,000 must be supported. Now if these 10,000, instead of labouring for ornament

namement alone, were employed directly in providing food, they might not only provide for themselves, but likewise for a certain number of others; by which greater numbers might be supported on the whole. In order therefore to have the greatest possible number of inhabitants in the world, all mankind should be employed directly in providing food; and this must always be the case till the whole earth shall be cultivated to the full. But whenever the earth shall happen to be as richly cultivated as is possible, then will there be room for those arts that tend only to ornament, since such as are employed in the more necessary labour of providing food, must be able to purchase it for a much greater number than themselves.

IN all this, we do not pretend to distinguish nicely such arts as are useful from such as are merely ornamental; much less do we assert that mankind ought never to employ themselves in arts which tend only to ornament, till the whole earth shall be cultivated in the highest degree possible. We only observe what must be the natural and necessary consequences of various sorts of labour, and by what means the earth may be best stocked with people; to wit, when the necessary arts are most studied. This must hold when the whole earth is considered *in cumulo*. It will also hold, as to any particular country, in all cases but one; I mean, when a smaller number by traffick and commerce, can import a greater quantity of food,



food, than could be raised by the same number pursuing agriculture at home. For in this case, tho' the world in general must lose in numbers of people, yet a particular nation might gain. Thus the world in general, and every particular nation, (except in the case just now stated) must have fewer or more inhabitants, in proportion as luxury and a delicate taste, or as simplicity of manners prevails, and as the arts necessary for providing food are less or more industriously cultivated.

HENCE it follows likewise, contrary perhaps to what many may apprehend, that trade and commerce, instead of increasing, may often tend to diminish the number of mankind, and while they enrich a particular nation and entice great numbers of people into one place, may be not a little detrimental upon the whole, as they promote luxury and prevent many useful hands from being employed in agriculture. The exchange of commodities and carrying them from one country to another by sea or land, does not multiply food; and if such as are employed in this exchange, were employed in agriculture at home, a greater quantity of food would be provided, and a greater number of people might be maintained.

THE same principle will teach us, that huge and overgrown cities, which are nurseries of corruption and debauchery, and prejudicial in many other respects, are in a particular manner destructive to the populousness of the world, as they cherish luxury,  
entice

entice great numbers of all ranks to resort to them, and drain the rest of a country of useful labouring hands, who otherwise would be employed in agriculture and the most necessary arts.

NOR do the operose manufactures of linen and woollen, toys and utensils of wood or metals or earth, in which so many hands are employed in a commercial nation, contribute so much to the increase of the people as many are apt to apprehend: and it is not always true, that in proportion as manufactures are numerous and flourishing, a country must of course be more populous than in times of greater simplicity.

IN general, living must be cheaper, where fewer things are wanted, and what is needed may be most easily purchased. Where-ever living is cheapest, and a family can be most easily supported, there will be more frequent marriages and greater numbers of people. Where scarce any thing is needed but simple food, a simple garment, and a little plain furniture, living will be cheapest. This agrees best to a state, where few mechanic arts are in use, and men are chiefly addicted to agriculture.

BUT operose manufactures of linen and woollen for cloaths and furniture of houses, a variety of utensils of wood and metals, and all the refinements of an opulent and trading nation, tend to multiply mens wants, make the most necessary and substantial things dearer, and in general increase the expences of living.

Food

Food and cloaths, houses and a little furniture are necessary for all. And if a nation be laborious and industrious, these necessaries of life will be in such abundance, that almost every one will have them at an easy rate; and while the people preserve their simple taste, and continue to be industrious, they will multiply prodigiously. But when this simplicity of taste is lost, which must always happen in proportion as operose manufactures increase: tho' they continue to be industrious, yet more of the people will apply themselves to less necessary manufactures, and fewer to provide what is more substantial; and as the proportion of those who apply to elegant manufactures increases, and fewer hands are employed in providing food, necessaries will become more scarce; toys abound, and become more necessary for the bulk of the people. This will still keep them dear, tho' they are in plenty. Hence living even in the most simple manner will become more expensive. Consequently mankind be less able to support families, and less encouraged to marry.

AND tho' the value of labour will become higher as manufactures increase, it will not compensate the greater expences of living. For this is only one article, and will not enable the labourer to furnish himself with such a variety, as growing manufactures render both necessary and difficult to be purchased.

IT

It must be confessed; that numerous manufactures make a nation more elegant and magnificent. They introduce a variety of fine cloaths and furniture; but at the same time they divert the attention of mankind from providing food: and while they create a taste for delicacies, and make them necessary, in some degree, for the bulk of the people, they increase the number of artists, and diminish that of husbandmen.

IN one respect, therefore, a variety of manufactures diverts the attention of mankind from more necessary labour, and prevents the increase of the people.

THIS will become more evident, if it shall appear, that, in a state where manufactures abound, every inhabitant has four or five acres of ground to maintain him; and, in another where the taste is more simple, there is not one acre for every member of the society.

HOWEVER, if in any state, whether the territory is small or great, there be more people than the whole lands can maintain, even with the best culture, the society must depend on manufactures; and by manufactures alone they can flourish.

BUT if they have so much uncultivated land, that, notwithstanding flourishing manufactures, they have still a much greater number of acres than people; had they a more simple taste, and

Directed to be applied

applied more vigorously to agriculture, their people would increase more speedily. This argument will be equally strong, whether we suppose these manufactures consumed at home, or exported abroad, provided what is returned in exchange for the exported commodities is not substantial food, such as corn or cattle, but only other manufactures which support elegance and magnificence, or contribute to delicacy of living.

NOR has the greater or less plenty of money any influence in this case. For men cannot live on money but on food: and if, from the policy, and the general customs of a country, the people want a variety of things they cannot easily purchase; especially, if, by a greater attention to manufactures than agriculture, common food becomes scarce and dear; whatever plenty of money may be supposed in such a situation, there must be great discouragements to marry, as it will be impossible to support families easily.

FOR money and the use of it must always be estimated by, and bear a proportion to the stock or quantity of goods that are in a nation, and the number of persons who are to use them.

WHAT chiefly encourages marriages, and enables men to support families easily, is the easy purchase of food and what is necessary for the bulk of the people. If these things can be easily purchased, it is of little consequence, in this argument, whether money be in plenty or not. But if,

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by means of opulose manufactures; such a variety of things becomes necessary, as the bulk of the people cannot purchase without difficulty, whatever is the quantity of money, multitudes will be discouraged from marrying.

AT the same time, we may suppose a great deal of elegance and magnificence in a state, tho' plain food and the necessaries of life may be easily purchased. This will be the case if the magnificence appears only in what belongs to the publick; as in temples, theatres, or public edifices of any kind, or in the splendor of the magistrates or officers of the state: or, if it descends to some rich men in a private station, it must consist principally in what is durable, and is not daily consumed; for this sort of magnificence will not employ many hands, and a sufficient number will remain for providing food.

SUPPOSE the great body of manufacturers in some trading nations that have a large territory, to lay aside their manufactures, and employ themselves in agriculture, pasturage, and fishing; they would provide a vast quantity of food; they would make all the necessaries of life cheap and easy to be purchased; and it would soon become visible how great a difference there is between agriculture and manufactures in rendering a nation populous.

IN opposition to this, it may be said, that when a nation is possessed of a large territory, which is either so unequally divided, or divided into such large shares, that the whole people, or a great part

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of them, have a much greater quantity of land than will maintain them easily; such a people must be lazy and indolent; and will have nothing to quicken their industry, unless arts and manufactures are introduced and cherished; that if they have a simple taste, and know little of elegance, as they must have great plenty of plain food, and all the necessaries of life, there is nothing that will be a spur to their ambition; and thus they may continue, for ages, in idleness, and their number increase very little. But if once a variety of arts and manufactures are introduced among them; if their taste be refined, their wants increased, and they have many alluring objects of art to excite their desires; this awakens ambition, kindles emulation, quickens industry, and engages men to labour; that they may procure the tempting objects they desire. 'Tis thus a society becomes elegant, magnificent and populous; and now they will make greater advances in a short time, than formerly they were capable of making in many ages; while their simplicity of taste remained.

It must be confessed, this has a specious appearance, and is partly founded on truth: yet, upon a more accurate examination, we shall find the former arguments for a simplicity of taste remain firm and unshaken.

In a preceding observation \*, we acknowledged, "That where the lands are very unequally divi-

\* Pages 17, 18.

ded,

ded, and are capable of maintaining many more than those who cultivate them, that country must be thinly peopled, unless elegance be studied, and proper encouragement given to the arts which conduce to it." This must always be the case, where this unequal division of the lands continues; or where the shares of individuals continue to be very large, tho' equally divided. But the question is, Whether, admitting such a division of lands once to have taken place, the inclination men generally have to marry and raise families, would not cause them to increase: and supposing them to have only a simple taste, and to know little but agriculture, and a few necessary arts, and that this taste continues, they would not, by means of agriculture, increase more speedily, and, in fact, become more numerous, than if they diverted gradually from agriculture; and, instead of improving their lands, and living in a simple manner, employed themselves so much in seeking elegance, and prosecuting manufactures, that, by degrees, plain and simple food became scarce, and so many things were wanted, that living became expensive, and it was not easy for the bulk of the people to support themselves? Now, it seems evident, that this must be determined in favour of agriculture, rather than manufactures; and that the people would grow more numerous in the one situation, than the other.

SUPPOSE

SUPPOSE that, at the same point of time, two nations were equal in all respects, and had the same simple taste for agriculture, and the necessary arts; that the one preserved the same simplicity, and the other became refined, and, by degrees, lost their antient taste: I apprehend the nation which preserved its simplicity longest, would increase most quickly, and that the accession of foreigners, which we may suppose in the one case more than the other, would not be able to compensate the ruin occasioned by luxury, except in very extraordinary circumstances.

To put this in a clearer light, let us attend to the natural order of things, and the progression that ought to be conceived from simplicity to luxury and refinement.

THE taste of mankind, in the most early times, most certainly was simple, and without refinement. We may even suppose the actual existence of a time, when men lived on the spontaneous fruits of the earth, and the milk and flesh of animals; when agriculture scarce was known, or was extremely imperfect. This taste however could not continue always; the world would become refined by degrees, agriculture would come more into esteem, and be improved. But it would not be improved alone: other arts would advance likewise. There is a connexion among them, whence they cannot be entirely separated, but must appear together, if any of them approaches to perfection. Hence, as agriculture advanced,

advanced, other arts would advance likewise; the most necessary would be first improved, and afterwards the less necessary, those, *to wit*, that tended more to refinement than use. The taste for simplicity being original, would long prevail; after it was lost in some things, it would continue in others; and the world would be old before the highest refinement, and most enormous luxury could take place. In fact, it will be found, that what would appear rustic and inelegant to many thought mighty polite at present, and would be called great simplicity, remained long among the antient nations: yet objects were never wanting to excite industry, to provoke emulation and ambition, and distinguish the rich from the poor. This is certainly the natural order and progression of things. 'Tis impossible to conceive, that various arts and manufactures would not be daily invented and improved along with agriculture. But we must also admit, that the highest refinement and greatest luxury would come last into fashion. In short, I cannot help apprehending, that while the antient simplicity remained, and men continued to employ themselves in agriculture and the subservient arts, and did not divert to arts more elegant than necessary, nations would become more populous; and as luxury prevailed, they would increase more slowly, and their number at length would begin to diminish.

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THESE general observations may shew how differently mankind may increase in different ages and countries, and by applying them to the history of particular nations, we shall be better enabled to form an opinion concerning the greater or smaller number of people at different periods. Something may likewise be done, by actual calculation from antient Historians, to make some approaches towards a determination of the real number of the inhabitants of some more noted countries. But calculations of this sort may be thought more uncertain, and conclusions of the first kind more firm and solid.

WHAT has passed in antient times, or even passes at present in the most northern nations of *Europe*, in the northern and eastern regions of *Asia*, and the middle of *Africa*, is very little known. But as to the rest of these continents, particularly those countries which lie near the *Mediterranean* sea, and were the chief seat of antient history, we are able to form a more certain judgment: and perhaps it will appear, that in most of those countries whose antient and present state is best known, there have been fewer inhabitants in later ages, are fewer at present, than were in more antient times, and that these countries were better peopled before the *Roman* empire was established, than they have ever been at any succeeding period.

To set this in the clearest light, and render such a speculation more useful, it may be proper,

*First,*

*First,* to take notice of some passages in antient historians, which may help us to form conjectures concerning the number of people in some of the most noted countries in antient times; and then to compare them with the numbers in *England*: whence it may, perhaps, appear, that many of the antient nations were more populous than such as are reckoned most civilized at present.

*Secondly,* To trace the causes of this, and inquire whether, from the reason of things, and the manners and customs of antient times, it is not probable that this must have been the case.

*First,* As to the fact, the monuments of antient times seem in general to present a more crowded and magnificent scene. We are struck with an idea of more sumptuous and expensive works, more powerful states and cities, more numerous armies, and greater crowds of people, than modern ages offer to our view. For this we may appeal to the histories of *Spain*, *France*, *Italy*, *Greece*, *Egypt*, the islands and coasts of the *Mediterranean* sea, and several countries of *Asia*, but especially *Asia Minor*.

At the same time, an opinion in favour of antiquity may be carried too far. We may degrade modern policy too much, and give too great a preference to antient manners and times. The world is apt to run into parties and factions in this, as in all other disputable matters; and in such a disposition, 'tis well if truth and justice be but moderately injured.

E.

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As an example of too great a prepossession in favour of antiquity, we may reckon the assertion of *Isaac Vossius*, who is not only of opinion that the earth was much more populous in antient than modern times, but even brings down the number of the inhabitants of *Europe* in his own age to 30 millions; a computation undoubtedly far below the just account.

WE have this estimate in his book of various observations\*. According to his account,

<i>Spain</i> contained	—	—	2,000,000
<i>France</i>	—	—	5,000,000
<i>Italy, Sicily, Corsica, Sardinia</i>	—	—	3,000,000
<i>England, Scotland, and Ireland</i>	—	—	2,000,000
<i>Belgium</i>	—	—	2,000,000
<i>Germany, Bohemia, Hungary</i>	—	—	5,000,000
<i>Denmark, &amp;c.</i>	—	—	400,000
<i>Sweden, Norway, &amp;c.</i>	—	—	600,000
<i>Poland and Lituania</i>	—	—	1,500,000
<i>Hungary, and eastward</i>	—	—	2,500,000
<i>Dalmatia, Illyricum, Macedonia,</i> <i>all Greece, Crete, and the Islands</i>	—	—	3,000,000
		Sum	27,000,000
<i>Muscovy</i>	—	—	3,000,000
		Sum	30,000,000

BUT,

\* At London, 4to, 1685. See the Dissertation of the great cities of the *Chinefe*, p. 66.

BUT, what is much more surprising in so great a man, we find the learned author of *Lettres Persanes*, published some years ago, giving it as his opinion, that there were 50 times as many people in the world, in the days of *Julius Cæsar* the first Roman Emperor, as at present; which is certainly too high a proportion\*.

THERE is less reason to admit so high a computation for the age of *Julius Cæsar*; as, according to antient accounts, the earth was much more populous in times far more antient. This is directly asserted by *Diodorus Siculus* who lived in *Cæsar's* age †, and enters a caveat against rejecting his relation of the numerous armies of the antients, on account of the paucity of mankind in his days. He even calls the earth a desert, compared with what it was antiently. And *Strabo*, ‡ a judicious author, who lived under *Augustus* and *Tiberius*, takes notice, in several places of his Geography, how much some mighty states and cities were decayed in his age, and how much the number of their citizens was diminished; particularly how that part of *Italy* near *Tarentum* was formerly full of people, and had 13 great cities ||; tho' in his age none remained save *Tarentum* and *Brundisium*; all the rest having been reduced to villages.

\* Lettre 108. † Lib. 2. cap. 5.

‡ The edition is in 2 volumes folio, at Amsterdam 1707, apud Joannem Wolters.

|| In his 6th book, p. 430.

villages. And mentioning the great armies of the *Getæ* and *Daci* in antient times \*, amounting to 200,000 men, he adds, that now they could muster only 20,000; or, as some read it, 40,000, or 80,000.

If we give credit to antient authors, many countries were well peopled in times of the most remote antiquity. And tho' it is not safe to trust entirely, or indeed to build a great deal on the particular accounts which they have given of the vast armies of *Semiramis*, *Ninus*, and other eastern Monarchs of early time; and tho' we are far from being certain that their numbers are not magnified; yet this much we must necessarily admit, that it was the belief of succeeding ages, antient in respect of ours, that there was a great number of people in those eastern countries in times much more antient.

Thus *Diodorus* relates †, that *Ninus* led an army into *Bactria*, of 1,700,000 foot, and 210,000 horse, and wanted only a few of 10,600 chariots.

That the king of *Bactria* met him with an army of 400,000 men.

That *Semiramis* gathered together 2 millions of men to build *Babylon*.

That this powerful Princess carried an army into *India*, of 3 millions of foot, half a million of horse, 100,000 chariots; and to supply the want of elephants,

\* In his 7th book, p. 468.

† In his 2d book, § 5. 6. 7. 16. 17.

elephants, caused 100,000 men to ride on as many camels dressed up in the resemblance of elephants: besides which, she carried along with her on the backs of camels, 2000 ships so framed that they could be taken down in different pieces, and joined together when there was occasion to use them: notwithstanding all which, the *Indian King* mustered up a greater army.

That the *Medes*, in one of their expeditions against the \* *Cadusii*, led an army of 800,000 men; and that the *Cadusii* met them with 200,000.

And *Strabo* observes, † that antiently the *Getæ* and *Daci* had armies of 200,000 men.

The age in which *Troy* was taken by the *Greeks*, is of very high antiquity, and was reckoned antient in the times of *Julius Cæsar*, *Diodorus Siculus*, and *Strabo*; yet, in this early age, *Greece*, and the neighbouring countries seem to have been well peopled. If we compute the army *Greece* sent against the *Trojans*, and their allies, we shall find it was one of the greatest, which, according to their history, the *Greeks* ever brought into the field.

*Homer* gives a catalogue of 1186 ships, which *Thucydides* (for the sake of the round number, as may be supposed) ‡ raises to 1200.

BUT

\* Diod. Sic. lib. 2. § 33.

† In the 7th book of his Geography, p. 468.

‡ Book I. § 10.



BUT taking the number from *Homer*, let us determine every thing from the accounts he hath given us.

In one part of his poem \*, he assigns 120 hands to some of the ships; who are to be considered both as sailors and foldiers, since the names of ἑτάται ἢ τόξων εὐεδοτες, *rowers and skilful archers*, which we find in the same catalogue, ought to be applied to the whole army except the commanders. At this rate if each of the ships had carried as many, the whole army must have consisted of 142, 320 men. But as according to another passage †, some ships contained only 50 men, the army could not be so great: and, at the mean proportion of 85 to each ship, amounted to 100, 810 men. This was a great army; tho' *Thucydides* observes the *Greeks* could have raised a greater, had they not been afraid of wanting provisions, in a foreign country ‡.

BUT besides these general observations, it will be proper to enter more into a detail, and form a calculation of the number of the antient inhabitants of the most noted countries on the coasts of

\* Τῶν μὲν πενήκοντα νέες κίον, ἐν δὲ ἑκάστῃ

Κῆροι βοιωτῶν ἑκάστων ἢ εἰκοσι βάλιον.

Book II. lin. 509. 510.

† ——— ἑτάται δ' ἐν ἑκάστῃ πενήκοντα  
Ἐμβέβαιαν, τόξων εὐεδοτες ἴφι μάχεσθαι.

Book II. lin. 719. 720.

‡ Book I. § 11.

the *Mediterranean* sea, and compare them with the people of *England* in the present age.

In this comparifon, the best we can do is to build upon the observations which have been made in a late book, concerning the bulk of most of the remarkable countries of the world computed in square miles \*: for tho' such observations cannot be supposed to be free from mistakes, being taken only from modern maps, which are not perfectly exact; yet they are the best helps we have, for determining the extent of these countries, and the proportion they bear to each other. They are more certain guides, than the antient maps, or the length and breadth assigned by antient or modern authors; especially in the islands, and such countries as *Spain*, *Italy*, and *Greece*, which had antiently, and still have the most distinct boundaries by the sea, or remarkable rivers and mountains.

A rule has likewise been laid down by one of our best Mathematicians †, by which we may nearly determine the number of inhabitants in any city or state, from the number of its fighting men. And this being fundamental in calculations of this kind, I may take notice, that 'tis not only confirmed from modern, but also from a couple of antient observations

\* A new Survey of the globe, by *Thomas Templeman*.

† The learned and ingenious *Dr. Halley*, in his observations on the bills of mortality of the city of *Breslaw* in *Silesia*, in *Lowthorpe's* abridgment of the *Philosoph. Transact.* vol. 3. p. 669.

tions of two of the most authentic antient writers, *Cæsar* and *Strabo*:

THE first of them relates, that, after he had conquered the *Helvetii*, who had abandoned their country to seek new habitations, and in this view had carried their wives and children along with them, he found in their camp, rolls of all who had undertaken this expedition, distinguishing such as could bear arms, and the old men, women and children separately\*.

In the rolls it stood thus:

Of the <i>Helvetii</i>	—	—	263,000
<i>Tulingi</i>	—	—	36,000
<i>Latobrigi</i>	—	—	14,000
<i>Rauraci</i>	—	—	23,000
<i>Boii</i>	—	—	32,000

Sum 368,000

And of the whole number, those who could bear arms were — 92,000

Which is the fourth part, and agrees very well with Mr. *Halley's* computation.

THERE

\* *In castris Helveticorum tabulæ repertæ sunt literis Græcis confectæ, et ad Cæsarem relatæ; quibus in tabulis nominatim ratio confecta erat, qui numerus domo exisset eorum qui arma ferre possent, et item separatim pueri, senes, mulieresque. Quarum omnium rerum summa erat, capitum Helveticorum millia CCLXIII, Tulingorum millia XXXVI, Latobrigorum XIV, Rauracorum XXIII, Boiorum XXXII. Ex his, qui arma ferre possent ad millia XCII. Summa omnium fuerunt ad millia CCCLXIX.*

*Cæsar de bell. Gall. lib. 1. § 29.*

*Plutarch*, in the life of *Cæsar*, assigns different numbers; but the numbers marked by *Cæsar* himself are more authentic.

THERE is also a passage in *Strabo*, which confirms the same calculation\*;

WHEN *Augustus Cæsar* rooted out the nation of the *Salassii*, who dwelt upon the *Alps*, he sold 36,000 persons for slaves; of whom 8000 were able to bear arms. And tho', by Dr. *Halley's* rule, there ought to have been a few above 9000, this difference is justly accounted for, by supposing more than 1000 of their best men killed, before they were subdued.

THESE passages in such old authors confirm the accounts of the authors themselves, as well as Dr. *Halley's* rule of computation from the bills of *Silesia*.

BUT to proceed to our calculations, let us begin with *Egypt* so famous in antient story.

*England*, according to Mr. *Templeman's* survey, contains 49,450 square miles (of which there are 60 in a degree), and *Egypt* 140,700. So the extent of *Egypt* is to that of *England*, as 2.84 to 1. *England* is computed to contain 8 millions of inhabitants. If *Egypt* was peopled in the same proportion, it must have contained about 22,700,000. But, according to antient historians, it appears to have contained many more.

*Diodorus Siculus* relates, † that more than 1700 males were born in *Egypt* the same day which gave birth to the famous *Sesostris*. The father of

F this

\* Lib. 4. p. 315.

† Lib. 1. cap. 53. 54.

this monarch ordered all these boys to be brought to court and educated along with his son; persuading himself, that those who were bred up with the Prince from their infancy would become his warmest friends, most affectionate soldiers, and most faithful commanders. Such wisdom and policy make the accounts of historians less improbable; since, by the assistance of so able counsellors, with an army of 600,000 foot, 24,000 horse, and 27,000 warlike chariots, he might well have made such mighty conquests. 'Tis to this uncommon action of the father of *Sesostris*, we owe the knowledge of the number of males born in *Egypt* on that particular day; and if as many were born every day, (which we must be allowed to assume, as there is no reason for distinguishing that day from any other) there must have been born in one year no fewer than 620,500 males; from which it follows, according to Dr. *Halley's* calculation, that there were more than 17 millions of males in *Egypt* in that early age. And allowing an equal number of females, the whole people amounted to more than 34 millions.

ACCORDING to the accounts of *Herodotus* \*, *Egypt* was very populous in the days of *Amasis*, who lived a little before the founding of the *Persian* empire by *Cyrus*. In the reign of this king, it contained 20,000 cities all inhabited: at this rate, allowing 2000 to each city, the number of the whole people amounted to 40 millions.

AND

\* Lib. 2. p. 179. edit. Henrici Stephani.

AND considering how many large cities *Egypt* contained; especially the grandeur and magnificence of its two capital cities *Thebes* and *Memphis*, this supposition of 2000 to each city will not perhaps be thought extravagant.

*Thebes* appears to have been one of the greatest cities that ever was in the world. It is celebrated by *Homer* \* for its hundred gates, out of each of which marched 200 men, with horses and chariots, in all 20,000, whom we may call cavalry. But *Tacitus*, an author of great credit, and far from being credulous, gives us yet a more magnificent idea of its inhabitants, † in computing the number of fighting men at 700,000. The quadruple of which or 2,800,000, being the number of its inhabitants, shews it to have been more than twice and a half, or perhaps thrice as populous as *London*.

THE great number of the citizens of *Thebes* is further evident from the largeness of its extent, which,

\* ————— οὐδ' ὅσα Θήβας

Αἰγυπτίας, ὅθι πλεῖστα δόμοις ἐν κλήματα κείται,  
 Αἱ θ' ἑκατόμυλοι εἰσι, διηκόσιοι δ' ἀν' ἐκάστην  
 Ἄνθρωποι ἐξοιχέουσι σὺν ἵπποισιν ἢ ὄχεσφιν.

*Homer. Iliad. 9. lin. 381. &c.*

† Mox visit veterum Thebarum magna vestigia, et manebant structis molibus litteræ Ægyptiæ, priorem opulentiam complexæ: jussusquæ è fenioribus sacerdotum patrium sermonem interpretari, referebat habitasse quondam septingenta millia ætate militari.

*Tacit. Annal. lib. 2. cap. 60.*

which, according to *Strabo*\*, was in his time no less than 80 *Greek* stadii, or 10 *Greek* miles, in length; and *Diodorus Siculus*† computes the circuit of its walls at 140 *Greek* stadii, or 17½ *Greek* miles: but in more antient times ‡ its circuit was reckoned much greater, and even computed to have been 420 *Greek* stadii, or 52½ *Greek* miles ||.

As

\* In the 17th book of his Geography, p. 1170.

† In his 1st book, sect. 45.

‡ *Eustachius's* Commentary upon the περιγήσις of *Dionysius*, printed at London 1638 in folio, v. 249. p. 45.

|| To make this and the following computations more clear, we shall set down the proportion of *Greek*, *Roman* and *English* measures of length from *Arbutnot's* Tables.

A *Greek* μίλιον contained 8 *Greek* στάδια, and a στάδιον contained 6052½ *English* inches; an *English* furlong contains 7920 *English* inches: so an *English* furlong is to a *Greek* stadios (or, which is the same, an *English* mile is to a *Greek* μίλιον), as 1 to .76420272727, and so in infinitum, or nearly as 1 to .7642, or as 1.3 to 1.

A *Roman* miliare contained 8 *Roman* stadia, and a *Roman* stadium contained 7252½ *English* inches: so an *English* furlong is to a *Roman* stadium (or an *English* mile is to a *Roman* miliare) as 1 to .91571969696 in infinitum, or nearly as 1.09 is to 1.

From whence it is easy to reduce either *Greek* or *Roman* measures of length to *English* miles.

In all such calculations, it seems safest to suppose, that the authors who write in *Greek*, and use the words στάδιον or μίλιον, mean the *Greek* measures; and that the writers in *Latin* mean the *Roman*, if the contrary is not expressed.

As *Thebes* was a most magnificent city, so *Memphis*, which became the capital in later times, was likewise very grand and populous. According to *Diodorus*\* it was 18½ *Greek* miles in circuit; he observes further †, that *Egypt* had antiently 18,000 remarkable cities, Κάμας ἀξιόλογας καὶ πόλεις. I confess he takes notice, in the same passage, that antiently there were 7,000,000 of people in *Egypt*; and that there were only 3,000,000 in his time: the expression too seems to be comprehensive, and to include the whole people, συμπαντος λαου; but 'tis probable, this can only be understood of the heads of families, or fighting men, as 3,000,000 (if it includes the whole inhabitants) was too small a number for the age of *Diodorus*: it is even too small for the present age, since *Maillet* makes it to contain 4,000,000 at a time when it groines under the oppression of *Turkish* despotism. Besides, *Josephus*, who lived not long after *Diodorus*, computes the inhabitants of *Egypt* at 7,500,000, besides the inhabitants of *Alexandria*‡. Understanding *Diodorus* therefore as meaning the fighting men, the inhabitants of *Egypt*, in the age of *Diodorus*, were 12, and had been antiently 28 millions.

THAT *Egypt* was very populous in times of the most remote antiquity, may be also concluded from

\* Book 1. sect. 50.

† Book 1. sect. 31.

‡ Book 2. chap. 16. Of the wars of the Jews.

from what *Herodotus* observes\*, That 410,000 soldiers, all native *Egyptians*, were sometimes kept in pay; a great army for a country of no great extent: especially as the old *Egyptians* were never much addicted to war, and the humour of keeping up great armies in time of peace, for making or preserving foreign conquests, seems to have begun much later. The old *Egyptian* army could only be intended for preserving the inward peace and police of the country. This makes it probable it bore a less proportion to the whole people, than the great standing armies of modern Kings do to the rest of their subjects. If we compare the *Egyptians* with the *French*, who are a more warlike people; and compute the people of *France* at 16 or 20 millions, and the army which the King maintains constantly at 200,000; according to this proportion, *Egypt* must have contained 32 or 40 millions. But the *French* armies must be supposed to bear a much greater proportion, than the *Egyptian*, to the number of the whole people.

Tho' we ought not to pretend to certainty in such computations; and conjectures on such subjects may often be far enough from the truth: yet if the accounts of *Herodotus*, *Strabo*, and *Diodorus Siculus*, may, in any measure, be depended on, and we take the medium of all the different computations of 34, 40, 28 and 32 millions, the inhabitants

\* Herod. lib. 2. pag. 175.

of *Egypt* may be reckoned about 34,000,000, and its populousness to that of *England*, as 3 to 2.

THE preceding computations are formed on supposition, that antient was as large as modern *Egypt*.

BUT, if antient *Egypt* was less, the argument for its greater populousness is so much stronger; and that it was so, will appear probable, if we compare *Egypt* with *Italy*, the limits of which, as it is bounded by seas and mountains, are more easily ascertained. From such a comparison, we can scarce suppose that *Egypt* was larger or even so large as *Italy*, which is only about half the bulk of modern *Egypt*, according to the measures in *Templeman*.

ACCORDING to *Herodotus*, the breadth of *Egypt*, at the *Mediterranean* sea, where it was greatest, was 3600 *Egyptian* stadioi, or about 346 *English* miles; and its length, from North to South, about 666 *English* miles\*. The measures in *Herodotus* are larger than those which either *Diodorus Siculus* † or *Strabo* ‡ has assigned. Above the division of the *Nile* it becomes much narrower: and the only region of *Egypt* that was well inhabited, was that on each side of the *Nile*; which, in few places, according to *Strabo*, || contained a breadth of 300 *Greek* stadioi, or 30 *English* miles.

*Italy,*

\* Herod. lib. 2. pag. 103. 104.

† Book 1. sect. 31.

‡ Book 17. pag. 1137. 1140. &c.

|| Book 17. pag. 1137.

*Italy*, whose limits are better fixed, is found, by the moderns, to be about 900 miles in length\*; and, at the foot of the *Alps* 560 miles in breadth; in the middle parts 136, and in some, scarce 25. And tho' in some places it is very narrow, yet, near the *Alps*, there is a wide extent of country.

FROM these measures, it is probable, that *Egypt* was not so large as *Italy*; which according to *Templeman*, contains only 75,576 square-miles. And, if antient *Egypt* was no larger, instead of being  $1\frac{1}{2}$ , it must have been thrice as populous as *England*.

WHAT has been observed of the extent of antient and modern *Egypt* is confirmed by a passage in *Strabo* † where he expressly asserts, that the antients gave the name of *Egypt* only to that region which was overflowed by the *Nile*; but that the moderns included all that region to the East which lay between the *Arabick Gulph* and the *Nile*; and a great part towards the West, as the *Ptolomys* had so far extended their dominions, and the *Romans* succeeded to their power. Thus the limits of antient *Egypt* were greatly enlarged by the *Ptolomys*, and, it is probable, they continue much in the same situation at present. Indeed, if something of this kind had not happened, there could have been no foundation for what *Diodorus Siculus* has asserted ‡, That antiently

\* Universal history, vol. 11. pag. 208.

† Book 17. pag. 1139. 1140.

‡ Book 1. sect. 31.

tiently *Egypt* was the most populous country in the world: this could not be true, unless it was thrice; for we shall shew immediately that several other countries were more than thrice, as populous as *England*.

THE accounts we have of *Egypt* from the memoirs of *Monseigneur de Maillet*, a French Consul who resided long in this country; render our conjectures concerning the populousness of antient *Egypt* not improbable. He does not indeed compute the inhabitants, in his time, at more than four millions, and confesses, that he once thought their number had never been greater; but he retracts this opinion, and declares, that, after having considered the matter more maturely, he believes that *Egypt* contained many more people in times of remote antiquity\*: and this is an evident consequence of the accounts he gives of the country. We have taken notice already, that it is said to have contained in antient times 18,000 or 20,000 cities. This will not appear improbable, if we consider what *Maillet* has observed, that many of its antient cities have been ruined by the various revolutions it has undergone; and that by cities we must not understand only walled towns, but every village built on an higher ground to prevent danger from the overflowing of the *Nile*: for the houses, in that quarter of *Egypt* which is covered by the waters of the river, are not built on low, but rising

grounds,

\* Lettre 1.

grounds, either natural or artificial, and formed into villages which do \* not consist only of a few houses, as in other countries where there is not the same necessity, but contain, many of them, public edifices, and some of them have two or three thousand inhabitants. Viewing it therefore in this light, as a country full of considerable towns which may well be supposed to have contained 2000 people at a medium, as some of them, such as *Thebes* and *Memphis* were very large, it will not appear incredible that the inhabitants of *Egypt* were above 30,000,000.

*Maillet* observes further, that a larger part of *Egypt* was cultivated antiently than at present; and that even those parts which are at any considerable distance from the *Nile* are not sown: such is the bad policy of the government. This does not contradict what was said above, that antient was much less than modern *Egypt*, as this comprehends many large desarts and barren islands, both towards the East and West, which were not reckoned parts

\* *Lettre* 1. page 27.

*Maillet*, taking notice of the plains of *Egypt* which extend from the borders of the *Nile* to the mountains, has the following words;

*Ces plaines sont semées partout de gros bourgs & de villages; mais quels villages! il ne faut pas se figurer que se soient de simples hameaux. La plupart sont décorés d'edifices publics à l'usage du pais; il y en a où l'on compte des deux & trois-mille personnes, & en general, plusieurs contiennent plus d'habitans que nos grandes villes.*

of *Egypt* in the most antient times; notwithstanding which, there may be, and actually is much less of *Egypt* cultivated, than formerly, when, by the care of its Princes, the waters of the river were conveyed to a much greater distance. And, if *Maillet* computes 4,000,000 of inhabitants in such a small extent of country, after all things have been going to wrack for 2000 years, after so many conquests and revolutions, and under such an oppressive government, and such a bad policy as the *Turkish*, it becomes highly probable, that, in its antient and most flourishing times, under its own Princes, and with the most excellent laws, when it was much better cultivated, and a greater extent of ground taken in, it contained six or seven times as many people.

NEXT to *Egypt* let us consider *Palestine*, a neighbouring country of very small extent. According to *Templeman*, it is not one sixth part of *England*; and must surely have been but a small country. Yet we find from sacred writ \*, that the fighting men, exclusive of the two tribes of *Levi* and *Benjamin*, were 1,570,000. And, if we take the proportions of these two to the other 10 tribes, from their enrolments which are marked in another passage †, we must add more than 121,000: the whole number of fighting men amounting by this

account

\* 1 *Chronicles* xxi. 5. 6.

† *Numbers* chap. i. 4.

account to 1,691,000; and the quadruple of this last sum, or the whole number of inhabitants, to 6,764,000: at which rate *Palestine* was at least five times as populous as *England*.

In the 4th chapter of *Numbers*, the *Levites* between 30 and 50 years of age, in the other tribes all above 20, are numbered. The proportion of the *Levites* ought therefore to be raised, and of course the number of fighting men and of the whole people must have been greater.

NOR is it only from one passage we conclude the *Israelites* were so numerous. This appears from other passages of sacred history. We find the two Kings of *Judab* and *Israel* bringing to the field no less than 1,200,000 chosen men\*; *Amaziab*, who was only King of *Judab* and *Benjamin*, had an army of 300,000 choice men†; *Uzziab* his successor had 307,500 ‡; and *Asa*, one of his predecessors in the same kingdom, had yet a greater army consisting of 580,000 ||: *Jehoshaphat* the son of *Asa*, had the greatest of all, consisting of 1,160,000. What a prodigious army must he have commanded, had he been Sovereign of all the tribes\*\*!

\* 2 *Chronicles* xiii. 3.

† 2 *Chronicles* xxv. 5.

‡ 2 *Chronicles* xxvi. 13.

|| 2 *Chronicles* xiv. 8.

\*\* 2 *Chronicles* xvii.

As we cannot but admit that *Palestine* was of a very small extent, and the account of its numerous armies is taken from scripture itself; this argument will have a peculiar force, and almost determine the question with such as acknowledge the authority of scripture. Two things seem evident: First, That the *Jewish* Historians have not written in much, perhaps not at all, higher terms concerning the great populousness of *Palestine*, than the Historians of other nations, concerning the numbers of people in those countries of which they write; which both confirms the accounts of these Historians, and also helps to answer an objection that might be raised against sacred writ, drawn from its representation of the vast number of the *Israelites*. Secondly, we may observe, that the great populousness of *Palestine* in so antient an age, would altogether determine the question concerning the populousness of antient nations, were it not that it may be imputed to a miracle, as there were so many other miraculous circumstances in the history of the *Israelites*: for if there was no miracle in the case, no good account can be given why *Palestine* should have been more populous than the neighbouring countries.

THE history of the *Jews* furnishes us with another argument for the truth of our hypothesis, as we learn from sacred writ how much they multiplied in *Egypt* in a very short time; and that when they left it, they amounted to 600,000 fighting men;



men\*; which not only shews how numerous the *Israelites* were; but is also a confirmation of the great populousness of *Egypt*, in times of such remote antiquity.

WE proceed next to *Greece*, which we shall find very populous. According to *Templeman's* survey,

<i>Epirus</i> contained square miles	—	—	7955
<i>Thessaly</i>	—	—	4650
<i>Achaia</i>	—	—	3420
<i>Peloponnesus</i>	—	—	7220
Sum			23,245

AND, of these countries alone *Greece* consisted in its best and most flourishing times, (for *Albania* and *Macedonia* which were somewhat larger than the other four, were not reckoned a part of *Greece*). Excluding these two countries, *Greece* was not half so large as *England*; yet it contained many great cities and republics, and must have been greatly stored with people. There is a passage in *Athenæus* † which may help us to form some probable conjectures about the state of *Athens*: for, in the times of *Demetrius Phalereus*, he makes its enrolled citizens amount to

—	—	—	21,000
And the strangers to	—	—	10,000
Sum			31,000

If,

\* *Exod.* xii. 37. *Numbers* chap. i.

† In the 6th book of his *Deipnosophists* chap. xx.

IF, then, we compute each man to have had a wife and two children, the number of such as were free was 124,000.

IF the family was greater, the number of citizens must have been greater in proportion. But reckoning the free citizens only — 124,000

And to this adding the slaves whom *Athenæus* reckons — — 400,000

The whole inhabitants of *Attica* were 524,000

IF we compute 6 free persons in each family, then the number of free persons was — 186,000

And that of slaves — — 400,000

Sum 586,000

Now *Attica* was only a part of what was called properly *Greece* or *Achaia*, which contained several other districts\*, viz. *Ætolia*, *Doris*, *Locris Ozolæa*, *Phocis*, *Megaris*, *Bœotia* and *Locris Epicnemidia*; and, tho' some of these states were small, others of them were considerable, and were sometimes the rivals of *Athens* itself. All the seven together with *Attica*, according to *Templeman*, contained only 3420 square miles; and tho' *Attica* appears to have been larger than any of the rest, except *Bœotia*, its territory could not have been greater than one fourth of *Achaia* or contained more than 855 square miles. But, supposing it had contained

1000,

\* See *Cluverius*, book 4. chap. viii.

1000; it was not, at this rate, the 23d part of Greece; and if all Greece was peopled in the same proportion, it contained above 12,000,000.

If *Attica* contained only 855 square miles, this makes the inhabitants of Greece more than 14,000,000. If it was only one fifth of *Achaia*, it raises the number to more than 17,000,000: taking therefore the medium of these three last computations, their number amounts to more than 14,000,000. At which rate, had Greece been as large as *England*, it would have contained more than 29,000,000, and been near four times as populous; and, considering what a mighty people the *Greeks* were, how surprising soever this may appear to the great admirers of modern policy, 'tis far from being improbable. The great strength of the *Athenian* state, at the beginning of the *Peloponnesian* war, is evident from the losses they sustained; 200 triremes that perish'd in *Egypt* with all that was in them: 150 near *Cyprus*: in *Pontus* 10,000 men compleatly armed, partly citizens, partly allies: in *Sicily*, 40,000 men, and 240 triremes: and 200 in the *Hellepont*; and so many men were killed by thousands and two thousands, and so many ships lost by tens and fives, that *Isocrates*, from whom this account is taken, says it was needless to mention them. These things happened in a very short time\*.

THAT

\* *Isocrat. de pace, edit. Cantabrigiæ 1686 pag. 290, 291.*

THAT the other countries in *Greece*, (besides *Attica*) and the neighbouring islands, were well peopled, is evident from the whole of their history. *Athenæus* in the passage quoted above, in which he takes notice of the *Athenians* having 400,000 slaves; asserts also, that the *Arcadians* had 300,000; the *Corinthians* 460,000; and the Republic of *Ægina* 470,000, tho' it seems not to have had any other territory; but that small island of the same name, which, according to *Strabo*\*, was only 180, or according to another reading, 150, *Greek* stadioi in circuit, that is, by the largest account, about 20 *English* miles. Now where there was such a great number of slaves, we must conclude, that there was proportionally a great number of free citizens; and, upon the whole, that *Greece* was extremely populous.

*PLUTARCH*, in the life of *Lycurgus*, takes notice, that there were 9000 citizens in *Sparta*, 30,000 in the rest of *Laconia*, in whole 39,000; and as slaves seem rather to have been more numerous at *Sparta*, than at *Athens*, the territory of *Laconia* must have been very populous. The whole region of *Peloponnesus* consisted only of 7220 square miles; and besides *Laconia*, it contained *Achaia*, (properly so called), *Elis*, *Messenia*, *Arcadia*, and *Argolis*†.

THE island of *Eubæa*, (now *Negropont*) situated near the coast of *Attica*, appears, both in antient

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and

\* Lib. 8. p. 576.

† Cluver. *Introduct. geograph. lib. 4. cap. 7.*

and modern maps, to have been a good deal larger than the whole *Athenian* territory : according to *Templeman*, it contains only 1300 square miles. This confirms the former computation of the small extent of *Attica*.

*ITALY* was likewise very populous before the *Romans* conquered its free cities. About the age of *Servius Tullius*, the sixth King of *Rome*, there were powerful states in the Southern parts of it, particularly in *Magna Græcia*. The state of *Sybaris* alone, as *Diodorus* relates \*, sent an army of 300,000 men against the *Crotoniensis*, who met them with 100,000. At this rate, these two neighbouring states had about a million and an half of inhabitants, even supposing they had no more fighting men than they brought to the field, which could scarce have been the case.

*STRABO* † gives the same account of *Sybaris*; and adds further, that it was about 200 *Greek* stadii, or 25 *Greek* miles distant from *Croton*, was 50 *Greek* stadii, or 6½ *Greek* miles in circuit, and commanded four neighbouring nations or tribes, and 25 cities. According to the same author ‡, there were several other considerable states and cities in *Great Greece*. Particularly, the *Tarentines* were a powerful people, and could raise 30,000 foot, 3000 horse,

\* Lib. 12. cap. 9.

† Lib. 6. p. 404.

‡ Lib. 6. p. 429.

horse, and 1000 officers of horse; besides they had a good fleet; and all the country around *Tarentum* was antiently full of people. Yet *Magna Græcia* was only a part of what is called the kingdom of *Naples* at present, which is but a little more than two fifths of *England*.

But we shall best understand the antient strength of *Italy*, and of what powerful and populous states it consisted, by considering their long struggle against the *Romans*, and the slow progress of the *Roman* empire, notwithstanding the vast numbers and bravery of that warlike people.

*ROME* arose from the smallest and most contemptible beginning. When \* *Romulus* founded the city, his subjects consisted only of 3000 foot and 300 horse; but, at his death, after a reign of 37 years, he left 46,000 foot, and near 1000 horse, within a very small territory. Neither did the territory of *Rome* in after-times increase in proportion to the numbers of the people. Even at the death of *Camillus*, about 388 years after the building of the city, the *Roman* territory was very small, and did not extend beyond 20 or 24 *English* miles around *Rome*. During this period, the *Romans* had only made war against their nearest neighbours, within a few miles of their city. The war with the *Samnites*, whose country was at no great distance, began only about the 420th year A. U. C.

*Eutropius*

\* Dionys. Halicarn. edit. Franckfort, 1586, folio, p. 74. 78. 79.

*Eutropius* remarks, that it was about that time the *Romans* began to be powerful \*; for they carried on a war at *Samnium*, almost 130 *Roman* miles from the city. It was not till about the year of *Rome* 450, that they made any considerable impression upon *Etruria*. The war with the *Tarentines* began only about the 477th year of *Rome*. But, during this period of 400 years, the people had increased prodigiously.

THE *Census* was not instituted till the time of *Servius Tullius*, who began his reign about the 175th year of the city. *Livy* has observed †, that at the first *Census*, 80,000 *Roman* citizens were inrolled; and another historian whom he quotes, relates, that all of them were able to carry arms. All the particular inrolments made at different times, are collected together, and may be seen at one view in *Vossius's* book of various observations ‡. In the year 245, the *Census* consisted of 130,000: in the year 256, 150,700 were inrolled: after the year 400, and between that and the 500, the *Census* was sometimes 250,000, sometimes 278,000, and sometimes 292,224. During most of this period,

\* Jam Romani potentes esse cœperant; bellum enim in centesimo et tricesimo ferè milliario ab urbe apud Samnites gerebatur. *Eutropius*, lib. 2. cap. 8.

† Millia octoginta eo lustro civium censa dicuntur. Adject scriptorum antiquissimus *Fabius Pictor*, eorum, qui ferre arma possent, eum numerum fuisse.

*Liv.* lib. 1. cap. 44.

‡ P. 26.

riod, the *Roman* territory was very small. How must it then have been crowded with inhabitants? the inrolments were only of free citizens, not of slaves. These the *Romans* neither enlisted in their armies, nor inrolled as citizens, but in cases of necessity (though they had slaves in great numbers from the beginning of their state).

ANOTHER proof of the great numbers of the *Romans*, is their being constantly engaged in war, and having so many of their men killed almost every year. From whence it is evident, that if their small country had not been populous to an extraordinary degree, it could never have been able to furnish their armies with such constant reinforcements, amidst such continual battles; in which tho' they were commonly, yet they were not always superior, but several times suffered great losses, and often paid dear for their victories: notwithstanding which, they were always able to raise great armies. So greatly did they abound in people!

NOR was the populousness of *Italy* confined to that part of it which belonged to the *Romans*, but extended to the other powerful states and republics, of which this antient country consisted.

*Terra antiqua, potens armis, atque ubere glebæ.*

If we consider that the *Romans* had a great number of fighting men; that they were a brave  
and

and warlike people; that they only attacked one of the nations of *Italy* at once, and artfully shunned, as much as possible, to be engaged with different states at the same time; that they were constantly engaged with one or other of them, and made a trade of war; that notwithstanding this, they made very slow progress, and had conquered but a little even in 400 years; we must admit, that those different states of *Italy*, were each of considerable power and strength. This is exactly agreeable to the *Roman* history, which represents the *Romans*, during 400 years after the building of their city, struggling with states as great or greater than their own, and subduing them at length, only by means of superior obstinacy and valour.

INDEED, on an accurate review of the history of the *Italians*, during this period, we shall wonder how such vast multitudes could be raised, as were engaged in those continual wars, till *Italy* was entirely subdued.

THUS *Italy* was populous before the *Romans* enslaved it. Nor is it perhaps so certain, as some may imagine, that its inhabitants increased after the *Roman* conquests. *Rome* became a mighty city indeed; but it may be a question, whether its greatness was able to balance the destruction and havock it occasioned among the other cities.

THAT it was not able to do so is not a little probable. *Livy* seems to have decided it on this

side;

side; when, mentioning the greatness of the armies of the *Volsci* and *Æqui*, he accounts for it\* in this manner, “That there was an innumerable multitude of free citizens in those places, where afterwards there were only slaves, and a small seminary or nursery of soldiers.”

*SICILY* was likewise well peopled before the times of *Alexander the Great*, and contained several powerful states. The greatness and wealth of *Syracuse* has been much celebrated. According to *Tully*, it was the greatest of all the cities possessed by the *Greeks* †. And *Strabo* ‡ hath observed, it was surrounded with a wall of 180 *Greek* stadii; or 22½ *Greek* miles. It was indeed the greatest and most powerful, but not the only powerful city of *Sicily*; as appears evidently from the vast armies the *Carthaginians* sent against the *Sicilians*, the difficulty with which so rich and powerful a

people

\* Mihi miraculo fuit, unde toties victis Volscis et Æquis suffecerint milites. — Simile veri est, aut intervallis bellorum, sicut nunc in delectibus fit Romanis, aliâ atque aliâ sobole juniorum ad bella instauranda toties usos esse: aut non ex iisdem semper populis exercitus scriptos, quanquam eadem semper gens bellam intulerit: aut innumerabilem multitudinem liberorum capitum in eis fuisse locis, quae nunc, vix seminario exiguo militum relicto, servitia Romana ab solitudine vindicant. *Liv.* lib. 6. cap. 12.

† Urbem Syracusas, maximam esse Græcarum urbium, pulcherrimamque omnium, saepe audistis. Est, judices, ita ut dicitur.

Accusat. in *Verrem*. lib. 4. edit. Lond. fol. 1681. p. 279.

‡ Lib. 6. p. 415.

people gained and preserved their conquests, and the blood and treasure it cost them to get any considerable footing in this small island.

*AGRIGENTUM* in particular is said to have contained natives and strangers, no fewer than 200,000. Now if these are reckoned only the heads of families; or the fighting men, the inhabitants must have been above 800,000; but supposing the whole inhabitants only 200,000, *Agrigentum* was a populous and a mighty city. It was likewise splendid, and abounded with sumptuous buildings\*; and some of its citizens were immensely rich. When *Gelon* the Prætor of *Syracuse* had destroyed the *Carthaginian* army which was besieging *Himera*, and had taken a great number of captives, he made a present to some of the citizens of *Agrigentum* of 500 slaves a-piece †. In the time of the elder *Dionysius*, one of the citizens was so rich, that he kept open house for all passengers; and he is said to have entertained at one time 500 riders, who came from *Gela*, and when they departed, (it being in winter) he furnished all of them with cloaths, *ἱματῖα ἔχιδνας*, out of his own wardrobe ‡. *Policlitus* the historian, as quoted by *Diodorus Siculus* ||, saw, in his cellar, a quantity of wine, which in our measure amounts to more than 3414 *English* hogheads.

BUT

\* *Diodorus Siculus*, lib. 13. § 84. 90.

† *Diod. Sic.* lib. 11. § 25.

‡ *Diod. Sic.* lib. 13. § 83.

|| *Ibid.*

BUT the wealth and power of *Sicily* may especially be learned from the greatness of *Syracuse*, which notwithstanding could never gain the dominion of the whole island. If we consider its other states, what footing the *Carthaginians* had in it; and that the whole is not so large as the fifth part of *England*; we must needs acknowledge that the territory of *Syracuse* was very small; yet *Syracuse* was able to defend itself against the most powerful maritime states in those ages.

THE *Carthaginians* were very powerful at that time, and had made several attempts on *Sicily*, before they were engaged in any wars with the *Romans*. History takes notice of their having equipt prodigious fleets and armies in this view\*. In *Gelon's* time they sent a fleet of 2000 ships of war, and 3000 transports, with an army of 300,000 men on board, under the command of *Hamilcar*. This is the account of *Diodorus Siculus*; and *Herodotus* agrees with him in the number of the army, 300,000, *τριακοντα μυριαδες* †. Under the command of this *Hamilcar's* grandson, they sent another great army in a fleet of 60 great ships, and 1500 transports. According to the account of *Ephorus* mentioned in *Diodorus Siculus* ‡, this army consisted of 200,000 foot, and 4000 horse; but *Timæus*, quoted by the same author, computes them

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them

\* *Diod. Sic.* book 11. § 20.

† *Herodot.* book 7. p. 499.

‡ *Diod. Sic.* book 15. § 54.



them to have been only a few more than 100,000. Soon after this they sent another grand fleet and army under the same commander\*, consisting, according to *Ephorus*, of 300,000 men; according to *Timæus*, of 120,000, in a fleet of 1000 transports, besides many ships of war. Not long afterwards, they sent an army against the elder *Dionysius*, of 300,000 foot, 4000 horse, 400 chariots, with a fleet of 400 ships of war, and more than 600 transports. This is the account given by *Ephorus* in *Diodorus Siculus* †; but *Timæus* makes the army consist only of 100,000 men. And tho' this army was almost entirely destroyed, they sent another against the same *Dionysius*, of 80,000 men ‡. — But, notwithstanding all these mighty fleets and armies, they could not gain much ground against the *Syracusians*, and were several times repulsed with great loss.

It was in the reign of *Gelon*, that *Syracuse* began to make such a shining figure. He lived at the time of *Xerxes's* expedition against *Greece*, and if the *Greeks* would have given him the chief command, which he thought he might well pretend to, as he had more numerous forces than either the *Athenians* or *Lacedemonians*, offered to supply them with 200 triremes, 20,000 men compleatly armed, 2000 horse, 2000 bowmen, 2000 slingers, 2000 light horse;

\* Diod. Sic. book 13. § 80.

† Diod. Sic. lib. 14. cap. 54.

‡ Diod. Sic. book 14. § 95.

horse; and besides, to furnish all the *Greek* army with corn during the whole time of the war\*. This shews his power, and the strength of *Syracuse* in those early times. To raise the siege of *Himera*, against which the *Carthaginians* had encamped with 300,000 men, he levied 50,000 foot, and 5000 horse, and defeated them †: and as powerful as the *Carthaginians* were, the elder *Dionysius* ventured to make war upon them. In which view he prepared in a short time 140,000 shields, as many darts and helmets, and a great quantity of other arms of various sorts, a fleet of 200 new, and 110 old ships, perfectly well repaired, and began the war with 80,000 foot, 3000 horse, 200 ships of war, and 500 transports ‡. The younger *Dionysius*|| had an army of 100,000 foot, 10,000 horse, a fleet of 400 ships of war, with magazines of provisions, and treasures sufficient to maintain and pay them. Princes capable of undertaking such great designs, and preparing such numerous fleets and armies, must surely have had great numbers of people, as well as great riches in their dominions: and unless *Sicily*, tho' it is less than one fifth of *England*, is acknowledged to have been little inferior to it in riches and numbers of people, it is scarce possible to account for the great transactions which happened, and the mighty fleets and armies

\* Herodot. lib. 7. p. 496. 497.

† Diod. Sic. book 11. § 21.

‡ Diod. Sic. book 14. § 42. 43. 47.

|| Diod. Sic. book 16. § 9.

armies which were raised and supported in it, during the space almost of 300 years; from the time that *Gelon* made himself master of *Syracuse*, till it was conquered by the *Romans*.

BEFORE the *Roman* conquests, the *Gauls* were a great and populous nation. *Gaul* was indeed an extensive country; for it contained not only all *France*, but a considerable part of the *Netherlands*, and some part of *Switzerland*; but it seems to have been equally populous, nay, to have contained more inhabitants than the same extent of country does at present, tho' some of the best peopled spots in *Europe*, and even the province of *Holland* itself are included.

ACCORDING to *Cesar's* description, *Gaul* was divided into small states, many of which could send numerous armies into the field. When *Cesar* first invaded the country, its inhabitants were not in the same barbarous state as the *Germans*, and other Northern nations, who, according to *Strabo* \*, did not exercise agriculture, nor lay up the fruits of the earth, but living in cottages which they could raise in a day, subsisted chiefly by their flocks, like the *Nomades*; and therefore were obliged frequently to change their places of abode for want of provisions, transporting their families and furniture in carts, and wandering from place to place with their cattle. His account of *Gaul* is quite different: *Narbonne* (says he) produces all kinds of  
fruits

\* Lib. 7. p. 446.

fruits that grow in *Italy*. Farther North, the soil yields every thing, except oil, figs, and ripe grapes: all the rest of *Gaul* produces much corn and other grain, and is stocked with cattle of all kinds. There is no part of it uncultivated, but the marshes and woods, occasioned, as he observes, by the men's being too much addicted to war. But as he admits at the same time, that multitudes lived even in these marshy and woody grounds, which were not sufficiently taken care of, the country in general must have been well peopled. It is true, the *Gauls* resembled the *Germans* in many of their customs and institutions, as well as in their fierceness, bulk and colour; but they were much more civilized, and neither neglected commerce nor agriculture\*.

CÆSAR, when he describes the manners and customs of these two nations, gives much the same representation with *Strabo* †. Formerly, says he, the *Gauls* were superior in valour to the *Germans*, and as they had not lands sufficient for the multitude of their people, they used to send colonies  
beyond

\* *Strabo*, lib. 4. p. 268. 269.

† *Of the Germans he relates.* Vita omnis in venationibus, atque in studiis rei militaris consistit.—Agriculturæ non student; majorque pars victus eorum in lacte, caseo, carne consistit. Neque quisquam agri modum certum aut fines habet proprios.—Civitatibus maxima laus est, quam latissimas circum se vastatis finibus solitudines habere.

*Cæs.* de bell. Gall. lib. 6. cap. 21. 22. 23.



beyond the *Rhine*; but they were become inferior to them in his time, which he imputes to their growing commerce. And it seems evident, that the *Gauls* did not, as the *Germans*, live by pasturage and hunting, but that when *Cæsar* invaded them, they were possessed of flourishing and powerful cities, and had many appearances of wealth and greatness.

THE flourishing condition and mighty opulence of the *Gallic* states\*, appears from that immense treasure at *Tbolouse*, which, according to *Po- sidonius*, on whom *Strabo*† chiefly relies, amounted to 15,000 talents of gold and silver in bullion. This treasure (had it been wholly silver) would have been worth 2,561,250 *l. sterling*; but had it been wholly gold, according to the modern proportion of gold to silver, that is, 16 to 1. its value had been above 40 millions: it must at any rate have been a vast treasure for one place; and as the *Gauls* had several sacred treasures in other places, what an idea must we have of their immense wealth!

As

\* Ac fuit antea tempus, quum Germanos Galli virtute superarent, ultro bella inferrent, propter hominum multitudinem, agrique inopiam, trans Rhenum colonias mitterent.— Gallis autem provinciæ propinquitas, & transmarinarum rerum notitia, multa ad copiam atque usus largitur. Paullatim adfuefacti superari, multisque victi præliis, ne se quidem ipsi cum illis virtute comparant.

*Cæf. de bell. Gall. lib. 6. cap. 24.*

† Lib. 4. p. 287.

As the *Gauls* wanted neither silver nor gold, they abounded greatly in people; which may be concluded from the great armies they drew together, on several occasions, to oppose *Cæsar*.

In the second book of his *Commentaries*\*, he gives a particular list of the levies made in *Belgium*; and on this occasion

The <i>Bellovaci</i> undertook to raise	60,000
The <i>Suessiones</i>	50,000
The <i>Nervii</i>	50,000
The <i>Atrebates</i>	15,000
The <i>Ambiani</i>	10,000
The <i>Morini</i>	25,000
The <i>Menapii</i>	9,000
The <i>Caleti</i>	10,000
The <i>Velocasses</i> and <i>Veromandui</i>	10,000
The <i>Aduatuci</i>	19,000
The <i>Germani</i>	40,000
	<hr/>
Sum	298,000

Now, we cannot suppose, that this was a levy of all the fighting men in *Belgium*; for *Cæsar*'s information was, that the *Bellovaci* could have brought 100,000 to the field, tho' they engaged only for 60,000. Taking the whole therefore in this proportion of 10 to 6, the sum of fighting men in all the states of *Belgium* was 496,666; and quadrupling this last number, *Belgium*

\* *Cæsar* in bell. Gall. lib. 2. cap. 4.

*gium* must have had 1,986,664 inhabitants, whom we may suppose to be free, or not employed in servile offices\*.

BUT, besides those who were enlisted in their armies; there was certainly a great number, who were of no account in war; for among the *Gauls*, as well as several other nations, there were many who were either in the condition of slaves, or only employed in agriculture, and such mechanic arts as were thought unworthy of brave men. This appears from what *Cæsar* relates †, when he treats of the different orders among the *Gauls*, and divides such as were of any account into two sorts, the *Druids* and the *Equites*: the rest he calls *Plebes*; and describes them as slaves; but the *Equites* are warriors: for when any war arises, *omnes in bello versantur*.

\* In some copies of *Cæsar's Commentaries*, the *Aduatuci* send 29,000, instead of 19,000, as it is stated in the preceding calculation; at which rate the fighting men in all *Belgium* would have been 513,333: so we may reckon them about half a million.

† In omni Gallia eorum hominum, qui aliquo sunt numero atque honore, genera sunt duo: nam plebes pæne servorum habetur loco, quæ per se nihil audet, & nullo adhibetur consilio. Plerique, quum aut ære alieno, aut magnitudine tributorum, aut injuria potentiorum premuntur, sese in servitutem dicant nobilibus. In hos eadem omnia sunt jura, quæ dominis in servos. Sed de his duobus generibus alterum est *Druidum*, alterum est *Equitum*.—Alterum genus est *Equitum*. Hi, quum est usus, atque aliquod bellum incidit, omnes in bello versantur.

*Cæs. de bell. Gall. lib. 6. cap. 13. 15.*

*versantur*. Does not this suggest, that when levies of the *Gauls* for fighting against *Cæsar* are mentioned, the *Plebes* must scarce be considered, as they were left to labour the ground, or work at meaner employments? And if we make this lower order of persons to have been thrice as numerous as the rest; which proportion is confirmed from what was the case at *Athens*, and may be observed in most places, that the laborious working people are much more numerous than their masters, we must reckon the inhabitants of *Belgium* about 8,000,000.

Now *Belgium* does not appear to have been larger than the fourth part of *Gaul*: for it was bounded, on the one side by the *Rhine*, on the other by the ocean, and, on the third, by the rivers *Seyne* and *Marne*. But *Gaul* was bounded, on one side by the *Alps* which divided it from *Italy*, next, by the *Rhine* which divided it from *Germany*, and, on all other sides by the ocean, except where the *Pyrennees* divided it from *Spain*. This was a vast tract of land; and, if it was four times greater than *Belgium*, (and it does not appear to have been less), we may compute 32,000,000 of inhabitants in *Gaul*.

In another passage, *Cæsar*\* gives an account of numerous levies which the *Gauls* resolved to make in order to raise the siege of *Alesia*, where *Vercingetorix* had shut himself up with a great army. In this measure, tho' they shewed great spirit and

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\* *Cæs. de bell. Gall. lib. 7. cap. 75. 76.*

unanimity, yet it is certain, that they could not make a levy through the whole extent of *Gaul*; for a considerable part of it was in subjection to the *Romans*, and, by the situation of *Cæsar's* army, it would have been impossible for several of the provinces to have sent their quotas. We may even suppose, they would not be entirely free from dissension, and that some of the states would be backward in joining; besides, at a general council of the chiefs, it was resolved, that all the fighting men should not be raised, lest their great number should occasion confusion, and it should be impossible to maintain them: but that every state should send only a certain number. By comparing this with the passage in the second book, which mentions the levies in *Belgium*, it will appear, that this levy was very small in proportion to what *Gaul* could have furnished before it was so miserably wasted by *Cæsar*. For the *Bellovaci*, before the war, could have raised 100,000 men; but 10,000 are only demanded at this time: the *Nervii*, who, in the second book, offered 50,000, are only marked for 5000: the *Morini* for no more, tho' they had offered 25,000: the *Atrebates* for 4000, tho' they are formerly marked for 15,000. And from the consideration of all circumstances, it may be conjectured, that, as all the states of *Gaul* neither were, nor could be concerned in this levy; and, as so small a proportion was demanded from those which agreed to it, the army they raised, on this occasion,

occasion, was not the tenth part of the *Equites*, or such as were commonly employed in war, through the whole extent of *Gaul*, at the time that this nation was first invaded by *Cæsar*.

Now the army they actually raised in this manner was — — 248,000

Hence the number of free citizens able to fight — — 2,480,000

The quadruple of this last is the number of free citizens, — 9,920,000

And thrice the last sum is the number of the *Plebes* or slaves — 29,760,000

Hence the number of the whole people is — — — 39,680,000

THO' the preceding numbers may appear high to such as have not been used to speculations of this kind, and are apt to measure antiquity by their own confined views, and the prejudices of modern times; they will be yet more surpris'd, when they are inform'd, that other Historians have assign'd larger numbers than *Cæsar*. According to *Plutarch's* account \*, *Cæsar*, in his *Gallic* wars, took more than

\* *Plutarch* in *Cæsar*. edit. *Francfurt*. fol. 1599. pag. 714.

715.

In the life of *Pompey*, the numbers are different, and *Cæsar* is said to have taken by force 1000 cities, subdued more than 500 nations, killed one million of men, and taken another million prisoners, pag. 655. This difference in the numbers does not

than 800 cities, subdued 300 nations or tribes of people; fought against 3,000,000 of men in his several battles; killed 1,000,000, and made 1,000,000 prisoners. Now, supposing these 3,000,000 to have been all the men in *Gaul*, that were commonly employed in war, there must have been 12,000,000 of this sort: and, if we add thrice as many slaves, the whole number of inhabitants was 48,000,000.

OR, if we suppose that the 3,000,000, against whom *Cæsar* fought, were composed of the *Equites* and *Plebes* without distinction; 'tis not reasonable to think, that a third, nay, we can hardly reckon, that more than a fourth part of the men able to bear arms were levied on this occasion. Now, if they were a fourth part, the number of fighting men, of all sorts, was 12,000,000, and the number of the whole people 48,000,000, as before. If we suppose them to have been a third part, the number of fighting men was 9,000,000, and of the whole people 36,000,000.

As *Plutarch*, in both passages, computes the number which *Cæsar* killed to have been 1,000,000, unless we affirm that he killed more than a thirtieth part of the whole people, the *Gauls* must have been 30,000,000.

In all these calculations, formed on the accounts given

so much destroy the authority of the testimony, as it shews, in general, what an high opinion the antients conceived of the populousness of *Gaul*.

given by *Plutarch*, we must exclude the *Druids* and their families, as they were wholly exempted from war, which will proportionally increase the number of the inhabitants of *Gaul*.

In fine, in whatever light we view it, this part of *Europe* appears to have been more populous in the days of *Cæsar*, than ever it has been since, and never to have recovered the flourishing state in which antient history represents it, before it was attacked and ravaged by this mighty Conqueror.

I shall not attempt any more calculations; tho', no doubt, many others might be made, were all the antient authors inspected with such care and accuracy as the subject deserves. I shall only observe further, that it seems probable, that several other countries were antiently more populous than at present, tho' 'tis difficult to find materials for forming particular calculations. This is the condition of almost all the islands in the *Mediterranean* and *Ægean* seas; which, in the happy days of *Greece*, were full of people; of *Lesser Asia* which flourished so greatly in antient times; of the whole coast of the *Mediterranean* sea, on the *African* side, or, at least, of a great part of it; of *Colchis*; and the tract which lies between the *Euxine* and the *Caspian* seas; of the antient *Hyrcania*, and other countries on the North or North-East of *Persia*, where, according to *Pliny*, there were antiently many populous and flourishing nations or tribes; but scarce any thing at present save forests and desarts. Among

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mong other things *Pliny* \* mentions a city in *Colchis* called *Dioscurias*, which was deserted in his time (*nunc deserta*), but so considerable of old, that, according to *Timosthenes*, 300 nations, all of different languages, traded with it; and that even, in later times, the *Romans* had 130 interpreters for carrying on their commerce in this country. He mentions another city (*oppidum opulentissimum*) that had been plundered by the *Heniochi*. This shews, that these parts of the world had antiently flourished, but were then in the decline. That little tract of land which lies between the *Euxine* sea and the *Palus Mæotis*, the parts around this lake, the *Greater* and *Lesser Armenia*, *Albania*, *Iberia*, and those countries which ly towards the South and the East of the *Caspian* sea, contained many different nations, and several great cities. A considerable commerce was carried on between *Europe* and *India*, by means of some great rivers which communicated with one another, and with the *Caspian* and *Euxine* seas. Much the same account is given by *Strabo* † of the populousness and commerce of those countries: but, in later ages, they have all been dispeopled, and scarce any vestige remains of what they were in antient days.

It must be observed, at the same time, in favour of modern policy, that there have been great changes

\* *Hist. nat. lib. 6. cap. 5.*

† *Lib. 11. pag. 762. 763. 764. 765. 772. 773. 776. 777. 782. 783.*

changes to the better in some countries. Our island of *Britain* has been fortunate, in a peculiar manner, and from that antient rudeness and barbarity with which it was overwhelmed in the flourishing ages of *Greece* and *Rome*, has gradually reared up its head. How much would *Cæsar* or *Agricola* be surpris'd to see the once inconsiderable and despis'd *Britain*,

— *Penitus toto divisos orbe Britannos,*

now become an abode of peace and seat of liberty. Happy island! studious of agriculture, flourishing in arts, and enriched by commerce.

BUT other countries have not been so fortunate. Besides, from the preceeding calculations it appears, that even *Britain* itself, and the nations that are most civilized at present, are not near so populous as those regions of the earth which were best cultivated in antient times: so that it may be a question, Whether the happier condition of *Britain*, and some other places is able to compensate the ruin and destruction of so many antient nations?

HAVING thus travelled along the coast of the *Mediterranean* sea; taken a view of *Egypt*, *Palestine*, *Greece*, *Italy*, *Sicily* and *Gaul*; and, from particular calculations, formed some probable conjectures about the superior populousness of these countries in antient times; we proceed to inquire into the causes of this phænomenon. And, if we shall find that antient policy, antient manners, and antient customs

customs were better calculated, to make nations great and populous, than modern policy, modern manners, and modern customs; this will be an argument *a priori*, for the truth of that hypothesis, which we have endeavoured to establish *a posteriori*.

Now these causes are either physical or moral.

WHATEVER alterations may have happened in the temperature of the air, whatever decay of heat in the sun, or diminution of the salubrity and nourishing virtue of the earth, are physical causes; which may be thought to have an effect on vegetable and animal bodies, and either prevent generation, or cut off greater numbers in all the different periods of life.

CAUSES of this nature may be supposed to operate in the same climates in different ages, and in different climates in the same age. Mankind may be greatly wasted by plagues and famines, and a fruitful land may become a desert. Yet neither do causes of this kind seem sufficient for explaining the phenomenon of so great a decay of people. Nor indeed does it appear that there has been any such alteration in the state of nature as could make any considerable difference, either over all the earth, or in particular regions: we do not therefore build on natural causes of this sort.

THERE may, however, be natural causes of another kind which may have produced no inconsiderable effects. Thus some diseases, unknown to antiquity, may have made great havock in modern

modern times: among these, two are remarkable; the *Lues Venerea*, and the *Small Pox*; concerning which the learned Author of *An Essay on the vital and other involuntary Motions of Animals*, was pleased to give me his opinion in the following words:

“ AMONG the natural causes which have contributed in latter times, to lessen the number of inhabitants in *Europe* and the western parts of *Asia*, the *Small Pox* and *Lues Venerea* are not the least remarkable. The former disease seems to have made its appearance in the world much about the same time with *Mahomet*; the first who mentions it being one *Aaron*, a priest and physician of *Alexandria* in *Egypt*, who flourished about the year 622: nor was the *Small Pox* known in *Europe* to the *Greek* physicians till after the year 640. It appears from pretty exact accounts, that in several towns of *Yorkshire*, and some other places of *England*, and in *Boston* in *New England*, the *Small Pox* carry off about 2 of 11 who are seized with them\*; but as other countries may be more healthful in this respect, and as many people escape this disease altogether, we cannot, from the above account, determine what proportion of the whole race of mankind die of the *Small Pox*. Doctor *Jurin* however, from a comparison of the bills of mortality in *London* for 42 years, has shewn, that in and about this *Metropolis*, above  $\frac{1}{4}$  part of all those

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\* Philosoph. Transact. Abrid. vol. 7. p. 616.

“ those who are born, die of this disease\* : and  
 “ as it is reasonable to imagine, that other places  
 “ in *Europe* may not be more healthful in this re-  
 “ spect than *London*, we may fairly conclude,  
 “ that  $\frac{1}{4}$  part of mankind are carried off by the  
 “ Small Pox, and these mostly in their younger  
 “ years, before they can have any children. Now,  
 “ as there is no antient disease that has ceased in  
 “ latter ages, which was near so destructive; the  
 “ Small Pox may be justly numbered among the  
 “ causes which have contributed to dispeople the  
 “ world.

“ THE *Lues Venerea*, or *Great Pox*, made its  
 “ first remarkable appearance in *Europe*, at the  
 “ siege of *Naples*, anno 1493. At first it made  
 “ great havock; and altho’ it is not now near so  
 “ mortal as the Small Pox, yet as it frequently  
 “ renders both sexes unfruitful, or at best debili-  
 “ tates them, so as to make their posterity sickly,  
 “ infirm, and often barren, it may be justly ques-  
 “ tioned, which of these diseases have had the  
 “ worst effects in lessening the numbers of man-  
 “ kind. Further, it merits consideration, whe-  
 “ ther the growing luxury of each succeeding age  
 “ does not deserve a place here, as by this, dis-  
 “ eases are at the same time rendered more fre-  
 “ quent, and much less obedient to the usual re-  
 “ medies.”

BUT

\* *Philosoph. Transact. Abrid. vol. 7. p. 613. &c.*

BUT notwithstanding the bad effects of particu-  
 lar diseases, or other physical causes which may  
 be assigned, such causes alone are by no means suf-  
 ficient. In order to account for the phænomenon in  
 a more perfect and satisfactory manner, recourse  
 must be had to moral causes: such as, 1. Diffe-  
 rence of religion, and of religious or moral institu-  
 tions. 2. Different customs with respect to ser-  
 vants and the maintenance of the poor. 3. Dif-  
 ferent rules of succession to estates; and the right  
 of primogeniture. 4. The little encouragement  
 given to marriage in modern times. 5. The  
 great number of soldiers in the standing armies of  
*Europe*. 6. Too extensive trade. 7. Neglect of a-  
 griculture. 8. The different extent of antient and  
 modern governments. 9. The ruin of the anti-  
 ent states by the greater monarchies, especially by  
 the *Roman* empire. 10. And last of all, The loss  
 of that antient simplicity which had long pre-  
 vailed\*. Some of these causes will appear to be  
 more

\* Some perhaps may imagine, that the greater tyranny  
 and oppression of many modern governments, is alone suffi-  
 cient to account for the great depopulation of the world,  
 since it cannot be doubted, that despotick and arbitrary power  
 has had a baneful influence, and caused in *France*, *Spain*, *I-  
 taly*, *Greece*, the *Grecian* islands, *Lesser Asia*, and other  
 countries, a scarcity of people extraordinary, when compared  
 with the vast abundance of antient times. But besides this  
 obvious one, there must be some other hidden sources of de-  
 cay,

more powerful than others; but each of them, I presume, must have had its influence, and all of them together been able to produce those great alterations.

*First.* Religion cannot be without its influence. It is surely of great importance that it do not teach any doctrines, or inculcate precepts, which are unfriendly to society. Now, there have been two great changes in religion since the more antient times; for, instead of Paganism, first Christianity, and afterwards Mahometanism, have been introduced and established. Let us consider their different effects.

As polygamy is an hinderance to the propagation of mankind, Christianity cannot have any bad influence in this respect: on the contrary, it must be profitable to society. Whatever strange and wonderful accounts have been given of the disproportion between males and females, and the more numerous births of the latter in some Eastern nations; according to the best observations, which have been made in the Western parts, the proportion between the births of males and females appears to be nearly equal. To provide therefore most equally for the whole human race,

as the former calculations make it credible, that even the most populous and most flourishing nations at present, and those which enjoy the greatest liberty, such as *England* and *Switzerland*, are far from being so populous, as the more civilized nations of antiquity.

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race, and make all of them most useful in propagating, one man ought to be allowed to marry but one woman at once. Thus polygamy, by which many men are deprived of wives, and several women being married to one man, become less fruitful, must have a baneful influence. Hence Mahometanism is pernicious in this respect; and if, to the influence of polygamy, we add the institution of eunuchs for guarding the fair, and of female slaves who assist these eunuchs, and seldom marry; this must have no inconsiderable effect in all those countries, where the Mahometan religion is established at present, and where polygamy and eunuchs were not allowed in antient times. This is the case with the more Eastern places of *Europe*, and Western parts of *Asia*. But whatever changes have been wrought in those nations which are situated farther to the East, cannot be accounted for in this way, since polygamy prevailed, and eunuchs swarmed in those countries from very antient times.

SOME reckon the difficulty of obtaining divorces, according to the Christian institution, another hinderance of the increase of mankind, as persons may be childless by being improperly matched, tho' either of them might have children in another marriage, if divorces could be easily obtained. But, as there are many dangers both to parents and children, from allowing divorces to be procured too easily; and as whatever loss is sustained

by



by the difficulty of procuring them, is more than compensated by other advantages; allowing divorces, merely for want of children, must have but an inconsiderable effect, as few instances can be supposed, where a married couple, pleased in other respects, would separate on this account alone.

NEITHER ought it to be reproached to the Christian religion, if any of the sacred writers should be found to declare, that celibacy is preferable to marriage in some particular situations, since it is certainly true: for circumstances may be so discouraging, that neither of the sexes are obliged to marry, merely from publick spirit, and to raise up citizens to the world.

BUT tho' Christianity, in its genuine purity, is not unfriendly to society; like the best institutions, it may be abused, and perverted to the most pernicious purposes. It must indeed be confessed, that a dangerous opinion, unfavourable to propagation, as if celibacy was to be preferred to marriage, crept in very early into the Church; neither perhaps shall we be able to justify every edict of the Christian Emperors on this head; and it has been yet more unfortunate, that this opinion daily gained ground. Undoubtedly the great number of unmarried priests in all the *Roman* catholick countries, which make so great a part of *Europe*, and the multitude of women who live unmarried in convents, and profess perpetual virginity, foolishly imagining, that celibacy is a more holy state than marriage,

marriage, may justly be accounted one of the causes of the scarcity of people in all the countries under the Pope's dominion\*. This superstitious and dangerous tenet most justly deserves to be esteemed a doctrine of those *devils*, who are the *seducers* and destroyers of mankind †, and is very suitable to the views and designs of a church, which has discovered such an enormous ambition, and made such havock of the human race, in order to raise, establish, and preserve an usurped and tyrannical power. Besides, as so great a part of the riches of every Popish country, is in the hands of priests and religious houses, this must hurt trade, and prevent the culture of the lands, which cannot but have a bad effect in diminishing the numbers of the people.

*Secondly.* Another cause of the scarcity of people in modern times, is the difference of anti-ent and modern customs, with respect to servants and the maintenance of the poor.

FOR many ages *Europe* has been over-run with vast multitudes of beggars, and has also abounded with

\* It will not destroy the force of this argument, that, in the Popish countries, abstinence from marriage often proceeds rather from policy, and interested views, than devotion; for as devotion is often at bottom, so even when it is otherwise, it is the pernicious policy of the Popish church, which gives an opportunity to execute such dangerous schemes.

† 1 Tim. iv. 1. 3.

with such as having no substance of their own; can only support themselves by daily labour. As frequently neither the first of these can be comfortably supported by begging; nor the second by the profits of their labour; and few of either kind are able to provide for more than themselves; little can be expected from persons in this situation: for either they do not marry at all; or their marriages are not fruitful; or their children die; or become sickly and useless, through the poverty or negligence of their parents. According to *Templeman*, there are 1,500,000 inhabitants in *Scotland*, among whom it has been computed\*, that there are no fewer than 100,000 beggars or poor people, supported solely at the expence of others: and if to these we add the vast multitude of the lower sort, in different employments, who are pinched with poverty; as this is the case almost every where in *Europe*, we may perceive one plain source of scarcity of people. In antient times, things were on a different footing. For men were either able to support themselves, or if they fell into poverty, became most commonly the property of rich men; and the masters finding their account in the number of their slaves, for cultivating their lands,

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\* This is the computation of that worthy Patriot, and ingenious inquirer into political institutions, Mr. *Fletcher of Salton*. See his works printed at *Glasgow*, 1749. p. 100. Probably this computation is too high, as well as *Templeman's*, of the whole people of *Scotland*.

and working in all kinds of trades; encouraged them to marry, and took good care of their children, who became their property, and a valuable part of their riches.

WE do not mean by this to assert, either that in the antient world none of those who were free, were in straitned circumstances, or that all the slaves were married, or were well taken care of. Nothing less. The contrary alas! is too evident from antient history. But we may presume, that as the substance of the world was in the hands of such as were free, there was a smaller number in proportion so poor, as not to be able to maintain families; and that the numerous crouds of slaves being the property of their masters, and useful to them by their labour, they were in general tolerably well taken care of, at least till they were old and useless. Further, as the marriages of their slaves must have been often for the advantage of the masters; in such cases they would commonly be encouraged to marry, and their children be taken care of, and trained up to labour, and not to begging.

THIS state of slavery is very remote from modern manners, and indeed it appears to be extremely wretched. Undoubtedly the antient slaves were often exposed to great severity, cruelty, and injustice. Such a constitution would require particular, and these very strict laws, to prevent the barbarous treatment of this order of men. However, on a more accurate examination, we shall

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perhaps find, that their life was not so miserable as we might be apt to imagine at first sight. In some states, particularly at *Athens*, equitable laws were enacted for their security; they were treated with gentleness and mildness, and allowed to acquire riches, on paying a small yearly tribute to their masters; nay, if they could scrape together as much as could purchase their liberty, their masters were obliged to set them free. Upon the whole, they seem to have been more certain of subsistence, and to have been better fed, not only than the beggars, but even many of the day-labourers, and lower order of the farmers and tradesmen of modern times. It would be chiefly where slaves were treated with equity and mildness, lived in friendship with their masters, were looked on as a part of the family, and interested in its welfare, that this institution could best serve to render nations populous: on the other hand, if they were cruelly used, and their spirits broken with severe bondage, they must have been less fit either for labour or propagation.

AFTER all, it is not easy, if it be not altogether impossible for a man of humanity, to reconcile himself perfectly to the institution of domestic slavery. With whatever particular advantages it may be accompanied, one can scarce ever think of it without sensible horror and deep compassion. Like too many of the barbarous and inhuman customs of the world, it is highly disgraceful to human nature:

ture: nor can it ever produce any advantages, which might not be gained by a better and more human policy. God forbid! that I should ever be an advocate for slavery, ecclesiastic, civil, or domestic, on account of any accidental advantages which it may happen to produce; yet it must be confessed, that considering it only with respect to the phenomenon we are at present examining, it seems probable, that the antient condition of servants contributed something to the greater populousness of antiquity, and that the antient slaves were more serviceable in raising up people, than the inferior ranks of men in modern times.

WHAT we have observed on this subject, is confirmed by the accounts historians have given of the prodigious number of slaves in antient times. From *Athenæus* we have conjectured, that in *Athens*, where agriculture and the mechanic arts, as well as navigation and the art of war were honoured, they were thrice as many as the free citizens: and we may reasonably believe, they were more numerous in other states, where the free citizens neglecting agriculture and mechanic arts, left these to their slaves, employing themselves wholly in the management of public affairs, or in war, as was the custom in *Lacedæmon*; and accordingly we find, that the *Lacedæmonians* had a prodigious number. *Herodotus* relates\*, that at the battle of *Platea*, there were 5000 *Lacedæmonians*, each

\* Lib. 9. p. 587. 597.

of whom had seven slaves to attend him. But 'tis needless to be more particular; almost every page of antient history demonstrates the great multitude of slaves; which gives occasion to a melancholy reflexion, that when the world was best peopled, it was not a world of free men, but of slaves.

*Thirdly.* The rules of succession, and the right of primogeniture, by which the eldest son, not only of the most opulent, but even of the middling and inferior families, carries off the greatest part of the father's estate, that the family may be supported in grandeur and affluence, while the younger children get but a small patrimony, may justly be accounted another cause of the scarcity of people in modern times. This was unknown in antient times; for both *Greeks* and *Romans* divided the father's estate more equally among all the children; nor did the antient world in general, as far as I have been able to learn, give so great a proportion to the eldest son. This custom no doubt may be accompanied with great advantages, if it be confined to a few great families, who by their grandeur and riches may be greatly serviceable to their country. In a monarchy it seems to be absolutely necessary; nay, in every such government, the most dreadful despotism seems unavoidable, where there is not a splendid nobility or gentry. But if it becomes so extensive, as to produce a general inclination to raise and support families by such an unequal division of the father's estate, it will prove

a source of idleness to the eldest, and prevent the other sons from marrying, since being born of the same parents, and educated in the same manner, they will naturally incline to live somewhat on a level with their elder brother; which they will seldom find possible, unless they keep themselves free from the embarrassments of a family. At *Venice* the custom is said to go so far, that often only one of the sons marries. This must surely have a bad effect in modern times, and make a sensible difference between the modern and the antient world, in which the estate being more equally divided among the children, all of them had greater encouragement to marry, and were more able to maintain families.

If then we join these two customs together, by which the younger sons are so often discouraged from marrying, and the eldest keeps many unmarried servants; these two must cause a sensible difference between antient and modern times.

*Fourthly.* Add to this, that there is now less care taken to encourage marriage. The antients conferred certain privileges and honours on such as were married. In *Greece*, not to marry was reckoned a crime; nor could marriage in some cases be delayed beyond a certain age; nay, it was even allowed to treat bachelors with contempt. By the laws of *Lycurgus*, those who continued unmarried, were held to be infamous; they were excluded from certain processions, and compelled

compelled to march naked round the market place in the depth of winter, singing a song to their own disgrace; the younger sort were dispensed from paying them that reverence which they were otherwise obliged to pay to their elders. Hence the treatment which *Dercyllidas*, a man of considerable rank, met with from one of their youth, who, instead of rising, and making room for him when he came into a public assembly, told him, "You must not expect that honour from me, when I am young, which cannot be returned to me by a child of yours, when I shall be old\*." The antient customs of *Rome* greatly favoured marriage. In modern times there is a wide difference; the laugh is often against matrimony; married persons have no privileges; and a prevailing luxury often makes it be thought imprudent to marry at the most proper season of life: men must first purchase such an estate, and be able to live in such a manner, as they cannot often afford to do till they are grown old. In antient times there was a greater simplicity of taste. I do not know if bachelors are incapable of offices at present any where but in *Switzerland*†. It is perhaps only in that country, where marriage is encouraged by the state: it is only among the *Swiss Cantons*, and in *Holland*, where estates are so equally divided among the children,

\* *Plutarch* in the life of *Lycurgus*.

† See an account of *Switzerland* published at *London* 1714. chap. 4. p. 92.

children, and these two countries are the best peopled in *Europe*.

*Fifthly*. Another cause of the want of people, is the great number of soldiers in modern armies, among whom there are few who marry, and by whose means so many women are debauched, and venereal distempers spread so wide and so fatally. This is an unhappy policy on many accounts, adapted in particular to increase idleness, and lessen the numbers of the people, and is entirely different from the policy of the most antient ages.

*Sixthly*. The extensive trade carried on between *Europe*, and the most remote corners of both the eastern and western world, seems to be another cause of the scarcity of people in *Europe*.

THE antient commerce, even when most extensive, whether carried on by the *Phœnicians*, *Carthaginians*, or any other antient nation, was much more confined than the trade in modern times, since *America* was discovered by *Columbus*, and *Vasco de Gama* sailed to the *East Indies* around the *Cape of Good Hope*. By these two discoveries trade has indeed been greatly extended, but at the same time a great number of *Europeans* have been excited to desert their native land, and settle in distant countries, and many have been lost by long voyages and trafficking in unwholesome climates. Such an extensive trade may enrich some particular cities or nations; yet it must help to drain *Europe* in general, and must prevent the increase of inhabitants,

bitants, in countries which have abundance of territory at home. Nations in this happy situation would often be more populous, by cultivating their lands, and trading with less distant regions, where the climate and air more nearly resembled their own, and were more adapted to their particular constitutions. Indeed one can scarce regard it but as a secret fascination, that so many *Europeans* go in quest of distant seats in *America*, while the lands in *Europe* are so poorly cultivated, and with a proper policy might plentifully maintain a much greater number of people.

ANTIEN policy was of a very different kind, and seems to have been far preferable. The antients did not neglect trade, but had a greater turn to agriculture; they traded with nations which were not at a great distance, and whose climate better suited their constitutions; but agriculture was their chief employment, and they managed it well.

IN this respect therefore the antients had much the advantage; among them fewer hands were employed in trade; trade was more confined; agriculture was more encouraged, and was indeed their principal occupation.

*Seventhly.* A taste for this peaceful and rural life, which prevailed so much in antient times, must be numbered among the causes of the great populousness of the antient world, and the decay of this taste among the moderns helps to account for the present scarcity of people.

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IT is needless to inquire minutely in what manner the antients cultivated their lands, and who were employed for this purpose\*; this much is certain, that many of them made use of slaves, while they themselves had the chief oversight. Agriculture was of old in great honour; the plow was in the hand of the proprietor, who himself took the chief direction of the tillage of his farm. Thus the lands were wonderfully improved. Among the moderns 'tis quite otherwise. Rustic labour is in little honour; and as people of rank often despise it, the methods of culture are left to be invented and brought to perfection by the mean and the ignorant, and the expences ly upon the poor labourer. In this situation neither are the best

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\* In the more antient and simple times, 'tis probable every man cultivated his little field with the assistance of his own family. In after times, those who had acquired large possessions, sometimes sent slaves to till their lands, the charge of whom they committed to overseers; at other times they set out their lands to *Coloni*, an order of men much resembling our farmers, who paid a certain rent. *Columella* determines when it is best to labour ground by slaves, when to set it out to *Coloni*, and gives it as his opinion, that for the most part, even tho' an overseer might be careless, greater profits were to be made by the first than by the last way of cultivating. *Cæterum, cum mediocris adest & salubritas, & terræ bonitas, nunquam non ex agro plus sua cuique cura reddidit, quam Coloni; nunquam non etiam Villici, nisi si maxima vel negligentia servi, vel rapacitas intervenit.* On which account 'tis probable the method of cultivating by slaves was more commonly in use.

*Columella de re rust. lib. 1. cap. 7.*

methods found out, nor are the labourers able to pursue them. This must occasion barrenness of lands, and greatly hinder the increase of the people.

How much agriculture was in esteem in the happiest times of the *Greek* and *Roman* Republics, is evident from their history. It was reckoned the most innocent, most useful, most pleasant, and most honourable employment. The greatest men took delight in it. Those who commanded victorious armies, shone in the most august assemblies, and had the chief direction of public affairs, did not only amuse themselves with agriculture, but studied it, and often employed much of their time in it. In this way they supported their families in a simple and frugal manner; in this way they promoted the interest of their country. Sometimes these antient husbandmen have been suddenly called from the plow, and the tillage of their little farms, to the command of armies, and the defence of their country; and having vanquished their enemies, and delivered the state from the danger which threatned it, been crowned with laurels, and then returned with pleasure to their rural employments.

*In antient times, the sacred plow employ'd  
The Kings, and awful fathers of mankind:  
And some, with whom compar'd, your insect-tribes  
Are but the beings of a summer's day,  
Have held the scale of empire, rul'd the storm  
Of mighty war; then, with victorious band,  
Disdaining*

*Disdaining little delicacies, seiz'd  
The plow, and greatly independent scorn'd  
All the vile stores corruption can bestow\*.*

This simplicity of taste continued long among the *Romans*, and was only destroyed by the ruin of their commonwealth, and by that universal corruption of manners, which was both the cause and the effect of it.

This is evident from *Columella*, whose useful work *de re rustica*, shews how much a man, who lived in corrupted times, laments the loss of the antient taste, and praises the manners of the old *Romans* †.

\* *Thomson's* Spring.

THESE

† *Sola res rustica, quæ sine dubitatione proxima, & quasi consanguinea sapientiæ est, tam discentibus egeat, quam magistris. Adhuc enim scholas rhetorum, &, ut dixi, geometrarum musicorumque, vel quod magis mirandum est, contemptissimorum vitiorum officinas gulosius condiendi cibos, & luxuriosius fercula struendi, capitumque & capillorum concinatores non solum esse audivi, sed & ipse vidi. Agricolationis neque doctores qui se profiterentur, neque discipulos cognovi.— Quo magis prodigii simile est,— ut sperneretur genus amplificandi retinendique patrimonii, quod omni crimine caret.*

*Then he compares and prefers agriculture to the profession of a soldier or lawyer, to traffick and navigation, to putting out money to interest, and attendance on great men; and then concludes,*

*Superest, ut dixi, unum genus liberale & ingenuum rei familiaris augendæ, quod ex agricolatione contingit. Cujus præcepta si vel temere ab indoctis, dum tamen agrorum possessoribus antiquo more administrarentur, minus jacturæ paterentur res rusticæ, nam industria dominorum cum ignorantia*

THESE manners and this taste for agriculture continued among the *Romans* till the days of *Cato* the censor, who endeavoured strenuously to pre-

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rantia detrimentis multa pensaret.— Nunc & ipsi prædia nostra colere dedignamur, & nullius momenti ducimus peritissimum quemque villicum facere.— Quæ cum animadvertam, sæpe mecum retractans ac recogitans, quam turpi consensu deserta exoluerit disciplina ruris, vereor, ne flagitiosa, & quodammodo pudenda aut inhonesta videatur ingenuis. Verum cum plurimis monumentis scriptorum admonear apud antiquos nostros fuisse gloria curam rusticationis (ex qua *Quintius Cincinnatus* obsessi consulis & exercitus liberator, ab aratro vocatus ad dictaturam venerit, ac rursus fascibus depositis, quos festinatius victor reddiderat, quam sumpserat Imperator, ad eosdem juvencos, & quatuor jugerum avitum hærediolum redierit. Itemque *C. Fabricius* & *Curius Dentatus*, alter *Pyrrho* finibus Italiae pulso, domitis alter *Sabinis*, accepta quæ viritim dividebantur captivi agri, septem jugera, non minus industrie coluerit, quam fortiter armis quæsierat. Et ne singulos intempestive nunc persequare, cum tot alios *Romani* generis intuear memorabiles duces, hoc semper duplici studio floruisse, vel defendendi, vel colendi patrios, quæsitivæ fines), intelligo luxuriæ, & deliciis nostris pristinum morem, virilemque vitam displicuisse. Omnes enim (sicut *M. Varro* jam temporibus avorum conquestus est) patres familiae falce, & aratro relicti, intra murum correpsimus, & in circis potius ac theatris, quam in segetibus & vinetis manus movemus: attonitique miramur gestus effæminatorum, quod à natura sexum viris denegatum, muliebri motu mentiantur, decipiantque oculos spectantium. Mox deinde ut apti veniamus ad ganeas, quotidianam cruditatem Laconicis excoquimus, & exucto sudore sitim quærimus, noctesque libidinibus, & ebrietatibus, dies ludo vel somno consumimus, ac nosmetipsos ducimus fortunatos, quod nec orientem solem videmus nec occidentem: itaque istam vi-

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serve the remains of the old simplicity and frugality, and to stop the growing corruption of his age.

Agriculture

tam socordem persequitur valetudo. Nam sic juvenum corpora fluxa & resoluta sunt, ut nihil mors mutatura videatur. At mehercule vera illa *Romuli* proles assiduis venatibus, nec minus agrestibus operibus exercitata, firmissimis prævaluit corporibus, ac militiam belli, cum res postulavit, facile sustinuit, durata pacis laboribus, semperque rusticam plebem præposuit urbanæ.— *Nundinarum* etiam conventus manifestum est propterea usurpatos, ut nonis tantummodo diebus urbanæ res agerentur, reliquis administrarentur rusticæ: illis enim temporibus, ut ante jam diximus, proceres civitatis in agris morabantur, & cum consilium publicum desiderabatur, à villis arcessiebantur in senatum. Ex quo qui eos evocabant, viatores nominati sunt: isque mos dum servatus est perseverantissimo colendorum agrorum studio, veteres illi *Sabini*, *Quirites*, atque *Romani*, quanquam inter ferrum, & ignes hostilisque incursionibus vastatæ fruges, largius tamen condidere, quam nos, quibus diuturna permittente pace prolatare licuit rem rusticam. Itaque in hoc *Latio* & *Saturnia* terra, ubi *Dii* cultus agrorum progeniem suam docuerunt, ibi nunc ad hastam locamus, ut nobis ex transmarinis provinciis advehatur frumentum, ne fame laboremus: & vindemias condimus ex insulis *Cycladibus*, ac regionibus *Bæticis*, *Gallicisque*. Nec mirum cum sit publice concepta, & confirmata jam vulgaris existimatio, rem rusticam fordidum opus, & id esse negotium, quod nullius egeat magisterio præceptoris.

And then he proceeds to shew what a variety of knowledge is necessary to make one perfectly skilled in agriculture.

Colum. de re rustic. præf.

This passage from *Columella* gives a distinct view of the taste of the *Romans* both in more early and later times.

To the same purpose are the two following passages:

Nam is demum cultissimum rus habebit, ut ait *Tremellius*, qui & colere sciet, & poterit, & volet: neque enim scire aut velle,



Agriculture was his constant business, when not employed either in pleading causes, or in the public service: and tho' he was so great a man in the Roman state, he found time to compose a treatise on this subject, some part of which has been preserved to our times\*.

THE Greeks were both polished and corrupted in more early times than the Romans; and notwithstanding

velle, cuiquam satisfuerit sine sumptibus, quos exigant opera.

Columell. de re rust. lib. 1. cap. 1.

Nec dubium quin minus reddat laxus ager non recte cultus, quam angustus eximie. Ideoque post reges exactos, Liciniana illa septena jugera, quæ plebis tribunus viritim dividerat, majores quæstus antiquis retulere, quam nunc nobis præbent amplissima vervacta. Tanta quidem Curius Dentatus, quem paulo ante retulimus, prospero ductu parta victoria ob eximiam virtutem deferente populo præmii nomine quinquaginta soli jugera, supra consularem, triumphalemque fortunam putavit esse. Repudiatoque publico munere, populari ac plebeia mensura contentus fuit.— More præpotentium qui possident fines gentium, quos ne circumire equis quidem valent, sed proculcandos pecudibus, & vastandos, ac populandos feris derelinquunt. Columell. de re rust. lib. 1. cap. 3.

\* In this little treatise, at the beginning, we have the following passage:

Majores nostri — virum bonum cum laudabant, ita laudabant, bonum agricolam, bonumque colonum. Amplissime laudari existimabatur, qui ita laudabatur. Mercatorem autem strenuum studiosumque rei quærendæ existimo, verum (ut supra dixi) periculosum & calamitosum. At ex agricolis & viri fortissimi & milites strenuissimi gignuntur, maximeque pius quæstus, stabilissimusque consequitur, minimeque invidiosus: minimeque male cogitantes sunt, qui in eo studio occupati sunt.

withstanding the greatest refinement, agriculture was highly honoured in many of their states.

How much it was honoured at Athens in the days of Socrates, appears from Xenophon's book of Oeconomics\*, where in the person of Ischomachus, whom he introduces in conversation with Socrates, he sets before us the manner in which many of the Athenians lived, and how studious they were of agriculture.

NOR was agriculture in much esteem among the Greeks and Romans alone: it was so too among other wise and mighty nations. Xenophon relates in the same book what passed between the younger Cyrus and Lysander, and how much Cyrus valued himself on his knowledge and his practice in agriculture. I myself (says Cyrus to Lysander) designed and measured out the whole garden, (meaning a fine garden at Sardis;) many of the plants I planted with my own hands; and when I am in health, I never

\* Τις δὲ οἰκέταις προσφιλέστερα, ἢ γυναῖκί ἡδίων, ἢ τέκνοις ποθεινότερα, ἢ φίλοις εὐχαριστοτέρα; ἐμοὶ μὲν θαυμαστὸν δοκεῖ εἶναι εἴ τις ἐλεύθερος ἄνθρωπος ἢ κτήμα τι τῆτι ἡδίων κέκτηται, ἢ ἐπιμέλειαν ἡδίω τινὰ ταύτης εὐρηκεν ἢ ὠφελιμωτέραν εἰς τὸν βίον. Xenophon. oeconom.

Καλῶς δὲ κακείνος εἶπεν ὃς ἔφη τὴν γεωργίαν τῶν ἄλλων τεχνῶν μητέρα καὶ τροφὸν εἶναι. εὖ μὲν γὰρ φερομένης τῆς γεωργίας, ἔρρωνται καὶ αἱ ἄλλαι τέχναι ἅπασαι ὅπου δ' ἂν ἀναγκασθῆ ἢ γῆ χερσεύειν, ἀποσβεννύνται καὶ αἱ ἄλλαι τέχναι χεῖρον τι καὶ κατὰ γῆν καὶ κατὰ θάλατταν.

Ibidem.

never dine, till I have first made myself sweat at some warlike or rural exercise. Ταῦτα δὲ, ὦ Κριτόβουλε, ἐγὼ διηγούμαι, ἔφη ὁ Σωκράτης, ὅτι τῆς γεωργίας οὐδ' οἱ πάντες μακάριοι δύνανται ἀπέχεσθαι. *These things I mention to you, O Critobulus, said Socrates, because the most fortunate and most happy of men cannot hinder themselves from having the highest inclination to rural business\*.*

*Eightly.* WE may further derive the scarcity of people in modern times, from the extent of many of the modern, compared with that of the antient states.

BEFORE the days of *Alexander the Great*, and even in succeeding times, till the *Roman* empire was established, the western parts of the world consisted of small and independent governments. *Cæsar* describes many such in *Gaul*, *Italy*, *Greece*, the *Lesser Asia*, and the *African* coasts, consisted of, and almost all the islands in the *Mediterranean* and *Ægean* seas were, independent states of this kind, containing commonly one city, and around it a small territory, that was well improved: for lands which ly near considerable cities, may generally be observed to be richly cultivated. The extent of most  
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\* Ταῦτα τοίνυν, ὦ Λύσανδρε, ἐγὼ πάντα καὶ διεμέτρησα καὶ διέταξα: ἔσι δ' αὐτῶν, φάναι, ἃ καὶ ἐφύτευσα αὐτός.—  
Ὁμνυμί σοι τὸν μίθρην, ὅταν περ' ὑγιαίνω, μὴ πώποτε δειπνῆσαι πρὶν ἰδρῶσαι ἢ τῶν πολεμικῶν τι ἢ τῶν γεωργικῶν ἔργων μελετῶν, ἢ αἰεὶ ἐν γέ τι φιλοτιμούμενος.

Xenophon. oeconomic.

of the governments of *Europe* is much larger in modern times. This continent was antiently divided into many hundreds, perhaps some thousands, of independent governments: there are not perhaps fifty at present. In consequence of this a small spot near the metropolis, or any considerable city, is finely cultivated, while places at a distance ly neglected. From hence it evidently appears, that states of small extent must in a peculiar manner be favourable to populousness: for the territory of such states, extending but a small way round the metropolis, cannot fail to be cultivated to the full.

MR. *Fletcher*\*, while he indulged his taste of inquiring into all kinds of political institutions; among those other speculations, with which he amused himself, proposed a scheme, according to which *Britain* might have been divided into ten or twelve independent states of this kind. Such a disposition of things might have its advantages; and in particular, as we have said, would produce great numbers of people. However, the frequent wars, contests and divisions among the states of *Greece*, *Italy*, *Gaul* and *Spain*, which made them at length a prey to the *Romans*; the struggles for power and dominion, with which *Britain* was molested during the *Saxon* heptarchy; the many bloody battles between the *English* and *Scots*, before the union of the crowns and kingdoms, which

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NOT

\* P. 312. &c.

not only destroyed great numbers of the people; but likewise produced an hatred between the nations, may convince every impartial observer, that it would be not a little rash to indanger the liberty, peace and tranquillity we at present enjoy, for any advantages which might result from such an imaginary constitution. I would not therefore, that what is said above, were constructed, as if by it I intended to hint, it were better *Britain* should be crumbled down into so many small states. I mean nothing less, and think it would be the greatest degree of madness to exchange the present happy constitution of this country, for the most perfect ideal one, which imagination could delineate. All I pretend is, that such small states have a tendency to produce great numbers of people; and that the populousness of antient times, before the huge monarchies arose, was owing in some degree to the smallness of the antient governments.

*Ninthly.* THIS points out another source of the destruction of *Europe*, closely connected with the cause just now given of the phænomenon into which we are inquiring; for the scarcity of people in later times seems to be not a little owing to the ruin of the antient governments by the *Roman* empire, and the havock the *Romans* made among the smaller states and cities, before they could fully establish their sovereign power.

If we may indulge conjectures about the increase

crease of mankind in the more early ages, it is not improbable, that the most antient inhabitants of the world peopling the earth by degrees, seized on those tracts first which were most fertile and most inviting: it was thus they formed small societies, and built cities, according to their different views and fancies. These cities grew by degrees, mankind multiplied, and the earth might have been well stored with inhabitants much sooner than is generally supposed; but these states would be formed, and these cities built at first, where mankind had their first abodes.

Now, according to the traditions of most nations, mankind made their first appearance in the East; and according to sacred history, a single pair was formed by the creating hand of GOD, and placed in *Eden*, to be the parents of the human race. Thus the whole country around the primæval seat of man would be first peopled. After the deluge, the posterity of *Noah* growing daily more and more numerous, would by degrees remove themselves from their original abode, which appears also to have been in the East; then they would spread themselves over the rest of the adjacent countries; and perhaps it would be long ere they would chuse to desert the fertile plains of *Asia*, and go in quest of unknown, uncultivated, and perhaps barren habitations. But their growing numbers would at last reduce them to this necessity. Some of them would then transport themselves

selves into *Europe*, others go towards *Africa*, and lay a foundation for peopling the West. So that *Europe* and *Africa*, according to this account, must only have been peopled some time after the peopling of the East. Hence whatever progressions in government, and whatever changes in the situation of human affairs, are, from the nature of man, and the gradual course of things, most likely to have happened, and to have succeeded each other gradually, must from this account be supposed to have happened first in the East. Thus mankind would here first form themselves into those small societies or states I spoke of. And even before *Europe*, and the western parts were fully peopled, while they were as yet only dividing themselves into states of the same kind, some ambitious and turbulent nation of *Asia* might have already raised its views, aimed at general empire, and perhaps accomplished its designs. This is exactly agreeable to the accounts of historians, who every where talk of great empires that were established in the East in the most early times. And from hence it is probable, that the great *Assyrian*, *Babylonian*, *Median* and *Persian* empires had swallowed up, and been formed on the ruins of the small states of *Asia*; and that not only *Europe*, but also *Asia*, was best peopled before the establishment of great monarchies.

BUT at this time, when monarchs domineered in the East, we read only of small states in *Europe*;

*Europe*; for these states had had but just time to form themselves, and none had arisen to aspire at universal dominion. However in a few years the fate of this part became the same with that of the eastern part of the world. *Rome* arose, and by the havock and destruction of the other states, obtained the empire of the West.

FROM this account of the gradual peopling of the world, and its formation into small states, it appears probable, that there was a point of time, when at least *Europe* was better peopled than it has ever been since, or shall ever be hereafter, unless some mighty revolution produces unforeseen changes: to wit, when it was most replenished with small states, and these states had had sufficient time to improve their lands: for history assures us, that the greatest part of *Europe* did once actually consist of such small states\*.

It cannot indeed be determined with precision, in what age this point of time should be placed: in such

\* The wars and struggles for power and dominion, which might happen to arise between them, would perhaps be neither so frequent, nor so dangerous in the most early times, and of course could not prevent the increase of mankind so much as, at first sight, may be supposed; for while great tracts of the earth remained unoccupied, and it was easy to find convenient habitations without fighting, as most men naturally love ease, and would rather purchase what they want without than with danger, 'tis probable that wars would be more destructive sometime after the world was well replenished with inhabitants, and there was less empty room for new-comers.

such matters there must be a latitude: one country flourishes, while another decays, and countries by turns either increase or are diminished. This much seems certain, that we ought not to place such a point of time in the most early ages, as before the siege of *Troy*, but rather in an after-age, when cities and states had got time to cultivate their lands, and improve their whole territory.

Now, by the common chronology, there passed from the siege of *Troy* to the building of *Rome*, about 430 years, and near as many from the building of *Rome* to the overthrow of the *Persian* empire by *Alexander the Great*: during some part of this period, it seems probable, that many of the countries of *Europe* and *Asia* were better peopled than afterwards, and, in general, were increasing in people. How long this might have continued, supposing no universal monarchy to have been established, cannot be determined: it seems evident, that, after the building of the ambitious and turbulent city of *Rome*, a stop was put to the increase of many of the states of *Italy*, by the continual wars and destruction caused by that haughty and usurping republic\*; and that from the

\* Tho' the former wars of the smaller independent states of *Greece*, and other antient nations, could not but prevent such a speedy increase of mankind, as would otherwise have happened in consequence of antient manners; yet these wars were

the beginning of the first *Punic* war, which happened only about sixty years after the death of *Alexander*, many countries in *Europe*, *Asia* and *Africa*, began to decay by the continual inroads of the *Romans*, who plundered their provinces, razed their cities, and put to death so many thousands, nay millions of people: nor could ever these nations recover their antient vigour, their spirits being broken, and their most generous efforts prevented, or defeated by *Roman* oppression. Thus instead of growing more populous, the world declined under the *Roman* yoke, till by the inroads and conquests of the *Goths*, and other barbarous and uncivilized nations, ignorant of industry and agriculture, it was still more miserably distressed. And, by an almost total ruin of antient manners and customs, and the introduction of others, not so well calculated for the increase and improvement of society, the necessary consequence of these inroads, the western parts of the world, which had been well cultivated in antient times, were greatly reduced, and have never been able to regain their antient strength and splendor.

It will not be necessary to illustrate at great length the oppression by the *Romans*, and the dreadful havock they made in every country which they invaded. This is evident from the whole of their history.

were but skirmishes, and the effect of them inconsiderable, in comparison of the more dreadful devastation by the *Romans*.

history. We need only produce two examples, and take notice of the ruin they brought on the *Samnites* and their allies within *Italy*, and of the manner in which they abused the *Epirots*, for their joining with *Perseus* king of *Macedon*. These are dreadful scenes of their history; but in many other cases they exercised their power with great severity.

DURING the war with the *Samnites*, they not only killed very great armies in the field, but even put the inhabitants of whole cities to the sword. Thus they treated *Aufonia*, *Minturnæ*, *Vescia* and *Luceria*, destroying, as *Livy* expresses it, the whole nation of the *Aufones*\*, tho' they were only suspected to favour the *Samnites*. They almost extirpated the nation of the *Æqui*, overrun and laid waste their whole country, and took forty one of their cities, most of which they razed and burnt †. After this, two consular armies ravaged, and entirely dépopulated the whole country

\* Tria oppida (Aufona, Minturnæ & Vescia) eadem hora, eodemque consilio capta. Sed, quia absentibus ducibus impetus est factus, nullus modus cædibus fuit; deletaque Aufonum gens, vix certo defectionis crimine, perinde ac si internecivo bello certasset. — Lucerini ac Samnites ad internecionem cæsi.

*Liv. lib. 9. cap. 25. 26.*

† — Ad singulas urbes circumferendo bello, unum & quadraginta oppida intra dies quinquaginta omnia oppugnando ceperunt; quorum pleraque diruta atque incensa, nomenque Æquorum prope ad internecionem deletum.

*Liv. lib. 9. cap. 45.*

try of *Samnium*, wasting it for five months. During this time one of the consuls moved his camp forty five, and the other eighty six times, leaving every where signal monuments of ruin and destruction\*; and, continuing their devastations, they at length forced the army of the *Samnites* to fly to *Etruria*: upon which they immediately attacked their cities, and in a few months plundered *Murgantia*, in which they took 2100 *Samnites*; *Romulea*, in which they killed 2300, and took 6000 prisoners; *Ferentinum*, in which they killed 3000, and during the course of this war, they made themselves masters of *Milionia*, killing 3200, and taking 4200 prisoners; *Amiternum*, killing almost 2800, and making 4270 prisoners; *Duronia*, much of the same strength; *Cominium*, where 4380 were killed, and 15,400 surrendered themselves prisoners. This city and *Aquilonia* they plundered and burnt in one day. They took likewise *Volana*, *Palumbinum*, and *Herculaneum*, in which three cities 10,000 were killed, or made prisoners; as also *Sæpinum*, where they killed 7400, and took 3000 prisoners. In short, during their war with the *Samnites*, which lasted about half a century, the *Roman* Generals triumphed twenty four times, and so entirely subdued the country of *Samnium*, and destroyed the very ruins of its cities, that, according to *Florus* †, *Samni-*

\* *Livy*, lib. 10. cap. 15. 17. 34. 39. 43. 44. 45.

† *Lib. 1. cap. 16.*

*um in ipso Samnio requiratur; nec facile appareat materia quatuor & viginti triumphorum.*

As an example of what they did without the bounds of *Italy*, we need only reflect on their cruel order to *Paulus Æmilius*, to plunder and destroy the cities of *Epirus*: in obedience to which he seized whatever was most valuable, and, reserving it for the public treasury at *Rome*, gave all that remained as plunder to his army; besides, he made 150,000 persons slaves, and dismantled seventy cities\*. Thus the exorbitant power and overgrown empire of the *Romans*, as well as the means employed to raise both to so prodigious an height, contributed greatly to the ruin of the world. Indeed this must always be the consequence of too extensive governments.

Tenthly. WE may view in another light the mighty change wrought on the world by the conquests of *Alexander the Great*, and his successors, and afterwards by the *Roman* empire; as such overgrown governments destroyed simplicity of taste and manners, and introduced a degree of luxury unknown to more antient ages, which helped gradually and insensibly to diminish the number of mankind.

If we consider the state of the antient world, while governments were small, before so many arts, merely ornamental, had been invented; mankind, we shall find from the accounts of historians, lived in a simple and frugal man-

\* Liv. lib. 45. cap. 34. & Plutarch. in Paul. Æmil.

ner, and were employed chiefly in agriculture, and the necessary arts of life; equality obtained in a great measure; and even when the fortunes of particular persons happened to be unequal, simplicity in general prevailed both among high and low. There was little grandeur, sumptuousness, or operose workmanship in their equipages, cloaths, or tables, in respect of that which was introduced under the great monarchies. This frugal and simple manner of living continued long; it was not banished at once, but decayed gradually, as luxury and a false taste prevailed. During the period of 800 years, from the siege of *Troy*, to the conquests of *Alexander the Great*, even after the finer arts of painting, sculpture and architecture had attained the greatest perfection, much of the antient simplicity and sobriety remained in other respects, and was chiefly destroyed by that corruption of taste which was introduced by the greater monarchies. Till they arose, the changes of manners were much slower; but so soon as such mighty empires were raised, false refinements, and extravagant sumptuousness suddenly over-run the world; and beginning at courts and palaces, made rich by oppression, they spread by degrees to places more distant, till at length the infection growing universal, a taste for all kinds of expensive ornaments increasing continually, and the great people requiring so much attendance, a much greater number in proportion applied themselves

to

to arts merely ornamental, fewer to agriculture and necessary occupations. In consequence of this, great tracts of land being left uncultivated every where; food, and all the necessaries of life, became scarce and dear. This again prevented marriage, as many would not choose to subject themselves to the incumbrance of a family, but would rather plunge into debauchery and irregular amours. Besides, the greater monarchies raising high taxes, and oppressing the more distant parts under their jurisdiction, multitudes would leave these distant provinces, and take up their residence near the center of the government: their not being married, would make this more easy: the magnificence and splendor, shows and diversions, excesses and debaucheries of the courts of princes, would allure vast numbers. By all these methods, the world daily declined in temperance, frugality and virtue, and of course the people were continually diminished, tho' after a manner so slow as was hardly to be perceived. Nor indeed has the world ever recovered the antient taste of frugality and simplicity, but is either barbarous, and in a great measure destitute of arts and agriculture, or corrupted by luxury and false refinements.

THE natural progression from simplicity to refinement, and from that to luxury, would take place in small states, as well as in extensive monarchies; but in the latter, the successive changes would follow each other more quickly, at the same time

time that luxury would be carried to a greater height than in the former. Thus in the false refinements and extravagancies of such over-grown monarchies, we may see one considerable cause of the ruin of the world. ALL this may be illustrated by what we find recorded in history concerning the smallness of estates among the Romans, even in the later times of their commonwealth. When Rome was built\*, a Roman family was decently maintained upon two jugera, or  $1\frac{1}{2}$  English acres. Plutarch† relates, that when Appius Clausus left the Sabines, and retired to Rome, he brought along with him 5000 Sabine families, to each of which the Romans gave two plethra of ground, and twenty five to Appius himself. If the plethrum was equal to the jugerum, as some think‡, each family had  $1\frac{1}{2}$  English acres, and Appius about fifteen: but if the plethrum was only 10,000 feet square, it was not the half; for a jugerum contained 28,800 feet square: if, according to others, it was only 1444 feet square, it was much less. In the year of Rome 292, Lucius Quintus Cincinnatus the dictator had only four jugera, or  $2\frac{1}{2}$  acres||. The famous Attilius Regulus,

\* Plin. nat. hist. lib. 18. cap. 2.

† In the life of Poplicola.

‡ See Arbutnot's tables of antient coins, &c. chap. 8.

|| Valerius Maximus, lib. 4. cap. 7.

He had seven at first, but lost three of them by a fine, so four only remained; yet according to Valerius Maximus, Ei quatuor



*lus*, in the time of the first *Carthaginian* war, had only seven *jugera*, or  $4\frac{1}{3}$  acres\*. It is recorded, that *Manius Curius Dentatus*, who was consul about the year of *Rome* 463, said, he was a dangerous citizen, who was not contented with seven *jugera*†. This had been the quantity allotted to the *Plebes*, after the kings had been expelled: and if their consuls and dictators long afterwards had no greater quantity, doubtless this was reckoned a decent allowance. However, as the love of riches crept in, and increased gradually, many without doubt became avaritious, and possessed greater estates. This occasioned the law enacted under the tribuneship of *Licinius Stolo*, about the year of *Rome* 378, that none should possess above 500 *jugera*, or about 312 *English* acres‡. Now, when the *Roman* consuls and dictators had only so small a piece of ground, which they laboured with the help of their slaves, and often with their own hands: this shews in what a frugal and simple manner they must have lived; how few arts there must have been merely ornamental; and how easy it must have been to support a family. In such a dictator's or consul's

*quatuor jugera aranti, non solum dignitas patris familie consistit, sed etiam dictatura delata est.* This circumstance is likewise observed by *Pliny*. *Nat. hist.* lib. 18. cap. 3.

\* *Val. Max.* lib. 4. cap. 6.

† *Plin. nat. hist.* lib. 18. cap. 3.

‡ *Ibid.* See also *Livy*, book 6. chap. 35.

consul's family, we may reckon the husband and wife, two or three children, and a slave or two, or perhaps more, as slaves were very numerous. A *Roman* family therefore, which had not above seven *jugera*, or  $4\frac{1}{3}$  *English* acres, to maintain them, might consist of seven persons or more, and had less than an acre, often perhaps not more than half an acre for each in the family. But, according to *Templeman's* calculations, the eight millions of inhabitants of *England* have very near thirty two millions of acres to support them, or four acres *per head*. The *Roman* territory therefore must have been four times as populous as *England*: nor can any state be said to be populous, where there are great tracts of land uncultivated, and where great estates go to the maintaining of a few, who, notwithstanding, through the luxury of the times, may stand in need of so many ornaments, that it is often with difficulty they can purchase the necessaries of life: whereas among the *Romans*, the necessaries of life being all they wanted, a small piece of ground furnished a family with abundance: hence their territory in general was more populous than *England*, in proportion to the smaller extent of ground, which was allotted for the support of the same number of persons.

Not only among the *Romans*, but also among the antients in general, there was a great simplicity of taste and manners; the great expence arose

arose from food; the generality of the people wanted fewer ornaments; and could support themselves; and maintain families more easily, than the bulk of mankind at present; nor did this arise from scarcity of money, but from the abundance of provisions; and from the customs of the times, which made ornaments much less necessary.

WITHOUT descending into a tedious and particular discussion of the subject, I shall only take notice at present of some passages of authors, which shew, that in antient times there was a great disproportion between the prices of necessaries and those of things ornamental; that while the latter were very high, the former were very low; and that even in times of luxury, and great plenty of money, food and the common necessaries of life might have been purchased at a very low rate.

IN the more early times, during the *Assyrian*, *Babylonian*, *Median* and *Persian* empires, there was great pomp in many of the countries in *Asia*, and silver and gold were more plentiful than in *Europe*. The courts of the *Asiatic* monarchs were very splendid. Softness, delicacy, and luxury reigned in their capital cities. Thus the *Persian* emperors lived in mighty grandeur, and had great treasures of gold and silver in their dominions. The magnificence with which *Xerxes* invaded *Greece*; the delicacy and sumptuous methods of living, which appeared among the governors, and many of the subjects of the *Persian* empire; the great sums expended

pended on their numerous fleets and armies, and remitted to bribe and to divide the *Grecian* states; especially the vast riches, which fell into the hands of *Alexander the Great*, when he overthrew the *Persian* empire, plainly demonstrate, how much money abounded in the East.

DURING this period, the *Greeks*, *Italians*, and several other nations of *Europe* did not want a good deal of money, tho' indeed it seems to have been scarcer than in *Asia*. Authors make early mention of very great sums; and while the most necessary provisions were very cheap, such things as were only ornamental gave a good price.

THE taking of *Troy* by the *Greeks* was a very antient event: even according to *Sir Isaac Newton's* chronology, which places it almost 300 years lower than the common account, it was more than 300 years before the reign of *Cyrus*; yet in this antient age, as we may see from *Homer*, both silver and gold abounded, and many fine arts and manufactures had been introduced into *Greece* and the neighbouring countries; and it is reasonable to presume, they would be on the growing hand, till the days of *Alexander the Great*. But through all this period, and long afterwards, a great deal of the antient simplicity remained, and the common necessaries of life might have been easily purchased.

SOLON, the *Athenian* lawgiver, was *Archon* at *Athens* more than 250 years before the reign of

Q

*Alexander*;

*Alexander*; yet there were many rich citizens in *Athens* in his time, to whom great sums of money were owing by the poorer sort. When he was called to settle the state, and had actually discharged the debts, he himself lost by it, according to some, five talents, or 968 l. 15 s. *Sterling*: according to others, 15 talents, or 2906 l. 5 s.\*. I cannot find he was among the richest citizens. *Plutarch* seems rather to be of opinion, that his family was poor, and that his estate had been much lessened by his father. 'Tis at least probable there were many richer citizens, and that many lost more than *Solon* at this time. *Plutarch* takes notice, that while *Solon* was devising schemes for discharging the debts of the *Athenians*, some of his intimate friends knowing that he did not intend to make any alteration in the division of lands, borrowed great sums of money from rich men, with which they purchased some large farms: it seems, notwithstanding the debts already contracted, there was still much money to be lent. Now, such considerable debts shew the *Athenians* did not want money in those early ages; yet we shall find, that at this time the prices of cattle and of corn were very low.

ACCORDING to *Plutarch*, the price of a sheep in *Solon's* time was a *drachma*, or seven pence three farthings *Sterling*, and the price of an ox five *drachmæ*, or three shillings two pence three farthings.

HE

\* *Plutarch*. in *Solon*.

HE observes, that the poorer citizens tilled the lands of the rich, and paid them one sixth part of the produce. This would be reckoned in many cases a cheap rent among us, and shews how easily a poor man might live by cultivating lands.

CORN at that time was valued at a *drachma* the *medimnus*\*, which contained nearly an *English* bushel and an half; so the *English* quarter cost only three shillings and seven pence †.

WHEN a woman went out of town, she was restricted in her provisions to the expence of an *obolus*, or one penny  $1\frac{1}{2}$  farthings *Sterling*.

SOLON was obliged to restrain, by sumptuary laws, many abuses and pieces of extravagance that had crept into the state: it was not therefore scarcity of money which occasioned the cheapness of provisions.

THE age of *Solon* was illustrious in many respects. He was contemporary with *Cræsus* king of *Lydia*, a country at no great distance from *Greece*, whose court at *Sardis* was remarkably splendid, whose riches have even become a proverb, and who notwithstanding his great conquests in *Asia Minor*,

\* See *Plutarch* in *Solon*.

† I calculate according to the *Medimnus Georgicus*, at which rate the *Scotch* peck would have cost about  $1\frac{1}{2}$  pence *Sterling*, and the boll not more than half a crown, which shews the plenty of provisions, and how easily the lower sort of the people could maintain families.

N. B. In all the following computations, the *Scotch* measure is to be understood of the *Linlithgow* barley measure.

*Minor*, in which there were many *Greek* cities, studied to preserve the friendship of the *Greeks* in *Europe*, sent rich presents to their temple at *Delphos*\*, and was much interested in the affairs of *Greece*. Now when riches abounded so much, and there were so many great and splendid *Greek* cities in *Asia*, can we imagine that *Greece* itself was poor?

FROM the Archonship of *Solon* to the battle of *Marathon*, there were about 100 years; from the battle of *Marathon* to that of *Leuctra*, about 116; and from thence to the reign of *Alexander* 38. This was an illustrious period, in which arms, arts, learning and commerce flourished in *Greece* and the neighbouring islands. Great sums of money are mentioned, and high prices are recorded by historians to have been given for things merely ornamental, while the prices of necessaries appear to have been wonderfully low.

PLUTARCH† relates, that after the battle of *Platæa*, the *Greeks*, before they divided the spoils, set apart 80 talents, or 15,500*l. Sterling*, for building a temple, and erecting a statue to *Minerva*: the *Platæans* built the temple, and adorned it with pictures, which retained their original beauty in the age of *Plutarch*. This was a considerable sum, and shews, that the *Greeks*, in those early times, had an idea of magnificent and expensive works; yet observe at the same time, that when it was left to

*Aristides*

\* Herod. lib. 1.

† In the life of *Aristides*.

*Aristides* to tax the *Grecian* states, in order to maintain a constant war against the *Persians*, he taxed them only at the rate of 460 talents, or 89,125*l. Sterling*. With this inconsiderable sum, an army of 10,000 foot, 1000 horse, and 100 ships of war were to be supported. Now, supposing 100 in each ship (tho' the antient ships of war had often many more) each man and horse will not have three pence for daily maintenance, tho' nothing be allowed for other necessary expences of such an army and navy. This shews how little was thought sufficient for purchasing the necessaries of life.

THE same conjecture may be formed from the account which *Plutarch*\* gives of the generosity of the *Treæzenians*, who, by a public decree, ordered the parents, wives and children of those *Athenians*, who had generously left their city, and betaken themselves to their ships, during the *Median* war, to be maintained at the public charge; for this purpose they distributed daily two *oboli* to each of them, or two pence  $2\frac{1}{2}$  farthings *Sterling*.

MORE than 50 years after this, about the end of the *Peloponnesian* war, the seamen in the *Grecian* fleets had only three *oboli*, or less than four pence a day†. The *Lacedæmonians* indeed gave four *oboli*, which is almost  $5\frac{1}{2}$  pence. But this was not necessary; and the *Lacedæmonians* did it only to encourage

\* *Plutarch*. in *Themistocl.*

† *Idem* in *Alcibiad.*

courage them, as the money they received from *Cyrus* enabled them easily to bear the expence.

PLUTARCH\* takes notice, that two women, very nearly related to *Aristides*, when they were poor, had but half a *drachma*, or about  $3\frac{1}{2}$  pence, a day allowed them out of the public treasury for their subsistence: indeed afterwards this allowance was doubled. At any rate this was a small matter for persons of their rank, if necessaries had not been got almost for nothing.

SOCRATES says to *Critobulus* †, that he believed, if he was to sell his house with all he had, and could make a good bargain, he might get five *mine* for it, or 16 *l.* 2 *s.* 11 *d.* So poor was *Socrates*. He was indeed reckoned poor at that time; yet he says in the same passage, that he could supply himself plentifully with all the necessaries of life. We may be apt perhaps to attribute this to the moderation of so great a man, and the willingness of his friends to assist him; but we ought to consider at the same time, that such a representation had been improper, if both houses and living had not been very cheap at *Athens*.

If we consider the situation of the *Roman* affairs, we shall find, that during the same period, that is, from the days of *Tarquin* the elder, until a little after the death of *Camillus*, a small portion of ground was sufficient to maintain very good families,

\* In the life of *Aristides*.

† Xenophon *oeconom.*

lies, and that the prices of necessaries were very low; nay, that long afterwards, when *Italy* had grown very rich, there was still a great disproportion between the prices of necessaries and those of ornaments; and that there was such plenty of provisions, as gave great encouragement to marry.

In the life of *Valerius Poplicola*, *Plutarch* gives account of the prices of sheep and oxen. A sheep was valued at ten *oboli*, or very near thirteen pence *Sterling*, and an ox at ten times the sum, or ten shillings ten pence. *Poplicola* died about the time of the battle of *Marathon*: hence it is probable, that provisions were much about the same price at this time, both in *Italy* and *Greece*.

In the manners of the elder *Cato*, who was contemporary with *Scipio Africanus*, we may see the frugal laborious life of the more antient *Romans*; how little they stood in need of, and of course at how small an expence they might support families. *Plutarch* relates\*, that even while he was General or Consul, he never wore cloaths which cost more than 100 *drachmæ*, or 3 *l.* 4 *s.* 7 *d.* *Sterling*; and that the provisions for his table at dinner never cost more than 30 *ἀσάκια*, much about two shillings.

BUT notwithstanding the cheapness of living, and the low prices of what was necessary for the bulk of men, there was much money at this time both

\* In *Cat. Censor.*

both in *Greece* and *Italy*; for ornaments, delicacies and curiosities often gave a great price.

ALCIBIADES got with his wife a fortune of 20 talents, or 3875*l.* *Sterling*; he had a favourite dog, which cost him 70 *minæ*, or 226*l.* *Sterling*\*.

THUCIDIDES introduces *Pericles* acquainting the *Athenians*, at the beginning of the *Peloponnesian* war, that their allies contributed yearly 600 talents † of taxes, or 116,250*l.*; that at that time there were 6000 talents of coined money in their castle, or 1,162,500*l.*; that there had been in it not long before 9700 talents, or 1,879,375*l.*; but that 4000 talents, or 775,000*l.* had been spent upon the gates of their castle ‡, and other buildings, together with what was spent upon the expedition to *Potidea*; that the uncoined gold and silver of the public and private donations, and the sacred vessels for their processions and exercises, the *Median* spoils, and other things of the same nature, could not be valued at less than 500 talents, or 96,875*l.*; that there were great riches in their temples; and that the statue of their goddess weighed about 40 talents of pure gold ||.

THAT

\* Plutarch. in Alcibiad.

† Thucidid. lib. 2. cap. 13.

‡ Τα προφυλαία τῆς ἀκροπόλεως.

|| This was the statue of *Minerva*, made by the celebrated *Phidias*. Now, reckoning gold to silver, as 10 to 1, which was the ancient proportion, the gold of this statue was 77,500*l.* but if we reckon according to the modern proportion of 16 to 1, it was much more valuable.

THAT the *Athenians* had 10,000 talents in their treasury, at the beginning of the *Peloponnesian* war, is confirmed by *Isocrates*\*, who observes also, that *Pericles* brought into it 8000 talents †, besides what was destined for sacred uses; and that the *Persians* had given the *Lacedæmonians* 5000 talents to maintain the war against the *Athenians* ‡.

HELIODORUS, as quoted by *Suidas* ||, relates, that the castle of *Athens* was completed in five years, had five gates, and cost 2012 talents, or 389,825*l.*

DEMOSTHENES says, that the revenues of *Athens* were once 130 talents, or 25,187*l.* 10*s.* *Sterling*\*\* ; that afterwards they amounted to 400 talents, or 77,500*l.* And *Xenophon* †† calculates, that at the beginning of the *Peloponnesian* war, they were 1000 talents, or 193,750*l.*

THE same *Xenophon* after the retreat of the 10,000, sold his horse for 50 *Darics*, a gold coin, reckoned worth 1*l.* 12*s.* 3½*d.* According to which computation he got for his horse 80*l.* 14*s.* 9*d.*

R

9*d.*

\* Isocrat. de pace, p. 287.

† Ibid. p. 302.

‡ Ες δὲ τὴν ἀκρόπολιν ἀνήνεγκεν ἑπτακίς χίλια τάλαντα, χωρὶς τῶν ἱερῶν.

‡ Ibid. p. 295.

|| Suidas in voce προφυλαία.

\*\* Philippic. 4.

†† Anabaf. lib. 7.

9 d.\* But this was an inconsiderable price, when compared with that which *Alexander* gave for *Bucephalus*, during his father's life, viz. 13 talents, no less than 2518 l. A great price indeed †!

THE elder *Tarquin* is said to have laid out upon the foundation of the Capitol 40,000 *librae* of silver, or 109,284 l. ‡.

AFTER these examples, and so plain documents of the great sums of money, and high prices of things merely ornamental among the *Greeks* and *Romans*, it can scarce be supposed, that the cheapness of living, and the low prices of the most common food, were occasioned by scarcity of money: 'tis more probable this arose from that vast plenty of necessaries, which proceeded from hence, that so great a proportion of the people applied themselves to pasturage and agriculture.

BUT what I shall observe immediately, will go near to be decisive. 'Tis certain, that even after the second *Punic* war, and the conquests of *Sicily* and *Macedonia*, when there was surely great plenty of money in *Italy*, the necessaries of life were extremely cheap; nay, even in the time of the emperors, when riches flowed from all quarters, when luxury rose to the highest pitch at which perhaps it ever arrived, and when the *Romans* were giving extravagant prices for trifles and delicacies, common provisions, which were necessary for the bulk

\* Anabaf. lib. 7.

† Plutarch. in Alexand.

‡ Plutarch. in Poplicola.

bulk of the people, were not proportionally dear. This cannot well be accounted for, unless they were in very great plenty.

ACCORDING to *Polybius*, the *Sicilian medimnus* of wheat was even in his time sold commonly, in some parts of *Italy*, for four *oboli*; the same quantity of barley for two *oboli*; the *metretes* of wine for the same price. Now, if the *medimnus Siculus* did not differ much from the *medimnus Atticus Georgicus*, it contained more than six *English*, or four *Scotch* pecks; that is, six *English* pecks of wheat were sold for 5 $\frac{2}{3}$  d. *Sterling*; six *English* pecks of barley for half as much; and more than ten *English* gallons of wine for the same low price. Such being the state of the case in the age of *Polybius*, when there was no scarcity either of men or money, this shews the prodigious abundance of common food. At this rate the *English* quarter of wheat would cost but half-a-crown, the quarter of barley but fifteen pence, and the *Scotch* boll less than one shilling *Sterling*. This brings the prices lower than in the days of *Solon*; and proving too much, may perhaps be thought to prove nothing; or at least, it may be imagined, that the measures are not exactly known. But what *Polybius* adds, will serve to obviate this objection, and shew, that at any rate we cannot be much mistaken: for he observes further, that there was such plenty of provisions in the north of *Italy* at that time, that a traveller was well entertained in an inn with all necessaries

necessaries he wanted, and seldom paid more than the quarter of an *obolus*, less than one third of a penny *Sterling* \*. How cheap and abundant must provisions have been, and how easily might a family be maintained in such a situation! And how easily might a family be maintained still, what a prodigious quantity of food might be raised, and how cheap would provisions be in *Britain*, were all or the greatest part of those, who are at present employed in procuring ornaments, as industrious in raising grain, and breeding cattle, as they are in providing toys, and administering to luxury!

FROM the days of *Polybius*, the *Romans* increased in power and riches: and, during the reign of *Augustus*, and for some time afterwards, riches and luxury came to the greatest height; the most extravagant prices were paid for delicacies; and the rich lived at an expence unknown to modern ages; of which I shall give a few examples from *Arbutnot's* tables of antient coins, &c.

IN those times many of the *Romans* were immensely rich.

APICIUS was worth 807,291 *l.* 13 *s.* 4 *d.*

CRISPUS, a Burgher of *Vercelles*, 1,614,583 *l.* 6 *s.* 8 *d.*

MARCUS CRASSUS was worth the same sum.

DEMETRIUS, a *libertus* of *Pompey*, 4000 talents, or 775,000 *l.*

PALLAS, a *libertus* of *Claudius*, 2,421,875 *l.*

SENECA

\* *Polybius*, Parisiis, 1609, folio, lib. 2. p. 103.

SENECA the philosopher in four years made 2,421,875 *l.*

LENTULUS the *Augur* was worth 3,229,166 *l.* 13 *s.* 4 *d.*

C. CÆCILIUS ISIDORUS, altho' he had lost much in the civil war, left by will 4116 slaves, 3600 yoke of oxen, of other cattle 257,000, and in ready money 484,375 *l.*

POMPONIUS ATTICUS got from his father 16,145 *l.* 16 *s.* 8 *d.*

THE patrimony of *Cato Minor* was 19,375 *l.*

SERVIUS, in *Virgil's* life, says, he was worth 80,729 *l.* 3 *s.* 4 *d.*

CICERO's effects must have been considerable: he owns that he had in *Asia* 17,762 *l.* 9 *s.* 4 *d.*

GREAT debts, as they are the effect of great credit, are an indication of great riches; some instances of which are as follow:

CURIO contracted a debt of 484,375 *l.*

JULIUS CÆSAR's debts, before he had been in any office, according to some, were 2,018,229 *l.* 3 *s.* 4 *d.* According to others, 807,291 *l.* 13 *s.* 4 *d.* According to others, 251,875 *l.*

Crassus was his surety for 160,812 *l.* 10 *s.*

MILO contracted debts to the sum of 565,104 *l.* 3 *s.* 4 *d.*

ANTONY, at the ides of *March*, owed 322,916 *l.* 13 *s.* 4 *d.*; which he paid before the kalends of *April*.

OTHO, before he was emperor, run in debt 1,602,083 *l.* 6 *s.* 8 *d.*

THERE



THERE are some circumstances with respect to the estate of *M. Crassus*, which will further illustrate this subject. He had left him by his father 300 talents, or 58,125*l.* which *Plutarch* says he improved to 7100 talents, or 1,375,625*l.* He had done this before he went on his *Parthian* expedition; nay he had this great estate, tho' he had feasted the *Roman* people, and given every *Roman* citizen a donative of three months provision of corn.

THERE were some of very low rank and professions, who acquired great estates. Coblers, dyers, and shoemakers, gave publick shows to the people.

As both estates and debts among the *Romans* were often vastly great, so their expences were great in proportion.

APICIUS, after having spent in his kitchen 807,291*l.* and squandered immense grants and pensions, being at last forced to look into his accounts for the first time, found he had a remainder of 80,729*l.* 3*s.* 4*d.* but thinking this too little, he poisoned himself, for fear of starving.

TIGELLIUS a singer spent in five days 8072*l.* 18*s.* 4*d.*

ALAGABALUS laid out on a supper 24,218*l.* 15*s.*

CALIGULA spent on a supper 80,729*l.* 3*s.* 4*d.*

VITELLIUS, in eating and drinking within the year, spent 7,265,625*l.* Nay, *Tacitus* saith, he spent the same sum in a few months.

LUCULLUS'S

LUCULLUS'S establishment for each supper in the *Apollo*, was 1614*l.* 11*s.* 8*d.*

VITELLIUS eat four times a-day; no supper, breakfast or collation under 3229*l.* 3*s.* 4*d.*

GREAT sums were given as donatives to the soldiers.

PAULUS ÆMILIUS gave to each of his soldiers 7*s.* 1½*d.*

LUCULLUS gave to each of his soldiers 30*l.* 13*s.* 6½*d.* After the taking of *Tigranocerta*, he gave to each 25*l.* 16*s.* 8*d.* out of the spoils taken from *Tigranes*'s army, and besides left the town to be plundered, except king *Tigranes*'s treasure; where, among other riches, he found in ready money 1,550,000*l.*

POMPEY, after he had overcome the pirates, in his triumph, gave to the public and the questors, 193,750*l.* and to each soldier 48*l.* 8*s.* 9*d.*

JULIUS CÆSAR gave at one time to each soldier of the veteran legions 16*l.* 2*s.* 11*d.* and to the equites 193*l.* 15*s.* At another time to each man 80*l.* 14*s.* 7*d.* At another time, to each man 161*l.* 9*s.* 2*d.* To the commander of a company double, or 322*l.* 18*s.* 4*d.* To the *tribuni militum* and the equites, 645*l.* 16*s.* 8*d.*

BRUTUS gave to each soldier 1*l.* 12*s.* 1½*d.*

AUGUSTUS CÆSAR gave to each soldier of the prætorian bands, after he had served sixteen years, 161*l.* 9*s.* 2*d.* He left to each soldier of the *urbane*

*banæ cohortes* 4 l. 8  $\frac{1}{4}$  d. To the prætorian soldiers 8 l. 1 s. 5  $\frac{1}{2}$  d.

At taking *Alexandria*, each Roman soldier got 8 l. 1 s. 5  $\frac{1}{2}$  d. to save the town.

NERO laid out on donatives at several times, 17,760,416 l. 16 s. 4 d.

THE emperor *Marcus Antoninus* gave a donative to each soldier of 96 l. 17 s. 6 d. And his colleague *Lucius* gave 161 l. 9 s. 2 d.

PERTINAX affirms, that he gave a donative to the soldiers of 2,179,687 l. 10 s.

HEROD king of *Judæa* gave in his life at once 4 l. 16 s. 4  $\frac{1}{2}$  d. ; and at his death 1 l. 12 s. 1  $\frac{1}{2}$  d. to each of his soldiers.

BESIDES donatives to the soldiers, the Roman emperors gave *congiaria*, or gifts to the people.

JULIUS CÆSAR gave to each citizen, besides ten *modii* of corn, and ten pounds of oil, 3 l. 4 s. 7 d. He bequeathed to each of the people 2 l. 8 s. 5  $\frac{1}{4}$  d. ; or, as some say, only 16 s. 1  $\frac{1}{4}$  d.

AUGUSTUS gave several smaller *congiaria* to the people. But at one time he gave 2 l. 1 s. 1 d. not omitting the very children, tho' the common custom was not to give to any under the age of eleven. *Eusebius* in his *chronicon* writes, that, after the battle of *Actium*, there were reckoned of Roman citizens 4,160,000 : suppose there were only two millions of these who received the forementioned sum of 2 l. 2 s. 1 d. it would amount to 4,036,458 l. 6 s. 8 d.

AUGUSTUS

AUGUSTUS left by his testament to each of the common people, 2 l. 8 s. 5  $\frac{1}{4}$  d.

NERO gave a *congiarium* of 3 l. 4 s. 7 d.

ANTONINUS PHILOSOPHUS gave a very large *congiarium* of 6 l. 9 s. 2 d.

His son *Commodus* gave 23 l. 8 s. 2  $\frac{1}{4}$  d.

SEVERUS gave a *congiarium* of ten *aurei*, amounting to 1,614,583 l. 6 s. 8 d.

THE *ambitus*, or bribing for offices, was very expensive.

MILO, when he stood for the consulate, gave to each voter 32 l. 8 s. 10 d.

JULIAN promised to each of the soldiers 201 l. 16 s. 5  $\frac{1}{2}$  d. if they would chuse him emperor.

A man, employed as a spy in *Catiline's* conspiracy, got 1614 l. 11 s. 8 d.

PAULUS the consul was bribed by *Julius Cæsar* to be of his party, with a sum of 56,510 l. 8 s. 4 d. Others call the sum 290,625 l.

Two considerable bribes are mentioned in law-suits, one of 8072 l. 18 s. 4 d. Another of 5166 l. 13 s. 4 d.

GABINIUS was accused of taking a Sum of 1,937,500 l.

THE revenues of the Roman empire seem to have been vastly great.

PAULUS ÆMILIUS, after he had conquered *Perseus* king of *Macedon*, brought into the treasury 1,856,770 l. 16 s. 8 d.

SCIPIO

SCIPIO having conquered *Antiochus*, brought into it 1,614,583 l. 16 s. 8 d.

BEFORE the third *Punic* war, there was in the treasury in the consulate of *Sextus Junius* and *Lucius Aurelius*, in gold and silver, bullion and coined money (reckoning the gold only ten times the value of the silver) 566,577 l. 12 s. 8½ d.

IN the beginning of the social war, it is said, there were above fifty two millions in the treasury; but it is thought that the sum is too extravagant, and that the numbers are not correct.

JULIUS CÆSAR brought at once into the treasury 12,593,750 l.

IN the beginning of the civil war, when he entered into *Rome*, he took out of the treasury, in gold and silver, bullion and ready money, 1,095,979 l. 3 s. 4 d.

TIBERIUS left in the treasury 21,796,875 l. And the revenues of the whole empire must have been very great, tho' it is thought, that what *Vespasian* said at his accession to the empire, was extravagant, viz. that more than 322 millions *Sterling* were necessary to support the commonwealth.

LET us now consider the prices of some particular commodities.

PLINY mentions a jack-ass for a stallion, bought for 3229 l. 3 s. 4 d. And that in *Celtiberia*, a province of *Spain*, a she-ass has brought colts to the value of 3229 l. 3 s. 4 d.

VARRO

VARRO speaks of an ass sold in his own time at *Rome* for 484 l. 7 s. 6 d.

THE price of a peacock was 1 l. 12 s. 3½ d. A flock of an hundred of them was sold at a much dearer rate, for 322 l. 18 s. 4 d. One of their eggs was worth 3 s. 2½ d.

FINE doves were sold the pair for 1 l. 12 s. 3½ d. Others of a finer kind were much dearer. *Varro* relates, that *Axius* refused to give a pair of his under 12 l. 18 s. 4 d. when the merchant offered him 8 l. 1 s. 5½ d.

THE *Romans* were more extravagant in the prices of fish than of fowl. *Juvenal* tells us of a *mullus* bought for 48 l. 8 s. 9 d. According to *Macrobius*, there was paid for another the sum of 56 l. 10 s. 1½ d. For a third, according to *Pliny*, 64 l. 11 s. 8 d. which he reckons the more wonderful, the *mullus* being a fish that seldom exceeded two pound weight.

C. HIRRIUS sold his fish ponds for 32,291 l. 13 s. 4 d. This man would not sell, but he lent 6000 lampreys for *Cæsar's* triumphal supper. *Lucullus's* fish, after his death, were sold for the same price of 32,291 l. 13 s. 4 d.

PEACHES were sold at first for 7¼ d. but afterwards they rose to 4 s. 10 d.

LARGE asparagus was sometimes sold for six pence a-piece.

THE pound of wool or cloth dyed a violet purple, cost 3 l. 10 s. 11 d. The *Tyrian* double dye

dye could scarce be bought for 35 l. 9 s. 1½ d. per pound. And the dying of one *English* pound of wool in some cases cost 4 l. 10 s. 5 d.

LOLLIA PAULINA, when dressed out in her jewels, wore about the value of 322,916 l. 13 s. 4 d.

THE *triclinaria*, or quilts or carpets were dear. One is said to have paid for such carpets 6458 l. 6 s. 8 d. Nero paid 32,291 l. 13 s. 4 d. Some paid for one piece of linnen 8072 l. 18 s. 4 d.

THE *vestes Byssinæ* were very dear: the weight of a pound Averdupois of such cloths cost 49 l. 12 s.

THE price of such slaves as were well skilled in the finer arts was very high. *Seneca* relates, that *Calpurnius Labinus* had many *Anagnostæ* slaves, or such as were learned and could read to their masters, and that none of them was purchased under 807 l. 5 s. 10 d. According to *Pliny*, *Daphnis* the grammarian cost 5651 l. 10 d. *Roscius* the actor could gain yearly 4036 l. 9 s. 2 d. A *morio* or fool was sold for 161 l. 9 s. 2 d.

PICTURES, statues, and other pieces of fine workmanship gave great prices.

THE *Medea* and *Ajax* of *Timomachus* were bought by *Julius Cæsar* for 15,500 l. *Hortensius* paid for *Cydia's Argonauts* 1162 l. 10 s. The *Venus Anadyomene* (that is, issuing out of the sea) was valued at 100 talents (for so much tribute was remitted) or 19,375 l. The *Archigallus*, or high-priest

priest of *Parrhasus*, of which *Tiberius* was very fond, was valued at 484 l. 7 s. 6 d. *Lucullus* bought the copy of *Glycera*, *Pamphilus's* maid, the original being painted by *Pamphilus* himself, for 397 l. 10 s. The statue of *Apollo* in the Capitol brought from *Pontus* by *Lucullus*, which was very large, cost 29,062 l. 10 s. *Lucullus* bought the *Protoplasma*, or model of *Venus Genetrix*, for 484 l. 7 s. 6 d. A model of paste of a cup was purchased for 193 l. 15 s. *C. Gracchus* bought silver Dolphins at 40 l. 7 s. 3½ d. the pound. *Craesus* had several silver vessels bought at 48 l. 8 s. 9 d. the pound. And reckoning according to the standard of our coin, and the *English* pound, the mere workmanship of the plate comes to 48 l. 19 s. 1 d. per pound. The *Romans* were very costly in their *vasa murrhina*, and in their *Trullæ*: one that held 3½ pints, cost 645 l. 16 s. 8 d.

THE prices of books, and the rewards of such as taught the sciences, of orators and physicians, were also high. In short, almost every thing that was not necessary for the bulk of the people, gave great prices. Indeed modern ages can scarce form an idea of the riches, magnificence, and luxury of the *Romans* in the declension of their commonwealth, and the beginning of their monarchy\*.

As

\* As Mr. *Arbutnot* has made so large a collection of the prices

As the riches and luxury of the great men in Rome increased so prodigiously, this must have occasioned a vast circulation, and a general plenty of gold and silver; nor was it possible to confine the money to a few hands: however, the necessities of life continued at a moderate price, and did not rise in their value in proportion to the high rates which were set on the materials of luxury.

We have seen already from *Plutarch*\*, that the price of sheep and oxen was very low in the days of *Valerius Poplicola*. We may further learn from *Pliny*, that *Manius Martius*, an *Ædile*, procured corn for the people, at the rate of an *as* the *modius*; which is less than two shillings half penny *Sterling* the *English* quarter, or about one shilling six pence the *Scotch* boll. And that *Minutius Augurinus*, the eleventh tribune of the people, reduced the price of corn to this rate in three market days†.

VARRO,

prices of various sorts of commodities; and as it is generally known, in what an expensive manner the *Romans* lived for some time before and after the age of *Augustus*, I have satisfied myself with taking the examples I have given, from p. 132. and the calculation of the value in our money out of his collection; the rest of the quotations, both in the *Dissertation* and *Appendix*, are taken from the original authors.

\* See above p. 127.

† *Manius Martius* *ædilis plebis primum frumentum populo in modios assibus donavit. Minutius Augurinus, qui Sp. Meli-*  
um

VARRO, quoted by *Pliny*, relates, that when *L. Metellus* led a great number of elephants in triumph, one might have purchased, for about three farthings, 1.014 *English* pecks of corn (of *Scotch* pecks .688) of dried figs more than 27 pounds *English* weight, of flesh 10 pounds 11 ounces, and of oil more than 9 pounds. This *L. Metellus*, according to the *fasti consulares*, could not have been so early as the 500 year of *Rome*\*.

In one of *Cicero's* orations against *Verres*, we may see the prices of corn, when both the *Roman* power and luxury were become high. He mentions two kinds of corn in *Sicily*, the *decumanum* and the *imperatum*; the *decumanum* was bought for three *sestertii* the *Roman modius*, or the *English* peck for five pence three farthings, and the *Scotch* peck for eight pence. The *imperatum* was higher;  
for

um coarguerat, farris pretium in trinis nundinis ad assen redegit undecimus plebei tribunus. *Plin. nat. hist. lib. 18. cap. 3.*

\* *M. Varro auctor est, cum L. Metellus in triumpho plurimos duxit elephantos, assibus singulis farris modios fuisse, item vini congios, ficique siccae pondo 30. olei pondo 10. carnis pondo 12. Plin. hist. nat. lib. 18. cap. 3.*

*He adds in the same chapter:*

Quenam ergo tantæ ubertatis causa erat? Ipsorum tunc manibus imperatorum colebantur agri (ut fas est credere) gaudente terra vomere laureato, & triumphali aratore: sive illi eadem cura semina tractabant, qua bella; eademque diligentia arva disponebant, qua castra; sive honestis manibus omnia lætius proveniunt, quoniam et curiosius fiunt.

for the *Roman modius* cost four *sestertii*, or the *English* peck seven pence two farthings, and the *Scotch* peck eleven pence. According to this estimation the senate ordained money to be given to *Verres* for buying corn in *Sicily*. But it appears from this oration, that no body in *Sicily* at that time got more than fifteen sesterces for the *medimnus* of corn (which was six *Roman modii*). At this rate the *Roman modius* cost  $2\frac{1}{2}$  sesterces, or the *English* peck four pence three farthings, and the *Scotch* peck seven pence. But while *Verres* was prætor of *Sicily*, the prices were sometimes lower, and the *Roman modius* was sold for two sesterces\*.

FROM which it appears, that notwithstanding the vast luxury and immense riches of *Italy*, corn might be bought in the neighbouring isle of *Sicily* cheaper than it is often with us; and that the price of it was but little affected by these extravagant prices which were given for delicacies and ornaments.

AFTER *Rome* was burnt in the time of *Nero*, we learn from *Tacitus* †, that the price of corn was reduced

\* In medimna singula video ex literis publicis tibi Halesinos H—s quinos denos dedisse. Ostendam ex tabulis locupletissimorum aratorum, eodem tempore neminem in Sicilia pluris frumentum vendidisse.

Est enim modius lege H—s IIII. æstimatus. fuit autem, te prætor, ut tu in multum epistolis ad amicos tuos gloriaris, H—s II. Cic. tert. Verr.

† Pretiumque frumenti minutum usque ad ternos nummos. Tacit, annal. lib. 15. cap. 39.

reduced to three *nummi*. This shews it had been higher before: but we can hardly suppose it had been higher than four. If it was reduced a fourth part, it was a great deal. From hence it appears plainly, that in times of the greatest luxury, when curiosities gave the most extravagant prices, corn never rose in proportion.

I do not however pretend, that the prices of corn were never higher; but it seems evident, that they are often higher among us, than they were among the *Romans* in the height of their grandeur, when the people of rank lived at a much greater expence, than the richest and most extravagant among us, and when they had estates, of which we moderns have scarce any conception.

BUT the truth of our hypothesis appears in the clearest light from what *Cornelius Nepos* informs us, concerning the expences of *Pomponius Atticus*: indeed this passage alone is almost decisive. He observes, that *Atticus* had a very good house, made use of all the best things, entertained persons of all ranks, and yet spent no more than 9*l.* 13*s.* 9*d.* in the month, or in the whole year 116*l.* 5*s.*\*. A very small sum for one of the most

T rich

\* Nam cum esset pecuniosus, nemo illo minus fuit emax, minus ædificator. Neque tamen non in primis bene habitavit, omnibusque optimis rebus usus est.—Elegans, non magnificus; splendidus, non sumptuosus; omni diligentia munditiam, non affluentiam affectabat. Supellex modica,

rich and most eminent citizens of *Rome*, in times of such plenty and magnificence. This is accounted for in the most probable way by what the historian adds, that he was elegant, not magnificent, splendid not sumptuous, affected neatness, not superfluity: in short, that he loved the antient simplicity, lived on plain food, and did not throw away his money on delicacies, which could not be purchased, unless for extravagant prices. How cheap must plain food have been at that time!

In general, a great deal of the primitive simplicity remained long in the world: and even when luxury increased, and great men were very expensive, the antient taste, accompanied with an industry, which was directed chiefly to the improvement of agriculture, produced the necessaries of life in great plenty. Simplicity and frugality cannot alone make nations great and populous: mankind must also be industrious, and their industry directed in a proper manner. Thus industry, which in antient times was directed to the provision

non multa, ut in neutram partem conspici possēt. Nec hoc præteribo (quanquam nonnullis leve visum iri putem) cum in primis lautus esset eques Romanus & non parum liberaliter domum suam omnium ordinum homines invitaret; scimus non amplius, quam terna millia æris, peræque in singulos menses, ex ephemeride eum expensum sumptui ferre solitum. Atque hoc non *auditum*, sed *cognitum* prædicamus. Sæpe enim propter familiaritatem, domesticis rebus interfuimus.

Vita Pomp. Attic. cap. 13.

sion of food, caused a wonderful plenty: and from hence in an especial manner, we may account for the superior populousness of many antient nations.

To what has been said I would add, that the countries we have chiefly in view must have been best peopled, when all the causes operated most strongly; that is, as one may conjecture, about the time of *Alexander the Great*, and before the *Roman* empire had enslaved the world.

SOME of those causes which have been assigned for the scarcity of people in modern times, *viz.* the great number of unmarried priests and women in Popish countries, the difference between antient and modern customs with respect to servants and the maintenance of the poor, the right of primogeniture, the great number of soldiers in *Europe*, the extensive trade with the East and West *Indies*, the largeness of modern governments, compared with that of the antient, and finally, the greater simplicity of the antient world, seem to be so fixed, and the methods of living arising from them, and founded upon them, so deeply rooted, that there is not the smallest prospect at present of any considerable alteration in those articles. Nay, not only is there not the least appearance, but there seems not to be even the smallest chance, that there shall be any sudden increase of mankind, equal to what appeared in antient times. It were however to be wished, that as the bountiful Author of nature

ture formed this earth chiefly for an habitation to man, and as with right culture it might support a much greater number than actually live upon it, the present scarcity of people in so many countries was more attended to, and that proper schemes were proposed for putting things on a better footing. Indeed it is true, that those who are employed in the administration of public affairs, are alone able to carry such schemes into execution, yet every private citizen may be allowed to employ himself in speculations, about such matters as may tend to the good of his country. This is the only apology I shall offer, for making a few observations on the state of *Scotland*.

In general, a country can never be said to be sufficiently peopled, while either there are great tracts of land, that are not cultivated to that degree which they can easily bear, or while a very great part of the grain, fruits, and cattle which the country actually produces, is not consumed at home. Indeed it may be profitable in several cases to export corn and cattle, as well as other commodities; yet a country is surely most powerful, when it has abundance of people to consume its grain and cattle at home, and when its lands are cultivated to the full. Till all countries are peopled in this manner, the earth is not replenished with that number of inhabitants which it is able to maintain.

HOWEVER, in this a latitude must be allowed. For this scheme, if carried to its utmost extent, would  
be

be an hindrance to mutual commerce. And if the whole earth were cultivated to the full, and every country had a number of inhabitants sufficient to consume its own product, many would perish at particular times by bad crops and famines: but a danger so distant needs not alarm, as from the present condition of the world, there is not the least reason to fear, that the earth shall be cultivated to the full, and every country be plentifully stored with inhabitants.

In particular, *Great Britain*, especially the northern part of it, is not peopled to the full, since there are both great tracts of land uncultivated, and a great deal of grain exported.

THE causes of this may be easily deduced from what has been said above; and among others, these following are remarkable.

*First*. MANY of our youth leave the country, and go abroad to push their fortunes, because, thro' some defect in our policy, they either cannot have business at home, or cannot raise such fortunes as will satisfy their ambition.

*Secondly*. MANY who remain at home, particularly the younger sons of the richer families, either imagine themselves not to be, or in reality are not able to maintain families suitable to their birth; or, tho' able during their own life, yet cannot leave a sufficient provision for their families after their death; and thus are discouraged  
from





from marrying: for both which reasons, many of our women are, and must be unmarried.

FURTHER, it may be observed, that our lands are not sufficiently cultivated, even where they are capable of great improvement. Hence large tracts serve only to maintain a small number of people.

IF we ask, why our lands are so ill cultivated, besides the obvious causes arising from the poverty and unskilfulness of many of our farmers, the shortness of their leases, and other things which will occur upon the least reflexion, it is not a little owing to a want of inclination for agriculture, and even to a contempt of it in many of the richer sort. This puts them upon educating their younger sons, either to some of the liberal professions, or to the army, or merchandize, or some of the more genteel mechanic employments, but seldom or never to agriculture. It is true, of late, a better spirit has arisen for improving lands, as well as manufactures; yet it must be owned, our schemes are still very defective, and agriculture has never been sufficiently encouraged.

THUS having taken notice of some of those causes, which prevent the culture of the lands, and of course the increase of the people in *North Britain*, it is plain, that things might be greatly rectified, were due attention given to the advantages of agriculture, and due encouragement given to carry it on with spirit.

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IN this view it may be considered, that, tho' it should be allowed, we have often more grain and cattle than we consume at home, whence there is less encouragement to cultivate our lands; yet since in the present condition of *Scotland*, of *Britain*, and of *Europe*, there is room for exporting both, it cannot be said, that great profits may not arise from cultivating lands.

BUT if instead of having grain to export out of *Scotland*, it is true, more is imported than exported, and that we often want supplies from *England* or *Ireland*, the argument for encouraging agriculture becomes stronger. At least, whatever may be in this, it is certain, our agriculture has not of late kept pace with our manufactures, which makes living in the principal towns of *Scotland* dearer than in many of the towns and counties in *England*.

BESIDES, as the former reasonings tend to shew, that the plenty and cheapness of the most simple food, is the great encouragement to the bulk of mankind to marry, and of consequence a great source of populousness: on this account grain and cattle can scarce be in too great plenty, or their prices too cheap.

'TIS true it may be said, and often with too much truth, that great plenty and cheapness of provisions hinder labour, render servants and the poorer sort of the people idle and insolent, and impoverish both the landed gentlemen and the farmers.

ers. But this is only a very partial and very narrow view of the matter; for this idleness and insolence proceeds chiefly from an accidental plenty, which happens only at particular times, and in some particular seasons. Were there a constant abundance and cheapness, with a tolerable policy in other respects, this would have the happiest influence in strengthening a nation, by the vast increase of the people.

SUCH confined observations, and such narrow maxims concerning the danger of plenty, are extremely just, if the great body of a people are only to be managed and treated in that manner, which may render them most serviceable for supporting the grandeur, and heightening the luxury of a few; but maxims of this kind can never surely serve to make a nation in general great and populous, or society happy.

IN order therefore to increase the stock of provisions, it would be of great advantage that rich men, instead of breeding all their children to the employments before mentioned, would educate some of them for agriculture.

MANY things recommend such a plan; could young gentlemen once be brought to a just taste of life, and to relish so useful an employment. I shall only observe,

THAT there are many places in *Scotland*, where leases may be got at a moderate rent, and where plenty

plenty of lime, marle, and other materials for improvement may be found. Now, if people of substance were well instructed in country affairs, agriculture is an employment which they might turn to great account. They might live more innocently and agreeably, and bid fair to be more rich and more happy than in most professions. Dirty houses and nastiness, tho' too common in our own, and perhaps most other countries, are not its necessary and inseparable attendants.

And, as there are still many idle hands among us, notwithstanding a growing spirit of industry unknown to our ancestors, it would greatly promote agriculture, and contribute much to the value and improvement of lands, if the most useful manufactures were erected in the villages, and supported by rich men of all ranks. Thus the manufacturers would encourage agriculture, by providing markets for the produce of the lands; the husbandmen would encourage manufacturers, by purchasing their commodities; and both together would conspire, by united endeavours, to make the lands fertile, the country populous, and society flourish\*.

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\* It may perhaps be thought, that I have lost sight of the preceding reasoning. But tho' I am of opinion, that too great a variety of manufactures are disadvantageous, some must always be allowed to be necessary; and as it cannot be expected, that the antient taste can all at once be revived, it is even better that people be employed in less necessary arts, than be altogether idle.

By such methods, the better sort of families in *Scotland* might keep many of their sons at home, greatly augment the number of the people, contribute to the improvement of lands and the growth of manufactures, banish idleness, and set a good example before those of an inferior rank: nor could this fail to have an happy influence on the religion and morals of the people.

A scheme might also be devised, for supporting the families of such as can easily provide for themselves and their families while alive, but cannot so certainly provide for their widows and children, if they happen to die at an early time of life. This scheme might be somewhat after the model of that lately established by law, for a provision for the widows and children of the ministers of the church, and the masters in the universities of *Scotland*, viz. by erecting one large, or several small societies of married men, who should pay either all at once, or annually, during their lives, certain sums, greater or less, as they might judge convenient, on condition, that proportional sums be paid after their death to their widows or children, in such manner, and with such provisions, as might be thought most proper. Such societies might be a security for the support of widows and children, on the event of the husband's or parent's death, be as useful in policy as banks, cash accounts, and insurance offices in the mercantile world, and be a great encouragement to marry. It is chiefly by encouraging

encouraging marriage, by keeping our youth at home, and by taking a greater turn to agriculture and the most useful manufactures, that it seems possible, in the present circumstances of the world, to increase the number of the people in any one country, without draining other places of a proportional number of their inhabitants.

THE peculiar situation and wildness of one part, I mean the highlands of *Scotland*, make me presume, ere I conclude this *Dissertation*, to add some observations on the state of a part of my country, which, tho' at present almost a desert, is able to maintain a great number of people, and whose present inhabitants are overwhelmed with ignorance and barbarity, tho' capable of the same civility, which distinguishes the rest of the subjects of *Britain*.

THE late unprovoked rebellion, raised by the rude inhabitants of these wilds, in order to dethrone the best of kings, to overturn the best of governments, and to undo the liberty of *Britain*, having come to so great and so unexpected an height, and having thereby awakened the attention of the government, as well as that of others, who had influence with those in the administration of affairs, has produced some excellent laws, by which the liberty of the whole country is better secured, manufactures and other kinds of labour are encouraged and promoted in *Scotland*, and the inhabitants of the highlands may be brought from

a state of barbarity and slavery, to a state of civility and independence. By the happy influence of these laws, a spirit for industry has seized the minds of the people, and in a few years wrought no inconsiderable change on the country. Indeed 'tis impossible to express, how great obligations every loyal subject to his Majesty, every zealous friend to the Protestant Succession, and every sincere assertor of the liberty of *Britain* has to those, whose hearty regard to the interest of their country has produced the happy prospect we have at present, of living for the future in peace, and seeing liberty penetrate into the most remote parts of the island.

BUT this change has as yet chiefly affected those parts of *Scotland*, which were tolerably well peopled, and that by inhabitants, who, tho' it must be owned they were not over industrious, were yet civilized before. The highlands continue still in their former state of barbarity and idleness; and indeed will long continue in it, unless some further scheme is carried into execution, which may have a more immediate effect, and may make opulence and industry penetrate into their innermost and most distant parts. Unless they penetrate thus far, we need never reckon we have done enough; for then, and not till then, shall the highlanders be civilized, as well as the highlands improved. How this may be effected, and industry be made to penetrate thus far, must be left to the consideration of those who can apply the proper remedies.

HOWEVER,

HOWEVER, this much may be said in general, that it is not by tillage chiefly, and the encouragement of it, that either the greatest part of the highlands can be fully cultivated, or the highlanders themselves civilized: for few parts of this country seem, either by the nature of their soil, or their situation, to be fitted for producing corn. Craggy rocks and high mountains cover the greatest extent of it. There are indeed, it must be owned, some charming spots and pleasant valleys, which admit of tillage. But how few, and how inconsiderable are these!

It seems therefore that the lands ought to be improved chiefly for pasture; and no doubt, if divided into well-disposed inclosures, are very capable of improvement in this way, and well able to maintain abundance of cattle.

BUT the inhabitants themselves can only be civilized, by being made industrious: and as the country does not seem to admit of much tillage, the only way in which they can be made industrious, is the introduction of some sort of industry among them, different from agriculture.

THE abundance of their lakes, the neighbourhood of the sea, and the hardiness of the inhabitants seem immediately to point out one kind of industry, which it might be proper they were employed in. In this way they might provide food in plenty, not only to themselves, but a great number of others. By exporting their fish, they might

might acquire wealth; by acquiring wealth, they would become industrious; by being industrious, they would be civilized. Thus the highlands might at last be well peopled, and its inhabitants help to promote the interest of *Britain*.

FURTHER, were it possible to send some industrious tradesmen and manufacturers among them, who might set an immediate example of industry before their eyes, this might engage them to betake themselves sooner to honest labour. For the sight of the great profits of labour, and of the affluence and abundance with which it supplies the labourer, would naturally produce a love of those profits, and a desire of that affluence and abundance.

INDEED the laws which have been enacted, and the schemes which in consequence of these laws have been devised for the improvement and cultivation of this part of the country, must be confessed to be extremely good, and are irrefragable documents of his Majesty's and the legislature's regard for the good of the whole subjects, as well as the welfare of those who are insensible of their own felicity; yet something seems to be still wanted to make industry penetrate into the center of the highlands. How happy would it be, if a few villages, stored with industrious hands, could be raised in the wildest and most rugged parts of their country!

In short, without the wisest and best digested schemes, for providing in a speedy manner against the

the violence of these our deluded countrymen, for securing liberty from their insurrections, and for rooting out the spirit of clanship and disaffection from among them, not only the peace, but the liberty of *Britain* shall be continually in danger, and their rudeness and barbarity shall, in all probability, leave them later than the remembrance of the Pretender. He may be quite forgotten, ere they shall be civilized.

### C O N C L U S I O N.

PHILOSOPHERS have been advising, and Divines calling upon mankind to cultivate frugality, temperance, simplicity, contentment with a little, and patience of labour, demonstrating, that these humble virtues are the only means by which they can expect to secure solid, lasting, and independent felicity. They have painted their charms in the most lively colours; described in the most inviting manner, that inward peace and tranquillity of mind, which is the inseparable attendant on these sober virtues; and taught, that it is in this way alone that men can enjoy happiness, freedom, and independence. Such has been the language of philosophy; such has been the language of religion.

BUT the cultivation of these virtues not only makes individuals happy; but, from what has been maintained in the preceeding *Dissertation*, appears further to be the surest way of rendering the earth

earth populous, and making society flourish. 'Twas simplicity of taste, frugality, patience of labour, and contentment with a little, which made the world so populous in antient times. The decay of these virtues, and the introduction of a corrupted and luxurious taste, have contributed in a great measure to diminish the numbers of mankind in modern days.

FROM hence we may conclude, that it is not the prevalency of luxury, but of simplicity of taste among private citizens, which makes the public flourish: and that private vices are far from being, what a notable writer has employed the whole force of his genius to demonstrate them to be, public benefits. Indeed 'tis ridiculous to condemn elegance and refinement of every kind. If displayed in public works, and things of a durable nature, they contribute to promote the happiness, as well as the grandeur of society, and will be no hindrance to populousness. But if displayed in every the least trifle in private life, and employed to satisfy the ridiculous taste and whimsical fancies of each particular citizen, must contribute in a great degree to diminish the number of mankind, as the constant labour, great expence, and vast number of hands, by which this luxury is maintained, must make the necessaries of life scarce and dear.

In this manner the most humble virtues are found to be not only consistent with, but greatly conducive to the populousness and grandeur of society.

F I N I S.

## A P P E N D I X

C O N T A I N I N G

Additional Observations concerning  
the NUMBERS of MANKIND in  
antient and modern Ages:

W I T H

Some Remarks on Mr. *Hume's* Political Discourse, intituled, *Of the Populousness of antient Nations.*

De hoc priusquam scribamus, haec praecipienda videntur lectoribus, ne alienos mores ad suos referant, neve ea, quae ipsis leviora sunt, pari modo apud caeteros fuisse arbitrentur.

COR. NER. in Epaminond. cap. i.

## APPENDIX, &c.

SINCE the preceeding *Dissertation* was composed, a Discourse, *Of the Populousness of antient Nations*, has been published by Mr. *Hume*, in which the learned Author depreciates antiquity, exalts modern times, and endeavours to prove, by all the arguments a lively and acute genius could suggest, that the superior populousness of the antient to that of the modern world, is not so certain, as is believed by the passionate admirers of antiquity.

THE author of the dissertation, though much pleased with that Gentleman's uncommon ingenuity, and struck with the brilliancy of his arguments, continued still to be of opinion, that what seemed to be confirmed by so many concurring testimonies, and to be supported by the uniform evidence of all antient history, could not well be false. He suspected therefore, that Mr. *Hume's* arguments were ill-founded, and resolved to review a subject so curious, so important, and so fertile in consequences; and to try if he could discover the latent fallacy of those pompous arguments, which puzzled, but did not convince. Thus, after having considered more accurately the force of his arguments, inspected more carefully

some of the authors of antiquity, and reflected more attentively on the state of the antient world, he now offers to the publick the result of his observations, in which he endeavours to illustrate more fully some things that were only hinted at in the dissertation; and at the same time to obviate the objections arising from what Mr. *Hume* has advanced in his discourse.

It would be a tedious, as well as an useless task, to follow minutely the author of the *political discourse*, through all his observations and all his consequences.

In general it may be remarked, that in various places of his work, he has made several concessions, and granted many propositions to be true, which are fundamental to the truth of the hypothesis maintained in the foregoing dissertation. An impartial inquirer is ever more fond of truth than of victory. Hence we find him admitting; \* that nothing could be more favourable to the propagation of mankind, than the establishment of small governments and an equality of fortune among the citizens †; that agriculture is that species of industry which is chiefly requisite to the subsistence of multitudes of people, and that it flourished greatly  
in

\* Pag. 183, 184.

† By the same reasoning, an equal division of the father's estate among his children must appear to be favourable to propagation.

in some countries in antient times\*; that marriage was almost universal among all ranks of men in times of more remote antiquity, inasmuch that even the soldiers among the antients were all married †.

FURTHER, though he contends, that the refinements of modern ages must have operated something towards the easy subsistence of men, and consequently towards their propagation and increase ‡, he does not deny, that simplicity of taste is attended with many advantages ||: though he seems disposed to believe, that the *Roman* empire introduced a peace and civility, which had not obtained formerly, he candidly observes, how much it tended in other respects to the ruin of industry and agriculture \*\*: though he considers the barbarous and inhuman custom, among the antients, of exposing infants ††, and their unnatural passions ††, as disadvantages on the side of antiquity, he acknowledges at the same time, that the discouragements to marry in the Popish church are yet greater disadvantages |||.

BUT

\* P. 208.

† P. 188.

‡ P. 210.

|| P. 183, 184.

\*\* P. 168, 169, 239, 253.

†† P. 180.

†† P. 182.

||| Convents ought to be considered not only as burdensome to the public, and oppressive to those confined in them, but also



BUT though our author has admitted, that antient ages had the advantage in some particular respects, he conceives, that the disadvantages under which they laboured, were more than sufficient to form a counter-balance; and, on the whole, gives the preference to modern times in respect of populousness.

THESE disadvantages on the side of the antients he endeavours to find out, first, in their domestic, and next, in their political situation, when compared with those of modern times. Under the head of

also as destructive to populousness. What our author hath observed, "That were the land which belongs to a convent bestowed on a nobleman, he would spend its revenue on dogs, horses, grooms, footmen, cooks and chambermaids, and his family would not furnish many more citizens than the convent" (*p.* 179.), may sometimes be true, but is not sufficient to shew, that convents are not very unfavourable to populousness. The revenues of a convent may surely be put to as bad an use, but are not the revenues of most lands put to a better, than to maintain a superstitious society of monks or nuns, who do nothing to support their species? How many well-peopled villages have arisen out of the ruins of monasteries and convents? *Paisly*, antiently the habitation of monks, but now one of the most industrious, as well as best peopled villages in our own country, is an obvious example of this truth. But, when such places continue from generation to generation in the possession of an useless and unprofitable set of mortals, they become highly destructive. There was nothing of the kind in antiquity, which can be supposed to have had such a pernicious effect.

of their domestic oeconomy, he considers the institution of slavery as remarkably unfavourable to populousness. With respect to their political situation, he takes notice, *first*, of their unsettled and turbulent condition, both in peace and war, and endeavours to shew, that their foreign as well as civil wars were more frequent and bloody; that their institutions in time of peace were more tyrannical and oppressive; and that their maxims neither of war nor of peace were so well calculated to preserve order and stability, as the milder maxims of modern times: *Secondly*, That their simplicity, and their ignorance of those refinements of modern times, which have improved human life, and rendered it more commodious, were a considerable disadvantage in respect of populousness. On both which accounts he is inclined to believe, that antient ages must have been less populous: and in consequence of his theory, when he proceeds to inquire into the facts, he rejects the testimony of antient authors, as incredible and absurd, when they represent antient nations as more populous than seems to him to be consistent with the superior refinements, and more humane and stable policy of modern ages.

It will be proper to follow our author through each of these particular heads.

## PART I.

MR. *Hume* has, in the first place, presented us with a most dismal picture of the domestic oeconomy of the antients, and endeavoured to shew, that the institution of slavery must have been unfavourable to propagation, both because the slaves were cruelly treated by their masters, and because the males and females were not allowed to have mutual intercourse. But upon inquiry it will be found, that they not only were not so harshly treated, as our author imagines, but were commonly well treated; that their treatment did not debilitate them, or hinder them from propagating; that interest, no less than humanity, led the masters to encourage them to propagate; and finally, that the slaves multiplied exceedingly, and that the *Vernae* or home-born slaves were extremely numerous.

THE low condition of the antient slaves must necessarily have exposed them to many insults, and to much oppression, notwithstanding the best laws which could have been framed for their protection. That same contempt, that same severity, which at present may be observed in superiors towards their inferiors; nay, a greater degree of this insolence must have often appeared in antient times. The pleasure and humour of the master would be by far too much, and the happiness of the

the slaves too little regarded. However, either the antients were moved by humanity, which has ever a mighty influence on the generality of mankind, to deal kindly by their slaves; or when motives of this kind did not influence, their conduct must have been chiefly regulated by regard to their own interest.

IN times of more remote antiquity, before the reign of *Alexander the Great*, and the establishment of the *Roman* empire, during which period, according to the *Dissertation*, the world was most populous, slaves must have been better treated, than they were afterwards in times of luxury; for while simplicity remained, the masters lived in greater familiarity with their slaves, and of course treated them with more gentleness. This is confirmed by *Seneca* \* with respect to the *Romans*. That sanctity of manners, for which they were so remarkable before the *Carthaginian* wars, was inconsistent with barbarity towards their slaves. What our author † has quoted from *Demosthenes*, shews how gently they were treated by the *Athenians*.

\* Ne illud quidem videtis, quam omnem invidiam majores nostri dominis, omnem contumeliam servis detraxerint? dominum, patrem familiae appellaverunt: servos (quod etiam in mimis adhuc durat) familiares. Instituerunt diem festum, quo non solum cum servis domini vescerentur; sed quo utique honores illis in domo gerere, jus dicere permiserunt, et domum pusillam rem publicam esse judicaverunt.

SENECA. epist. 47.

† P. 171.