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THE 'ANALYSIS'¹

ANALYSIS OF THE ARITHMETICAL FORMULA OF THE *TABLEAU ECONOMIQUE* OF THE DISTRIBUTION OF ANNUAL EXPENDITURE IN AN AGRICULTURAL NATION

For when husbandry flourishes, all the other arts are in good fettle; but whenever the land is compelled to lie waste, the other arts of landmen and mariners alike well-nigh perish.

SOCRATES, in *Xenophon*.²

The nation is reduced to three classes of citizens: the *productive class*, the *class of proprietors*, and the *sterile class*.

The *productive class* is that which brings about the regeneration of the nation's annual wealth through the cultivation of its territory, which advances the expenses which agricultural work entails, and which annually pays the revenue of the proprietors of the land. We include within this class all the work done and all the expenses incurred up to the sale of the products at first hand; it is through this sale that the value of the annual reproduction of the nation's wealth is ascertained.

The class of proprietors includes the sovereign, the owners of land, and the tithe-owners. This class subsists on the revenue or net product of cultivation, which is paid to it annually by the productive class, after the latter has first deducted, out of the reproduction which it causes to be annually regenerated, the wealth necessary for the reimbursement of its annual advances and for the maintenance of the wealth it employs in cultivation.

The sterile class is composed of all the citizens who are engaged in providing other services or doing other work than that of agriculture, and whose expenses are paid by the productive class, and by the class of proprietors, which itself draws its revenue from the productive class.

In order to follow and calculate clearly the relations between these different classes, one must fix one's attention on a particular case of some sort, for a concrete calculation cannot be based on elementary abstractions.

Let us assume, then, a large kingdom whose territory, fully cultivated by the best possible methods,³ yields every year a reproduction to the value of *five milliards*; and in which the permanent maintenance of this value is ensured by the constant prices which are current among trading nations, in a situation where there

* This translation of the *Analyse* is taken from Ronald L. Meek, *The Economics of Physiocracy: Essays and Translations*, Cambridge: Harvard University Press, 1963, Chapter III that contains a whole series of translated pieces by Quesnay dealing with this *Tableau Economique*. The footnotes followed by R.L.M. were added by Meek.

¹ The *Analyse* first appeared in the *Journal de l'Agriculture, du Commerce et des Finances* in June 1766. It was later republished, in an amended and enlarged form, in *Physiocratie*. The present translation is from the text of *Physiocratie*, as reproduced in I.N.E.D., II, pp. 793-812. R.L.M.

² Xenophon, *Oeconomicus* (Loeb Classical Library edn., 1923), p. 405. English translation by E. C. Marchant. R.L.M.

³ *Porte d son plus haut degré d'agriculture*. This phrase clearly implies not only that the kingdom is fully cultivated, with no land going to waste, but also that large-scale agriculture, using the most productive methods available, has been widely introduced. R.L.M.

is unremitting free competition in trade and complete security of property in the wealth employed in agriculture.⁴

The *Tableau Economique* includes the three classes and their annual wealth, and describes the trade between them in the following way:

<i>PRODUCTIVE CLASS</i>	<i>CLASS OF PROPRIETORS</i>	<i>STERILE CLASS</i>
<i>Advances</i>	<i>Revenue</i>	<i>Advances</i>
The <i>annual advances</i> of this class amount to <i>two milliards</i> . ³⁵ They have produced <i>five milliards</i> , of which <i>two milliards</i> take the form of net product or revenue.	A <i>revenue</i> of <i>two milliards</i> accrues to this class. It spends <i>one milliard</i> in purchases from the <i>productive class</i> and <i>the other milliard</i> in purchases from the <i>sterile class</i> .	The <i>advances</i> of this class amount to <i>one milliard</i> , which is spent by the <i>sterile class</i> in purchases of raw materials from the <i>productive class</i> .

Thus the productive class sells one milliard's worth of products to the proprietors of the revenue, and one milliard's worth to the sterile class, which buys from it the raw materials necessary for its goods..... 2 milliards

The one milliard which the proprietors of the revenue have spent in purchases from the sterile class is employed by this class to provide subsistence for the agents of whom it is composed, by means of purchases of products obtained from the productive class..... 1 milliard

Total of purchases made by the proprietors of the revenue and by the sterile class from the productive class 3 milliards

Of these *three milliards* received by the *productive class* for *three milliards'* worth of products which it has sold, it owes *two milliards* to the proprietors for the current year's revenue, and it spends *one milliard* in purchases of goods from the *sterile class*. This latter class retains this sum for the replacement of its advances, which have been spent with the *productive class* at the beginning of the process in purchases of the raw materials which it has used in making its goods. Thus these advances produce nothing; the sterile class spends them, they are returned to it, and they always keep on being laid by from year to year.

⁴The extent of the territory is about *130 million arpents* of land of different qualities; the total amount of wealth employed in cultivation which is necessary to keep this territory in good shape is about *12 milliards*; and the population consists of about *30 million* people, who can subsist comfortably, in accordance with their positions, on the annual product of *five milliards*.

But it should not be forgotten that wherever the population enjoys a peaceful life it normally increases beyond the product of the territory; moreover, the strength of a state and the number of citizens who compose it are always assured when they are based on a quantity of wealth employed in cultivation which is sufficient to maintain a wealthy agriculture. The maintenance of this fund of wealth employed in cultivation should be the main object of economic government; for the revenue of the sovereign and the nation depends entirely upon it, as will be demonstrated by the description of the regular order of the distribution of the expenses paid for and maintained by the annual reproduction.

⁵ The annual advances consist of the expenses which are annually incurred for the work of cultivation; these advances should be distinguished from the original advances which constitute the fund for the establishment of cultivation, and which are valued at about five times the annual advances.

The raw materials and labour used in making the goods of the *sterile class* bring the sales of this class out at *two milliards*,⁶ of which one milliard is spent for the subsistence of the agents who make up this class. It is seen that nothing is involved here but the consumption or destruction of products, with no reproduction at all; for this class subsists only through the successive payment of the recompense due for its labour, which is inseparable from expenditure employed in subsistence—*i.e. from expenditure on pure consumption, without regeneration of what is destroyed through this sterile expenditure, which is taken in its entirety out of the territory's annual reproduction.* The other *one milliard* is reserved for the replacement of its advances, which, in the following year, will be employed anew in purchasing from the *productive class* the raw materials for the goods which the *sterile class* makes.

Thus the *three milliards* which the *productive class* has received from the sales which it has made to the proprietors of the revenue and to the sterile class are employed by the productive class in paying the current year's revenue of *two milliards*, and in purchasing *one milliard's* worth of products from the *sterile class*.

The course of this trade between the different classes, and its essential conditions, are by no means hypothetical. Anyone who wants to think about it will see that they are faithfully copied from nature; but the *data* which have been used, as the reader has been warned, are applicable only to the case which is here being dealt with.

The different states of prosperity or decline of an agricultural nation offer a host of other cases, and consequently other sets of *data*, each of which serves as the foundation of a special calculation which is in all strictness applicable to it.

The data with which we began, according to the most constant rule of the natural order, fix at *five milliards* the total reproduction which the *productive class*, working with *two milliards* of annual advances, causes to be annually regenerated in a territory such as that we have described. According to this hypothesis, the annual advances reproduce 250 per cent.⁷ The proprietors' revenue can then be equal to the annual advances. But these data imply certain conditions *sine quibus non*. They assume that freedom of trade maintains sales of products at a proper price - a price of 18 livres per *setier* for corn, for example; moreover they assume that the cultivator does not have to pay, either directly or indirectly, any charges other than the revenue, of which one part, for example *two-sevenths*, should form the *revenue* of the sovereign. On the basis of these data, with a total revenue of two milliards the sovereign's share would be 572 millions,⁸ that of the proprietors would be *four-sevenths*, or one milliard 144 millions; and that of the tithe-owners would be *one-seventh*, or 286 millions, taxes included.⁹ There is no other way of laying taxes which are capable of supplying as large a public revenue as this without causing any decline in the annual reproduction of the nation's wealth.¹⁰

It is very much in the interests of the proprietors, the sovereign, and the nation as a whole that all taxes should be directly laid on the revenue of the land; for any other form of imposition would be contrary to the natural order, since it would be detrimental to reproduction and to taxation, and the taxes would fall on the taxes themselves. Everything in this world is subject to the laws of nature: men are endowed with the intelligence required to understand and observe them; but the great number of factors involved demands that they should be grouped together in comprehensive patterns, which form the foundation of a very far-reaching and self-evident science,¹¹ whose study is indispensable if we are to avoid mistakes in policy.

⁶ The sterile class uses one milliard's worth of raw materials, and consumes one milliard's worth of subsistence goods while it is working them up. This, on Quesnay's assumptions, brings the total market value of its products out at two milliards. R.L.M.

⁷ Here the rate of reproduction is estimated by relating the annual advances to the total product reproduced. In most of the earlier versions of the *Tableau* it is estimated by relating the annual advances to the net product. R.L.M.

⁸ Note that the taxes levied on tithes which have been rented out are not included in this estimate. Adding them to the calculated amount, it will be seen that the *two-sevenths* which constitutes the sovereign's share would yield without deterioration about 650 millions in taxes every year.

⁹ In the earlier versions of the *Tableau*, the net product or revenue is usually reckoned exclusive of taxes and tithes. In the present context it is reckoned inclusive of them. R.L.M.

¹⁰ If some landed property were exempt from contributing to the taxes, this could only be on account of certain benefits conducing to the welfare of the state, in which case these benefits should be counted as forming part of the public revenue. Moreover, such exemptions should be granted only on good cause shown.

¹¹ *Mais la multiplicité des objets exige de grandes combinaisons qui forment le fond d'une science évidente fort étendue.* R.L.M.

Of the total reproduction of *five milliards*, the *proprietors of the revenue* and the *sterile class* have purchased *three milliards'* worth for their consumption; thus *two milliards'* worth of products still remain in the hands of the *productive class*. In addition, this class has purchased *one milliard's* worth of products from the *sterile class*. This adds up to an annual sum of *three milliards*, which is consumed by the various agents employed in the different types of work of this class, which are paid for by the annual advances of cultivation, and in the various types of day-to-day work involved in keeping the capital of the enterprise in proper repair, which are paid for by the interest shortly to be discussed.

Thus the annual expenditure of the productive class is *three milliards*, made up of *two milliards* of products which it retains for its consumption, and *one milliard* of goods which it has purchased from the sterile class.

These *three milliards* form what are called THE RETURNS of the *productive class*, *two milliards* of which constitute the annual advances which are consumed for the labour directly involved in the reproduction of the *five milliards* which this class causes to be annually regenerated, in order to restore and perpetuate the expenses which are destroyed by consumption. *The other one milliard* is taken by this same class out of the proceeds of its sales for the interest on the advances of its enterprises. We are now going to see why this interest is necessary.

(1) The fund of wealth employed in cultivation which constitutes the original advances is subject from day to day to a wearing-away which demands continual repairs, absolutely necessary if this important fund is to remain intact and not to move progressively towards complete annihilation, which would destroy cultivation, and consequently the reproduction, and consequently the wealth of the state, and consequently also the population.

(2) Cultivation is inseparable from a number of serious accidents which sometimes almost completely destroy the harvest; such are frost, hail, blight, floods, mortality among live-stock, etc., etc. If the cultivators did not have any fund in reserve, it would follow that after such accidents they would be unable to pay the proprietors and the sovereign, or unable to meet the expenses of their cultivation in the following year. The latter event would always be that which in fact occurred, since the sovereign and the proprietors have the power to see that they get paid; and we know the fatal results of such a destruction of cultivation, which would soon fall, without any means of escape, on the proprietors, the sovereign, the tithe-owners, and the whole of the remainder of the nation.

The interest on the advances of the cultivators' enterprises ought therefore to be included in their *annual returns*. It enables them to face these serious accidents and the day-to-day maintenance of the wealth employed in cultivation, which requires to be constantly kept in repair.

It has been noted above (note (3), p. 151) that the *original advances* are about five times as great as the *annual advances*. According to our present hypothesis of *annual advances* amounting to *two milliards*, the *original advances* are therefore *ten milliards*, and the annual interest of *one milliard* represents a rate of only ten per cent. If we consider the amount of expenditure for which the interest must provide; if we think about the importance of its destination; if we reflect that without it the payment of rent and taxes would never be assured, that the regeneration of society's expenses would be destroyed, that the fund of wealth employed in cultivation and consequently cultivation itself would disappear, and that this devastation would destroy the greater part of the human race and force the remainder to live in the forests—we shall see that it is very far from being the case that a rate of ten per cent for the interest on the perishable¹² *advances* of cultivation is too high.

I am not saying that all cultivators draw annually, in addition to their *annual advances*, ten per cent for the *interest* on their original advances. But I do say that this is one of the main conditions of a state of prosperity; and that whenever it is not to be found in a nation, that nation is in a state of decline, and in a state of decline which progresses from year to year in such a way that when its course is known we can

¹² *Périssables*. RL.M.

make a calculation enabling us to announce the moment of its complete destruction. I am also saying that a fund which is as advantageous to the nation as that of the advances of its cultivation ought in itself to bring in net to the farmers, who combine their work and the use of their intelligence with it, an annual interest at least as high as that which is paid to idle rentiers.

The total amount of this interest is spent annually, because cultivators never allow it to remain inactive; for in the intervals when they are not obliged to use it for repairs, they do not fail to put it to profit in order to increase and improve their cultivation, without which they would be unable to provide for serious accidents. That is why interest is included in the total of annual expenditure.

SUMMARY

The total of *five milliards*, which is divided at the beginning of the process between the *productive class* and the *class of proprietors*, is annually spent in a regular order which perpetually assures the same annual reproduction. *One milliard* is spent by the *proprietors* in making purchases from the *productive class*, and *one milliard* in making purchases from the *sterile class*. The *productive class*, which sells *three milliards'* worth of products to the two other classes, returns *two milliards* of its receipts in payment of the revenue, and spends *one milliard* of them in making purchases from the sterile class. Thus the *sterile class* receives *two milliards*, which it employs in making purchases from the *productive class* for the subsistence of its agents and for the raw materials for its goods. The *productive class* spends annually *two milliards* on its own products, which completes the expenditure or total consumption of the *five milliards* of annual reproduction.

Such is the regular order of the distribution of the expenditure of the *five milliards* which the *productive class* causes to be annually regenerated through the expenditure of *two milliards* of annual advances, included in the total expenditure of the *five milliards* of annual reproduction.

We are now going to put before the reader the arithmetical formula of the distribution of this expenditure.

On the right,¹³ at the top, is the sum of the advances of the *productive class*, which have been spent in the previous year in order to generate the present year's harvest. Below this sum is a line which separates it from the column showing the sums which this class receives.

On the left¹⁴ are the sums which the *sterile class* receives.

In the middle, at the top, is the sum of the *revenue* which is divided out, to the right and left, between the two classes with whom it is spent.

The division of expenditure is indicated by dotted lines¹⁵ which start from the sum of the revenue and go down slantwise to one class and the other. At the end of these lines on both sides is to be found the sum which the proprietors of the revenue spend in making purchases from each of these classes.

The mutual trade between the two classes is also indicated by dotted lines which go down slantwise from one class to the other from which the purchases are made. At the end of each line is the sum which one of the two classes receives in this way from the other by means of the mutual trade which they carry on, among themselves for their expenditure.¹⁶

¹³ Should read 'on the left'. R.L.M.

¹⁴ Should read 'on the right'. R.L.M.

¹⁵ For technical reasons, the dotted lines have been replaced by ordinary lines in the reproduction of the *Tableau* on p. 158 below. R.L.M.

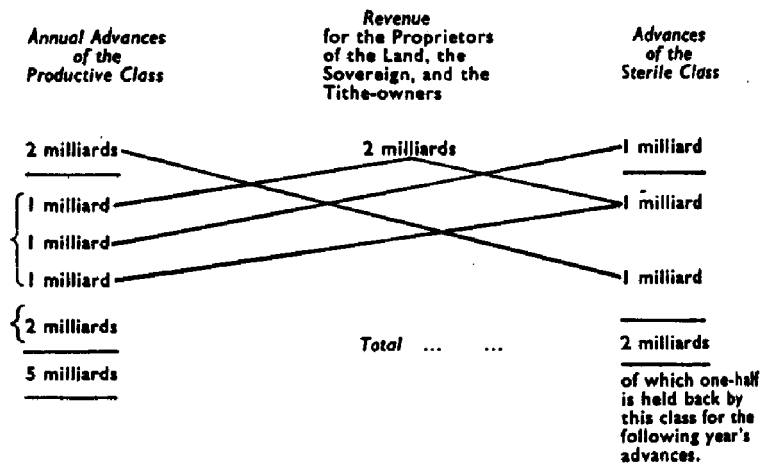
¹⁶ Each sum which the *productive class* and the *sterile class* receive implies a double value, because it involves a sale and a purchase, and consequently the value of what is sold and the value of the sum which is used to purchase it. But real consumption is involved only to the value of the *five milliards* which form the total receipts of the *productive class*. The sums of money which pass into the hands of each class are distributed among them by means of the circulation of a total sum of money which every year starts the same circulation again. This total sum of money can be assumed to be more or less large, and its circulation more or less rapid; for the rapidity of the circulation of money can in large part make up for the total quantity of money. For example, in a year in which, without there being any reduction in reproduction, there was a big rise in the price of the products, whether by reason of facilities granted to

Finally, the calculation terminates on each side with the total sum of the receipts of each of the two classes. It is seen that in the given case, when the distribution of the expenditure follows the order which has been described and detailed above, the receipts of the productive class, including its advances, are equal to the total amount of the annual reproduction, and that cultivation, wealth, and population remain in the same state, without any increase or decline. A different case, as we have said above, would yield a different result.¹⁷

If the proprietors were to spend more with the *productive class* than with the *sterile class*, in order to improve their land and increase their revenue, this addition to the expenditure employed on the work of the productive class should be regarded as an addition to the advances of this class.

The expenditure of the revenue is assumed here, in the state of prosperity, to be distributed equally between the productive class and the sterile class, whereas only one-third of the expenditure of the productive class goes to the sterile class, the reason being that the cultivator's expenditure is less freely disposable than that of the proprietor. But the more agriculture is in a state of stagnation, the more one should then devote a portion of the disposable expenditure to building it up again.

FORMULA OF THE TABLEAU ECONOMIQUE
Total Reproduction: Five milliards



IMPORTANT COMMENTS

First Comment

The expenditure of the proprietors with the *sterile class*, which is used for the subsistence of this *class*, should not be confused with the proprietors' direct expenditure with the *productive class* for their own wants and those of their guests, and for the animals which they keep; for this expenditure of the proprietors with the *productive class* can be much more profitable to agriculture than their expenditure with the *sterile class*.

trade or otherwise, it would not be necessary for there to be an increase in the stock of money in order to enable payment for these products to be made. Nevertheless, larger sums of money would pass into the hands of buyers and sellers, which would lead most people to believe that the total quantity of money in the kingdom had been greatly increased. Thus the vulgar, taking this appearance for the reality, find it very mysterious.

¹⁷ Quesnay is clearly assuming here that the consumption of the two milliards' worth of manufactured goods is simply the consumption in another form of the one milliard's worth of subsistence goods and the one milliard's worth of raw materials which are as it were incorporated in the manufactured goods. R.L.M.

Among the proprietors of the revenue there are a great number who are very wealthy and who consume the most expensive products. Thus the volume of products which they consume is proportionately much less great than that of the least expensive products which the other classes consume. The men who spend the revenue and who buy at such high prices must then also be proportionately much less numerous relatively to the total value of their purchases. But their expenditure maintains the price of the best quality products, and thus maintains gradationally the proper price of the other products, to the advantage of the territory's revenue.

It is not the same with the large amount of money which the *proprietors* may spend with the *sterile class*; and this is what constitutes the difference between conspicuous consumption of primary produce and luxury in the way of ornamentation.¹⁸ The effects of the first are not as much to be feared as those of the second.

The man who purchases a *litron* of green peas for 100 livres pays this sum to a cultivator who employs it in the expenses of cultivation, to the advantage of the annual reproduction. The man who purchases a piece of gold braid for 100 livres pays this sum to a worker who employs a part of it to re-purchase the raw material from abroad; it is only the other part, employed to purchase his subsistence, which is returned to the *productive class*. And this return, moreover, is not as advantageous as the direct expenditure of the proprietor with the *productive class* would have been, for the worker does not purchase expensive products for his subsistence, and therefore does not contribute, as the proprietor does, to the maintenance of the value and the revenue of the good land which has the capacity to produce this costly produce. So far as the part which has been sent abroad in payment for purchases is concerned, if this returns to the productive class, as does in fact happen at least in part in nations where there is a mutual trade in products,¹⁹ it always does so burdened with commercial costs, which bring about a reduction in it and prevent its return from being complete.

Second Comment

The expenditure involved in simple consumption is expenditure which is itself destroyed without any return. It can be maintained only through the productive class, which in this respect can provide for itself. Thus this expenditure, when it is not employed in reproduction, ought to be regarded as sterile expenditure, and even as harmful, or as luxury expenditure, if it is superfluous and detrimental to agriculture.

The greater part of the expenditure of the *proprietors* is at least *sterile* expenditure; we can except only that which is undertaken for the maintenance and improvement of their property and for the expansion of its cultivation. But as the proprietors are by natural law entrusted with the care of the administration of their patrimony, and with the expenses involved in keeping it in repair, they cannot be confused with that part of the population which forms the purely sterile class.

Third Comment

In the state of prosperity of a kingdom whose territory was fully cultivated by the best possible methods, where trade was as free and unobstructed as possible, and where consequently the revenue of the *proprietors* could not be further increased, the *proprietors* would be able to spend *one-half* of their revenue in making purchases from the *sterile class*. But if the territory were not completely cultivated and improved, if roads were lacking, if there were rivers to be made navigable and canals to be constructed for the transport of products, the proprietors ought to economize on their expenditure with the *sterile class*, in order to undertake the expenditure necessary to increase their revenue and their enjoyments to the maximum possible. Until they had reached this point, their superfluous expenditure with the *sterile class*

¹⁸ *Faste de subsistance et luxe de decoration*. The concepts involved in the Physiocratic distinction between *faste* and *luxe* are discussed below, pp. 316 ff. R.L.M.

¹⁹ This is not normally the case in trade with the East Indies; except when it is carried on by foreign merchants who sell us what they have purchased, and who employ in our country, in purchasing products, the same money with which we have paid for their East Indian commodities. But it is not the same when this trade is carried on by our own native merchants, when it is restricted to exchanges between ourselves and the East Indians who want nothing but money.

would be luxury expenditure, detrimental to their opulence and to the nation's prosperity; for everything which is disadvantageous to agriculture is detrimental to the nation and the state, and everything which favours agriculture is profitable to the state and the nation. It is the necessity of the expenditure which the proprietors alone can make for the expansion of their wealth and for the general well-being of society, which makes security of landed property an essential condition of the natural order of the government of empires.

Under the feudal political system this landed property was formerly regarded as the basis of the military strength of the nobles, but it was only the ownership of the land which people thought about. That is why so many curious customs and laws relating to the inheritance of landed property still exist today in spite of the changes which have occurred in the monarchy, while at the same time so little attention has been paid to security of property in the movable wealth necessary for cultivation, which alone can turn landed property to advantage. It has not been sufficiently recognized that the true foundation of the military strength of a kingdom is the nation's prosperity itself.

Rome knew how to conquer and subjugate many nations, but she did not know how to *govern*. She despoiled the countries fallen under her domination of their agricultural wealth; thenceforth her military strength disappeared; the conquests which had enriched her were taken from her; and she found herself left alone and defenseless against the ravages and violence of the enemy.

Fourth Comment

In the regular order which we are following here, the total amount which the *proprietors* and the *sterile class* pay out every year for their purchases is returned every year to the *productive class*, so that it may pay the annual revenue of *two milliards* to the *proprietors*, and the interest on its original and annual advances to itself.

If anything were taken away from this distribution of expenditure to the detriment of agriculture, or if anything were taken away from the returns of the cultivator, by any exactions or impediments to trade, a decline in the annual reproduction of the nation's wealth and a reduction in the population would be bound to follow—a decline easy to demonstrate with the aid of calculation. Thus *it is with reference to the order of the distribution of expenditure, according to whether it is returned to or taken away from the productive class, according to whether it increases or diminishes the advances of this class, and according to whether it maintains the prices of products or causes them to fall, that we may calculate the effects of the good or bad leadership of a nation.*

The *sterile class* can spend for the subsistence of its agents only about one-half of the *two milliards* which it receives, because the other half is used in purchasing raw materials for its goods. Thus this class constitutes only about one-quarter of the nation.

We have seen that the returns of *three milliards* accruing to the *productive class* include *one milliard* for the interest on the original and annual advances of this class, which is continually employed in keeping these advances in good repair. Thus only about *two milliards* remain with this class for the expenditure of its own immediate agents, whose number is consequently about double that of the agents of the *sterile class*. But each of them, with the aid of labouring animals, can generate a reproduction which can support eight men, i.e. his own family, which may be assumed to consist of four persons, and one other family containing the same number of persons belonging to the *sterile class* or to the *class of proprietors*.²⁰

If it is desired to make a more detailed examination of the distribution of a nation's expenditure, it will be found in Chapter 7 of the *Rural Philosophy*. It will be seen there that in addition to the *five milliards* which

²⁰ The population of the kingdom in the present case is assumed to be 30 million, as compared with 16 million in some earlier versions of the *Tableau*. But the proportions in which families are divided between the different classes, and the relative amounts of their consumption, are the same. As before, one-quarter of the families are assumed to belong to the sterile class, one-half to the productive class, and one-quarter to the class of proprietors. Consumption per head in the class of proprietors is twice as high as it is in the other two classes: thus the proprietors consume two value-units, the productive class two value-units, and the sterile class one value-unit. See below, pp. 227 and 282-3. R.L.M.

are assumed here to make up the nation's portion, there are other expenses: such are commercial costs and the fodder for the labouring animals employed in cultivation. These expenses are not included in the distribution of expenditure represented in the *Tableau*, and when they are added to the latter they cause the total value of the annual reproduction to rise to 6,370,000,000. But it should be noted in this connection that the commercial costs may increase, to the detriment of the nation, or diminish, to the benefit of the nation, according to whether this branch is or is not directed in contradiction to the natural order.

Fifth Comment

In the pattern of expenditure which has just been described, it has been assumed that the nation trades only with itself. But there is no kingdom whose territory produces all the kinds of wealth suitable for the enjoyment of its inhabitants: thus there must be external trade, by means of which a nation sells abroad a part of its products in order to buy from abroad those which it needs. Nevertheless, since it can buy from abroad only as much as it sells abroad, the state of its expenditure must always be in conformity with the reproduction which its territory annually regenerates. Thus the calculations regarding this expenditure can be regularly based on the quantity of this reproduction itself, abstracting completely from external trade, the details of which are indeterminate, incalculable, and useless to inquire into. It is enough to draw attention to the fact that in a situation where there is free competition in external trade there is simply an exchange of value for equal value, without loss or gain on either side.

So far as the costs of transport are concerned, the nation and the foreign country each pay for them in their sales or purchases; and they constitute for the merchants a fund separate from that of the nation, because in the external trade of agricultural nations every merchant is a foreigner relatively to the interests of these nations. Thus an agricultural kingdom which engages in trade unites in itself two nations which are distinct from one another: one, bound to the territory which provides the revenue, constitutes the essential part of the society; and the other is an extrinsic addition which forms part of the general republic of external trade, employed and paid by the agricultural nations. The costs of this trade, although necessary, should be regarded as a burdensome expense, taken out of the revenue of the proprietors of the land. Thus it ought to be freed from all forms of monopoly and from all surcharges which would fall in a ruinous way on the revenue of the sovereign and the other proprietors.

When there is free competition in external trade, the prices which are current among the trading nations ought to form the basis of the calculation of the wealth and annual expenditure of nations which have an immune and unobstructed trade.²¹ External trade is more or less extensive according to the diversity of the consumption of the inhabitants, and according to whether the products of the country are more or less diverse. The more diverse are the products of a kingdom, the less will be its imports and exports, and the more will the nation be able to save on the costs of external trade. Nevertheless, external trade should always be quite free, cleared of all encumbrances and exempt from all impositions, because it is only by means of the communication between nations which it maintains that we can make sure of always having the best possible price for the territory's products in internal trade, and the highest possible revenue for the sovereign and the nation.

Sixth Comment

It can be seen that the same products pass several times through the hands of the merchants and artisans; but attention should be drawn to the fact that these repetitions of sales and purchases, which unproductively increase *circulation*, represent only the transposition of commodities, and an increase in costs, without any

²¹ I.e. exempt from all fiscal, seigneurial, etc., contributions, all forms of monopoly, and all salaries of inspectors and other useless officials. Trade, like agriculture, should have no other government than the natural order. In every act of trade there is a buyer and a seller, who stipulate their interests freely and in contradiction with one another; and their interests, regulated in this way by those who are the sole competent judges of them, are in conformity with the public interest. Any intervention of officers invested with authority is foreign to it, and all the more dangerous because one has to expect in them ignorance and even more formidable motives. Monopoly in trade and agriculture has only too often found protectors: the planting of vines, the sale of spirits of cider, freedom of trade in corn, and the import of foreign manufactured commodities, have been prohibited; the manufactures of the kingdom have obtained exclusive privileges to the detriment of one another; manufacturing entrepreneurs have been compelled to employ foreign raw materials to the exclusion of those of the country, etc. Faint and false lights have glittered in the darkness, and the natural order has been turned upside down by individual interests, which always hide under the cloak of general welfare and make their requests in its name.

production of wealth. Thus the sum of the products is reckoned with reference to quantity and their prices when they are sold at first hand.

The more these prices are subject to the natural order, and the more they are constantly high, the more profitable they are in the exchanges made with foreign countries, the more they stimulate agriculture,²² the more they maintain the value of the various products of the territory, the more they increase the revenue of the sovereign and the proprietors, and the more also they increase the nation's currency and the sum of the wages paid in return for the labour or employment of those who are not original possessors of products.

The employment of these wages, and their good or bad distribution, contribute greatly to the prosperity or decline of a kingdom, to the regularity or irregularity in the habits and customs of a nation, and to the increase or decrease in the population. Men may be harassed in the countryside and attracted to the capital by the pleasures of luxury and sensuality, or alternatively they may be evenly distributed throughout the provinces. In the latter case they can maintain consumption close to the place of production, whereas in the other case they cannot avoid high transport costs which make products fall to a low price in sales at first hand and cause the territory's revenue and the total of wages and population to diminish.

The extent of resale trade²³ depends upon the energy and means of the merchants; but that of an agricultural nation is regulated by the annual reproduction of its territory. The profits which provide a clear gain for the merchants of a nation should never be confused with the wealth of the nation itself, for the extent of the merchants' annual trade cannot exceed the sales of the existing reproduction of the territory, as determined by the current prices paid in sales at first hand. The merchant tries to buy at the lowest possible price and to sell at the highest possible price, so as to make his gain as high as possible at the expense of the nation: his individual interest and that of the nation are opposed. Nevertheless, taking a broad view of the matter and considering all its ramifications, it is not the case that the whole body of merchants, and even each member of this huge body, does not have a very real interest in products being constantly sold at first hand at the highest possible price. For the more they are sold at high prices, the more net product cultivation yields; the more net product cultivation yields, the more profitable it is; the more profitable cultivation is, the more it expands on every hand; the more production it regenerates, the more returns it provides for the cultivators, the more revenue for the sovereign, the proprietors, and the tithe-owners, and the more wages for all the other orders of citizens; the more does expenditure of every kind increase, the more does trade find objects and opportunities and the more energetic does it become; and consequently the more does the sum total of the gains of the merchants increase, precisely as a result of competition, which, in each individual case, prevents these gains from being excessive to the detriment of the prices of the products. But there are very few merchants who look thus far into the matter, and still fewer who are capable of sacrificing a present gain for the certainty of these considerable future benefits. Thus it is never the merchants, but rather the needs of consumers and the means which they have to satisfy them, which in the first instance ensure the prices of products in sales at first hand. The merchants never cause prices or the possibility of trade to come into being: it is the possibility of trade and the intercommunication of prices which causes merchants to come into being.²⁴

Seventh Comment

We have said nothing about the stock of money which circulates in each nation's trade, and which is vulgarly regarded as the true wealth of the state, since, as it is said, 'with money one can buy everything one needs'. But people do not ask themselves with what one can procure money for oneself. Money does not give itself away for nothing, however: it costs as much as it is worth to the man who buys it. It is trade which supplies it to those nations which do not possess gold or silver mines; but these nations would have

²² The interest of the cultivator is the mainspring of all economic operations and all agricultural progress: the more that products constantly sell at high prices, the more assured are the annual returns of the farmers, the more cultivation is extended, and the more revenue the land brings in, as much through the proper price of the products as through the increase in the annual reproduction. And the more reproduction increases, the more the wealth of the nation is expanded, and the more the power of the state is augmented.

²³ *Commerce de revendeur*. R.L.M.

²⁴ It is the same with them as with a well-rope and the use to which it is put. These do not constitute the source of the water which is in the well: on the contrary, it is the water which is in the well, together with the knowledge and the need which we have of it, which is the cause of the use to which the rope is put. Enlightened men do. not confuse causes with means.

neither gold nor silver if they did not possess the wherewithal to pay for them; and they will always have as much of them as they want to buy, or as it suits them to buy, if they have products to give in exchange.²⁵

I say as much as it suits them to buy, because money is not a form of wealth which men need for their enjoyment. What we have to obtain are the goods necessary for life and the annual reproduction of these goods themselves. To convert these products into money, by abstracting this money from expenditure which is beneficial to agriculture, would be to reduce correspondingly the annual reproduction of wealth. The stock of money in a nation can increase only so far as this reproduction itself increases; otherwise an increase in the stock of money could be brought about only to the detriment of the annual reproduction of wealth. And the decrease in this reproduction would necessarily, and quickly, bring in its train a decrease in the stock of money and the impoverishment of the nation. The stock of money in a nation can decrease, however, without there being any decrease in the wealth of that nation, because one can in numerous ways make up for a lack of money when one is wealthy and has a free and unobstructed trade; but nothing can make up for a lack of annual reproduction of the wealth suitable for men's enjoyment without involving a loss. We should even expect that the money stock of a poor nation would require to be proportionately greater than that of a wealthy nation; for there remains to both only the amount which they need for their sales and purchases. And in poor nations there is a much greater need for the intervention of money in trade: they have to pay for everything in cash, because there is scarcely anyone whose promise can be relied on. But in wealthy nations there are many people who are known to be wealthy, and whose written promise is regarded as quite safe and fully guaranteed by their wealth, so that all the major sales are made on credit, i.e. through the medium of sound bills which stand in the place of money and greatly facilitate trade. Thus it is not with reference to the greater or lesser quantity of money that one should judge a state's opulence; also it is estimated that a money stock equal to the revenue of the proprietors of the land is much more than sufficient for an agricultural nation in which circulation takes a regular course and trade is carried on with confidence and under conditions of complete freedom.²⁶

So far as the universal trading republic spread over the different countries is concerned, and the small purely trading nations which are only parts of this huge republic and which can be regarded as capital cities or if you like as principal counting-houses, the total of their coined money is proportionate to the extent of their resale trade. They increase this total as much as they can by means of their profits and their savings, in order to expand the capital employed in their trade; money is their appropriate patrimony; and merchants employ it in their purchases only in order to get it back with a profit in their sales. Thus they can expand their money stock only at the expense of the nations with whom they trade. It is always kept in reserve in their hands; it goes out of their counting-houses and circulates only in order that it should come back again together with an additional amount; thus this money does not form part of the wealth of agricultural nations, which are always limited to their reproduction, out of which they continually pay the gains of the merchants. The latter, in whatever country they may happen to reside, are bound to other nations by their trade; it is their trade, indeed, which is their fatherland and the store-house of their wealth; they buy and sell both where they live and where they do not live; and the area over which they carry on their occupation has no determinate boundaries at all and is not confined to any particular territory. Our merchants are also other nations' merchants; other nations' merchants are also our merchants; and all of them also carry on trade with one another. Thus their trading connections penetrate and extend everywhere, their final goal always being money, which trade itself supplies and distributes among the nations in conformity with the prices determined by the natural order which regulates from day to day the market value of the products. But agricultural nations look at things from another point of view, more useful for them and more far-reaching: they should seek only for the greatest reproduction possible in order to increase and perpetuate the forms of wealth suitable for men's enjoyment. Money for them is only a minor form of intermediary wealth which would disappear in a moment if there were no reproduction.

²⁵ Cf. Hume's view that the stock of money will tend to be "nearly proportionable to the art and industry of each nation" (*David Hume: Writings on Economics*, ed. E. Rotwein, p. 63), R.L.M.

²⁶ A long note is inserted by Quesnay at this point. Since most of it is substantially identical with the note translated on pp. 134-5 above, and the remainder contains material which is substantially duplicated in other items translated in this volume, it has been omitted. R.L.M.