

Chapter 5

Capitalism and Population: Marx and Engels Against Malthus

An Ambivalent Hostility

The violence of the attacks on Malthus by Marx and Engels and the virulence of their criticism cannot but strike the reader of *Capital* and especially the *Theories of Surplus Value*, although they are not overtly political or polemical works (like *The Communist Party Manifesto*, *The Eighteenth Brumaire Of Louis Bonaparte*, *The Class Struggle in France* or *The Poverty of Philosophy*). The criticism is directed towards the law of population, which is the very core of Malthus's thinking and the main complaint against him is the accusation of plagiarizing from James Stewart, Benjamin Franklin, Wallace and Townsend.¹ Further, had Marx and Engels confined themselves to refuting the demographic aspects of Malthus's thinking, their persistence in this matter could be explained quite easily for he was held intellectually responsible for the 1834 Poor laws reform abolishing all assistance at the parish level. But the truth is far more complex: Marx had taken care to acquaint himself with Malthus's work in the field of economics and his attitude was much more ambivalent. He scornfully rejected his theory of value calling it "a very model of intellectual imbecility", but also gave him credit for his decisive inputs as compared to Ricardo.² He respected Ricardo intellectually, but he accused Malthus of servilely defending the interests of the landed aristocracy. It therefore follows that there must be something fundamental in Malthus's writings that drives Marx to refute him so persistently. Explaining Marx's ambivalence towards Malthus is the primary aim of this chapter.

Marx's and Engel's principal thoughts on population are to be found in *The Condition of the Working Class in England in 1844* (published by Engels in 1845), *Capital* (1867) and the *Theories of Surplus Value*, written between 1861 and 1863, but published by Kautsky in 1905 after Marx's death.³ Like Malthus, Marx too can be interpreted at two levels. *Capital* is essentially a treatise on economic theory

¹ *Capital*: I, footnotes 26: 633; 5: 675: 37: 677; *Theories*, Vol. VI: 42, 94 and Vol. IV: 6.

² *Theories*. . . , Vol. VI: 38, and his "peculiar considerations" Vol. VI: 60.

³ Translated into French under the title *Histoire des doctrines économiques*. Only Book I of *Capital* was published during Marx's lifetime. The manuscripts of what would become Books II and III

and claimed as such, population being one of the three main variables in his analysis together with land and capital. However, jointly with Engels, Marx made a significant contribution as a sociologist as his theoretical claims are supported by very precise examples taken from English life in the mid-nineteenth century. He constantly tried to prove what he proposed at the theoretical level, just as Malthus had done before him, to demonstrate the universality of his population principle. The second aim of this chapter is to establish a link between the economic and demographic aspects of Marx's writings and we shall therefore approach them from a theoretical as well as empirical viewpoint. Marx is very precise in conceptualising and analysing the principal demographic variables but, unlike his contemporaries, he is more interested in mortality and the various forms of mobility than in fertility. Why should it be so when other writers of his time, undoubtedly fascinated by the implacable logic of Malthus's *Essay on the Principle of Population*, were eager to either refute him or support him on the vital point of fertility while ignoring the other variables?

We intend to show that the answers to these two questions, viz. Marx's ambivalence towards Malthus and the nature of his views on population, are actually directly linked with two fundamental theoretical elements of *Capital*, viz. accumulation and surplus value, referring to his main interest which is the prediction of the collapse of capitalism. When analysing Malthus's thinking, it was necessary to start with demography and then go on to economics, following the chronological order of his writings. It must be remembered that *the Essay on the Principle of Population* was published in 1798 and the subsequent editions were profoundly revised before the publication of the *Principles of Economics* in 1820. In the case of Marx and Engels, it is necessary to move in the opposite direction because demographic theory can only be understood on the basis of economic theory. As a matter of fact, though they refer to Malthus and population much before the publication of Book I of *Capital* in 1867,⁴ their ideas do not have the strict coherence that they gained from 1867 onwards. In fact, when they denounced the Poor Laws or the crises induced by capitalism, it is evident that they were still trying to sort out their ideas until the final epistemological change occurred in 1845. It is necessary to start afresh from basic economic concepts and once the theoretical base is established, the law on population logically fits into the structure, both theoretically and empirically. Let us finally point out that this chapter confines itself to Marx and

were published by Engels in 1885 and 1894 and the draft of Book IV (Theories of Surplus Value) was published by Kautsky in 1905.

⁴ A careful reader can discern references to Malthus and to population in general in articles published in 1848–1849 in the *Neue Rheinische Zeitung*, but they are not expressed in the form of a theory. For example, the journal *Die Constitution* contains a “fairly long” report on a lecture by Dr. Marx in Vienna on 2 September 1848, at the first meeting of the First Workers' Union. It says, “The speaker also talks of the remedies used and their inadequacy, as for example Malthus's theory of overpopulation.” Vol. III: 475. Also see issue No. 60, 30 July 1848, regarding a mobile scale of duty on cereals, proposed by Hansemann-Pinto, which reminds Marx of Malthus's double progression (Vol. I: 330).

Engels and their criticism of Malthus. It does not deal with either Darwin, whom Marx and Engels rightly considered Malthus's heir, or with later anti-Malthusian doctrines formulated by Marxists and orthodox Communists, except for brief allusions when they are necessary to understand Marx (e.g. Rosa Luxembourg and Lenin).⁵

It is surprising indeed that there should be so few in-depth studies, or at least studies easily available in English or French, dealing with the thoughts of Marx and Engels on population. Among the French sociologists, for example, Raymond Aron peremptorily declares that Marx "is first and foremost a sociologist and economist of the capitalist regime." Referring to the demonstration of pauperisation, he dismisses it in one line as "a socio-demographic mechanism based on an unemployed reserve army of workers" and does not return to the subject again. Similarly, in *Homo Aequalis* Louis Dumont notes that Marx's conclusions and results regarding "the exuberant production of socio-historical analyses" are "very unevenly integrated in his general theory", but when he quotes Malthus in the same chapter, he compares him with Ricardo and not with Marx.⁶ As it could be expected, the most meaningful writings are those of economists and demographers. As regards specialists of economic theory, the main contributions have come from Sidney H. Coontz, who focuses on the concept of the demand for work, and Ronald Meek, whose indispensable work brings together the main writings of Engels and Marx, preceded by a long introduction.⁷ Among the early XXth century specialists, René Gonnard devotes barely two pages to Marx. He rapidly presents the two laws of population put forth by Marx and Malthus and concludes with the astonishing statement, "It is curious to note that Malthus was, however, a precursor of Marx, due to his general attempt to explain economic development from the viewpoint of historical materialism."⁸ As for Charles Gide and Charles Rist, they do not say a word about what Marx has to say regarding Malthus or even his theory of value. Joseph Schumpeter briefly mentions Marx's and Malthus's laws on population in the preface and refuses to get involved in any argument about them. Recent publications by specialists of the history of economic theory have a limited approach and even tend to be evasive on

⁵ The assessment by Berelovitch in *Malthus hier et aujourd'hui*, suggests that in Russia Marx is essentially cited by nineteenth century communists (pp. 405–415); the twentieth century point of view is confirmed by Behar quoting Spirikine, Yakhot, Gleserman, Koursanov, Urlanis, Valentey and Guzevaty (1976: 9–12, 21). Regarding Marxist thinkers, see Gani (1979) on Laffargue and Guesde; Meublât (1975) and Behar (1974) on Otto Bauer, Rosa Luxemburg, Antonio Gramsci and Paul Sweezy. Articles by McQuillan (1982) and Brackett (1968) are more thorough than those by Mertens (1962) and Sauvy (1966). One of the popular works by Alfred Sauvy with the enticing title (*Malthus et les deux Marx, De Malthus à Mao-Tsé-Toung*) does not deal with the subject in depth.

⁶ Raymond Aron: *Les étapes de la pensée sociologique*: 144, and again 145, 158, 177; on the socio-demographic mechanism of the unemployed army of workers: 170. Louis Dumont, *Homo Aequalis*: 204–205.

⁷ *L'épouvantail malthusien*, by Jean Fréville, which can be considered as another example of orthodox Marxism, is outdated and, in the final analysis, also quite superficial.

⁸ 1923: 324.

this subject which is nevertheless so vast (Heilbroner, 2001). Finally, even a systematic survey (1969–2004) of the *History of Political Economy*, considered to be a reference journal on the history of economic thought, proves to be disappointing. There are relatively few articles on Marx and hardly any mention (even indirect) of the law of population through references to the organic composition of capital.⁹ The debate in the *American Economic Review* starting in 1983 between Baumol, Hollander and Ramirez is more meaningful even though it is rather confused. It was continued in 1988, 1991 and 1995 in the *History of Political Economy* by Cottrell, Darity, Green and Brewer. Essentially, these writers differ on one point: whether Marx succeeded in demonstrating that the growth of the industrial reserve army and, consequently, the growth of wages are independent of population growth. In other words, if population is assumed to be an exogenous and uncontrollable variable, Marx failed to refute Malthus's theory. On the other hand, Marx and Malthus have seldom been read in the light of present-day environmentalist concerns. Michael Perelmann has devoted significant and convincing studies to the position of Marx and Malthus on the subject of rarity while a recent issue of the journal *Organization and Environment* is questionable, if not ludicrous.¹⁰

What about demographers? E.P. Hutchinson (1967), Johannes Overbeek (1974), John R. Weeks (1992), William Petersen (1988), who say little about Marx, are almost silent about the antagonism between Marx and Malthus or pass very swiftly over it. Only Cem Behar (1974, 1976) delves deep into the Marxist theory of population; but, on the other hand, he hardly touches on Malthus. A systematic survey of the five main journals since they were started, viz. *Demography* (1964), *Genus* (1942), *Population* (1945), *Population Studies* (1950), *Population and Development Review* (1985), yields a poor harvest. *Malthus hier et aujourd'hui*, a collective work touching upon a wide variety of disciplines, which was the result of an international seminar in 1981, gives an idea of the present state of thinking on the subject. In her review of the papers presented during the session on "Malthus and Socialism", Michelle Perrot restricts herself to only two paragraphs on Marx. And in the session on "Malthus the Economist", no paper deals seriously with the relationship between the ideas of Marx and Malthus.¹¹ Referring to an

⁹ The "mini-symposium" on Marx in 1995, which brought together ten authors, mentioned population in two places: 3 pages in an article on "Wages and the Value of Labour-Power" and sixteen lines by Foley on pauperisation, to affirm without argument that Marx "simply would not admit the possibility that capitalist industrialization would raise workers' standards of living as in fact it did" (Foley, 1995: 163).

¹⁰ The first, published in a brief presentation of Marxist theory, treats it as though it were a logical development of the latter and does not hesitate to surreptitiously slip in the sentence, "in the capitalist system, men should adapt themselves to the environment which results from the tendency of capitalism to create widespread unemployment" (Wiltgen, 1998: 453). The other article gives the same importance to the devastation of land denounced by Marx and to the forced exodus of men due to relative overpopulation, which is, to say the least, disproportionate (Gimenez, 1998: 463).

¹¹ *Malthus Past and Present*. . . (1983: 261–262). Jacques Wolff devotes 21 lines to this topic which include a comparison between Marx and Keynes (1983: 68). But Martin Bronfenbrenner, Guy Caire and Jean Cartelier (all in the 1984 French edition of that book) are silent on the subject

unpublished paper by Raimondo Castagno Azevedo, Michelle Perrot says without taking sides, “knowing whether Marx had actually read Malthus” is subject to debate.¹²

Last, the appendix to this chapter discusses the purely philosophical reading of Marx, which has been proposed by the Althusserian school, which had the great merit to raise the problem of the epistemological status of the population, but excludes all the other levels of interpretation. It will be shown that this narrow line generates inner epistemological contradictions.

The Poverty of the Working Classes and the Poor Laws

Engels wrote one after the other, *Outlines of a Critique of Political Economy*, an article published in the short-lived *Deutsch-Französische Jahrbücher* (only one issue of which appeared in February 1844) and a book, *The Condition of the Working Class in England in 1844*, which continues to serve as a frame of reference for writers on English capitalism. He was well placed to do this as he was born in a family belonging to the German industrial bourgeoisie and was well aware of the realities of the business world even as he frequented radical circles, and especially because he had been living since 1842 in Manchester, the capital of the cotton trade, where he conducted a genuine social survey.¹³ His analysis of the functioning of the labour market, which opened the way to the concept of relative overpopulation, regarding which Marx would theorise in *Capital*, is simultaneously micro- and macroeconomic. He pointed out that following the deterioration of working conditions, workers married early and increased their fertility so that they could earn faster from the extra income brought in by their wives and children. Engels thus combined Malthus’s population theory with Adam Smith’s analysis to show that the workers’ behaviour was directly governed by the ruthless competition they had to face to obtain employment. At the macroeconomic level, he explained how, thanks to the flexibility of capitalism and to what Rosa Luxemburg and Lenin would turn into a theory based on the concept of imperialism, the demand for work went up, as a result of which the population of the British Empire continued to grow instead of decreasing. He finally concluded his analysis of this ruthless competition by emphasising the need for an “unemployed reserve army of workers” and the

of Marx. According to Michel Herland, “Marx sought to ridicule Malthus the theoretician because he saw in him a political enemy.” (1984: 293). As for A.W. Coats, he says that Marx is particularly brutal when he describes Malthus as a ‘plagiarist’, a ‘professionnal sycophant’ and an ‘ideologue of the landed aristocracy’ (1984: 310); only Etienne Van de Walle questions the reason for this hostility (1984: 425), but he does not provide an answer.

¹² Perrot: *ibid.*: 261. Going by a chapter written by this writer in a collective work published in 1977, this is hardly what he says: Marx had well and truly read Malthus, but, due to lack of time, he never applied himself to an exhaustive rebuttal. And as this chapter will show, there is no doubt on this point.

¹³ Regarding the quality of the research done by Engels, it is interesting to read Eric Hobsbawm’s preface to *The Situation . . .*: 7–23.

so-called “surplus population” of England. Then he went on to denounce the “social policy” formulated in 1833 following the amendment of the Poor Law of 1601, firmly establishing a link between Malthus’s theory and “surplus population”. He declared, “The most open declaration of war of the bourgeoisie upon the proletariat is Malthus’s Law of Population and the new Poor Law framed in accordance with it.” He challenged conservative opinion according to which there was no point in continuing aid (e.g. the *Speenhamland System*, which decreed in 1795 that the relief given to parishes should be proportionate to the number of children and the price of bread), on the pretext that it would spur the growth of this surplus population by encouraging “improvident marriages” and a higher fertility. But when he wrote that this aided population puts a strain on the wages of employed workers, it must be noted that he subscribed to the classical theory of a wage fund. The break with classical economics would occur later under the influence of Marx. Finally, he believed that those who amended the Poor Law did not dare to apply Malthus’s theory in its entirety as the allegory of the banquet implied that the man who was incapable of satisfying his needs was surplus on earth and condemned to die of hunger. “Good,” said they, “we grant you poor a right to exist, but only to exist; the right to multiply you have not, nor the right to exist as befits human beings. You are a pest, and if we cannot get rid of you as we do of other pests, you shall feel, at least, that you are a pest, and you shall be at least held in check, kept from bringing into the world other ‘surplus.’” Workhouses were invented and their regulations conceived “so as to frighten away everyone who has the slightest prospect of life without that form of public charity”.¹⁴

This condemnation was based on the conventional interpretation of Malthus, viz. regulating surplus population through mortality, and denouncing the allegory of the banquet, which justified the absence of any questioning of social inequalities. It thus ignored other aspects of Malthus’s thinking and amounted to an instinctive rejection of the Malthusian doctrine, so characteristic of radical English reformers (like William Godwin or William Cobbett) and French socialists all through the nineteenth century. In 1845, Engels’ thinking represented the optimism inspired by the Enlightenment for another reason. The other way to refute Malthus was to reject his contention that the means of subsistence are insufficient. On the basis of Archibald Alison’s *The Principles of Population in Connection with Human Happiness*, published in 1840, Engels held that “the ‘overpopulated’ Great Britain could be so developed in the course of ten years to produce sufficient corn for six times its present population. Capital increases daily; labour power grows together with population; and science masters natural forces for mankind to a greater extent every day.” This is so because scientific progress is as limitless and rapid as the growth of population and he gave the example of agriculture’s debt to chemistry and particularly to Humphry Davis and Justus Liebig. How can it be it possible to talk of overpopulation while “the valley of the Mississippi alone contains enough waste land to accommodate the whole population of Europe, while altogether only one third of the earth can be described as cultivated and while the productivity of this

¹⁴ *The Situation*. . . : 348.

third could be increased six fold and more merely by applying improvements that are already known”? Finally, in 1844, he believed that he could still resolve, thanks to science and education, the contradiction raised by Malthus, “With the fusion of those interests which now conflict with one another, there will disappear the antithesis between surplus population in one place and surplus wealth in another.”¹⁵ This shows to what extent Engels’ thinking was still very idealistic. Such is the essence of the anti-Malthusian arguments put forth by Engels. What does Marx have to say?

During the summer of 1844, an article by Arnold Ruge titled “The King of Prussia and Social Reform” appeared in *Vorwärts*, a magazine published by a group of German revolutionaries exiled in Paris. On 7 and 14 August 1844, Marx published in the same magazine a critical review of this article as a rebuttal of the belief that the problem of chronic poverty in Prussia was caused above all by the shortcomings of the administration and the lack of philanthropic action. Marx had closely followed the developments in England and refused to pay attention to the differences between the Whigs and the Tories. The former held that the principal cause of poverty was the existence of large landed estates and the ban on the import of wheat. According to the Tories, who defended the landed aristocracy, the real cause was liberalism and ruthless competition unleashed by industrial capitalism. Both the political parties blamed each other’s political conduct, but neither saw the causes of pauperism in “politics in general” and “neither of the two parties ever dreamt of a reform of society”.¹⁶ So England, he continued, is the only country characterised by a large-scale “*political* action against pauperism” that attributes the acute nature of present-day poverty to the Poor Law and hence to shortcomings in the management of poverty. But the comparison with Prussia stops there. In England, this national epidemic was attributed to the worker’s lack of education, which reduced him to poverty and drove him to revolt, which might – and here Marx quotes Eugène Buret – “affect the prosperity of manufactures and trade (. . .) and diminish the stability of political and social institutions.”¹⁷ Marx wondered why the English bourgeoisie, which had dealt with poverty *politically*, had gone astray to the point of “misunderstanding the general significance of universal need” and distress whose general importance had been accentuated “partly through its periodical recurrence in time, partly through its extension in space, and partly through the failure of all attempts to remedy it.” Thus he came back to Malthus, pointing out that in England, unlike Prussia, “Pauperism is looked upon as an eternal law of nature, according to the theory of Malthus.” So the English Parliament combined this theory with the opinion that “pauperism is *poverty*

¹⁵ Quotations: *Esquisse*. . . : 50, 58, 61–62.

¹⁶ *Gloses*. . . : 402. On Marx ‘s views on natural resources, see Pearlman, 1985.

¹⁷ Interesting notes can be found in Althusser (1996, 72–74) on the difference between England and Prussia as well as on Prussia’s “historical incapability of bringing about national unity and a bourgeois revolution”. This was the cause of “ideological overdevelopment” of which Hegel is a prime example, while the reading of theoretical works by French and English writers together with purely historical works prepared Marx for his break with Hegelian idealism.

which the workers have brought on themselves, and that it should therefore be regarded not as a calamity to be prevented but rather as a crime to be suppressed and punished.”¹⁸ Marx thus complements Engels when it comes analysis of the reform of the Poor Laws. Even though both of them firmly link it with the Malthusian theory, Marx goes further than Engels by exposing the limitations of bourgeois ideology owing to the “inability,” writes Meeks, “to understand the problem of its uncritical acceptance of Malthus’s explanation in terms of an ‘eternal law of nature’.”¹⁹

The Epistemological Break of 1845 and Population

In 1965, Louis Althusser pointed out that the young Marx, who wrote *The German Ideology* broke away from his Hegelian idealism in 1845 to write his major works showing proof of maturity like *Capital* (1867) and the theories of surplus value, written between 1861–63 but published after his death by Engels and Kautsky.²⁰ In 1969, in the foreword (*Avertissement aux lecteurs*) to a new edition of *Capital*, Althusser qualifies his judgement. The preface written in 1859 to *A Contribution to the Critique of Political Economy* is still profoundly Hegelian and evolutionist because, even though “something decisive started in 1845, Marx still had to put in a lot of work before he could translate into truly new concepts the revolution accomplished with Hegel’s ideas.”²¹ We will come back later to Althusser’s arguments and to the total absence of any mention of population in his book *Lire le Capital* which is surprising because if there is one point on which Marx takes a definite position against Hegel, it is the conceptualisation and theorisation of population.

Applying the Method of Political Economy to Population

After writing *A Contribution to the Critique of Political Economy*, Marx denounced the reification of population by economists. It is significant that the section titled “The method of political economy” begins with the example of population, as if Marx believed that it was the best example for denouncing the claim that this bourgeois science was capable of separating facts from their social base. “When examining a given country the economists begin with its population, the division of the population into classes, its distribution between town and country. They carry on with hydrography, the different branches of production, export and import, annual

¹⁸ Ibid.: 403–405. Also see p. 408. According to Eugène Buret, Marx quotes an anonymous pamphlet by “Dr Kay”. E. Buret took this extract from the 11th edition of Kay’s pamphlet (who was later found to be Sir J-D Kay-Shuttleworth) published in 1839. Buret’s book, *De la misère des classes laborieuses en Angleterre et en France*, appeared in 1840.

¹⁹ *Op.cit.*: 53.

²⁰ *Lire le Capital*, particularly 345–362.

²¹ Althusser, *Avertissement*. . . : 21.

production and consumption, prices, etc (...). Population is an abstraction if, for instance, one disregards the classes of which it is composed. These classes in turn remain empty terms if one does not know the factors on which they depend, e.g., wage-labour, capital, and so on. It would seem to be the proper thing to start with the real and concrete elements, with the actual preconditions, e.g., to start in the sphere of economy with population, which forms the basis and the subject of the whole social process of production. Closer consideration shows, however, that this is wrong. It is a sham that results in a chaotic interpretation of everything, for one would arrive analytically at increasingly simple concepts; from imaginary concrete terms one would move to more and more tenuous abstractions until one reached the most simple definitions." The right method, on the contrary, would be to "make the journey again in the opposite direction until one arrived once more at the concept of population, which this time is not a vague notion of a whole, but a totality comprising many determinations and relations". Having denounced this pseudo-scientific method, he goes on to attack the basics of false science. "The first course is the historical one taken by political economy at its inception (...). The first procedure attenuates meaningful images to abstract definitions, the second leads from abstract definitions by way of reasoning to the reproduction of the concrete situation. Hegel accordingly conceived the illusory idea that the real world is the result of thinking which causes its own synthesis, its own deepening and its own movement; whereas the method of advancing from the abstract to the concrete is simply the way in which thinking assimilates the concrete and reproduces it as a concrete mental category."

Why did Marx choose population as an example? On this point, it may be a good idea to side with Althusser in the controversy that opposed him in 1963 to Garaudy and Mury. Marx was bent on "overturning" Hegelian dialectic and his *Introduction to the Critique of Political Economy*, written in 1859, is "a methodological text of the first order" where the word overturning does not appear, but which "speaks of its reality: namely; what are the conditions for a valid scientific use of the concepts of political economy. It is enough to think about this use to draw from it the fundamental elements of dialectics."²² From Althusser's point of view, population is actually the object of a double movement: idealisation into categories of figures that we would call individual socio-demographic data and then the substantiation of these categories, irrespective of their participation in the dialectic balance of power. Thus, when one talks of a rural exodus and of push and pull factors, the deeper meaning is lost, because leaving the countryside after being expropriated is not the same as voluntary migration. And if the need for this theoretical break with Hegelian idealism is illustrated in Marx's case by the example of population, it is not an accident. It is, as we shall see, the prerequisite that allows Marx to move to the analysis of primitive accumulation, which in its turn gives a theoretical perspective to population movements before the industrial revolution. The crises of capitalism

²² Althusser, *Pour Marx*: 184. The expression is found in the afterword of the second edition of *Capital*.

show how Marx gave himself the means of cutting himself off from idealism, which is naïve, being more often than not trapped by the observation of reality. This is seen in the changes that occurred in relation to Engels' analyses.

From Engels to Marx: Analysing the Crises of Capitalism

In *The Condition of the Working Class in England in 1844*, Engels defines the overpopulation of England as an “unemployed reserve army of workers.” But in *Capital*, Marx uses the concept of an “industrial reserve army”. The change of adjective with *industrial* replacing *unemployed* is not without significance as it refers to a totally different conceptualisation. When Engels talks of unemployed workers, he does so in a passage describing the nature of commercial and ruthless competition which emphasises the key role played by the capitalist.²³ The latter performs his function in an environment over which he has little control and although he knows the quantity of a particular product bought in the course of a year in the markets of various countries, he does not know anything about the market demand for the product, the stocks available or the volume exported by his competitors, which he can assess only roughly on the basis of price fluctuation. And since all company heads are in the same position, the slightest favourable sign in a foreign market causes a spurt in exports leading to the saturation of the market. As soon as the sales lose momentum, production stops and there is less work for workers employed in that branch of industry. So, with the advance of capitalism, markets become so unstable that the crisis affecting a particular market is not limited to it alone; all sectoral crises end up as a chronic crisis affecting all markets (domestic as well as foreign) and all branches of industry. Small enterprises cannot survive such situations and go bankrupt.

The rest of the argument takes us to the socio-demographic consequences of such crises caused by overproduction: “wages fall by reason of the competition of the unemployed, the diminution of working-time and the lack of profitable sales; want becomes universal among the workers, the small savings which individuals may have made are rapidly consumed, the philanthropic institutions are overburdened, the poor-rates are doubled, trebled, and still insufficient, the number of the starving increases, and the whole multitude of ‘surplus’ population presses in terrific numbers into the foreground. This continues for a time; the ‘surplus’ exists as best they may or perish.” The return to prosperity is unfortunately accompanied by fresh speculative action whose intensity is explained by the need to ensure an immediate return on capital. Engels believes that economic cycles last on an average for five to six years and concludes that, “English manufactures must have at all times, save the brief periods of highest prosperity, an unemployed reserve army of workers, in

²³ *Op.cit.*: 126–127. We have at times modified the quotations taken from the French translation and quoted the original English words as given in Meek, when they appeared to be more exact (*op.cit.*: 76–79).

order to be able to produce the mass of goods required by the market in the liveliest months.” To maintain this army in times of prosperity, the less active branches of industry provide the required labour, agriculture too contributes to the work force and women and children are put to work.

This analysis is directly related to the analysis of the labour market, even if it lays stress on the paroxysm caused by competition resulting in the creation of a reserve army whose strength goes up in the short term due to the workers’ mobility. Engels is quite clear and mentions the need to employ women and children and the rural exodus in the case of agriculture. But quite logically he does not foresee any mechanism for increasing labour supply apart from early marriage and high fertility because he describes short economic cycles, whereas it takes time for birth cohorts to take their place in the labour market, as Malthus observed earlier. The demand for labour was crucial for Malthus and the entire classical school, adjustments being made by hiring or dismissing surplus labour. It is therefore easy to see the need for a reserve army of *unemployed* workers. Engels was also limited by his reading of Malthus’s first *Essay* on another point, viz. regulation of population according to the means of subsistence. “Malthus, who carried the foregoing proposition of Adam Smith farther,²⁴ was also right, in his way, in asserting that there are always more people at hand than can be maintained from the available means of subsistence. Surplus population is engendered rather by the competition of the workers among themselves, which forces each separate worker to labour as much each day as his strength can possibly admit.”²⁵ We may therefore conclude that in 1844 Engels was still caught in the trap of Malthusian logic.

In *Capital*, especially in Chapter 25, the analysis of the crises caused by capitalism reveals a radical change of perspective. Marx was not interested in economic movements but in structural changes, while Engels, focused on cyclical crises. It is tempting to interpret this difference by opposing empiricism to theoretical construction with Engels playing the role of an observer and describing the true situation of workers in England in the 1840s. However, this interpretation is not quite satisfactory because throughout Book I of *Capital* there are numerous and particularly well documented pages, which are remarkable examples of sociology of labour. Marx, when analysing the need to employ of women and children, to extend working hours and increase the intensity of work, relies on a mass of concrete data. In addition to Engels’ book, he uses, particularly in Chapters 10, 15 and 25 of Book I of *Capital*,

²⁴ In the chapter on wages for work, Adam Smith writes, “If this demand increases continuously, the remuneration for work will necessarily encourage marriage and the multiplication of workers in such a manner that it will enable them to satisfy this constantly growing demand of a constantly growing population. (. . .) the demand for men, like the demand for any other good, which necessarily regulates its production. It will make it grow faster when it grows too slowly and it will stop when it grows too fast.” (*The Wealth of Nations*, Book 1, Chapter 8, p. 183). Regarding the demand for readers may consult Coontz, 1961.

²⁵ *Op. cit.*: 124.

material from *Reports of Inspectors of Factories*,²⁶ *Reports on Public Health*,²⁷ *Reports of the Children Employment Commission*²⁸ and various specific surveys and accounts available from time to time.²⁹ Thus it is not possible to use the argument of Engels' empiricism due to the very nature of his subject, which was the description of the social situation in 1844. Besides, when he describes economic crises, Marx is more concerned about their social implication, e.g. malnutrition following the cotton crisis of 1862 or mortality following the starvation of the poor in London in 1866–1867.³⁰ However, his thinking on economic crises is based on a perspective that is very different from Engels'. The speculator, who is a central figure in Engels' writings, is hardly mentioned and no specifically speculative action is actually censured.³¹

When Marx makes a careful inventory of crises over a long stretch of time (1770–1866) with particular reference to the cotton trade, which illustrates capitalist mode of production in its purest form, his objective is very clear: counting the years of crisis to prove that they continuously increased as compared to periods of prosperity and that this is an inevitable consequence of greater international competition and therefore closely related to the functioning of capitalism. “We find then, in the first 45 years of the English cotton trade, from 1770 to 1815, only 5 years of crisis and stagnation.”³² To support our interpretation, the penultimate chapter of Book I³³ and indeed the final section of Book I devoted to primitive accumulation acquire a historical depth that the previous sections do not have. “The economic structure of capitalistic society has grown out of the economic structure of feudal society”.³⁴ Marx proposes to his readers a synthetic overview based on “The expropriation of the agricultural population from the land” since the last third of the fifteenth century, which was a period of great discoveries, of mercantilism and of the enclosures movement (Chapters 27–29), which logically led him to the “Genesis of the industrial capitalist” (Chapters 30 and 31). In Chapter 32, which is very short (just two and a half pages), he turns his attention to the future. The “Historical tendency

²⁶ Reports dated 31 October 1855, 31 October 1856, 10 June 1857, 31 October 1858, 30 April 1860, 31 October 1861, 31 October 1862, 30 April 1863, 31 October 1865 and 31 October 1866.

²⁷ *Sixth Report on Public Health*, London, 1864. He also quotes the 1863 and 1866 reports.

²⁸ Especially the 1863, 1864 and 1866 reports. Also see the analysis of the labour law governing mines (*Factory Acts* of 1833, 1844 and 1847) in Chapter 15 of *Capital* (355–362) and the duration of work (Chapter 10 *Capital*: 208–221).

²⁹ *Report by Dr Julian Hunt on the excessive mortality of infants in some rural districts of England*, speech by Lord Ashley on the ten-hour law in the House of Commons in 1844; Alexander Redgrave, *Journal of the Society of Arts*, 5 January 1872; statement of Mr. Ferrand in the House of Commons on 27 April 1863.

³⁰ Crisis of 1862: 497–482. Crisis of 1866: 490 and footnote 84: 680.

³¹ Except for the crisis of 1866 (*Capital*, I: 490).

³² *Capital*, I: 325–326. Quotation p. 329.

³³ Chapter 32 “Historical Tendency of Capital Accumulation”.

³⁴ *Capital*, I: 528 (Chapter 26).

of capitalistic accumulation”, which is barely outlined in contrast with the long developments on the accumulation in England in the middle of the nineteenth century, assumes a prophetic character, which explains the meticulous counting of the years of crisis between 1770 and 1866. Marx refers to “the immanent laws of capitalistic production itself, which generates the concentration of capital” and he ends up predicting the system’s inevitable collapse. “Along with the constantly diminishing number of the magnates of capital, who usurp and monopolise all advantages of this process of transformation, grows the mass of misery, oppression, slavery, degradation, exploitation; but with this too grows the revolt of the working-class, a class always increasing in numbers, and disciplined, united, organised by the very mechanism of the process of capitalist production itself”. Why and how, Marx does not tell us, but all through the preceding chapters, he has been taking note of the strikes and the movements of resistance to the most glaring instances of capitalistic exploitation. He concludes by saying, “The monopoly of capital becomes a fetter upon the mode of production, which has sprung up and flourished along with, and under it. Centralisation of the means of production and socialisation of labour at last reach a point where they become incompatible with their capitalist integument. This integument is burst asunder. The knell of capitalist private property sounds”.³⁵

Thus the conditions that produced the epistemological break with the writings of 1844 are brought together. His rejection of the concept of the “unemployed reserve army of workers” in favour of the concept of an “industrial reserve army” cannot be separated from a double movement consisting of a passage from short-term cyclical crises to long-term structural changes and rejecting the belief in the crucial role of actors like the capitalist and the speculative financier in favour of a picture showing entrepreneurs subjected to an inevitable process of accumulation, in other words a passage from a micro-economic analysis of the firm to a macro-economic analysis of development. In the same way, Jacques Rancière writing about the *Manuscripts* of 1844 says that “the importance given to competition in the *Manuscripts* – and even more in Engels’ writings – reveals the still ideological nature of their criticism of political economy, and the confusion between what Marx will distinguish as the real and the apparent movement in *Capital*.”³⁶ Let us return to Engels for a moment to get an idea of the distance covered. On 29 March 1865, Engels wrote to F. Lange about his book on the subject of workers, “You ask yourself how increase of population and increase in the means of subsistence are to be brought into harmony; but except for one sentence in the preface I find no attempt to solve the question. We start from the premise that the same forces which have created modern bourgeois society – the steam engine, modern machinery, mass colonization, railways, steamships, world trade – and which are now already, through permanent trade crises, working towards its ruin and ultimate destruction, these same means of production and exchange will also suffice to reverse the relation in a short time, and to raise the productive power of each individual so much that he can produce

³⁵ *Capital*, I: 566–567.

³⁶ *Lire le Capital*: 105. Also see 104, on the personality of a capitalist; 105, on competition; 154–159 on the capitalist’s subjective attitude.

enough for the consumption of two, three, four, five or six individuals.”³⁷ Engels, in accordance with what would later be termed as Marxist orthodoxy, implicitly refers to the contradictions of capitalistic accumulation and the break with the utopian views of 1844 is complete.

Proudhon could not escape the trap of Malthusian logic. Marx, on the contrary, succeeded in doing so but at the cost of theoretical work done much before the formulation of the law of population, whereas he would inevitably have fallen into the trap had he referred to the concept of the labour market and the adjustment between supply and demand. The epistemological break was therefore indispensable to escape the Malthusian trap and Marx was able to refute the Malthus’s population theory, widely accepted by his contemporaries as a universal law, only by demonstrating that it was inseparable from the working of capitalism and by linking it firmly with social classes, the theory of surplus value and the process of widespread accumulation. This is the subject of the following pages.

The Accumulation of Capital and Its Organic Composition

The *Theories of Surplus Value*, written between 1861 and 1863, marks a crucial turning point in the formulation of Marx’s population theory. What is remarkable is that, contrary to the article that appeared in *Vorwärts* in 1844, the argument lies entirely and *solely* in the domain of economic theory without any reference to social policy or to the analysis of the bourgeois ideology. Marx begins with the accumulation of capital and emphasises the decisive progress made by John Barton³⁸ in 1817 as compared to Smith and Malthus. Even though the latter were well aware that the demand for labour governs population and Malthus had correctly understood that the risk of overpopulation was a consequence of the accumulation and reproduction of capital at a pace slower than that of population, Barton was the first to emphasise that “the different organic constituencies of capital do not increase at the same rate when capital is accumulated”, as the part which resolves itself into wages diminishes while the fixed capital increases, and this is more marked in industrialised countries than elsewhere.³⁹ Ricardo, Marx continues, abandons in the third edition of his *Principles of Political Economy* Smith’s approach in favour of Barton’s and – an “important” point according to Marx – Ricardo goes even further to assert that the machine itself causes a “redundancy of population”, thus creating overpopulation.⁴⁰

³⁷ affirms the same thing in a letter written to Kautsky on 1st February 1881. *Letters*. . . : 299.

³⁸ *Observations of the Circumstances which Influence the Condition of the Labouring Classes of Society*, London, 1817.

³⁹ *Theories*. . . , Vol.V: 167. Taken up in Chapter 15 of *Capital* (I: 325).

⁴⁰ *Theories*. . . , Vol. V: 167–168. We have borrowed Meek’s translation (1971: 83), which is much better than Molitor’s (who misinterprets the word “price” on p. 168).

What is important is that “the whole absurd ‘theory of population’ was overturned by this and also in particular the empty assertion of the vulgar economists to the effect that the workers must strive to keep their rate of reproduction below that of the accumulation of capital. It follows on the contrary from the arguments of Barton and Ricardo that such a restriction on the reproduction of the working population, because of the decrease in the supply of labour and the consequent rise in its price, would only speed up the employment of machinery, the transformation of circulating capital into fixed capital, and would therefore artificially create a surplus population, a surplus which is usually caused not by a lack of subsistence, but by a lack of means of employment of the workers, a lack of demand for labour.”⁴¹ Marx, in line with the classical economists, holds that demographic growth is induced by economic growth, but he breaks new ground by demonstrating that any autonomous movement of demographic growth necessarily reintegrates itself in the accumulation process. If so, it was not possible to foresee any significant effect on the demographic growth due to the population principle itself. Marx thus solved the problem confronting Malthus, viz. how to integrate the population principle in the mechanism of adjusting the supply and demand for labour. Malthus the demographer, who had always assumed that this exogenous *demographic* variable would come into action *ex ante*, had to somehow *import* it in his *economic* model of the analysis of the market for products and work in the agricultural sector.⁴²

Marx took this up as his central idea and improved upon it many times in Chapter 25 of Book I of *Capital*.⁴³ In the absence of any change in the organic composition of capital (the division between constant capital and variable capital remaining the same), the demand for work increases directly due to an increase in the total mass of capital. This leads to a regular rise in wages because a part of the surplus value is annually integrated into the fixed capital.⁴⁴ For the reason mentioned in the *Theories of Surplus Value*, the objection that immediately comes to mind, namely a faster growth of population, cannot be raised in that case; the demographic characteristics of the working class, and particularly its fertility and mortality levels, do not change anything in the accumulation process.⁴⁵ And he

⁴¹ *Theories. . .*, Vol. V: 167–168.

⁴² As with all classical economists, the Malthusian concept of dynamics – at least in the first *Essay*, but not in the later works – is reduced to an analysis of the fluctuations around a point of equilibrium in two distinct markets: the labour market and the agricultural produce market. (see Chapter 2, the second Malthusian model).

⁴³ In particular: 444–445, from where the following quotations have been taken.

⁴⁴ Any new avenue for production giving rise to the additional accumulation of capital, “since in each year more labourers are employed sooner or later a point must be reached at which the requirements of accumulation begin to surpass the customary supply of labour, and therefore a rise of wages must take place. A lamentation on this score was heard in England during the whole of the fifteenth, and the first half of the eighteenth centuries.” *Capital*, I: 444.

⁴⁵ “The more or less favourable circumstances in which the wage-working class supports and multiplies itself, in no way alters the fundamental character of capitalistic reproduction (. . .) This

quotes turn by turn the mercantilists Mandeville (the author of *Fable of the Bees*) and Eden who had understood after a gap of one century that “the surest wealth consists in a multitude of laborious poor” (Mandeville) and that “a portion at least of the society must be indefatigably employed” (Eden). Although the mercantilists had not theorised the exploitation of workers, they had understood its logic perfectly. Besides, Mandeville who lays stress on the need for the poor to work incessantly, especially if their wages are barely above subsistence level and they remain “ignorant”, cynically viewed things from a typically mercantilist perspective: “for besides that they are the never-failing nursery of fleets and armies, without them there could be no enjoyment and no product of any country could be valuable.” One hundred and fifty years later, we have moved from a demographic doctrine without a theoretical base, so characteristic of the mercantilists, to the theorisation by Marx of the constitution and the expansion of the proletariat. In order to convince his readers better, he explains a little later why the rise in wages does not change anything and cannot harm the capitalist system: if they continue to rise, the profits, as shown by Smith (quoted at length by Marx), will decrease, but the capital will always benefit by being invested because it will continue to earn interest and even if the interest is not very high, the process of accumulation will be strengthened. If, on the contrary, wages increase by slowing down accumulation, the relative surplus of work in relation to the capital will decrease and the rate of wages will fall. What really matters is not the change in the population of workers – whether there is an increase or decrease in absolute or relative terms – but the proportion of employed workers within the entire working class.⁴⁶ As the biological dimension of Malthus’s thinking is eliminated, the population principle dependent on the sexual instinct ceases to be important. What continue to matter are the historicised individuals, i.e. workers selling their labour.

Marx’s Primitive Accumulation Versus Malthus’s Effective Demand

Even if it were admitted that once the accumulation process gets started it sustains itself, one question remains unanswered, viz. what is the starting point? Marx fully understands the difficulty: manufacturing cannot be divided and mechanisation can be introduced only in areas where large-scale production already exists and “a certain accumulation of capital (. . .) forms therefore the necessary prelim-

reproduction of labour-power forms, in fact, an essential of the reproduction of capital itself. Accumulation of capital is, therefore, an increase of the proletariat.” Ibid.

⁴⁶ “It is therefore in no way a relation between two magnitudes, independant of each other: on the one hand, the magnitude of the capital; on the other, the number of the labouring population; it is rather, at bottom, only the relation between the unpaid and the paid labour of the same labouring population.” *Capital*, I: 447–448. Regarding this point, see Behar, 1974 and 1976.

inary of the specifically capitalistic mode of production.”⁴⁷ On this subject, Marx repeats Smith almost word for word saying, “Work cannot expand to this extent without a preliminary accumulation of capital.”⁴⁸ Once again his path crosses that of Malthus and his research on effectual demand. As a matter of fact, the latter had asked himself what gave rise to the initial investment and wondered about the origin of the real demand and the pre-existing purchasing power that set in motion the production of a particular good. To put it in present-day language, which potential market would offer sufficiently good prospects for the decision to invest? Let us recall Malthus's argument that Marx partly followed in his *Theories of Surplus Value*.

The Effective Demand

Malthus subscribes to the orthodox ideas of the classical economic theory, according to which supply is determined by the demand for labour.⁴⁹ And if Malthus rules out the idea that the growth of population (supply of labour) cannot govern production (demand for labour), it is so because there must be an existing demand in order to start a new line of production; in other words, there must be a pre-existent income and purchasing power independent of those that will be created when the production materialises.⁵⁰ On this point, Marx agrees with Malthus because the worker cannot buy from his capitalist employer the merchandise that he has been employed to produce, because the employer cannot realise any surplus value (in Marx's terms) and “his demand does not correspond to the supply.”⁵¹ Finally, when Malthus analyses the conditions of a strong and sustained demand, he examines the social groups and categories whose income is likely to create a strong and sustained demand for the product.⁵² Marx, who follows the classical theory, (Malthus and Smith), according

⁴⁷ *Capital*, I: 452.

⁴⁸ I, footnote 14: 677.

⁴⁹ “. . . an increase of population, when an additional quantity of labour is not wanted, will soon be checked by want of employment, and the scanty support of those employed, and will not furnish the required stimulus to an increase of wealth proportioned to the power of production”, *Principles of political economy*: 349–350.

⁵⁰ “There must be something in the previous state of the demand and supply of the commodity in question, or in its price, antecedent to and independent of the demand occasioned by the new labourers, in order to warrant the employment of an additional number of people in its production”. *Principles of political economy*: 349.

⁵¹ *Theories*. . .VI: 64–65.

⁵² *Principles*...: 363–369. “If the conversion of revenue into capital pushed beyond a certain point must, by diminishing the effectual demand for produce, throw the labouring classes out of employment, it is obvious that the adoption of parsimonious habits in too great a degree may be accompanied by the most distressing effects at first, and by a marked depression of wealth and population permanently (p. 369). Marx : “Class A [the capitalist class that produces the means of subsistence], has created a real surplus of food, an excess that is freely available, that can be accumulated or used like income for buying food or luxury goods.” *Theories*. . .VI: 73. And: “If it

to which workers and capitalists cannot by themselves create a demand, concludes that Malthus was forced to find another category, viz. “unproductive consumers” (. . .) a class which “in society, will represent consumption for the sake of consumption, just as the capitalist class represents production for the sake of production”.⁵³

It is quite significant that Marx does not question this theoretical proposition. He says, “This is the only means of escape from overproduction, which exists alongside overpopulation relatively to production. Over-consumption by the class standing outside production is [recommended] as the best remedy for both overproduction and overpopulation”⁵⁴ However, he reproaches Malthus for his incoherence or rather the incompleteness of his demonstration and repeatedly asks from where this class obtains the means of payment. “Malthus does not explain. Anyway this is the basis of his plea for the greatest increase in the unproductive classes.”⁵⁵ It is thus necessary to undertake a proper socio-economic inventory to find out which classes have purchasing power. Marx follows Malthus once more. First come the landowners and their employees and although Marx is not very explicit, he undoubtedly thinks that this social group is not large enough and that its consumption habits are such (which is what Malthus argued) that they cannot by themselves give rise to a sufficiently large demand. So it is necessary to resort to another source of purchasing power, as Malthus puts it, to sustain the effectual demand or, as Marx says, to stimulate the accumulation process.

But at this point, the tone changes drastically. Malthus suggests nothing less than “artificial methods”, such as heavy taxes, State and Church sinecures, national debt and costly wars.⁵⁶ And Marx’s scorn for these social groups irrupts in the following words, “We have the immense section of society which consists of parasites and self-indulgent drones, in part masters and in part servants, who appropriate gratuitously a considerable quantity of wealth – partly under the name of rent and partly under political titles – from the capitalist class, paying for the commodities produced by the latter above their value with the money they have taken from the capitalists themselves.”⁵⁷ The reasons for Marx’s violent reaction to Malthus’s theoretical proposal regarding the unproductive classes are worth exploring. It is first and foremost an intellectual opposition. Marx does not fail to underline the contradiction between Malthus the economist and Malthus the demographer. “From

is accumulated further, there is a fall in demand from buyers who can afford to pay the price asked for and a contraction of the food market.” *Theories* . . . VI: 75.

⁵³ *Theories* . . . , VI: 77–78: “The unproductive consumers not only constitute an enormous diversion for the products thrust on the market; further, they do not thrust products on the market; they do not thus compete with the capitalists; they simply constitute a demand without supply and thus compensate for the excess supply as compared to the demand from capitalists.”

⁵⁴ *Theories* . . . , VI: 81.

⁵⁵ *Theories* . . . , VI: 35.

⁵⁶ *Theories* . . . , VI: 78: Though they spend money for buying labour, it is essential that they do not employ productive workers, but just guests and domestic servants who will keep up the prices of food by buying without making the slightest contribution, the slightest increase.”

⁵⁷ *Ibid.*: 80.

Malthus's theory of value there springs the whole doctrine of the necessity for an ever-increasing unproductive consumption, a doctrine which this theoretician of overpopulation (arising from lack of subsistence) has preached so emphatically."⁵⁸ It is also a quasi moral opposition as these parasitic classes are not subject to any work ethics and involves a dual stake – both theoretical and ideological – that is much more serious. These classes are essentially a relic of the old system of land-ownership and aristocracy, while Marx is more concerned with the present and the future of bourgeois society ruled by capitalistic production methods. It would appear that his mind refuses to admit the *logical* error that consists of proposing a solution applicable to an old system of production to solve a theoretical problem of capitalism in the 1860s, which amounts to mixing two different time frames. This interpretation is proved by the fact that the method he has chosen to solve the problem is radically different from the one used by Malthus. When analysing primitive accumulation, he proposes a *historicised* solution whose factual elements precede capitalistic accumulation. But there is more to come. As a matter of fact, what Marx cannot accept in Malthus's proposition is that it postpones the confrontation between the two classes – the only ones that matter economically – involved in the accumulation process. In other words, it delays the collapse of capitalism and the advent of the communist society.

These aspects are brought together in a very telling manner in the following passage that is rarely noticed: "Malthus's conclusion follows quite logically from his basic theory of value;⁵⁹ but this theory itself is curiously in accord with his aim – to act as an apologist for the state of affairs in contemporary England, with its landlordism, State and Church retired officials, tax collectors, tithes, national debt, stock exchange jobbers, law-court officials, parsons and hangers-on, against which the Ricardians fought as so many useless, outlived, detrimental and malignant phenomena of bourgeois production. Ricardo disinterestedly defends bourgeois production insofar as it stands for as unbridled a development as possible of the social forces of production. He is unconcerned with the fate of the agents of production, whether they be capitalists or workers (. . .). Malthus, too, wants as free a development as possible of capitalist production, insofar as only the poverty of its main agents, the working class, is a condition of this development; but according to him, this production should at the same time adapt itself to the 'needs of consumption' of the aristocracy and its representatives in State and Church, and serve as a material basis for the obsolete demands of those who represent interests inherited from feudalism and absolute monarchy."⁶⁰

⁵⁸ Ibid.: 63. Chapter 2 showed how to reconcile the two Malthuses.

⁵⁹ We cannot deal with this point here. In Marx's eyes, Malthus commits a serious mistake: he believes that "the price and value of production are identical." Malthus therefore assumes the existence of profit, but does not wonder about its origin. *Theories*. . ., Vol. VI: 51 and footnote 1: 50.

⁶⁰ Ibid. 79, 80.

Primitive Accumulation in the History of Capitalism

If the Malthusian solution of unproductive classes is rejected, the following question remains unanswered: how can the pump of capitalistic accumulation be set in motion? The solution proposed by Marx is radically different from the Malthusian analysis. He does not take into consideration the different economic actors and he totally rejects the economic theory in favour of economic and social history. The entire Section VIII of Book I, which concentrates on “The so-called primitive accumulation”, and more particularly Chapter 31 (“Genesis of Industrial Capitalism”), are devoted to identifying the different stages of laying the foundations of capitalism since the sixteenth century. The problem is raised in the introductory chapter titled “The Secret of Primitive Accumulation”. Capitalistic accumulation presupposes surplus value and surplus value presupposes capitalistic production”, which in turn “presupposes the pre-existence of considerable masses of capital and of labour-power in the hands of producers of commodities.” To come out of this vicious circle, it must be admitted with Adam Smith that “a primitive accumulation (previous accumulation according to Adam Smith) preceding capitalistic accumulation (. . .) [is] not the result of the capitalist mode of production, but its starting point.”⁶¹

While Malthus presumed the existence of an *available* purchasing power at the time the decision to invest was taken, Marx preferred to demonstrate that the solution to the theoretical problem was necessarily of an *historical* nature. He believed that the means of production should have been violently snatched from the producers before the bourgeois world came into being. In a few pages of powerful writing, he shows that this is what actually happened when the feudal economic order made way for the capitalistic economic order.⁶² It is well known that when the influx of gold and silver from the New World injected a considerable purchasing power into the European economy, England, Flanders and France developed their industry to raise their supply to meet the new level of demand. To satisfy the requirements of the wool industry, the area under pasture was expanded from the sixteenth century onwards through an expropriation drive (the famous *Bills for enclosures*) and the concentration of lands in the hands of aristocratic landowners. The *yeomen*, the small landowners who tilled their own land, being deprived of access to communal lands that provided them with the extra resources indispensable for the economic equilibrium of the family-based system, became proletarianised. By 1750, the *yeomen* had practically disappeared and were replaced by farmers. Marx starts with the enclosures movement, which was the first major social change, and illustrates the chapter with numerous examples of men being chased away from their lands by sheep. The second case of violence was the Poor Law going back to the sixteenth century which was denounced by Thomas More. Begging was severely repressed by Henry VIII, Edward VI, Elizabeth I and James I, while the Statute

⁶¹ *Capital*, I: 527.

⁶² *Capital*, I: 528.

of 1349, which came into effect during the reign of Edward III, worsened their situation. Wages were fixed, conspiracies banned and prison sentences imposed.⁶³ The proletarianisation of peasants and the confiscation of their lands did not however lead to a fall in agricultural production because these two movements were concomitant with an agricultural revolution of which England is a classic example, and to which Marx refers in one line focused on one of its major consequences: “the means of subsistence for a large part of the rural population were available while in the future they would be treated as an element of variable capital.”⁶⁴ Let us briefly recall here that this was possible because of technical innovations: the disappearance of the practice of letting land lie fallow (following the introduction of a three-yearly crop rotation of cereals, turnips and clover), the introduction of artificial grasslands, irrigation and drainage, the replacement of the swing plough by the iron ploughshare and the use of multiple breaker ploughs. Jethro Tull invented the seeding machine, which made it possible to economise on seeds, while McCormick designed the first reaping machines in 1839. Bakewell (1725–1795) improved animal species through artificial selection thus increasing their weight in terms of meat. Advances in chemistry (Liebig) brought in nitrogenous fertilisers. Moving to the seventeenth and eighteenth centuries, he finally refers to the importance of trade, especially international trade, in a chapter on “The Genesis of Industrial Capitalism”. Commercial capitalism served as a lever for the concentration of capital (the Bank of England was established in 1694), while the colonies opened up major sources of supply of raw materials and markets for products manufactured by the colonial power. By putting English capitalism of the 1860s in a historical perspective, Marx could give a factual demonstration of primitive accumulation and do without Malthus's argument on the effectual demand while retaining the essential points of his contribution. All these concepts and analyses must now be integrated in the theory of population.

Capitalism's Population Law: The Industrial Reserve Army

Marx's theory is supported by a wealth of data drawn from official censuses and surveys on employment and health available in his time and, on the theoretical side, by a profound knowledge of the writings of a large number of English, French and German authors. He then set about illustrating it with examples taken from life in England between 1846 and 1866. The theoretical part is somewhat complex as Marx takes into account several factors such as the decline, stability or growth of population, which are systematically related to changes in the organic composition of capital. Further, he constantly moves from the analysis of one particular branch to the entire capitalist system. It is quite evident that his aim was to demonstrate that capitalism was moving towards an aggravation of tensions that would end in an implosion. This analysis is accompanied by the identification of concrete changes in

⁶³ I: 543–548.

⁶⁴ *Capital*, I: 522.

the variable capital: he breaks up the industrial reserve army into several categories of population – floating, stagnant and latent – not forgetting to take into account the different methods of extending the working day, the rural exodus and the movement of the labour force from one sector to another and even from one country to another (e.g. Ireland) and the use of women and children in the place of male labourers. Finally, he condemns the physical deterioration, malnutrition and mortality of the labour force.⁶⁵

Creation and Development of the Reserve Army

For the sake of convenience, we will confine ourselves to one particular branch before showing how capitalistic production methods embrace the entire economy. Let us recall the indispensable precondition, a direct legacy of Adam Smith and Ricardo, that Marx mentions specifically, namely that technical progress makes it possible to produce more with a given labour force and this can be done only through investments in capital. As observed in the case of the “puddlage” of iron before 1780, the organic composition of capital changes and its “constant” component (investment in machinery) increases at the cost of the “variable capital” (labour force) for the same amount of production.⁶⁶ But the fall in the share of variable capital (in the form of wages) is only relative and not necessarily absolute. The variable capital, or the demand for labour in the terminology of classical political economy, may even go up when the total capital (both constant and variable) *increases* at the rate x while the variable capital *decreases* at a rate lower than x . In such a case, the demand for labour (the disposable wage fund) and therefore the working population employed in that particular branch will increase in *absolute* value. Marx quotes the census figures of 1861 in support of his claim that this is exactly what happened in England between 1851 and 1861 in the cotton spinning and weaving industry (from 371,777 to 456,646) and in the iron industry (from 68,053 to 125,711) while, at the same time, other branches or sectors lost their labour force: agriculture (from 2,011,447 to 1,984,110), the silk industry (111,940 to 101,678) and long-stapled wool (from 102,714 to 79,249). The last three branches, where capital accumulation did nevertheless take place, illustrate the second variant in the change in the organic composition of capital translated by an absolute decrease in the wage fund.⁶⁷ As it

⁶⁵ Book III of *Capital* repeats in more simple terms the sometimes complicated arguments of Book I, but it limits itself to the economic mechanisms without considering the contribution of socio-historic data which constitute the real worth of Book I. In the case of Book III, see 215–216 (Chapter 13, Section III) and 244–251 (Chapter 15, Section III).

⁶⁶ Smith: “The growth of capital tends to increase the productive abilities of labour and makes it possible to use a smaller amount of labour to produce a larger quantity of work” (*Capital*, I: 449). Ricardo: footnote 115: 649; Andrew Ure: footnote 118: 650. On puddlage: *Capital*, I: 449–450

⁶⁷ “As long as the amount of capital does not change, any proportional decrease in its variable part amounts to its absolute decrease. For it to be otherwise, the proportional decrease should be counterbalanced by an increase in the total amount of the advance capital value.” (*Capital*, I: 456).

is quite clear, everything depends on the idea, inspired by Barton, of changes in the organic composition of capital. Besides, Marx summarises in *Capital* what he had written about Barton's and Ricardo's theories of surplus value.⁶⁸

However, the pace of technical progress is not the same in all branches with some witnessing a technical revolution before others. This was true of the textile industry where the revolution in spinning following the invention of the spinning jenny led to a bottleneck due to the lack of a similar advance in weaving. Marx logically inferred that it was a result of the interdependence of the two processes since "development in the productivity of labour" results in low-cost mass production. These products would stimulate other industries where there was no technical progress and the latter would respond to the stimulus by increasing the number of workers, especially in branches where manual labour continued to predominate. This is exactly what was observed in the census of 1861: "The increase of labourers is generally greatest since 1861 in such branches of industry in which machinery has not up to the present been employed with success." Regarding branches that had not yet been modernised, as it would be said today, "the centralisation of capital enabled them to set up enormous industrial armies."⁶⁹ Let us return to the branch (or branches) where technical progress resulted in the transformation of small factories into "large industries". Since this technical progress was made possible by the constant increase in capital, this meant that the relative diminution of the variable capital created a surplus population, which was surplus not due to demographic growth, but due to a fall in the number of jobs available.⁷⁰

Let us now look at all the branches. Before they were mechanised, they attracted the major part of the industrial reserve army, but as the change in the organic composition of capital spreads to all the branches, a relative surplus population builds up in each of the branches. "But if a surplus labouring population is a necessary product of accumulation or of the development of wealth on a capitalist basis, this surplus population becomes, conversely, the lever of capitalistic accumulation, nay, a condition of existence of the capitalist mode of production. It forms a disposable industrial reserve army, that belongs to capital quite as absolutely as if the latter had bred it at its own cost. Independently of the limits of the actual increase of

⁶⁸ *Capital*, I: 460–461. He also quotes two other economists, Jones and Ramsay.

⁶⁹ *Capital*, I: 458. This is what Marx's contemporaries called "manufacturing industry".

⁷⁰ "This accelerated relative diminution of the variable constituent, that goes along with the accelerated increase of the total capital, and moves more rapidly than this increase, takes the inverse form, at the other pole, of an apparently absolute increase in the labouring population, an increase always moving more rapidly than that of the variable capital or the means of employment. But in fact, it is capitalistic accumulation itself that constantly produces, and produces in the direct ratio of its own energy and extent, a relative redundant population of labourers, i.e. a population of greater extent than suffices for the average needs of self-expansion of capital, and therefore a surplus population (. . .) We call it relative because it is caused, not by a positive increase of the working class population which would cross the limits of wealth being accumulated but, on the contrary, of an accelerated growth of social capital that enables it to do without a more or less significant part of its labourers. Since this surplus population exists only in relation to the short-lived requirements of capitalistic exploitation, it can expand and contract all of a sudden." *Capital*, I: 459.

population, it creates, for the changing needs of the self-expansion of capital, a mass of human material always ready for exploitation.”⁷¹ In order to assess the importance of this theoretical construct, the above lines should be related to four operating conditions of the population law of capitalism as these conditions refer to certain basic elements of the Marxist theory.

Conditions for the Working of the Population Law of Capitalism

The first condition relates to labour as a commodity. Accumulation is possible only because labour, unlike other factors of production which are not renewable, is capable of reproducing itself indefinitely provided that care is taken to maintain it, a point dealt with at length in the second section of *Capital* (Chapters 6 and 7). When used in conjunction with labour as a factor of production, capital and land will create a surplus value which will rise, for instance in proportion to the duration of the working day. Thus in large industries, low-cost mass production makes it possible to obtain a surplus value thanks only “to the minimum wages paid, no more than requisite for a miserable vegetation, and to the extension of working time up to the maximum endurable by the human organism”.⁷² Capitalistic accumulation therefore presupposes the existence of an ever-increasing labour force.

The second condition relating to the availability of labour is actually a double condition: firstly, a worker does not sell his labour once and for all and, secondly, he has nothing else to sell. Marx repeats point by point Engels who, in 1844, had explained at length the difference between a worker and a slave. Engels’ ideas were based on Adam Smith who said that work is a commodity like any other whose price and wage is regulated by supply and demand, the worker being in “in law and in fact the slave of the property-holding class”. If the demand for workers decreases to such an extent that a number of them become “unsaleable if they are left in stock”, they cannot survive and will die of starvation. “For, to speak in the words of the economists, the expense incurred in maintaining them would not be reproduced, would be money thrown away, and to this end no man advances capital; and, so far, Malthus was perfectly right in his theory of population”. And continuing in line with Smith, he observes that this situation is no different from that of a slave, the only difference being that the worker is not sold once and for all, but piecemeal by the day, the week, the year. He therefore does not belong to a specific master, but to the property-holding class as a whole. It follows that this class is better placed than in a system based on slavery as it has no obligation towards the workers since it has not invested any capital; the worker therefore costs less than a slave.⁷³

⁷¹ *Capital*, I: 461. Regarding the relationship between the concepts of an industrial reserve army, relative surplus population and actual demographic growth, see Behar, 1974.

⁷² *Capital*, I: 339. Marx refers here to wages corresponding to the minimum living wage.

⁷³ Engels: *Situation...*: 122–123. Marx: *Capital*, I: 131.

The third condition is that capitalism should have attained a certain level of maturity. Otherwise, it would not really be possible to increase constant capital at the cost of variable capital unless there is technical progress, as was the case before the development of modern capitalism. "This particular course of modern industry, which occurs in no earlier period of human history, was also impossible in the childhood of capitalist production. The composition of capital changed but very slowly. With its accumulation, therefore, there kept pace, on the whole, a corresponding growth in the demand for labour", whereas "The whole form of modern industry depends on the constant transformation of a part of the labouring population into unemployed or half-employed hands".⁷⁴

The fourth condition refers to the pace of reproduction of the labour force. Marx agrees with Merviale and Malthus on this point. Let us suppose that a new opportunity for industrial accumulation arises. It will trigger a demand for extra labour. But since the time needed for a new generation of workers to enter the labour market is 16–18 years, in the short run it is necessary to resort to a reserve stock of labour.⁷⁵ Marx does not fail to denounce the contradiction in which Malthus is caught and says, "Even Malthus recognises over-population as a necessity of modern industry, though, after his narrow fashion he explains it by the absolute over-growth of the labouring population."⁷⁶

These four elements of the Marxist theory are therefore indispensable for establishing the validity of the concept of the industrial reserve army and, in the final analysis, the population law cannot be dissociated from accumulation. "The labouring population therefore produces, along with the accumulation of capital produced by it, the means by which itself is made relatively superfluous, is turned into a relative surplus population, and it does so to an always increasing extent. This is a law of population peculiar to the capitalist mode of production".⁷⁷ This gives rise to the famous statement that every historical mode of production has its own law. "An abstract law exists only for plants and animals, and only in so far as man does not interfere with them."⁷⁸

⁷⁴ *Capital*, I: 461.

⁷⁵ Marx continues by quoting Malthus: "Prudential habits with regard to marriage, carried to a considerable extent among the labouring class of a country mainly depending upon manufactures and commerce, might injure it (. . .). From the nature of a population, an increase of labourers cannot be brought into market in consequence of a particular demand till after the lapse of 16 or 18 years, and the conversion of revenue into capital, by saving may take place much more rapidly; a country is always liable to an increase in the quantity of the funds for the maintenance of labour faster than the increase of population." *Capital*, I: 463.

⁷⁶ *Capital*, I: 463.

⁷⁷ *Capital*, I: 480.

⁷⁸ *Capital*, I: 460.

The Actual Working of the Population Law

Increasing the Industrial Reserve Army

The use of machinery has a direct impact on the labour force as it makes it possible to replace adult male workers by women and children.⁷⁹ But if the extra earnings represent for a working class family an amount of money higher than that provided earlier by the sole earnings of the head of the family, it means that the degree of exploitation has increased because now the entire family is employed by the large-scale industry. Marx thinks that this is so evident that he does not feel the need to analyse the family's microeconomics. He is satisfied with a note that raises the problem of the disappearance of the traditional function of production which foreshadows the situation of the family in industrialised countries in the twentieth century: "since certain functions like nursing and suckling children cannot be entirely suppressed, the mothers confiscated by capital must try substitutes of some sort. Domestic work such as sewing and mending must be replaced by the purchase of ready-made articles."⁸⁰ All through Book I of *Capital* (Chapters 10, 15 and 25 in particular), the labour of women and children is analysed at length and illustrated with precise examples. Members of the same family worked together making bricks, lace and woven straw products, but when large-scale industry gained predominance, the severe exploitation of children by their parents became the rule (Marx quotes at length the *Report from the Select Committee on Mines*). Further, the consequences of the exploitation of workers were documented in great detail, especially the figures regarding differential mortality and morbidity. For example, the rate of mortality of tailors in London was undoubtedly underestimated according to him. It was a labour force that had come from the countryside to learn or to improve its skills and was generally under thirty years of age. Numerous ageing workers or many others suffering from serious ailments came back to die. In the lace-making industry, there were numerous cases of consumption; in the match-making industry, poisoning caused by phosphorous was common among children (half the work force was under eighteen) and a specific disease that attacked the jaws; in the ceramic industry, the loss of weight and height and low life expectancy were common as attested by several doctors in the *First Report of the Children's Employment Commission*. Nutritional deficiencies gave rise in 1862 to a survey covering agricultural workers, silk weavers, dress-makers, glove-makers, cobblers and hosiers: the quantity of nitrogen and carbon in the food consumed by these children was measured and found to be lower than the required minimum. The manufacture of bread was also censured in

⁷⁹ *Capital*, I, 286–291, 340. For example, 463: "We have further seen that the capitalist buys with the same capital a greater mass of labour-power, as he progressively replaces skilled labourers by less skilled, mature labour-power by immature, male by female, that of adults by that of young persons or children, a Yankee by three Chinese."

⁸⁰ *Capital*, I, footnote 36: 641. Surprisingly, Marx does not make any mention of "the nursemaid industry" which was however known in his times.

1855. Lastly, London was considered to be the capital of the rag trade and a source of contagious diseases. In such conditions, alcoholism was rampant, promiscuity had reached such a high level that there was an abundance of illegitimate children and the consumption of opium derivatives was very common in some circles.⁸¹

How can the difference between the treatment of the two topics be explained? Why should the use of female and child labour be treated so briefly while giving numerous and detailed examples of working conditions and their effects on the working class? The first answer would be that Engels, like others, had described the process of substitution of labour and once the truth of his observations had been established, there was no need to proceed further. What is more surprising though is that Marx did not develop a microeconomic theory of fertility. In fact, this imbalance can once again be explained by the strategic importance of demonstrating the inevitable nature of accumulation. Since accumulation always leads to greater exploitation of the labour force, the demographic proofs provided by mortality and morbidity were evidently more obvious and convincing than the increase in fertility.

Besides greater exploitation, accumulation has another major demographic consequence. For the growth of the industrial reserve army, capitalism can have at its disposal an additional supply of labour when there is greater mobility of population. Marx quotes the figures of the census of 1861 pertaining to urban growth to which he alludes briefly. In the early nineteenth century, there was no other city apart from London having a population of 100,000 as against twenty-eight at the time he wrote *Capital*. Though he remarks on the deterioration of the environment and housing as a result of the rapid urbanisation, his essential contribution is the conceptualisation of the mobilisation of the labour force, which leads him to raise the question of relative surplus population.⁸² This surplus population is present in many different forms. It may be floating, latent or stagnant, but it would be better to say that it can be divided into these three segments. In modern industry, surplus population is “floating” because it varies according to the economic situation, even if the population tends to grow on account of the progress made by this type of production as compared to manufacturing or domestic work, and even if variable capital decreases as compared to constant capital. When adult male labourers are replaced by women and children, he points out that “one consequence is that the female population grows more rapidly than the male”, but he does not quote any figures in support of this statement.⁸³ The surplus population is “latent” in rural areas. There is an exodus from rural areas only if there are new employment opportunities in urban areas. One may add that for migration to take place, agriculture must suffer from veiled unemployment. But Marx does not say so clearly, he even contradicts himself when he analyses the technical revolution in agriculture: “If the use of machinery in agriculture is for the most part free from the injurious physical effect it has on

⁸¹ Regarding these different points: Book I, Chapter 10: 187–188, 190–191; Chapter 15: 288, 333–335, 338, 356–359, footnote 182: 655; Chapter 25: 479–48, 498–500, 504.

⁸² *Capital*, I: 468, 484–485.

⁸³ *Capital*, I: 468.

the factory operative, its action in superseding the labourers is more intense, and finds less resistance, as we shall see later in detail." So if it is a sustained structural movement ("without any after-effects"), it must be concluded that the push factors are more powerful than the pull factors and that the surplus population cannot be latent in rural areas.⁸⁴ The third component, viz. the "stagnant" surplus population, is a part of the *active* industrial army, and not the industrial "reserve" army. In other words, it is an employed work force but its activity is very irregular and the wages are at the lowest level. According to Marx this applies above all to the "domestic industry" whose demographic characteristics are specific and "call to mind the boundless reproduction of animals individually weak and constantly hunted down." It recruits itself constantly from the supernumerary forces of modern industries; it forms at the same time "a self-reproducing and self-perpetuating element of the working class, taking a proportionally greater part in the general increase of that class than the other elements. In fact, not only the number of births and deaths, but the absolute size of the families stand in inverse proportion to the height of wages, and therefore to the amount of means of subsistence of which the different categories of labourers dispose."⁸⁵

This obscure passage calls for a brief clarification. In the case of a population earning the minimum living wage, it is understandable that its reproduction should be directly related to the price of the food it consumes. It grows when there is a *fall* in mortality or a *rise* in fertility or a combination of the two in an inverse ratio to food prices. Let us suppose there is a fall in food prices. This would cause a fall in mortality, but what is more surprising is the claim that there would be a rise in fertility. This is so in the case of agricultural workers, because their employers, the agricultural landowners, who are obliged to sell food at lower prices, will maintain their rate of profit by lowering wages. Agricultural workers will then increase their fertility to compensate for the fall in their purchasing power, thanks to the income resulting from child labour). But workers from other branches will on the contrary benefit from a higher purchasing power and have no reason to increase their fertility. But what workers is he referring to? Going by his classification, there is no doubt Marx is clearly thinking of the *active* industrial army. It must therefore be concluded that on this particular point Marx's reasoning is rather incoherent.

Apart from this classification, his perceptive analysis of the English agricultural proletariat, which takes up about twenty pages, is a mixture of historical analysis, accounts of observers (like Young, Wakefield and Hunter), statistical data regarding wages and malnutrition and information obtained from the social surveys of 1863, 1864 and 1865 on housing and health in rural areas. The lines referring to the types of surplus population in the counties of Worcestershire and Lincolnshire describe the contradictions arising from the seasonal nature of agriculture. Except for the peak season, labour was surplus in the rural areas and farmers gradually stopped hiring local labourers, who were too costly, preferring to hire gangs of ten

⁸⁴ Quotation: *Capital*, I: 362; see p. 508 regarding Worcestershire.

⁸⁵ *Capital* I: 470.

to fifty workers, mainly women and children, who were placed under the orders of a *gangmaster*. These gangs moved from farm to farm, a system that spread rapidly, and surveys covering the testimony of big farmers clearly indicate that they found it very profitable. There is no doubt that Marx greatly benefited by the remarkable social surveys conducted in the mid-1860s and published just as he was writing *Capital*, but he was very successful in synthesising these facts into the concept of relative surplus population: “The gang-system, which during the last years has steadily increased, clearly does not exist for the sake of the *gangmaster*. It exists for the enrichment of the large farmers, and indirectly of the landlords. For the farmer, there is no more ingenious method of keeping his labourers well below the normal level, and yet of always having an extra hand ready for extra work, of extracting the greatest possible amount of labour with the least possible amount of money, and of making adult male labour ‘redundant’. From the exposition already made, it will be understood why, on the other hand, a greater or lesser lack of employment for the agricultural labour is admitted, while on the other, the gang-system is at the same time declared necessary on account of the want of adult male labour and its migration to the towns. The cleanly weeded land and the uncleanly human weeds of Lincolnshire are pole and counter-pole of capitalistic production.”⁸⁶

The International Dimension of Capitalism

We have already mentioned that Engels and Marx treated the crises of capitalism in a different manner. Marx, who looked at them from the perspective of the structural transformation of capital, shows that these crises are inherent in capitalism. But in the free-trading England of the 1860s, Marx ascribed the problem to the stagnation of international markets. Thus if a new market opens, “the technical conditions of the process of production themselves, machinery, means of transport, etc.” now permit the fastest access to the new market. However, if this market is initially captured by selling goods at a lower price, sooner or later it will get saturated. Commercial crises and even financial speculation will add to the technical crises and there will be a “constant transformation of a part of the labouring population into unemployed or half-employed hands.” Finally, resorting to credit to finance investment can only augment the commercial crisis.⁸⁷ Capitalism works on an international level and unemployment may be caused by crises in distant lands. Marx repeats this argument several times, often referring to the cotton famine of 1862 caused by the War of

⁸⁶ Farmers’ accounts: footnotes 125, 126, 127: 685.

⁸⁷ *Capital*, I: 461–462. Also about credit: “with capitalist production an altogether new force comes into play – the credit system. Not only is this itself a new and mighty weapon in the battle of competition. By unseen threads it, moreover, draws the disposable money, scattered in larger or smaller masses over the surface of society, into the hands of individual or associated capitalists. It is the specific machine for the centralisation of capital.” (*Capital*, I: 454).

Secession in the United States.⁸⁸ But the international outlook is not confined to just economic crises; it is also affected by structural changes like, for example, the destruction on the Indian cotton industry due to the import of English mill-made textiles from Manchester. He cites an unexpected source, the Governor General of India writing in his report in 1834–1835 that “the bones of the cotton-weavers are bleaching the plains of India.”⁸⁹ Imperialism being the logical extension of capitalism, once the local industry is ruined, capitalism transforms the colony into a source of raw material. This is what happened in India which was forced to de produce cotton, wool, hemp and indigo. Between 1846 and 1865, cotton exports from India to England rose from 34.5 to 445.9 million pounds and wool exports from 4.5 to 20.6 million pounds.⁹⁰ The same was true of Australia. The capitalist system is therefore characterised by a new international division of labour since “industrial supremacy implies commercial supremacy.”⁹¹ Chapter 31 of Book I (“Genesis of the Industrial Capitalist”) makes a brief mention of mercantilism, protectionism and the Dutch and English colonial regimes in the seventeenth and eighteenth centuries.⁹² But the main point is that all these characteristics of the pre-capitalist period “increased gigantically during the infancy of Modern Industry.”⁹³

Challenging the Theory on the Basis of Demographic Facts

It is necessary to establish one last point. Since Marx proposes a population law and since he has quoted in its support all the demographic data that he could obtain, has he integrated this information correctly in his theory? And has the population law, which according to Marx explains population growth on the basis of capital accumulation and particularly the changes in its organic composition, been verified? The concept of relative surplus population, as we have seen, is closely linked with the observation of the rural exodus and urbanisation, which themselves are linked with the demand for labour in industry. The writings of English demographers and historians confirm Marx’s statement that growth was more rapid in urban and industrial areas. On a long-term basis, for example between 1700 and 1750, the whole of England and Wales grew by 23%, much less than industrial areas like Lancashire (33%), Warwickshire (28%) and West Riding in Yorkshire (26%). On a smaller scale, between 1751 and 1831, the rural counties grew by 88% and urban counties

⁸⁸ *Capital*, I, 326, 479–482. For example, the “cotton famine” of 1862 led to an attempt to develop its cultivation in some parts of India at the cost of local rice production. Due to the poor means of communication, local famines occurred as rice could not be transported to the regions suffering from a shortage.

⁸⁹ *Capital*, I, 309.

⁹⁰ *Capital*, I, 324, footnotes 156, 157.

⁹¹ *Capital*, I: 324, 559.

⁹² *Capital*, I, 556–564.

⁹³ *Capital*, I, 562.

by 129%. And between 1764 and 1801, in the Vale of Trent studied by Chambers, the 62 farming villages grew by 38.7% while the 40 industrial villages grew by 96.5%.⁹⁴ On this point, Marx's contribution is not very original, in so far as he relies essentially on public sources, particularly the publications of the *Registrar General*. As for the gangs of agricultural workers who hired themselves out to landowners, he observes that the villages to which these gangs belonged were known for their sexual promiscuity and a very high rate of illegitimacy (up to half the children in villages like Bilford in Worcestershire were born out of wedlock), often among adolescents aged 13–14 years, and illegitimacy was undoubtedly accompanied by abortion and infanticide. And finally, there was widespread alcoholism aggravated by the consumption of opium derivatives fed by mothers to their infants.⁹⁵ Recent work by English historians (Hair, 1966, Sauer, 1978, Laslett and Oosterveen, 1973) confirms the magnitude of this problem of illegitimate births, the most "demographic" of the social consequences of the gang system, which was also seen in several other contexts, particularly in urban areas. But here again, the existence of this social blight was quite well known and Marx did not contribute anything new.

Much more interesting is the problem raised by a passage in Chapter 25 of *Capital*, in which Marx borrows a table from the *Registrar General's* report containing the results of the census of 1861 (Table 5.1).

The slowdown of population growth in England between 1811 and 1861 does not give rise to any *specific* observations. Immediately after the table, Marx quotes just a series of figures to establish that the growth of capital and wealth was much faster during this period and contrasts it with the continuing poverty of the working class that he condemns vehemently.⁹⁶

Table 5.1 Annual increase per cent of the population of England and Wales in decimal numbers

1811–1821	1.533
1821–1831	1.446
1831–1841	1.326
1841–1851	1.216
1851–1861	1.141

⁹⁴ For a more convenient summary, see Tranter, 1973.

⁹⁵ Housing and health: *Capital*, I: 492–511; illegitimacy: footnote 122: 685; opium: 288 and footnote 48: 642.

⁹⁶ The figures available today have been corrected by B.R. Mitchell and P. Deane (quoted by Tranter, 1973: 42, 53):

Year	Population	Years	Growth Rate
1821	12.0	1811–21	1.8
1831	13.9	1821–31	1.6
1841	15.9	1831–41	1.4
1851	17.9	1841–51	1.3
1861	20.1	1851–61	1.2

But he does not pursue these ideas further. Let us try to complete the demonstration by following the same line of reasoning as *Capital*. It is certainly very tempting to assume that Marx's comparison between the growth of wealth and poverty refers, in accordance with the analysis of the changes in the organic composition of capital, to the idea that constant capital grows faster than variable capital.⁹⁷ But if we begin by admitting the slowdown of the population growth rate to proceed further, it is at least necessary to separate the birth and death rates. Let us recall that each year the overall growth of a population results from the surplus of births over deaths (the so-called natural increase or decrease) and from the surplus of immigration over out-migration. By assuming that the figures involved in the natural increase are much larger than those pertaining to migration flows, the slowdown of the total growth may be due either to a constant fertility accompanied by an increasing mortality (reflecting a fall in the standard of living), or a fall in the mortality, compensated by a faster drop in fertility (which suggests an improvement in the standard of living).

Since Marx claims that poverty had increased, it implies that mortality had increased and that fertility *also* had increased or, at least, that it had remained constant. In fact, in macroeconomic Marxist terms, if the growth of variable capital (population) is slower than the accumulation of constant capital, proletarianisation spreads and at the microeconomic level workers should increase their fertility to compensate for the fall in wages. It is known today that the birth and death rates actually remained quite stable during this period (Table 5.2). So the first of the two hypotheses is confirmed and Marx's theory reflects reality.

Table 5.2 Birth rate and death rate (1841–1861)

Years	Birth Rate	Death Rate
1841–45	35.2	21.4
1846–50	34.8	23.3
1851–55	35.5	22.7
1856–60	35.5	21.8
1856–60	35.8	22.6

Table 5.3 Some data on migrations (1841–1861)⁹⁸

Year of census	Total population (millions)	Period between censuses	Net migration (millions)	Rate of emigration
1841	15.9	1841–51	–0.483	–3.03
1851	17.9	1851–61	–1.368	–7.6

⁹⁷ *Capital*, I: 474–477, particularly 474: “The increase of profits liable to income tax (farmers and some other categories not included) in Great Britain from 1853 to 1864 amounted to 50.47% or 4.58% as the annual average, that of the population during the same period to about 12%.”

⁹⁸ Source: D. Glass, quoted by N. Tranter, 1973: 53.

But all this reasoning is vitiated by a hypothesis that we had adopted earlier and which does not hold because emigration far from being negligible, was actually massive (Table 5.3).

This has important implications. Firstly, it is obviously difficult to establish any theory in the absence of appropriate data. Marx evidently did not have these data at his disposal, but he wanted his population law to be demonstrated *only* by the overall rates of growth during the intercensal period. According to his own reasoning, the proof that he needed implied that he should at least have taken into account the dynamic aspect of demography in its simplest form, the birth and death rates. Consequently, the slowdown cannot be explained by a change in the organic composition of capital that directly affected fertility and mortality, but by the growing emigration because the birth and death rates remained more or less constant. There is no doubt that the economic factors continued to rule demographic behaviour since poverty was the main reason for emigration as shown by the tragedy in Ireland where out of a total population of 8,175,000 in 1841, almost one million died due to famine in 1846 leading to the emigration of one and a half million Irish people during the famine, so that in 1851 Ireland's population had been reduced by 1,623,000 inhabitants as compared to 1841. But the major ideological implication is that emigration provides a safety valve during crises created by capitalism by reducing the industrial reserve army. Marx anticipated the objection and retorted that the fate of the "workers who had stayed back in Ireland and were freed from surplus population" did not improve in any case because "The revolution in agriculture has kept pace with emigration. The production of relative surplus population has more than kept pace with the absolute depopulation."⁹⁹

But why did he not take into account the *other* international migratory flows, especially those from England to North America, Australia and New Zealand, when he analysed the crises of English capitalism in their international dimension? Since industrial capitalism was the most advanced in England, whereas Ireland, as he points out frequently, was still a rural and agricultural country, he should have taken migration into account in the case of England. We hold that Marx underestimated the importance of emigration in the case of England for the reason mentioned at the beginning of this paragraph, namely the *ideological* implications of such crises because the existence of large-scale out-migration weakened his prediction of the necessary collapse of capitalism. It is interesting to note the difference with Malthus who, on the contrary, *relied* on emigration, arguing that for England in particular it was the wrong solution for the problem of poverty because, in the long run, the population principle would ensure that the space vacated by emigrants was immediately occupied by others.

There is, however, one more point of criticism that has nothing to do with the problem of quantitative proof that Marx lacked. He could not ignore the fact that the proletariat was still in the process of being formed and that England had not yet reached the stage of the final confrontation between the proletariat and the capitalist. In Chapter 32 of Book I, he confines himself to *predicting* that such a confrontation

⁹⁹ *Capital*, I, p. 519. For a recent update, see Ross, 1998: 48–50.

would occur in due course. As we have seen, he nevertheless interprets the overall data regarding the population of England and Wales as if it *already* consisted only of workers and capitalists. Here is a serious conflict of timing as one cannot use figures pertaining to a current period to analyse a future context in which the economic and social structure will, Marx tells us, be different from the present structure. This error in reasoning is all the more surprising because in his *Critique of Political Economy*, Marx, who was so careful about timing and contextualisation, repeatedly insisted that figures should be anchored in social reality. For instance, he fully agreed with Malthus that the increase of fertility was too slow a response to satisfy the requirements of capital and that it was therefore necessary to depend on migration through the stock of rural labour. This opens up the ideological debate on the quality of Marx's forecast that capitalist society would be irresistibly drawn towards pauperisation. Demographic data show that after 1860, mortality and fertility followed an irreversible downward trend, a proof that the standard of living had gone up. We know that mortality fell due to an improvement in the food intake as a result of the agricultural revolution and a simultaneous drop in the severity of epidemics.¹⁰⁰ On the one hand, Marx, who lived in London where neo-Malthusian propaganda had begun to spread under the influence of Francis Place and George Drysdale, ignored the emerging reality of the drop in fertility among the middle classes.¹⁰¹

Demography and the Evolution of Capitalism

Almost everything separates Malthus from Marx: their intellectual approach, which is wavering in one and well structured in the other, their theoretical construction and, finally, their personal involvement in the political life of their time. But what they have in common is that each of them has formulated a law of population, which they have both put on a solid theoretical level, with Malthus believing in the universality of the principle of population in time and space and Marx claiming the existence of specific population laws for every mode of production and devoting himself exclusively to capitalism.

How should Marx's writings on population be interpreted? It is certainly necessary to verify the coherence of the theoretical construction from the economic angle because the law of population is also the law for a mode of production, paying special attention to central concepts like the demand for labour or the surplus value. At the same time, it is necessary to integrate the socio-demographic dimension of Marx's ideas, which were in actual fact inspired by Engels. The conclusion that the poverty of the working class is a reason for early marriage and high fertility, the

¹⁰⁰ For example: McKeown and Brown, 1955; McKeown and Record, 1972; McKeown, 1978.

¹⁰¹ Petersen (1980: 192–193) notes that Marx, unlike the Socialists and later the Marxists, never referred to neo-Malthusianism, in spite of the stir created by the Bradlaugh-Besant case in 1877, six years before his death. But much before the establishment of the Neo-Malthusian League in 1877, there was considerable propaganda by Place and Drysdale.

recognition of various types of mobility especially the amplitude of the rural exodus, is a significant contribution while the analysis of morbidity, malnutrition and mortality among the working classes is equally important. So when Marx the economist proposed a population law for capitalism, he should have taken into account the socio-demographic behaviour of all classes: capitalists, workers as well as the other social classes, even if they were likely to disappear in the future. And although Marx is a remarkable sociologist of the working classes, he says very little about the demographic behaviour of the other social classes, which indirectly prevents the experimental verification of his theoretical propositions. Finally, having failed to make a distinction between what was specific to the working class and what concerned the entire population, Marx the sociologist either did not know or did not want to compare the theoretical implications of his very concrete observation of fertility, marriage, mortality and migration. While he brilliantly relates the analysis of the actual working of capitalism in England in the 1860s to the theory of capital accumulation, demonstrates that the concept of relative surplus population is useful for analysing the working of the labour market, makes good use of the demographic data relating to the condition of the working class, he fails to handle the overall demographic observations related to this same England of the 1860s, for the reason already mentioned. When he used the data relating to the entire population as if they were relevant to only one social class, the need to justify the prediction took the upper hand over sociological analysis.

Let us go back to our first question: why did Marx adopt such an ambivalent attitude towards Malthus? He acknowledged his worth as a theoretician while reproaching him for advocating a doctrinal approach perfectly consistent with his theoretical contribution. A careful reader of Malthus, he examined his arguments point by point and gave him credit for having perceived the risk of a general glut and for not trying to “conceal the contradictions of bourgeois production.”¹⁰² Unlike the optimism displayed by “vulgar” economists like Jean-Baptiste Say and his sacrosanct law of markets or Frédéric Bastiat and his theory of the harmony of interests, Malthus, by warning against the possibility of a lack of demand, effectively undermined once and for all the liberals’ optimism about the evolution of capitalism. Keynes, who, by the way, shared this opinion, proclaimed that Malthus was the first of the Cambridge economists to have gone against Ricardo and foreseen the risk of a widespread crisis caused by an insufficient effectual demand.

But Marx firmly rejected Malthus’s conclusion that crises can be avoided by multiplying the unproductive classes. The answer to the first question lies in the domain of ideological debate. From the point of view of social doctrine, Malthus pleads, in a very modern manner, in favour of a society largely composed of the middle classes which would make it possible to maximise demand. In the long run, industry as the principal source of the demand for labour can improve well-being

¹⁰² In 1852, in a letter to Joseph Weydemeyer, journalist and member of the Communist League (*Lettres sur le Capital*, 5 March 1852: 59. The same opinion is expressed in a letter to Engels dated 14 June 1853 (64)).

and resolve social problems due to the widespread practice of prudent restraint. It stimulates demographic growth without, however, any deterioration in the living conditions of the people. In the short run, regulation is possible due to fluctuations in the standard of living and the rate of marriage, both of which vary according to the demand for labour. Marx clearly sees the political stakes: “Malthus admits that bourgeois production, though it may not be revolutionary, is not a historical force either, but it creates a material base that is wider and more convenient for the old society.”¹⁰³ As a matter of fact, if there is a solution for the crises arising from capitalism in the realm of consumption and if, in spite of the process of accumulation, stocks resulting from low-cost mass production can be sold in the market thanks to consumption by the middle classes, then the contradictions of capitalism will be solved. Marx could not but strongly oppose Malthus on this point. And he was not the only one to perceive the danger: the hostility of Clara Zetkin and Rosa Luxembourge to neo-Malthusianism follows the same logic.

In 1913, at the Berlin Congress, they opposed the arguments of the anarcho-syndicalists, who advocated a “strike of the womb” to stop production of canon fodder, opposed the arguments of the anarcho-syndicalists, who advocated a “strike of the womb” to stop the production of canon fodder, of bodies for labour and flesh for the pleasure of the bourgeoisie. The Communists, they held, were radically opposed to this strategy, because the larger the proletariat, the greater its revolutionary potential. But in the same year, Lenin published on 16 June 1913 a frequently quoted article in the *Pravda* whose line of reasoning is considerably different and which is particularly interesting for our study. Initially, he reaffirmed the Communists’ “absolute” hostility to neo-Malthusianism. But, he added a clearly neo-Malthusian plea: “That does not prevent us from demanding a complete change in the laws banning abortion or the circulation of medical books dealing with contraception. These laws are nothing but hypocrisy on the part of the ruling classes.” This stunning position was justified in the name of “the elementary democratic rights of citizens of both sexes.” There is extreme doctrinal ambiguity in his utterances. If one follows the logic of the analyses in *Capital*, it is clear that the proletarian revolution must inevitably result in the economic contradictions peculiar to capitalism, while Lenin’s “democratic” arguments are a plea clearly addressed to the middle classes. And while Clara Zetkin and Rosa Luxembourge addressed themselves to the workers and were naturally faithful to Marxian orthodoxy, Lenin’s siding with the neo-Malthusians, if only for purely tactical reasons, was more dangerous because the spread of contraception posed the risk of social-democracy going adrift: with fewer workers offering their labour, they would be in a better position to negotiate their wages, improve their standard of living and ultimately become bourgeois. So Lenin was obliged to add that “the conscientious workers will always continue their ruthless struggle against the attempts to instil this reactionary and cowardly theory in the most advanced class of contemporary society, which is the strongest and the best

¹⁰³ *Theories...*, Vol. VI: 80; also see Vol. IV: 7.

prepared to face the great transformation.”¹⁰⁴ In other words, taking into account the superstructure, which in this case is the legislation on contraception and abortion, it becomes necessary to move on to the level of the ideological combat to protect the future of the proletarian revolution.

Behind the laxity visible in Marx’s analysis of the role of emigration in England and at the heart of the flagrant contradiction in Lenin’s reasoning (e.g. contraception is good but neo-Malthusianism is reactionary), lies the problem of political strategy: how to persuade the working classes to accept the quasi Pascalian wager of the immediate absence of an improvement in their situation in the expectation of the golden age of a communist society? It is impossible to avoid politics. What Lenin proposed implicitly was reliance on the on the Bolshevik Party, the most advanced party and the most concerned about the well-being of the proletariat, which amounted indirectly to signing the death warrant of the purely economic prediction about the collapse of capitalism.

Annex: The Althusserian School and Population

Our analysis of Marx’s thinking on population therefore favoured an epistemological approach based on economics, history and demography itself, taking into account the facts that Marx was aware of and which he had intentionally used to support his arguments. A major epistemological break occurred between 1845 and 1859, which inspired a purely philosophical interpretation of Marx’s writings by the Althusserian School. It must now be seen if a philosophical reading can do justice to Marx’s conceptualisation of population. In other words, what is the epistemological status of population?

In his book *Lire le Capital*, Althusser dismisses in a few lines all other forms of investigation, particularly historical investigation. Regarding the “relationship between economic theory and historical theory” that he believes is “imaginary”, he claims that its success is a result of the “empiricist temptations of historians, who, on reading pages of ‘concrete’ history in *Capital* (the struggle for reducing the duration of the working day, the shift from small-scale manufacturing to large-scale industries, primitive accumulation, etc.) somehow felt ‘at home’ and raised the problem of economic theory in accordance with the existence of this ‘concrete’ history, without feeling the need to question its credentials. They followed a purely empirical method to interpret Marx’s analyses which, far from being historical analyses in the real sense, i.e. supported by developing the concept of history, are really semi-finished historical data (cf. Balibar’s text in Vol. II of this book), rather than a truly historical treatment of such data.”¹⁰⁵

It is known that Althusser and his disciples proposed a radically different analysis by reconsidering the very nature of *Capital* from a philosophical angle and

¹⁰⁴ *Classe ouvrière et le malthusianisme*. Quoted by Fréville, 1956: 290.

¹⁰⁵ *Lire le Capital*: 306–307.

showing that thanks to the epistemological break with Hegelian philosophy, Marx had rethought the concept of surplus value, which led him to question “the very purpose of economics.”¹⁰⁶ After this, Marx created a radically new epistemological concept, namely *Darstellung*, which refers to structural causality: “structure is present in its effects” and “a structure’s entire existence lies in its effects; briefly, this implies that structure which is only a specific combination of its own elements, should be nothing more than its effects.”¹⁰⁷ This is the reason why he rejects the Cartesian tradition: “If economic phenomena are determined by their complexity (i.e. their structure), the concept of linear causality can no longer be applied as before and the new force of causality will be determined by the structure.”¹⁰⁸ This interpretation led Althusser to challenge idealism and the historicist or humanistic interpretations of Marx’s works and the “naïve anthropology” of the *homo oeconomicus*.¹⁰⁹

The Epistemological Status of Population

Considering this interpretation of *Capital*, do Marx’s writings on population have only a secondary importance as “semi-finished historical data”, or do they lead to a “truly historical treatment of this data”? From Althusser’s viewpoint of historical materialism, defined as the science of history, what is the epistemological status of population? It should be noted that the term population does not appear at all in the 246 pages of Althusser’s two books, nor in the contributions of Rancière, Machery and Estabiet. Balibar refers to it exactly four times.¹¹⁰ Althusser does not even quote capitalism’s population law though he celebrates “discoveries having far-reaching consequences: the general law of capitalistic accumulation, the tendential law of the fall in the rate of profit, the theory of rent, etc.” thus mixing up Marx’s and Ricardo’s discoveries while claiming that classical economists had “ignored them” or “avoided them because they were incompatible with their premises.”¹¹¹ However, if there is a law that Marx can claim to have discovered, it is indeed the population law of capitalism.

Let us concede that the epistemological status of population is so marginal and minor that none of the Althusserians found it worthwhile to dwell on it. This would explain why, although Althusser quotes twice the passage in which Marx denounces the abstract construction of the concept of population by economists, he clings to just one point, namely Marx’s silence on the process of abstraction, but says nothing

¹⁰⁶ Ibid. 363.

¹⁰⁷ Ibid. 404–405.

¹⁰⁸ Ibid.: 399, 402.

¹⁰⁹ Ibid.: 310–344, 368–369. Also see Rancière’s analyses: 99.

¹¹⁰ He uses the expression “population of labour forces” (Ibid., 467), and mentions “relative surplus population” (Ibid.: 535–549).

¹¹¹ Ibid.: 256.

about the *object* of this silence, namely population.¹¹² We hold that attributing a *minor* epistemological status to population is not valid. On the contrary, we believe that even within the logic of the Althusserian interpretation of Marx's writings, population cannot be ignored either as a theoretical concept or in its empirical quantification, since they are obviously linked together; and in view of these conditions it must be concluded that this contradiction reveals the limitations of Althusser's theorisation of historical materialism. These limitations are obvious in the case of three key Althusserian theoretical points, which are far from marginal, namely the concept of productive forces, the paradigmatic value of the English example and, finally, the Althusserian concepts of reproduction and timing or "periodization" as proposed in *Lire le Capital*.

Three Key Theoretical Points

What does Balibar say? Since historical materialism was founded by Marx as a science of history and since it should be analysed according to the principles of structural logic, the result is that "in the realm of historical materialism as a scientific discipline", the analysis of productive forces, far from being a "technical or geographical precondition", is "on the contrary inherent in the definition of the social structure of a mode of production."¹¹³ Since population is explicitly listed among the "fundamental concepts of historical materialism", along with "machinery, science, etc.", and Marx is quoted in support, population must at least be integrated in the structural analysis of *Capital*. Moreover, according to Balibar, "the most interesting aspect" is the rhythm or speed of development because rhythm is directly linked to the nature of the relationship between production and the structure of the mode of production.¹¹⁴ Translated into demographic terms, "the speed of population" is actually its rate of growth, and it is one of the possible means of quantifying the population law of capitalism. Finally, Balibar points out that every specific combination "of the elements constituting the structure of the mode of production" defines the form of this structure, which takes us to one of Althusser's major contributions: the idea of a "matrix" of the mode of production.¹¹⁵ Thus population, which certainly has the epistemological status of "a fundamental concept of historical materialism", has nonetheless been totally neglected in the philosophical interpretation he has proposed.

Secondly, the empirical data regarding England can hardly be described as "semi-raw material". Here again, there is a total contradiction with the letter and even the spirit of historical materialism. As is known, for Marx, the England of the 1860s

¹¹² Ibid.: 267–268. Marx's text is given above (128–129).

¹¹³ Ibid.: 484.

¹¹⁴ Ibid.: 466, 468.

¹¹⁵ Ibid.: 447.

had a paradigmatic value, “In this work, I have to examine the capitalist mode of production and the conditions of production and exchange corresponding to that mode. Up to the present time, their classic ground is England. That is the reason why England is used as the chief illustration in the development of my theoretical ideas.”¹¹⁶ We have seen that Marx compared the rhythm of the growth of population and wealth to explain the increasing contradictions in English capitalism. What meaning would these data about population in England have for the Althusserians in their analysis of historical materialism? “We must consequently read all of Marx’s analyses regarding the formation and dissolution of a mode production by looking for this second concept in it; it may exist explicitly or it may have to be prised out of it.”¹¹⁷ The proposed concept is that of “reproduction” and Balibar states later that reproduction assures “the continuity of production” and that it is “inscribed in the identity of the elements as they come out of one production process to enter into another.”¹¹⁸ This ambiguous wording needs to be clarified. Balibar proposes the concept of reproduction to explain “the passage from one mode of production to another.”¹¹⁹ That is exactly what the data collected by Marx helped to support or, to put it in Balibar’s words, “the development of the structure according to a tendency, that is to say a law that does not include (mechanically) just the production of effects at a specific rhythm, therefore signifies that *the definition of the specific internal temporality* (emphasis Balibar’s) of the structure belongs to the analysis of the structure itself.”¹²⁰

Finally, the Althusserians bypassed this aspect of population for two reasons. Firstly, because all their thinking revolved around the philosophical deconstruction of economics. Marx’s historical analyses of primitive accumulation (Chapters 29–31 of Book I) have been played down because of their lack of logical coherence. This led to a “fragmented analysis” that does not have the fine structural causality that they found in the analysis of capitalism as a mode of production.¹²¹ Marx, as Balibar rightly notes, is content to allow the elements explaining primitive accumulation to succeed one another. But he reproaches him for not producing a proper history in the theoretical sense “by taking into account the dependence of the elements on a structure.”¹²² The objection is valid only if the pre-eminence of philosophy is accepted and if the importance of the *Critique of Political Economy* for Marx is underestimated, though it is the sub-title of *Capital*. . . It is also necessary to mention a second reason. Population gives rise to a time analysis (referred to by Balibar as a

¹¹⁶ Preface of the first edition of *Capital*. Surprisingly enough, Balibar quotes Marx on the importance of the English case, just after having disregarded the “semi-raw material” (Balibar: 496).

¹¹⁷ *Lire le Capital*: 429.

¹¹⁸ *Ibid.*: 500–501.

¹¹⁹ *Ibid.*: 520.

¹²⁰ *Ibid.*: 541.

¹²¹ *Ibid.*: 529.

¹²² *Ibid.*

“periodization”) which is *doubly specific*, and which Marx obviously accepts just as it is, though it differs considerably from the way it is conceptualised by Althusser and Balibar. All the lengthy articles devoted to “periodization” in *Lire le Capital* are actually intent on rejecting the distinction between synchrony and diachrony, denouncing the historians’ empiricist conception of time and explaining the change from one mode of production to another.¹²³ The first peculiarity is that the five-yearly census data used by Marx are quite empirical. Should they be rejected as irrelevant for the structural understanding of *Capital* on the pretext that they constitute a fine example of reification by the bourgeois ideology that Marx condemned? Besides, they were put together by the ideological superstructure, namely the State machinery which, in this case, was the *Registrar General*. Quite the contrary, writes Althusser, “it is not possible to think of the relationship of production in their concept, while disregarding their specific conditions of existence as a superstructure.” And still further, he says, “it is an absolutely theoretical condition that determines the definition of the economic situation itself.”¹²⁴

The contradiction with the text of 1859 that Althusser considered very important is quite obvious. It could either be that Marx was right to condemn the reification of population and he should not have used these data, or that the text of 1859 is not fundamental and, if it is so, Althusser’s interpretation needs to be seriously questioned. The second peculiarity of demographic periodization is that labour as a commodity has the unique characteristic of being renewable and Marx fixes a period of 16–18 years for this renewal, following in this respect Merrivale and Malthus. Every new opportunity of industrial accumulation gives rise to a demand for extra labour, but since it is necessary to wait for at least one generation for the working class population to be able to satisfy the demand, in the short run, it is necessary to resort to stocks of labour. So in the short run, it is more advantageous to resort to immigration instead of depending on fertility. Generally speaking, Marx was more concerned, as we have seen, with identifying the historical mechanisms of primitive accumulation because Malthus’s theory of value was incapable of resolving the problem of priming the accumulation pump. If our interpretation is correct, then structural interpretation completely bypasses the perfectly *coherent* theorisation seen in Marx’s writings and an important contribution in the sphere of political economy.

Once again, the rejection of any other interpretation of *Capital* ends up in dealing with time only as an element of the structure instead of considering its place *within* the economic theory, as Marx explicitly meant it to be. There is no doubt that Marx believed that time is an exogenous variable.¹²⁵ But what is true of demographic time is *a fortiori* true of population as an “element” of production. This gives rise to a double paradox: firstly, in the very name of the method proposed, namely

¹²³ Ibid., Althusser: pp. 279, 285–290; Balibar: pp. 426–429.

¹²⁴ Ibid., pp. 389–390.

¹²⁵ Which explains the insistent tributes to Michel Foucault (Ibid.: 289, 490 for example).

the structural interpretation of *Capital*, the Althusserians leave out one important element that is considered to be inseparable from the structure's matrix; secondly, they do not take into account population, which, according to Marx, was important enough to warrant nothing less than a *law* that fits perfectly with historical materialism and which he deemed a major advance as compared to classical Malthusian economics. This is the price to be paid for rejecting interdisciplinarity.