

**Robert Wallace: First Draft of *A Dissertation on the Numbers
of Mankind in Antient and Modern Times***

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Foreword

The manuscript labeled as 'Dissertation on the Numbers of Mankind First Draft', housed in Edinburgh University Library (MS. La II. 96-3), is a copy of dissertation which Robert Wallace (1697-1771) read at a meeting of the Philosophical Society of Edinburgh prior to the 1745 Jacobite Rising and submitted to Lord Morton, president of the society. As for the 'romantic adventures' that the manuscript went through, see Ernest Campbell Mossner, *The Life of David Hume*, Oxford, second ed., pp. 262-263.

In transcribing the manuscript, the original capitalization has been ignored, and the punctuation modernized to a certain degree. Excepting these alterations, the manuscript is reproduced as faithfully as possible. Obsolete spellings are not modernized, and even incorrect ones are reproduced in the present text. Square brackets [] indicate superfluous material in the original text, and angle brackets < > the material supplied by the present editor. Round brackets () are as marked in the original text. Asterisks * are used to indicate the original author's notes. Vertical rules indicate page endings. In the original text one or two words are frequently repeated at the beginning of the next. In these cases the repetition is, as it were, credited to

the next.

As for the editor's view on the 'First Draft' and the relevant topics, see Yasuo Amoh 'The ancient-modern controversy in the Scottish enlightenment' in Tatsuya Sakamoto and Hideo Tanaka eds., *The Rise of Political Economy in the Scottish Enlightenment*, Routledge, 2003.

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Robert Wallace: The Dissertation of the Numbers of Mankind First Draft

1 | As the knowledge of former times has always been reckoned a valuable branch of learning, many learned men since the revival of letters have taken pains to illustrate the history of the different ages of the world and given us many curious and usefull dissertations on antient manners and customs, but as there is room for more to be done this way there is one subject in particular which I cannot find has been considered with that care which it deserves namely the numbers of mankind and their encrease & decrease in different ages and countries.

As this is a subject both curious & usefull I hope it will not be dissagreeable to this learned society¹ to have a paper upon it.

I am aware that there is no small difficulty in determining our selves on such a subject, that the numbers of inhabitants in Europe at present or in any particular country is not known exactly, that we can only form conjectures about this, many of them perhaps far enough from the truth, that it's utterly impossible from history to find out the precise numbers of mankind
2 in any past age even in | one country; but I do not pretend to such exactness.

¹ The Philosophical Society of Edinburgh.

I design only to consider the subject in generall and I think I will be able to show that in most of the countries of Europe, Asia and Africa which are best known, there are at present and have been for many ages past many fewer inhabitants than were in antient times.

And here I shall first consider the fact and what seems to be certain from history and the comparison of antient and modern times and secondly endeavour to trace the causes of so² great a change to the worse.

As to the first I think it very evident on reading antient history and comparing antient and modern times, that Italy, Sicily, a great part of Asia, but in particular Asia Minor and Syria, as also Egypt and the coasts of the Mediterranean Sea were anciently³ much fuller of great cities and populous states and kingdoms than they are at present or have been for some ages past, the same thing holds with respect to France and Spain and other places tho perhaps it is not so easy to make a clear comparison.

Isaac Vossius⁴ in a dissertation he has *De Magnis Sinarum Urbibus* in his book intituled *Variarum Observationum Liber* printed 1685 asserts the same thing; that many places were much more populous in antient times than at present, but he does not offer to prove it and he is certainly much mistaken in the numbers of inhabitants he assigns to Europe in his time
3 which he does not make to exceed | thirty millions and in generall he seems too fond of everything that is antient and Chinese.

I find too the author⁵ of the Persian letters printed at Paris not long ago asserting that the world was much more populous in antient than modern times and he has several good observations concerning the causes of this, but neither does this author give particular proofs of the fact and certainly car-

² Written by a different hand between lines.

³ Written by a different hand between lines.

⁴ Isaak Vossius (1618-1689), *Variarum Observationum Liber*, London, 1685.

⁵ Charles Louis de Secondat, baron de la Brede et de Montesquieu, (1689-1755), *Lettres Persanes*, lettre 112, 1721.

ries it much too far when he says that there were fifty times⁶ as many in the world in Julius Caesars time as att present.

Nor have I found any one who has collected the passages of antient authors which give light to this subject, this has oblidged me to glance over severall of these authors which might be supposed to give the greatest light and tho I have not had time (since I thought on this subject) to make such accurate and large collections as may be made from the antient historians, I have observed severall things which I shall lay before the Society.

And first if we give credit to antient authors it will appear that many countries were well peopled in very antient times. I shall not build on the particular accounts we have of the great armies of Semiramis Ninus⁷ and other eastern monarchs. Perhaps their numbers are magnified but at least we may conclude it was the belief of after times and times very antient in respect of ours that there were great numbers of people in these eastern countries in times far more antient.

4 | Diodorus Siculus in his second book writes that Ninus led an army into Bactria⁸ of 1,700,000 foot and 200,000 horse and 10,000 chariots.⁹

That the King of Bactria had an army of 400,000 men.

That Semiramis gathered together 2,000,000 of men to build Babylon.¹⁰

That Semiramis carried an army into India of 3,000,000 foot, 500,000

⁶ In Penguin Classics' *Persian Letters* based on the text of the 1758 edition, this read: 'there is scarcely a tenth of the number of men on earth that there was in former times'. pp. 203-4.

⁷ Legendary queen of Assyria, wife of Ninus, founder of Nineveh.

⁸ Ancient name of a country situated in the eastern part of Iran.

⁹ Numbers mentioned in Wallace's published work, *A Dissertation on the Numbers of Mankind in Antient and Modern Times* (Edinburgh, 1753, p.36) are different: '1,700,000 foot, 210,000 horse and slightly less than 10,600', and these are the same numbers as mentioned in Diodorus Siculus (1st century BC), *Library of History*, II.v.4.

¹⁰ II. vi.7.

horse 100,000 chariots and 100,000 rode on camels dressed like elephants.¹¹

At the same time the Indian King had a greater army.

That the Medes led 800,000 men against the Cadusii.¹²

Strabo in the seventh book of his *Geography*¹³ writes the Getie and Daci in antient times had armies of 200,000 men.

But there is a passage in the first book of Diodorus Siculus¹⁴ which deserves a particular attention that the males born in Egypt (which from all the antient accounts was but a small country, not much larger perhaps than England and much less than modern Egypt) on the same day on which Sesostris¹⁵ was born exceeded 1,700 but suppose them only 1,700; that makes the number of males born in Egypt in one year to be 620,500: this (according
5 to Mr Halley's computation¹⁶ from the bills | of Silesia) makes the number of the males in Egypt at that time to have been above seventeen millions and doubling this for the whole number of the inhabitants makes above thirty four millions of people.

And if we compute the army that Greece sent against Troy from Homer's catalogue¹⁷ we shall find there were 1,186 ships and in one place¹⁸ he adds there were 120 in some ships. Now if each ship had as many the army must have been 142,320: in another place¹⁹ he gives but fifty to some ships

¹¹ II.xvi.10. Wallace drops 'two hundred thousand cavalry' mentioned by Diodorus.

¹² The Medes and the Cadusii were ancient peoples inhabiting in the north-western part of Iran.

¹³ Strabo (c. 63 BC-c. 24 AD), *Geography*, VII. iii. 13. The Getie and the Daci were ancient peoples of Thracian origin.

¹⁴ I.liiii-liv.

¹⁵ Third king of the ancient Egypt XIXth dynasty.

¹⁶ See note 26.

¹⁷ 'Homer's catalogue' is a name usually given to the second half of the second book of the *Iliad*, in which Homer enumerates the leaders and forces of the Greek host assembled against Troy.

¹⁸ *Iliad*, ii.

¹⁹ ii.

whom he describes as the ἐρέται & τόξων ἐὺ εἰδότες²⁰; but supposing they were the whole number of persons in the ships and that you take the mean betwixt 120 and 50 for the number in every ship, this makes the army to be 100,810 which is the greatest army as far as I remember that history makes the Greeks ever to have brought into the field.

Now tho we cannot depend on these precise numbers, yet these accounts make it probable that many countries were well peopled in these antient times and indeed Diodorus tells us plainly in his second book²¹ that the world was much better peopled in the antient times than in his dayes, and that the
6 truth of the | accounts of the great armies of the antients ought not to be measured by the thinness of the world at that time.

And Strabo speaking in severall places of antient cities and states takes notice how greatly they were sunk and their numbers diminished in his time. So in his sixth book²² treating of that part of Italy about Tarentum he writes "it was all full of people in antient times <and> had thirteen great cities but now it has none but Tarentum and Brundisium, all the rest are vil- lages." And in his seventh book²³ when mentioning the great armies of the Getie and Daci extending to 200,000 men, he adds that now they had but 20,000. But I shall in the next place consider how populous some particular countries must have been according to the antient accounts.

And as to Italy, it appears to have been full of powerfull and opulent states before the times of the Roman Empire, Livy in his first book²⁴ writes that in the time of Servius Tullius²⁵ the sixth King of Rome and who insti-

²⁰ rowers and skilful archers

²¹ II. v.

²² VI. iii. 5; Tarentum (modern Taranto) and Brundisium (modern Brindisi) were cities in the southern part of Italy.

²³ VII.iii.13

²⁴ Livy (59BC- 17AD), *History of Rome*, i.44.

²⁵ Sixth legendary king of Rome (6 th centuryBC)

tuted the census, there were enrolled 80,000 Roman citizens (Another makes the number 84,700). Livy adds that an old author writes that all these could carry arms or were fighting men and if this was the case then according to
 7 Halley's calculation²⁶ from the bills of Silesia; " that the number | of men able to bear arms in any city or province is a very little above a fourth part of the whole," the inhabitants of Rome and its territories at this time must have been about 320,000: at this time the territory of Rome was very small not above fifteen miles round the city and but equall to some of our coun- ties.

As I was making observations proper for illustrating this subject I mett with a passage in Caesar's first book of the *Gallick War*²⁷ which confirms this computation of Mr Halley's which I shall set down by the way. Caesar writes that after he had conquered the Helvetii who had left their own coun- try to find out habitations else where, he found in their camps rolls of all who had left their country both such as could bear arms and of the old men, children and the women separatly.

In the rolls it stood thus

Of the Helvetii	263,000
Of the Tulingi	36,000
Of the Latobrigi	14,000
Of the Rauraci	23,000

²⁶ 'The whole Force this city [Breslaw] can raise of *Fencible Men* . . . is some- what more than a quarter of the *Number of Souls*, which may perhaps pass for a Rule for all other places.' Edmund Halley (1656-1742), 'An estimate of the degrees of the mortality of mankind, drawn from curious tables of the births and funerals at the city of Breslaw; with an attempt to ascertain the price of annuities upon lives', *Philosophical Transactions of the Royal Soci- ety of London*, vol. XVII, no. 196, 1693, reprinted in *Two Papers on the De- grees of Mortality of Mankind*, ed. by Lowell J.Reed, The Johns Hopkins Press, 1942, p.7.

²⁷ Caesar (100-44BC), *Gallic War*, i.29.

Of the Boii	<u>32,000</u>
The sum of all	368,000
Of these there were who could bear arms	92,000
Which is a fourth of the whole.	

8 | This passage in so old an author confirms both the authors accounts and Halley's computation.

There is also a passage in Strabo in the fourth book of his *Geography*²⁸ which confirms the same computation for we find that when Augustus Caesar rooted out the whole nation of the Salassi who dwelt upon the Alps he sold 36,000 persons; of whom 8,000 were fitt to bear arms. According to Halley's computation there should have been some more than 9,000 that could bear arms, but this is easily accounted for by considering that not a few of their men must have been killed before they were quite subdued.

But to Return to Italy.

The Romans were still encreasing in people; we may see the differences at different times from the different enrollments marked in authors; Mr. Moyle in his *Essay upon the Roman Government*²⁹ and Vossius in his *Variarum Observationum Liber* sets them before us in one view, by which we may see how greatly they encreased. In Servius Tullius's reign about 200 years after the building of Rome they are but about 80,000, but about the 500th year of Rome they are near 300,000. Now considering the numbers of
9 fighting men among the Romans even in Servius Tullius's | reign which were still encreasing, the inclinations and valour of the Romans, and the slow

²⁸ IV. vi. 7. The Salassi were one of the most powerful of the Alpine tribes in the north of Italy.

²⁹ Walter Moyle (1672-1721), *An Essay upon the Constitution of the Roman Government*, 1726.

progress of the Roman conquests in Italy, it appears Italy must have been very powerful and populous and this is agreeable to the³⁰ Roman history that Rome was all this time struggling with nations as great and populous as her self.

But there are other documents to show how populous Italy was in ancient times. About the times of Servius Tullius there were powerful states in the south of Italy which is now the Kingdom of Naples particularly in what was called Magna Graecia and was but a small territory; The state of Sybaris alone sent out an army of 300,000 men against the Crotonienses their near neighbours who met them with an army of 100,000 men; as Diodorus Siculus relates in his twelfth book³¹, this shews that these two states had above a million and an [*sic*] half of inhabitants even supposing they had had no more fighting men than they brought to the field which certainly was not the case.

Strabo in the third book³² of his *Geography* relates the same as to Sybaris and adds that it was a city distant from Croton about 200 stadia or 25 miles, and had³³ 50 stadia or $6\frac{1}{4}$ miles in circuit, that it commanded four nations and 25 cities and calls the nations neighbouring nations, this shews
 10 how many and great | cities must have been in that part of Italy, and yet Magna Graecia was but a small part of what is now the Kingdom of Naples, there were many other states and cities in it, particularly Strabo in his sixth book³⁴ mentions the Tarentines as a great and powerful people that they could raise 30,000 foot and 3,000 horse and that all the country about

³⁰ Written by a different hand between lines.

³¹ XII.9. Sybaris (modern Basilicata) and Croton (modern Cortona) were cities in southern and central Italy.

³² VI. i. 13. The original author refers mistakenly to the third book instead of the sixth book.

³³ Written by a different hand between lines.

³⁴ VI. i.13.

Tarentum was antiently full of people and had therteen great cities, tho only Tarentum and Brundisium remained then, the rest being all but villages. And in his fifth book³⁵ treating of the northern parts of Italy writes that Patavinum³⁶ sent antiently to war 120,000 men.

Thus Italy was very populous before the Roman Empire and I do not know but Italy in generall as to the number of people lost more than it gained by the conquest of the world; Rome was a mighty city indeed, yet I doubt if its greatness was able to ballance the destruction it occasioned among the rest of the cities.

We shall have a more distinct view how populous these southern parts of Italy must have been, if we consider their extent; tho whole Kingdom of Naples at present according to³⁷ Mr. Templeman³⁸ (who has given us a survey of the globe and the extent of the different countries in square miles, <and> calculated from the best modern maps) is much about two fifth of
 11 the | extent of England and yet this contained many and great states and Magna Graecia in which were Sybaris and Croton was but a part of it.

It will likewise convince us how populous Italy must have been before the times of the Roman Empire, if we consider that the above calculations are of the number of citizens and freemen excluding slaves, whom the antients did not usually enroll or employ in their wars except in cases of the greatest extremity; that slaves were very numerous in antient times is certain; it is not easy to guess at their numbers or proportion to such as were

³⁵ V. i. 7.

³⁶ Modern Padova in the northern part of Italy.

³⁷ Two or three words deleted.

³⁸ Thomas Templeman, *A New Survey of the Globe; or, an Accurate Mensuration of all the Empires, Kingdoms, Countries, States, Principal Provinces, Counties, and Islands in the World*. London, 1729. According to plates 1 and 9 in the *New Survey*, England is 49,450 square miles, and Naples 22,000.

free. There is one passage* may help us a little: in the times of Demetrius Phalereus³⁹ the enrolled citizens of Athens were 21,000, the strangers 10,000, in whole 31,000, the quadruple of this is the number of the people that were free viz 124,000, it's added there were 400,000 slaves.⁴⁰ So the free men were to the slaves nearly as three to ten, that is, not a third part; according to this calculation, the numbers of the people in the states of Italy must have been vastly great and the same observation will hold of most of the antient nations.

*This is from Athenaeus's sixth book of the *Deipnos*<*ophists*> near the end⁴¹, where are severall other things about the great numbers of the antient slaves, such as that the Arcadians had 300,000 slaves; the Corininthians 460,000; the Republick of Aegina 470,000 (and yet the Island of Aegina according to Strabo in his eight book was not 23 miles round), that some persons among the Greeks had 1,000 slaves or above and some of the Romans above 10,000 or even 20,000.

12 | Now if Italy was so populous before the Roman Empire we cannot but conclude both from antient history and the nature of the thing that Greece and Egypt and other places that seem to have been more easily peopled or polished by arts were yet more populous.

As to Egypt in particular it was not a large country; According to Herodot<us> in his second book⁴², it was not above 500 miles in length and

³⁹ Athenian orator and statesman, c.345-283 BC.

⁴⁰ Hume critically examines the numbers mentioned by Athenaeus and says 'the number of slaves is augmented by a whole cipher, and ought not to be regarded as more than 40,000.' David Hume, *Political Discourses*, Edinburgh, 1752, p. 221.

⁴¹ Athenaeus (c.170-c.230), *Deipnosophists*, vi. 272.

⁴² Not identified in book II.

of⁴³ a small breadth in some places not above more than 30 miles; it seems to have been a very narrow country and to have lain betwixt two ridges of mountains and not to have comprehended so much as modern Egypt: Templeman in his survey⁴⁴ (above cited) makes the modern Egypt to be almost three times as large as England, but from the measures in the antient authors and comparing it in the antient maps with Greece, the antient Egypt appears to be much less than the modern, perhaps not much larger than England, and yet Herodot⁴⁵ writes in his second book⁴⁶ that in the times of Amasis⁴⁶ a little before the reign of Cyrus⁴⁷ the founder of the Persian Empire; it had 20,000 cities well inhabited, if you allow 2,000 to each city, this makes fourty millions; this will not be thought too great an allowance when it's considered how many large cities were in it.

13 | Thebes is celebrated by Homer⁴⁸ for its 100 gates out of each of which went 200 men with horses and chariots that is 20,000. But Tacitus in the second book of his *Annals*⁴⁹ says that there were in it of old 700,000 fighting men and quadrupling this number it must have had 2,800,000 inhabitants: about thrice as many as in London.

Strabo in his seventeenth book⁵⁰ adds that it remained to be seen in his times extending almost to 80 stadia or ten miles in length.

Diodorus in his first book⁵¹ makes the circuit of its walls 140 stadia more than 7 miles and the houses of private men to rise to the fourth or fifth story.

⁴³ Written by a different hand between lines.

⁴⁴ According to Templeman, Egypt is 140,700 square miles. As for England, see note 38.

⁴⁵ Herodotus (c.484-c.425BC), ii. 177.

⁴⁶ Fifth king of the 26th dynasty of ancient Egypt, (reigned 570-526 BC)

⁴⁷ Cyrus the Great (6 th century BC)

⁴⁸ *Iliad*, xi. 383-385.

⁴⁹ Tacitus (c.55-c.120), *Annals*, ii.60.

⁵⁰ Not identified in book. xvii.

⁵¹ I. xlv. 4.

According to the same Diodorus⁵² in the same book Memphis⁵³ in Egypt was in circuit 150 stadia or⁵⁴ more than eighteen miles.

And in the same book⁵⁵ he writes that Egypt had antiently above 18,000 remarkable cities and villages and that 3,000 of them were numbered in the times of Ptolemius Lagus⁵⁶ which were populous in his own time; and that the census consisted of old of seven millions & was in his own time 3 millions⁵⁷. Now this cannot be understood of the whole inhabitants for three millions were too few for the age of Diodorus, they must therefore have been only the heads of families or the fighting men: According to which the inhabitants of Egypt in Diodorus's time were twelve millions, but antiently 28 millions.

14 | That Egypt was very popul^{<ou>}s in antient times may be also concluded from what Herodotus relates in his second book⁵⁸ that 400,000 soldiers all native Egyptians were kept in constant pay, a prodigious number for so small a country, especially when it's considered that the Egyptians were not much addicted to war and the humour of great standing armies in time of peace and in the view with which they are kept up at present seems to have been of a much later date; so this great army of 400,000 men cannot bear so great a proportion to the whole number of the people as the standing armies in Europe do now.

Next to Egypt let us consider Palestine a neighbouring country; the extent of this was very small. According to Templeman's survey⁵⁹ it was not

⁵² I. l. 4.

⁵³ A great city of ancient Egypt.

⁵⁴ Written between lines.

⁵⁵ I. xxxi. 6-7.

⁵⁶ Founder of the Ptolemaic dynasty (c.367-283 BC).

⁵⁷ The last eight words written by a different hand between lines.

⁵⁸ Not identified in book II.

⁵⁹ Palestine is 7,600 square miles. See *New Survey*, plate 21.

above the sixth part of England, at any⁶⁰ rate it was but small; and yet we find in the first book of the *Chronicles* twenty first chapter⁶¹ the fighting men in it exclusive of the two tribes of Levi and Benjamin were 1,570,000; and if we take the proportions of the tribes of Levi and Benjamin to the rest, from their enrollments which are marked in the first and fourth chapters of Numbers we shall find that above 114 thousand must be added for Levi and Benjamin; which will make the whole | number of fighting men 1,684,000 and quadrupling this last sum, the number of inhabitants 6,736,000.

Nixt⁶² let us consider Greece: this was a very small country, according to Templeman's *Survey*, including even Epirus, Macedonia, and Albania; it was less than England. England according to this survey contains 49,450 square miles. Albania contains 6,375, Epirus 7,955 and Macedonia 18,980, Thessaly 4,650, Achaia 3,420, and Peloponesus (now the Morea) 7,220 square miles; and all these only 48,600⁶³: and yet this country was full of populous cities and states, I have not met with passages which determine the number of people either in the whole or in many particular states. There is however one passage (already cited⁶⁴) which shows how populous Attica was which was a very small territory. In the time of Demetrius Phalereus the citizens of Athens were 21,000. As Athens was not disposed to admit strangers to the rights of their city, their citizens were not much encreased for a long time, since they are reckoned 20,000 in the days of Cecrops⁶⁵, but in Demetrius's time there were 10,000 strangers that is 31,000 in all and quadrupling this for the number of such as were free there must have been 124,000 free and to these there were 400,000 slaves, that is, 524,000 inhabitants.

⁶⁰ Replaced with one illegible word.

⁶¹ 1 *Chronicles*, xxi. 5-6.

⁶² Replaced with 'Then' by a different hand between lines.

⁶³ See *New Survey*, plate 20.

⁶⁴ See above p.121.

⁶⁵ First legendary king of Attica.

Now if we consider how many other five cities and republicks were in
 16 Greece and | what a powerfull people the Greeks were and that the whole of
 their country when Macedonia Albania and Epirus are excluded (which
 antiently were not reckoned parts of Greece) was not the third part of the
 extent of England, how prodigiously must this country have been peopled.
 If Athens alone but a small part of Greece had above half a million how
 many millions must have been in the whole; if we should say that the Athe-
 nians were not the twentieth part of the people of Greece; perhaps we should
 not err much, and yet at this reckoning there must have been ten millions in
 a country not larger than the third of England.

It appears likewise that Sicily was very populous and powerfull and had
 severall great cities; it is but a small island. According to Templeman's
Survey not the fifth part of England⁶⁶, yet it was very powerfull: Agrigentum⁶⁶,
 one of its cities, had 200,000 inhabitants, and was a place of vast riches.
 Diodorus Siculus in his 13th book⁶⁸ describes the opulence and magnificence
 of this city and the riches of its inhabitants, and in his 11th book⁶⁹ writes
 17 that after King Gelon⁷⁰ had defeated the Carthaginians in Sicily | he gave to
 many of the citizens of Agrigentum 500 prisoners to be their slaves.

But the greatness of Sicily appears especially from the power of Syra-
 cuse. Strabo in his sixth book⁷¹ writes it was enclosed with a wall of 180
 stadia (twenty two miles) and Diodorus in his second book⁷² that one of the
 Dionysii who was not tyrant of the whole of Sicily had an army of 120,000
 foot, 12,000 horse and a fleet of 400 long ships, some of which were triremes

⁶⁶ Sicily is 9,400 square miles. See *New Survey*, plate 9.

⁶⁷ Ancient name of Agrigento, situated in the south-west part of Sicily.

⁶⁸ XIII. xc. 3.

⁶⁹ XI. xxv. 2.

⁷⁰ Tyrant of Syracuse (c.540-478 BC)

⁷¹ VI. ii. 4.

⁷² II. v. 6.

and quinquereims; in short as small as the territories of Dionysius⁷³ were in reading his history one would be apt to conclude there is scarce a prince in Europe at present who is much his superior in power and riches.

I shall add one other calculation concerning the Gauls. Caesar in his second book of the *Gallick War*⁷⁴ mentions the levies of Belgium for fighting against the Romans. When the

Bellovaci promised	60,000
The Suessiones	50,000
Nervii	50,000
Atrebates	15,000
Ambiani	10,000
Morini	25,000
Menapii	9,000
Calotes ⁷⁵	10,000
Telecasses ⁷⁶ and Vermandui	10,000
Aduatuci	29,000
The Germani as he calls them	40,000
The sum	308,000

18 | Again he says the Bellovaci could raise 100,000 fighting men but promised only 60,000. So taking the whole in this proportion of ten to six the sum of fighting men in all the states was 515,000 and quadrupling this last number all these states had 2,060,000 inhabitants, and if all these be reckoned only such as were free, as is reasonable, since the antients did not employ their slaves in war except in cases of the greatest necessity, and the

⁷³ Dionysius, the elder (405-367 BC), tyrant of Syracuse.

⁷⁴ ii. 4. Wallace's list is slightly different from Caesar's.

⁷⁵ Possibly 'Caleti', a Germanic tribe.

⁷⁶ Possibly 'Velocasses', a Germanic tribe.

Gauls used slaves as well as others, then reckoning thrice as many slaves according to the proportion before: this makes the inhabitants of the antient Belgium 8,540,000, even supposing there were no more states in it than these mentioned by Caesar which is not certain.

It's true the antient Belgium was much larger than the present Netherlands and contained part of the present France besides other territories.⁷⁷

But if we consider the former computation of above eight millions of inhabitants, we may conclude it was as well peopled as these countries are at this time even taking in the Seven United Provinces which are so⁷⁸ populous at present only by some particular accidents which these places wanted in
19 antient times. | I shall not at present attempt any other calculations, and am far from pretending that all these I have made are absolutely certain, but these I have made and indeed the whole of antient history make me ready to conclude that the world was much more populous antiently than now, tho it is not possible to determine in what proportion, or in what time or times it was best peopled, and the progress that was made; I take them to be much mistaken who say that there were fifty times as many people in the world in Julius Caesar's time as there are at present⁷⁹, this proportion is too great for any time; and if we give credit⁸⁰ to Strabo and Diodorus who lived near to his time the world was far more populous in times more antient, and as Diodorus writes in his second book⁸¹ was a sort of *de fact*⁸² in his time but in generall that the world was much more populous in antient times seems to be certain from the most antient accounts and comparing the antient na-

⁷⁷ Several words deleted.

⁷⁸ Written by a different hand between lines.

⁷⁹ See note 5.

⁸⁰ 'both' deleted.

⁸¹ II. v. 7.

⁸² The last two words replaced with illegible words by a different hand between lines.

tions with such as are most populous at present.

England is one of the best peopled countries in Europe, it is computed to have about eight millions of inhabitants.⁸³ Yet if the preceeding accounts of Italy, Greece, Egypt and other countries may be depended on as coming near to the truth, these countries were thrice or four times as well peopled as England is at present.

20 | Having thus illustrated the fact, let us next enquire into the causes of such a change to the worse.

And this may either arise from natural or moral causes; Natural such as the alteration of the air, the decay of heat in the sun, and alteration in the strength and wholesomeness of the earth, which may have an effect on animal and vegetable bodies and either prevent generation or cut off greater numbers in infancy; but tho there may be causes of this nature working in particular places and times, they are not sufficient for explaining the phenomenon; and I reckon we cannot show that there has been any universall alteration in the air to the worse, or decay of the heat of the sun, to make any considerable difference; I shall therefore only consider moral causes which are so many and great as to be sufficient to account for this change without recurring to natural causes.

One reason which some assign for this change is the Mahometan religion introduced in later ages which authorizes polygamy by which many men are deprived of wives, and many women being married to one man become
21 less fruitfull; and certainly as the proportion | in the births of males and females is very near equall, the institution which provides most equally for the whole race and of consequence must tend most to make them all usefull

⁸³ According to *New Survey*, to which Wallace frequently refers in this paper, the number of souls in England at his time is increased to eight millions from seven millions in King Charles II's time. See explanatory note on plate 5.

for propagation is; "that one man should have but one woman" and if to polygamy you add the institution of eunuchs for guarding the women and the female slaves that are assisting to the eunuchs and never marry; this must have a great effect in all these countries where Mahometanism prevails now, and where polygamy and eunuchs were not allowed in antient times; this is the case of the lesser Asia, Greece and some other places of Europe, but whatever changes are in the more eastern nations, cannot be accounted for in this way since polygamy and eunuchs were in use from the most antient times.

Some reckon the difficulty of obtaining divorces among the Christians as another cause, but this must have a very inconsiderable effect for the divorces were more easily obtained among the Greeks and Romans yet they were never common among them; the husband and wife usually lived together during life; and few instances can be supposed to have happened where a couple pleased in other respects separated purely for want of children. But surely the great numbers of unmarried priests in the Roman
22 Catholick countries which make | up so great a part of Europe; and of women who live unmarried in convents and profess perpetuall virginity thro an opinion that celibacy is a more holly state than marriage is one of the causes of the scarcity of people in all these countries; and so great a part of the riches of these countries being in the hands of priests, and religious houses, this hinders both the cultivating the lands and trade: and this again has a bad effect in diminishing the numbers of the people.

Another great cause of the scarcity of people is the difference of antient and modern customs with respect to slaves and the poor. Europe has been for many ages overrun with vast multitudes of beggars and poor people or such as having no substance can only support themselves by daily labour which often fails them; what can be expected from persons in this situation: either they do not marry, or their marriages are not fruitfull, or their

children die for want and due care. Our worthy countryman Mr. Fletcher of
 23 Saltan [*sic*] computed that there is a million and an half | of inhabitants in
 Scotland and of these not less than 100,000 beggars⁸⁴. If to these we add the
 vast number of tenants, subtenants and the meaner sort of tradesmen who
 tho⁸⁵ not beggars are yet oppressed with poverty, (and the same is the case
 almost everywhere in Europe.) We may see one good reason of the scarcity
 of people. But in antient times things were quite otherwise, the world was
 not oppressed with such numbers of beggars; Men were either able to subsist
 themselves pretty easily or if they became poor, they became the property of
 rich men; and the masters finding their account in the number of their
 slaves who cultivated their lands and learned all kinds of handscarfts, en-
 couraged them to marry and took good care of the children who were their
 property and a valuable part of their riches.

This state of slavery is very remote from our manners and appears to us
 to be very wretched, and certainly the antient slaves were exposed some-
 times to great cruelty and injustice and such a constitution requires particu-
 lar laws to prevent the barbarous treatment of slaves; yet if we consider the
 condition of the antient slaves, we shall find their life was not so miserable
 24 as | we may be apt to imagine. In some states particularly in Athens there
 were particular laws for their releif, they were treated with gentleness and
 equity and were allowed to get riches, paying their masters an yearly small
 tribute out of them, and if they could get as much as could purchase their
 freedom their masters were obliged to give it, and in generall they seem to
 have lived more easily, and to have been much better maintained, not only
 than our beggars but great numbers of our tenants, subtenants and the

⁸⁴ Andrew Fletcher, *Two Discourses concerning the Affairs of Scotland*, Edin-
 burgh, 1698, in John Robertson ed., Andrew Fletcher, *Political Works*,
 Cambridge, 1997, p. 67.

⁸⁵ Written by a different hand between lines.

meaner sort of tradesmen.⁸⁶ But without entering upon a discussion of this subject or ballanceing the advantages and disadvantages of the antient servitude or setting up to be an advocate for slavery; if we consider this only with respect to the phenomenon we are now enquiring into, it's certain the antient servants contributed greatly to encrease the numbers of the people and one cannot but see that this difference of manners must make a great change in this respect, who considers how great a part of the people now are
 25 servants and | that our servants are generally unmarried, whereas the antient servants were all married and their children being all maintained they propagated as fast as any; what numbers of slaves were in antient times appears from the instance of Athens taken notice of above⁸⁷ where 30,000 enrolled citizens and strangers had 400,000 slaves and at the battle of Patea⁸⁸ there were 5,000 Lacedaemonians and each of them had seven slaves that attended him.⁸⁹

Another cause of the scarcity of people is the right of primogeniture by which the eldest son for the support of the family gets a great estate and the rest of the sons very little in proportion, this is a custom entirely Gothick, unknown to the Greeks or Romans, who divided the estate equally among all the sons, nor did the antient world in generall as far as I have yet found know any such custom as giving almost all to the eldest, tho some gave him some what of a greater share; this modern custom whatever other advantages it is attended with certainly tends⁹⁰ to diminish the numbers of the people, as it often hinders the other sons from marrying. At Venice this

⁸⁶ Wallace's favourable observation on ancient slavery is bitterly criticized by David Hume. Cf. Hume, *Political Discourses*, 1752, pp. 165-179.

⁸⁷ See above p.121.

⁸⁸ Possibly Plataea; at the battle of Plataea (480-479 BC) the Greeks defeated the Persians decisively.

⁸⁹ Herodotus, ix.10.

⁹⁰ The last two words replaced with one illegible word between lines.

custom goes so far that it's common only for one son of a family to marry, but where ever it obtains it must have a very bad effect in this respect; Whereas among the antients the estate being equally divided among the sons, or nearly so, all had equal encouragement to marry and were equally able to maintain families.

Now if we join these two customs together, that⁹¹ all the sons of the best families except the eldest are so often discouraged from marrying, and
26 that | the eldest son keeps a great family of unmarried servants, these two together must cause a visible difference betwixt antient and modern times.

Add to this that there is less care taken to encourage marriage in modern than antient times: among the antients married persons had both greater priviledges and respect; in Greece not to marry was reckoned a crime, Yea marriage could not be delayed beyond a cerain age; it was allowed to treat batchelors with contempt; in modern times the laugh is rather against such as are married. Married persons have no priviledges, and there is often a prevailing luxury which makes it thought imprudent for men to marry unless they have such riches as not only can enable them to live but to live in splendor. I do not know if batchelors are incapable of offices any where now but in Switzerland; It's only there so far as I know where marriage is encouraged by the state. It's only there and in Holland where estates are so equally divided among all the sons and these two countries are the best peopled in Europe.

Another cause of want of people in many places of Europe is the trade with the East and West Indies, but chiefly the West Indies; the antient trade
27 was much more confined than the modern. Since | America was found out and the passages to the East Indies by the Cape of Good Hope; severall European countries would be much more populous were it not first for the great

⁹¹ Replaced with one illegible word between lines.

numbers who settle in these distant places and secondly who are lost by such distant voyages into climates that are not natural to them: this trade must certainly weaken Europe in general by consuming great numbers of the people. It may possibly enrich some particular men or cities, but it must do harm to every nation in general if they have any considerable territory; and every nation would be much more populous by cultivating their lands at home and trading with nations nearer to them and whose climate is more like their own: and there seems to be an infatuation in many Europeans going to seek distant seats in America when the lands in Europe are not cultivated in any tolerable degree and might maintain much greater numbers.

Another cause of want of people in Europe is the great numbers of soldiers in the standing armies that are maintained in it of which so few marry in proportion and by whose means so many women are debauched, this was not the case of the armies in the most antient times.

But perhaps above all the scarcity of people in modern times arises from the different constitution of the antient and modern governments. Before
28 the time of Alexander the great and | even in many places after his days till the Roman Empire was established, the western parts of the world were filled with small and independent governments, many of which were republicks; Caesar describes a great many independent states in Gaul, Italy, Greece and the lesser Asia, Syria, the African coasts and the Islands were all made up of such small governments and chiefly republicks. There were a great many large cities with a small territory round them, all independent on one another; these small territories were well cultivated, each state made the most of its lands, we see still that lands near to cities are more richly cultivated than others; the governments of Europe are quite different now. Europe antiently was divided into many hundreds perhaps some thousands of independent governments, there are not perhaps fifty at this time; by this it happens that a small spot near the metropolis is well cultivated but places

at a distance are much neglected; all about London for fifty miles is like a garden; but the distant lands of Brittain do not share the same advantages: Was Brittain divided into ten or twelve territories belonging to as many cities according to Mr Fletcher of Salton's [*sic*] scheme⁹²: whatever other advantages or disadvantages this might bring along with it, this
 29 would | certainly be one consequence that Brittain would be more full of people than at present with one large city at a corner of it.

Nor was it a small advantage in antient times for the encrease of the people that there were so many republicks; Whatever advantages may arise from monarchies in other respects and without considering whether monarchies or republicks may be presumed to take best care of the generall interest or whose subjects have the better chance for the milder or more equall government, it is certain the greater equality there is among men they will encrease the faster. Just as an equall division of the fathers estate tends to the better provision of the whole family and to multiply the race faster and encourage marriage more than the Gothick custom of primogeniture.

Another thing which hinders the encrease of mankind is the leaning too much to trade and neglecting agriculture.

This perhaps will not be allowed and it may be thought difficult to conceive how trade can be carried too far, how agriculture can be neglected through the flourishing of trade, or if it can, how a flourishing trade can possibly not tend to a greater encrease of the people than any other method. Nor do I incline to assert any thing positively in such subject. I shall only observe a few things with respect to this.

I take the cultivating of lands in its largest sense to be one great
 30 dation of trade and | indeed it is the only one save the fishing in the seas and

⁹² Cf. Fletcher, *An Account of a Conversation concerning a Right Regulation of Governments for the Common Good of Mankind*, Edinburgh, 1703, in Robertson, *op.cit.* p. 210ff.

digging in the bowels of the earth. It is agriculture that furnishes materials for manufactures and export: but may we not suppose nations after their trade is begun to turn so much to trade as to neglect to improve their lands sufficiently and depend too much on the commodities of other nations which they do not bring home to be manufactured in their own country and afterwards exported but carry from place to place as the materials of their trade: by this means they may doubtless enrich their country greatly, they may also encrease their people, they may even encrease them more than if every inch of their lands was improved to the outmost and may multiply so fast that their lands by the outmost improvement could not maintain a fourth part of them or even so great a proportion; Witness the states of Holland; Yet as this scheme of trade can never answer to the world in generall or even to any great part of it, nor can people be supported but by the fruits of the earth and the animals and if agriculture is neglected anywhere a smaller number in proportion to this neglect can only be maintained. So when any particular nation has a large | territory, if they shall choose to neglect great tracts of their lands and to be crouded together in cities near the coasts for the sake of the carrying trade; altho they may multiply greatly in this manner, yet one would think if these hands that were employed merely in the carrying trade (for I have⁹³ only that in view) were employed in agriculture and every part of their country were⁹⁴ well improved and inhabited, this would encrease their people faster and lay a foundation in time for a more extensive trade of every sort, for by this method of improving their lands many of their people would be kept at home, and live in a more wholesome way and by the carrying trade many in a manner live out of the country, and sea voyages destroy great numbers of the people; Nor do I see how the carrying trade is proper to encrease the people in

⁹³ One illegible word deleted.

⁹⁴ One illegible word deleted.

any country, till once the lands are fully improved: and certainly if this humour become generall and great tracts of lands are everywhere left uncultivated for the sake of trade in any shape, this must have a considerable effect in diminishing the numbers of mankind in generall.

Now the antients seem to have had⁹⁵ very much the advantage above the moderns in this respect, for tho the antients did not neglect trade, yet as I observed before, their trade was more confined and they seem to have had a
 32 greater turn | and greater advantages for agriculture: Great numbers among the antients (for I do not enquire at present what other methods there were for improving their estates) who were proprietors of lands and rich cultivated their lands by their slaves and they themselves had the chief direction; agriculture was more in esteem among them and the chief direction not left to the poorest of the people; the plow was in the hands of the proprietor who knew agriculture and was able to improve the lands best. Among the moderns agriculture is in less honour, the better sort mind it little and both the methods of agriculture are entrusted to the more ignorant and the expences of it ly upon the poorer sort, by this means neither are such excellent methods found out, or tho' they were the tenants are not able to follow them and the barrenness of lands must ever hinder the encrease of the people.

Such is the difference betwixt antient and modern manners and governments that as we see from a comparison of antient and modern times⁹⁶ there were actually greater numbers of people in antient times, so this difference
 33 of | manners and governments shows it must have been so, and confirms the antient accounts; It is also plain that the world must have been best peopled, when all the causes contributing towards it operated most strongly that is (as I reckon) in Europe immediately before the time of Alexander the

⁹⁵ Written between lines.

⁹⁶ One illegible word deleted.

great and before the Roman Empire; while Europe was divided into small and independent governments.

The reasons which I have assigned for the scarcity of people in modern times are of different kinds; These arising from the great number of unmarried priests and women in the Roman Catholick countries, from the difference betwixt antient and modern customs with respect to servants and slaves, the right of primogeniture, the trade with the East and West Indies, the great number of standing forces in Europe; and the greatness of modern governments in comparison of the antient are of such a nature and so deeply rooted in the world that there is not the least prospect at present of any considerable alteration in these respects and therefore there cannot be the least hope that there will be any encrease of mankind equall to antient times, and yet certainly it were to be wished that as God formed this earth chiefly for a habitation to mankind; and with right culture it might support much greater numbers, this thinness of the world at present was more considered and such schemes proposed as might in some measure be a remedy, I shall beg leave to suggest a few things in this head.

34 | 1. A country can never be said to be sufficiently peopled while there are great tracts of land that are not cultivated to that degree they would easily bear and while the far greatest part at least of grains, fruits and cattele the country produces is⁹⁷ not consumed at home: for if they are obliged to export these for consumption, this is a sign that they have not a sufficient number of people. A country is most powerfull when it has people to consume its product of grains and cattele and it's better to export the manufactures of these people than their food by way of trade and till all countries are peopled in this manner the world is not sufficiently peopled.*

⁹⁷ Replaced with one illegible word between lines.

*Notwithstanding of what I have said here I am sensible that if the whole earth was so finely cultivated, great numbers of mankind must perish at particular times by bad crops and famine: But from the view of the world at present there is no reason to fear that the earth shall be too much cultivated.⁹⁸

2. Brittain is not sufficiently peopled since there are both great tracts of land uncultivated and a great deal of grain exported.

3. One cause of this is that the younger sons of the richer families either go abroad to push their fortune or if they stay at home are not able to maintain families suitable to their own education and thus are discouraged from marrying; for which reason also great numbers of women are and must be unmarried.

35 | 4. There are also many who live by their bussiness easily enough, who cannot provide for wives and children in case of death and are discouraged from marrying.

5. Another cause of our lands not being sufficiently cultivated besides the obvious reasons of their being laboured by poor tenants, the shortness of our leases, and other things of this nature, is the small turn of the richer sort to agriculture and their educating their younger sons either to some of the learned professions or to be soldiers or merchants or to some of the more gentile mechanical employments.

6. Altho we have more grains and cattelle than we can consume at home and therefore there is the less encouragement to cultivate our lands when we have not people to consume our present product, yet since in the present condition of Europe there is room for exporting our grains, great profites may still be made by cultivating lands.

⁹⁸ The last twenty-two words written by a different hand.

7. It would therefore be of great advantage that gentlemen of land estates and other men of substance instead of educating their younger sons to the forsaid employments of law & would educate them for agriculture.

36 | 8. Many different schemes for this might be proposed. I shall propose this that follows: I suppose there are a great many places in Scotland where land is set in tack at less than three or even two shillings by the acre and where you have lime or other advantages for improvement. If a gentleman has one thousand pounds sterling to give his son and either breeds him up with some of the English Farmers or by a home education trains him up to the knowledge and taste of agriculture in its larges⁹⁹ sense, I do not see but he may live as agreeably as in any other bussiness whatever, he will live more innocently than in most professions, and will make great profits. I need not speak of the pleasure of agriculture, after the descriptions of it by the antients, and dirty houses and nastiness, tho so common with us, are not necessary attendants of it. As for the profits, if he has a lease for two or three lives or a great number of years, a farm of two thousand acres at two shillings each acre or even more, one thousand pounds or a less sum[e] for the improving of this farm; why should he not be able to make his farm
37 produce | twice, thrice, four times as much as many of the lands of Scotland of such a rent now produce which will yield great profits.

9. A scheme¹⁰⁰ might also be proposed for supporting the wives and children of men who can live easily by bussiness but cannot secure their wives and children in case of death by erecting one large or rather many smaller societies of married men in such circumstances. Who would pay annually certain sums greater or smaller as they find it convenient during their life, on condition that proportionable sums be paid to their widows and children

⁹⁹ Sic. Probably 'larger' was intended.

¹⁰⁰ In the early 1740s, Wallace endeavoured to establish a church's ministers' widows' fund with the Rev. Alexander Webster.

after their death, either during the widows life, or her not marrying again, or failing the widows to the children untill they come a certain age. Such societies might be a kind of security for the provision of widows and children in case of the husbands death and be an encouragement to marry; and it's chiefly by encourageing marriage and our taking a greater turn to agriculture that it seems possible in the present circumstances of mankind to encrease the numbers of the people.