ECONOMIC GROWTH AND STRUCTURAL CHANGE IN RICARDO: THE ROLE OF DEMAND FORCES IN THE PROCESS OF INDUSTRIALIZATION

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The role of demand in the Ricardian system has been the subject of a great controversy. Initially, the idea that demand does not play any significant part in Ricardo's analysis predominated in the literature, especially with the rise and development of the Sraffian school. A reaction to this line of interpretation has already appeared in the literature, in particular, in the works of Samuel Hollander. This controversy, however, has been basically confined to the discussion of price determination and the mechanism of resource allocation. It is in the context of that debate that the present study of the role of demand in Ricardo within the broader perspective of accumulation and economic development is set. Ricardo's concern with the feed-back effect between the process of growth and changes in the structure of consumption of society is illustrated, as also its importance as a necessary condition for the development of the industrial sector.
"I am eager for information on the causes which are constantly obstructing man in the rational pursuit of his own happiness" (David Ricardo)

To my parents

Bernardo and Coleta
CONTENTS

Acknowledgements 6

PREFACE 8

1 GROWTH AND INDUSTRIALIZATION IN RICARDO: THE ROLE OF DEMAND FORCES 11

1.1 The Role of Demand in the industrial revolution
1.2 Ricardo’s Vision of the process of Development
1.3 Economic Development and the Nature of Demand

2 RICARDIAN MODELS OF GROWTH 58

2.1 The Sraffian View of Ricardo on Growth
2.2 The "New View" of Ricardo
2.3 Models of Growth and Ricardo’s Vision of Development
2.4 The Basic Ricardian Problem

3 DEMAND AND ECONOMIC GROWTH 88

3.1 Limits to Growth in a Predominantly Agricultural Society
3.2 Economic Growth and Changes in the Pattern of Demand
3.3 Poor Laws and the Economic Process
3.4 Foreign Trade, Taste Differentiation and Growth

4 RICARDO AND MALTHUS ON THE "PROGRESS OF WEALTH" 135

4.1 Ricardo Versus Malthus on the Role of Unproductive Consumption in the course of Development
4.2 Ricardo and Malthus: Two Views of the Process of Development

5 THE CHANGE-IN-TASTE ARGUMENT: OTHER CONTRIBUTIONS IN THE POLITICAL ECONOMY LITERATURE

5.1 David Hume
5.2 Adam Smith
5.3 Other Contributions
5.3.1 Turgot
5.3.2 James Steuart
5.3.3 James Mill

6 THE SRAFFIAN INTERPRETATION OF RICARDO: A CRITIQUE

6.1 Ricardo from the Sraffian Standpoint: An Overview
6.2 Demand in the Sraffian Framework
6.3 Demand in Ricardo: A Critique of the Sraffian View
6.3.1 Reproduction in the Sraffian framework: the lack of market considerations
6.3.2 The unchanging nature of consumption in Sraffa

CONCLUSION

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PREFACE

The thesis is concerned with the role of demand forces in David Ricardo's analysis. There has been a long tradition among his interpreters to maintain the he neglected the role of demand in economic phenomena. This line of interpretation has, however, been the subject of recent criticism, in particular, by Samuel Hollander.

Much of the controversy over the role of demand in Ricardo, though, has centred on price determination and the mechanism of resource allocation. The present work, however, seeks to examine the role of demand in Ricardo's analysis within the broader context of the development of the economic system through time. The thesis attempts to demonstrate that demand forces function as an active and meaningful element in the dynamics of the Ricardian system.

It is argued that a critical characteristic of that dynamic is the interaction between the process of accumulation and growth, on the one hand, and modifications in the pattern of demand, on the other. To Ricardo, it was crucial that transformations in the structure of consumption of society towards a greater demand for the products of the non-agricultural sectors accompanied the accumulation of capital and the creation of wealth. He perceived the need to extend the market and to motivate individuals to increase their exertions and productivity, and he regarded changes in personal tastes as a powerful force to bring that about, to help the drive
to industrialization and to avert the arrival of the stationary state. This is the main theme of this research and to which the first three chapters are addressed.

Chapter 1 is a general introduction comprising a brief survey of the view advanced by some economic historians on the importance of demand forces in the Industrial Revolution, and then a presentation of what we consider to be Ricardo’s vision of the process of development.¹

In chapter 2 we critically examine two major Ricardian models of growth: Sraffa-based Ricardian models of growth and the "New View" of Ricardo; and attempt to show their shortcomings in relation to Ricardo’s own vision of development.

Chapter 3 draws on the findings of the previous two and describes our main argument in detail, i.e., that demand forces, through changes in the consumption pattern of society, are a cardinal factor in Ricardo’s analysis of growth.

Chapter 4 examines the debate with Malthus on the role of unproductive consumption and labour in the creation of wealth and puts forward the argument that, as far as the prospect for, and significance of, the rise of a consumerist society are concerned, Ricardo is closer to

¹- All quoted passages from, and references to, Ricardo’s writings are taken from Sraffa’s edition of the Works and Correspondence of David Ricardo and are indicated by the number of the corresponding volume and of the page(s) as follows: (vol.1, p.5). All other references are of the following type: (author, year, page number). All emphases found in the quoted passages are original.
Keynes than Malthus is. The latter, it is argued, relied upon unproductive consumption by landlords and the exploitation of labour to secure the growth and stability of the economic system, while Ricardo and Keynes favoured the spread of consumption throughout all ranks of society so as to extend the market and stimulate accumulation and production.

In chapter 5 we argue that Ricardo’s standpoint on demand forces belongs to a much older tradition in the history of economic thought, which includes among others, the names of David Hume and Adam Smith. Also some of the work in that tradition is reviewed in order to establish this connection.

Chapter 6 attempts a critique of the traditional Sraffian interpretation of Ricardo based on the findings of the previous chapters.

Finally, the conclusion briefly summarizes the main results of the research.
CHAPTER 1- GROWTH AND INDUSTRIALIZATION IN RICARDO: THE ROLE OF DEMAND FORCES.

That economic growth constituted Ricardo's chief concern is a well-known fact. That his interests as a political economist to a greater extent coincided with those of the industrial bourgeoisie, is well known too. His advocacy of an open economy, free of restrictive laws (like those regulating imports) and driven by individual interests and action, and his firm belief in the generation of savings and the accumulation of capital as the dynamos of the process of economic growth, all are characteristic of his analysis frequently referred to. As such there has been a predilection for stressing supply-side elements (conditions of production) when presenting Ricardian economics. What there has been almost completely neglected, though, is the fact that Ricardo was perfectly conscious of the importance of demand forces to the process of growth. This last point is the focus of our work.

Ricardo was an enthusiast for the strengthening and development of the then emergent industrial sector of the economy, seeing it as the springboard for the unleashing of a series of radical transformations which could not fail to bring about considerable and beneficial results for society as a whole. His aim was to secure the attainment of

a) a sustained process of economic growth; and

b) a marked increase in the well-being of the great mass of individuals within society.
Among the transformations mentioned above there are modifications not only in the productive system affecting the generation of the national product and in the laws governing the economic institutions of society, but also alterations in the structure of demand. For Ricardo deemed it essential, if the drive to industrialization was to be successful, that it should be supplemented by changes in individual preferences towards a greater and increasing participation of industrial products in national consumption, apart from increases in foreign demand for those products.

In this sense, and contrary to what most of the traditional Ricardian models seem to indicate\(^1\), Ricardo thought it absolutely essential that the extension of markets for products of the industrial sector comprehended not only the opening up of new areas of consumption abroad but principally the enlargement of the domestic market for such products.

The increase in the consumption of products originating from the industrial sector of the economy was thus considered to be a necessary condition to render it profitable and able to expand, at the same time that a broader and more efficient division of labour in the economic system was made possible. Besides, it was seen as conducive to improvements in people's welfare.

All that, however, must be understood with reference to a more complex process of cause and effect. As long as the

\(^1\) In the next chapter, when considering the traditional Ricardian models of growth, we shall return to this point in more detail.
economic system evolves there occurs a progressive diversification of production, with the economy exploiting its comparative advantages and the benefits resulting from the division of labour. Society has at its disposal a larger and more variegated array of goods and services that greatly stimulates the development of new preferences on the part of individuals and impels them to increase their effort in order to satisfy those new desires.

As a result, productivity is boosted and markets extended, favouring the division of labour and the furthering of productive activity, especially of those sectors linked to industrial production. On the other hand, individuals have their living standards considerably improved. In sum, economic growth leads to changes in the structure of demand, which in turn lead, through the extension of markets and gains in productivity, to the advancing of the process of growth. Ricardo was, indeed, a growth-cum-welfare economist, something that the standard Ricardian models hardly ever envisage.

It follows that changes in the structure of demand are a crucial point of the whole story. Without it being taken into account, the picture representing Ricardo's analysis remains incomplete and quite restricted in scope. This, as we shall see later, is a characteristic of various traditional Ricardian models of growth.

In this chapter we intend to discuss, in a general manner, why demand forces are part and parcel of Ricardo's analysis and why their inclusion gives rise to a better
understanding of it and of its objectives. As a first step towards that aim we concentrate attention on what the economic historians have remarked with respect to the role of demand in the Industrial Revolution. This, we think, will assist us when considering Ricardo’s vision of economic development. It is so because, even if Ricardo was not able, for lack of data and case studies or whatever, to develop these insights in the way a modern economic historian of the Industrial Revolution would, he certainly witnessed the facts then occurring and made use of them in his analysis. There is no suggestion of course that Ricardo had worked out a sophisticated analysis of the phenomenon or that he fully incorporated it within his more formal theory. The fact remains, however, that Ricardo explicitly held such view as an integral part of his grand vision of the process of economic development of a capitalist system, which comprises the grand theme of our work.

1.1- The Role of Demand in the Industrial Revolution.

The period Ricardo lived in was the period of the Industrial Revolution.\(^2\) That was a period which witnessed profound transformations in almost every aspect of British society. During it Britain, and England in particular, faced

\(^2\)- We refer to the period spanning the second half of the 1700s to the first half of the 1800s, which coincide more or less with the period commonly accepted to cover the so-called Industrial Revolution, and which contains Ricardo’s lifetime (1772-1823).
high rates of population growth and accumulation of capital, the growth of cities, important advances in technology, the rise of factory production, changes in tastes, and so forth. There were also the Napoleonic wars. That was a feverish period, a fundamental one in mankind's history, which bred a new form of society.

An outstanding characteristic of that period was the unprecedented rate of population growth (Deane and Cole, 1967, p.5; Hueckel, 1985, p.1). Just before the beginning of the period population was increasing at a rate of about 3.5% per decade, reaching the impressive rate of nearly 17% circa 1810s (O'Brien, 1975, p.16). Throughout this process towns like Birmingham, Liverpool, and Manchester experienced great changes, expanding and becoming 'gigantic cities' (McClosckey, 1985, p.53). The swelling of the cities was also prompted by internal immigration, the prosperous industrial area attracting people from the neighbourhood. The economic implications of this population explosion were manifold. It affected the wages level, income distribution, labour supply, consumption levels, demand composition, etc., all points of great concern to the political economists.

Another major feature of the period was organizational and technological change and the rise in productivity. Concentration of production in factories, coupled with a series of technical innovations, helped to boost productivity.3 Innovations like Hargreaves' Jenny,

3- According to Mokyr (1985, p.27), "the factory in which large firms concentrated their workers under one roof and subjected them to rigid work rules has become the symbol
Arkwright's water frame, Crompton's mule, the steam engine, the steam-powered loom, furnace developments, Kay's flying shuttle, etc., contributed enormously to raise productivity.\(^4\)

The impact of technical change on productivity growth was tremendous. Taking the cotton cloth industry as an illustration, "a given bundle of cotton, labour and machines in 1860 produced eight times more cotton cloth than it did in 1770" (ibid). And technical improvements were closely connected with the process of accumulation of capital, which in many cases was a necessary requisite for the adoption of innovations.\(^5\)

Some estimates of the ratio of investment to GNP have lent support to the idea that the investment ratio doubled during the Industrial Revolution, from 5.7\% in 1760 to 11.7\% in 1830 (Mokyr, 1985, p.340). These estimates also buttressed the view that there was a shift from the employment of circulating capital to that of fixed capital in the period considered (ibid). Huge requirements in terms of transport, communications, large buildings, etc. may partly explain such a shift.

\(^{4}\)- One must remember, though, that "a list of inventions ... is not a list of adoptions" (McCloskey, 1985, p.109), since in several cases the adoption of an innovation comes only after a gap from the time the invention was created. It may be said, however, that that gap was considerably reduced during the Industrial Revolution (Tunzelman, 1985, p.151).

\(^{5}\)- Thus Mokyr (1985, p.29): "[T]he transition from the old to the new technique required capital accumulation in the modern sector, which enabled the new techniques to be implemented. Steam engines, mule-jennies, blast furnaces, paper mills, chaff cutters, and threshers, are all examples of a new technique requiring a large capital expenditure".
In line with the above facts there occurred deep modifications in the structure of the productive apparatus. At the start of the nineteenth century the industrial sector and those linked to commerce together took the lead in the process of economic growth, reducing thus the relative importance of the agricultural sector. According to one assessment (Crafts, 1981, p.3), the picture regarding the participation of industry in the British total product was the following:

<table>
<thead>
<tr>
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<th>1700</th>
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<tr>
<td>agriculture</td>
<td>45%</td>
<td>33%</td>
</tr>
<tr>
<td>industry and commerce</td>
<td>30%</td>
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Therefore, when Ricardo enters the scene as a political economist the non-agricultural sector already appears as the leading conductor of the process of growth. But supply-side structural changes must be matched by demand-side structural changes.

The market for products of the industrial sector had been progressively expanded. The reason for that is multiple. Population had been accelerating fast, income power growing, and commercial activities spreading. Equally

6- "The older view of the Industrial Revolution -that it was a sudden cataclysmic transformation, starting around 1760- clearly is no longer tenable. The 'pre-industrial' economy had been gradually becoming more industrialized: the population had been rising, towns had been growing, markets had been expanding, new industries and processes had been introduced, craft gilds had been disintegrating and larger-scale capitalist organization had been spreading" (Musson, 1978, p.61).
important was the phenomenon of changes in society's consumption pattern, with the development of taste, and then an increase in the demand, for non-agricultural goods, especially for industrial products.7

Conspicuous consumption, emulation, influence of fashion, and the simple natural act of personal self-betterment explain, on the demand-side, why there had been such an increase in total consumption and the diversification of its composition, with industrial products being the object of a great and increasing demand on the part of individuals. On the supply-side, meanwhile, stimulating and being stimulated by this brisk and ever expanding market, a formidable exhibition of an assorted contingent of commodities made itself present.

Thanks to a market in constant expansion, the industrial sector extended and grew in efficiency. Individuals, on the other hand, eager to participate in this consumer revolution, exerted themselves harder and harder in their work in order to raise their personal income, and, in the process, contributed to the growth of productivity and of the market, rendering yet more profitable the drive towards

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7- As Gilboy pointed out, "changing consumption standards, the increase of population and shifting of individuals from class to class, and a rise in real income provided a stimulus to the expansion of industry which must not be underestimated" (quoted in Fay, 1948, p.135, from the 1932 original essay 'Demand as a factor in the Industrial Revolution'). Musson (1978, p.62) also shares this view: "[I]ndustrial expansion in the late seventeenth and early eighteenth centuries was based mainly on rising internal demand, resulting from increasing agricultural output (with enclosures, new crops, etc.), cheaper foodstuffs, rising real wages and growing consumption of a widening range of manufactured goods ...". See also Crafts (1985, p.112).
industrialization. The latter gave rise to increases in aggregate income and demand, which in turn encouraged the continuing of the industrialization process, in a chain of dynamic causation that made the achievement of a striking rate of economic growth possible.8

Helping things to take that shape there was the fact that agricultural and industrial prices were running in opposite directions. With the division of labour and the associated gains in scale and in productivity, the prices of industrial goods fell well behind those of the agricultural produce, whose tendency was up due, among other things, to the manifestation of diminishing returns in agriculture.9

It is then that, as Coles (1981, p.63) has observed, "changes in the composition and level of demand have a part to play in explaining how and why England became the world's first industrial nation".10

8- Cf. Coles (1981, p.63): "[P]art at least of the explanation of how and why Britain experienced both growth and a unique and remarkable transformation of her economy during that period must surely be that the economic expectations of her people were rising and that enough of them, both as producers and consumers, were willing and able to take the steps necessary to satisfy them".

9- "Whereas in the period before 1750 the trend of grain prices was steadily downwards, in the latter part of the century it was just as clearly upwards - yet industrial output per head probably continued to expand in the third quarter of the century as fast as it had done earlier, and by the last two decades of the century it was evidently growing at an unprecedented rate" (Coles, 1981, p.55).

10- "Just as the Industrial Revolution of the eighteenth century marks one of the great discontinuities in history, one of the great turning points in the history of human experience, so in my view, does the matching revolution in consumption. For the consumer revolution was the necessary analogue to the industrial revolution, the necessary convulsion on the demand side of the equation to match the
This is the picture Ricardo had before his eyes. He certainly noticed it. Not only noticed it but understood it. He understood the importance of changes in the composition of consumption and in the structure of demand for the realization of his vision of an economic system marching along the path of sustained growth and of a society in which its inhabitants enjoyed increasing levels of welfare.

From the point of view of facts, therefore, changes in society's consumption pattern and structure of demand can be said to have contributed to the rise and development of industry. Our next step is to trace Ricardo's vision of the process of development in order to ascertain to what extent the stylized facts it contains resemble those we have seen so far. It is our contention that Ricardo explicitly recognized the significance of such changes and that his analysis implicitly rests on them.

1.2- Ricardo's Vision of the Process of Development.

Ricardo's analytical system was aimed at explaining and understanding the dynamics of an economy going through a process of growth characterized by changes in the environment upon which it took place, by distributive conflicts among the recipients of the national income, by struggles among the political forces in action, by battles among the partisans of conflicting and opposing economic views, and so on.

convulsion on the supply side" (McKendrick, in chapter 1 of McKendrick, Brewer, and Plumb, 1983, p.9).
Such an effervescent environment reflected the bustle related to the unfolding of the Industrial Revolution and the political strife carried out in Parliament (and outside it) which marked that time and shaped the advancing path of British society. The flurry of facts and events mirrored the efforts of, and the conflicts within, a society in its course along that path.

The monumental degree of capital accumulation brought about by the Industrial Revolution on the one hand, and the consequences of war engagements (in the Napoleonic wars) on the other, called for a deeper understanding and questioning of many a theme: the taxation system, the Poor Laws, trade restrictions epitomized by the Corn Laws, the relation between capital and labour and between agricultural and industrial interests, welfare effects of economic growth, political reforms, etc.

The disturbances and changes occasioned by the unravelling of the process of accumulation of capital and the shift from a war period to a peaceful one pressed for the emergence of a new pattern of development which assured the continuing of the growth movement, notwithstanding the protests coming from opposition quarters, that is, from the defenders of the old pattern.

It was clear to the advocates of the new pattern that the time had come in which the manufacturing, industrial sector was to represent the leading force driving the economic system up to the heights of development and growth, and that the role of agriculture was to facilitate that
achievement rather than stand as an obstacle to it.

Some interests had, if necessary, to be sacrificed in order to secure the complementarity between agriculture and industry. That the interests to be hurt were those of the landlord class the proponents of the new economic order had no doubt, as well as entertaining none with respect to the imperative necessity of modifying several legal structures which backed up landlords' privileges, ranging from trade laws to parliamentary representation.

Moreover, a new relationship between capital and labour and between money and industrial capital (which was the real demandant and employer of labour) was required, one that could give rise to the setting up of an authentic free factors market devoid of the presence of restrictive rules such as those represented by the Poor Laws or the Usury Law.

Not bounded by cramping and inefficiency-inducing laws, the economy was trusted to find by itself, through the action of individuals looking for their own interests, the best way of allocating its resources, with high levels of growth and welfare thus ensuing.

Among the front-line adherents to the new pattern of development were the political economists, self-proclaimed followers of Adam Smith, having Ricardo as their leading figure. They had as their mission to spread the claim for a new economic order based on the principles laid down by the science of Political Economy, and Ricardo's name and works were wielded as weapons against the upholders of the old order.
The criss-cross of opposite conceptions of how the country might achieve an ever more prosperous state produced hot debates across magazines, books, newspapers, and pamphlets, and inside clubs and in Parliament.\textsuperscript{11} Matters of monetary policy, national debt, taxation, population growth, agricultural distress, Poor Laws, Corn Laws, parliamentary reform, work conditions, etc. were fiercely debated. Ricardo was a major participant in those debates and his works are undeniably connected with them.\textsuperscript{12}

Mitchell (1967, p.5) has correctly pointed out that an understanding of Ricardo requires the knowledge of the socio-politico-intellectual environment which surrounded him. Only in this way can we fully appreciate what kind of challenges he adressed his mind to, what intellectual inheritance he departed from, which relationship his writings bore to the debates of the time, and how he tackled the problems he had been confronted with.

For the character of Ricardo's works is closely linked with the interplay between economic theorizing and economic policy prescription which distinguished the emergence of Political Economy. Political economists had not only tried to establish laws and principles concerning social and economic phenomena in the mould of, say, Newtonian physics, but also

\textsuperscript{11}- For a comprehensive account of these debates, see Fetter (1965) and Gordon (1976).

\textsuperscript{12}- As Mason (1928, p.686) remarked, the "interests of Ricardo and Malthus, at least, were largely determined for them by the events of the war period in which they lived. An understanding of their principles can come only from a consideration of the controversies in which they had been engaged ...".
to set up a framework capable of being put into use to formulate practical recommendations in questions of economic policy.

Such a normative trait in Ricardo's works has to do with his concern with policies, economic or otherwise, affecting society's prospects of gearing up accumulation and improving the welfare of its inhabitants.

Taking into account his broader vision of the process of development, it is clear that the ghost of the "stationary state" definitely was not a concrete perspective he had in his mind. The possibility of continuous gains in terms of productivity and welfare through industrial advance was, in fact, the picture he had in his mind. That was his concrete perspective. To identify Ricardo's analysis with stagnationism is to concoct a grotesque caricature of it.\(^\text{13}\)

What interest therefore had Ricardo in pointing to the danger of the "stationary state"? The fact that he spent so much time in his writings dealing with it in the shape of the immense troubles owing to the situation of a country in which agriculture, subjected to diminishing returns, predominates and pushes the whole economy to the brink of stationariness, does not suffice to label him a pessimist and blind to the prospects for advancement.

Ricardo hammered that gloomy picture into his

\(^{13}\)- This is exactly what Checkland (1959, p.50) did when he made the following remark: "What did Ricardo have to say about the long run prospect? He had no sense of a system raised to ever higher levels of wealth on the basis of continuously renovating technology; he was in fact a stagnationist".
contemporaries' heads precisely to show them the inevitability of the materialization of a substantial structural change in the productive system that opened the way to the emergence and development of the industrial sector. The reward would be a society much more powerful economically and with a standard of living without precedent.

What is more, he already considered Britain moving irreversibly along the road to industrialization. His objective was to lay down arguments which demonstrated how the politico-economic situation of that time, marked by protection to agriculture, was retarding the march along that road, with the result that the fruits capable of being gathered if no such obstacle existed remained out of the reach of society.

From what we have seen above, a basic idea which Ricardo entertained was that which confers a character of necessity upon the drive to industrialization. Without bearing in mind the importance of that idea to Ricardo's analysis one risks to make a "stagnatiotist" of him.

It is symptomatic of his involvement with policy issues that his writings were frequently addressed to practical questions of his time. His works of the first phase dealing with monetary matters already show that. Ricardo was putting forward arguments against restrictive and interventionist laws which interfered with the "natural" working of the economy.

His Essay on Profit (1815) is a frontal attack, through the manipulation of a very simple model, against agricultural
protectionism. From the Essay, though, what is most referred to is the so-called "corn-model". However, the "corn-model" fits ill within the general conception of development Ricardo had in mind. Less attention has been direct to certain crucial passages which clearly display the real intention of his analysis.

In the first place, he presents his principal concern. It refers to the then British situation where, given the limited supply of fertile and well-located land and the operation of laws restricting imports of basic agricultural goods, profits were low. That is to say, a society favouring agriculture through the manipulation of the legal system presents itself with no great perspective of sustained growth since the process of accumulation of capital is forwarded by profits being high enough to entail capitalists to invest, and in the situation in question they were not.¹⁴

As a result of the protection to agriculture, a greater part of the resources at the disposal of society is allocated to a relatively less efficient sector (operating under diminishing returns)¹⁵, consequently reducing the possibility of investing them to expand the more productive sectors of the economy. Ricardo is quite explicit about this trade-off:

¹⁴- "Profits of stock fall because land equally fertile cannot be obtained, and through the whole progress of society, profits are regulated by the difficulty or facility of procuring food" (vol.4, p.13, n.).

¹⁵- "Supposing then the land to be equally fertile, the necessity of employing more labourers, horses, &c. ... would make it necessary that more capital should be permanently employed to obtain the same produce" (vol.4, p.13).
"Productive labour employed on such land never does in fact afford so great a reproduction as the same productive labour employed in manufactures" (vol. 4, p. 38).

The message is obvious. Britain being a rich nation, industrialization is the path to be taken. In a letter to Malthus, just after the publication of the Essay, Ricardo reaffirms this position. He writes:

"You agree with me that if a large tract of rich land were added to the island[Britain] it would restore the state contemplated in my table. Though we agree in the conclusion we differ materially in our opinion of the means by which it would be brought about. You think that 'before any fall of price had taken place capital would be removing fast from the old land, and from manufactures,' - I think that capital would go from the old land to manufactures, because a given quantity of food only being required, that quantity could be raised on the rich land added to the island, with much less capital than was employed on the old, and consequently all the surplus would go to manufactures to procure other enjoyments for the society, and profits on the land would rise at the expense of the rent of the landlord, whilst the cheaper price of corn would raise the profits on all manufacturing capital" (vol. 6, p. 220).

The new "large tract of rich land" may be seen as the access to new markets from where basic agricultural products can be acquired at prices considerably lower than those produced domestically, and with it the country has now open before it the opportunity of directing resources, previously allocated to relatively less efficient activities, to the industrial sector. Profits rise on account of lower costs of
production and lower rents, at the same time that society's welfare is improved. Real wages, on the other hand, increase with the lower prices of basic goods, giving room to an increase in the demand for goods of industry (assuming here, as Ricardo does, that population remains constant). Distribution shifts favourably towards wages and profits at the expense of rent. As consumers, however, all are benefited\textsuperscript{16} by lower agricultural prices and higher productivity in the industrial sector. The demand for agricultural goods being almost inelastic, it means that the market for industrial products is expanded.

One might argue that Ricardo is referring, in the above passage, only to an allocative problem and not to a necessary historical movement towards industrialization. The analysis he carried out in the \textit{Essay} and the conclusions therein reached, nonetheless, convey a message which is much deeper than a mere discussion of the functioning of the allocative mechanism.

This latter, evidently, is an important part of the analysis, but its use transcends the description of its working in itself and rather serves to highlight a superior principle, namely that with the rise and unfolding of industry the economic resources are more efficaciously employed, generating as a result a greater and more diversified level of output and a larger investible surplus which is directed to the reproduction and expansion of the economy.

\textsuperscript{16} Regarding the recipients of rent the picture is more complex. It depends whether the drop in rent is more than compensated for by the drop in the price of goods.
economic system. This is a line of reasoning Ricardo persistently followed, either in his writings or in his correspondence or in his interventions in Parliament.

Ricardo is partially guilty for his analytical system being so many times identified with the analysis of a "big farm". His *Essay* can easily be reconstructed in the mould of the Sraffian "corn-model". At the very beginning of his *Principles*, in the preface, he refers to the "produce of the earth" and to the "skill, ingenuity, and instruments employed in agriculture", without ever mentioning the manufacturing sector. And through much of its basic chapters he concentrates on the discussion of agriculture.

This, we think, is due to the fact that he was trying to demonstrate in a very clear way the losses in terms of efficiency, growth, and welfare associated with the system of protection to agriculture Britain then held. It was necessary to investigate into this problem and erect a solid argument which substantiated his point. He was seeking to convince his fellow economists, the politicians, and the public in general (either as producers or consumers) of the growth potential awaiting Britain if only a freer economy was established and some of the nation's resources found their way into the industrial sector, that is, if only "a little labour was bestowed upon it [agriculture], more of the labour of the country, which constitutes its only real source of wealth, would have been at its disposal to procure other enjoyments

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The relevance of such reconstruction to Ricardo's overall analysis is another matter, the evaluation of which is not our concern here.
which are desirable" (vol. 4, p. 213).

The "big farm" analogy is, however, anachronistic. Britain was already an industrial nation, and Ricardo was aware of the fact. In chapter 19 of his Principles, "On Sudden Changes in the Channels of Trade", which is addressed to the study of the revulsions coming in the wake of capital being redirected within the economy, and which represented his diagnosis of what had been happening in the post-Napoleonic wars period in Britain, he distinctly refers to a "Great manufacturing country".

In that very chapter Ricardo makes a praising reference to an article written by his friend McCulloch in the Encyclopedia Britannica called "Corn Laws and Trade", and quotes a passage from it that is very significative in revealing his own thoughts. The passage in question is this:

"If we shall at any future period, think of retracing our steps, in order to give time to withdraw capital from the cultivation of our poor soils, and to invest it in more lucrative employments ... When this happy event shall take place, it will be no longer necessary to force nature. The capital and enterprise of the country will be turned into those departments of industry in which our physical situation, national character, or political institutions, fit us to excel. The corn of Poland, and the raw cotton of Carolina, will be exchanged for the wares of Birmingham, and the muslin of Glasgow" (vol. 1, p. 267, n.).

In a later chapter ("On Gross and Net Revenue") Ricardo

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18 - Ricardo says of the article that it is "well worthy of attention; it is very instructive, is ably written, and shews that the author is completely master of the subject" (vol. 1, p. 267, n.).
himself says much the same thing:

"In the distribution of employments amongst all countries, the capital of poorer nations will be naturally employed in those pursuits, wherein a great quantity of labour is supported at home, because in such countries the food and necessaries for an increasing population can be easily procured. In rich countries, on the contrary, where food is dear, capital will naturally flow, when trade is free, into those occupations wherein the least quantity of labour is required to be maintained at home: such as the carrying trade, the distant foreign trade, and trades where expensive machinery is required; to trades where profits are in proportion to the capital, and not in proportion to the quantity of labour employed" (vol.1, p.349).

But, as we have said above, this idea, with all normative implicatio for economic policy it comprises, is part of a more general vision, of a much ampler perception of the way through which human productive efforts had been historically organized and evolved in order to attend the always increasing and ever more varied needs human development gives rise to.

The economic system is a social organization, and its success depends on its efficient set-up, success itself being measured by the improved conditions of life it occasions.

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19- As far back as 1810, in his pamphlet "The High Price of Bullion", Ricardo already hinted to this "natural" path. There he wrote: "In return for the gold exported, commodities would be imported; and though what is usually termed the balance of trade would be against the country exporting money or bullion, it would be evident that she was carrying on a most advantageous trade, exporting that which was no way useful to her, for commodities which might be employed in the extension of her manufactures, and the increase of her wealth" (vol.3, p.54).
Along with the utilitarian creed Ricardo may be said to have embraced, this means "the greatest happiness for the greatest number". That organization comprises two basic things. First, the understanding of how the organization is established, viz., how the system is organized. The implication is stronger, however. It refers to how it should be organized so as to produce the best possible of results. Political Economy, through the study of the human productive organization and the elaboration and elucidation of laws which purport to explain its "natural" evolution, provides this. Secondly, the rules of behaviour inside the organization. The central rule is that each individual knows what is better for himself, and in acting in self-interest promotes the common good. A free market society is deemed to constitute the ideal set-up encompassing that social organization.

As we have noted, this organization is evolving. The institutions it comprehends experience transformations, and one of the tasks assigned to the social scientist is to grasp the direction of them and to show their necessity.

The agricultural society was a step in the evolution line and had to give way to the industrial society. Each stage has its role to play in securing the social

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20- There is no implying here that Ricardo was a full-blooded utilitarian. It only means that Ricardo shared with the utilitarians the idea of a society where improved life conditions were enjoyed by the whole of it.

21- Much in the same way as Hicks has described in his A Theory of Economic History, though he had in mind a completely different context. See Hicks (1969, p.11).
reproduction and the disclosing of ways of helping evolution to a new phase, superior in terms of productive capacity and welfare.

The generation of an investible surplus is a crucial factor in this process of reproduction and evolution. It is the creation of surpluses over and above the ordinary needs of merely reproducing the system on the same level as before that gives it the possibility to grow and diversify, that is, to increase its productive capacity and exploit new opportunities of production.

One of the essential elements in making it possible for the transition to come about is the existence of a surplus generated by agriculture and put to use to finance the unfolding of non-agricultural sectors of society.

Malthus held the opinion that Ricardo neglected this fact, and that he, consequently, underrated the significance of the surplus created in the agricultural sector to the gearing up of economic growth. Malthus was particularly critical of Ricardo's idea respecting the status of rent. To him, Ricardo, referring to rent as a creation of value but not a creation of wealth, belittled the importance of the agricultural surplus (rent) as a catalyst assisting to stimulate growth.\textsuperscript{22}

\textsuperscript{22} As Malthus wrote in his \textit{Principles of Political Economy}: "It seems rather extraordinary that the very great benefit which society derives from that surplus produce of the land which, in the progress of society, falls mainly to the landlord in the shape of rent, should not yet be fully understood and acknowledged. I have called this surplus a bountiful gift of Providence, and am most decidedly of opinion, that it fully deserves the appellation"( Ricardo, vol.2, p.208).
Ricardo, however, is not to blame for that fault. He plainly acknowledged the worth of the surplus generated by agriculture in assisting economic growth. The problem he was concerned with was different. It had not to do with the denial of the importance, historical and economic, of agriculture but with its contextualization. In other words, he sought to demonstrate that, in the context of a society going through a process of evolution, with the rise of new needs and of new opportunities to be capitalized on, the time had come for the industrial sector to take the lead in pushing the system ahead along the growth path. In these circumstances, and taking into account the situation Britain found itself in at that moment, a crucial point was the form by which the surplus available to society had been utilized.

On the one hand there was the problem of the short supply of fertile land and the manifestation of diminishing returns in agriculture. On the other there was an emergent industrial sector presenting high productivity and gains of scale due to its more efficient specialization and division of labour. The question of the allocation of the surplus is thus quite apparent. Given that situation, the problem is to decide in which proportion the surplus should be divided among sectors so that it was utilized in the most efficacious way. According to Ricardo, to the industrial sector should fall the lion’s share in such a partition if the efficiency rule was anything to go by.

We have an allocation question here. Agriculture is extremely important, doubtless. It furnishes food and raw
material, basic inputs to the production activity. The surplus, however, is scarce. Its allocation, in its totality or greater part, to the agricultural sector, given its structural conditions, implies inefficiency relatively to what might be obtained if it was mostly allocated to the industrial sector.

The surplus, therefore, must take predominantly the form of profits rather than rents. If it is so, the economic system has but one path to follow: after agriculture has reached its prime\textsuperscript{23}, the available productive resources should be increasingly allocated to the emergent non-agricultural sectors. The system passes through a radical structural transformation, having its economic strength gradually and increasingly being based upon industrial activities, which by their nature are more efficient and more capable of taking advantage of new markets and gains of scale.

Meanwhile, food and raw materials can be acquired in foreign markets where they are more efficiently produced and sold cheaper.\textsuperscript{24} The division of labour is extended on an international scale, that is. A new "tract of rich land" is added to the "Island". But it now represents other(s) country(countries)'s relatively more efficient agricultural sector.

\textsuperscript{23} That is, as soon as the problem of rich land scarcity and the manifestation of the phenomenon of diminishing returns in agriculture make themselves apparent.

\textsuperscript{24} We suppose here, as Ricardo did, a competitive environment.
This is exactly the idea Ricardo conveys in his answer to Malthus’s criticism levelled against him. Ricardo there observes that:

"Here then once for all let me declare that I estimate as the source from which we derive all we possess the power which the earth has of yielding a surplus produce. In proportion to this power we enjoy leisure for study and the obtaining of that knowledge which gives dignity to life. Without it we could neither possess arts or manufactures, and our whole time would be devoted to the procuring food to support a miserable existence."

"It is only because the prolific powers of land in other countries are greater than those on which we must draw for our last supplies, that I would have recourse to those lands, and would consent to import corn, because as less labour would be devoted to the obtaining of food, more might be employed in getting other gratifications."(vol.2, p.211).

Note Ricardo’s strong emphasis on the role of agriculture in supporting industrial development, and on the claim that the latter respond to the rise of markets for non-agricultural products. It is crystal-clear the association between the growth of the industrial sector, more productive, and changes in the pattern of social consumption ("other gratifications" above bare needs). Obvious too is the necessity of the international division of labour and the widening of markets.

Agriculture continues to be a strategic sector, but its importance and role are now directly linked and subordinated to the progress and expansion of the industrial sector, which
take the lead in rich countries due, at least in part, to the diversification occurring in consumers' preferences. As the market grows there are more and more opportunities for exchange and specialization, thus for the division of labour and gains of scale and productivity, and thus for growth.

This vision of Ricardo's bears some analogy to Hick's depiction of the rise of the market in the wake of trade specialization and systematic trading. Hicks (1969, p.26-27) gives the example of how religious festivals transform into village fairs as the convenience and benefits the novel activity gives rise to become patently clear, and how that new undertaking grows as those advantages are increasingly sought for, even to the sacrifice of the old activity.

In the same fashion, Ricardo's vision of the pattern of development entails the breakthrough of the industrial sector at the expense of agriculture in response to its being more efficiently productive and to the unfolding of a significant market to be exploited. The demand and consumption of non-agricultural goods and services, earlier the privilege of a small number of rich people, are both enlarged and diversified. Enlarged because of the purchasing power generated in the process of accumulation and growth and the lower relative prices of, particularly, industrial products. Diversified because of the advent of an impressive miscellany of products thrown in the markets and the ascending influence of modish trends.²⁵

²⁵- For a historical and well illustrated account of this phenomenon refer to chapter 1 of McKendrick, Brewer, and Plumb (1983).
Ricardo's view of progress is thus clear. Agriculture must give way to industry as the system's driving force. As long as the economy remains agricultural the nation has always before itself, sooner or later, the existence of a barrier to growth. As an industrial society, however, those limits seem farer and farer away (even without any reconizable ones, he sometimes implies).\textsuperscript{26}

The following his statement summarizes perfectly well his grand vision of development:

"Manufactures and trade are alternately the cause and effect of wealth. An agricultural nation without trade and manufacturers cannot be rich, because neither an individual or a nation can be said to be rich, if it have only food to eat. An agricultural nation might however have the command of a great quantity of labour besides that employed on the land, which it might expend on war, or in supporting the rude ostentation and magnificence conferred by a great number of retainers. Such a nation would have powerful resources, and would I think be more than a match for a country of the same extent and fertility which was also a manufacturing country. Why have we not heard of any such agricultural nation? because none ever persevere in the course from which they commence- they prefer manufactures to menial servants- instead of a great man having a thousand persons about him ready to obey his mandates, they are accumulated in workshops manufacturing his lace, his china and his furniture, or they are digging the earth for the purpose of obtaining the precious metals of which he is so greedy. Give a country wealth, or let it acquire wealth, and it ceases to be purely agricultural, not because there is any thing which necessarily obliges it to be any thing else, but be-

\textsuperscript{26} "There would always be a limit to our greatness, while we were growing our own supply of food: but we should always be increasing in wealth and power, whilst we obtained part of it from foreign countries, and devoted our own manufactures to the payment of it" (vol.5, p.180).
cause with wealth a desire for manufactures is excited, and this desires becomes a powerful stimulus to the accumulation of capital, in order that the desire may be gratified" (vol.8, p.102).

This very categorical exposition of his conception of the direction and form the course of development takes is quite rich in the insights it reveals into the factors behind the pushing forward of a nation along its growth path.27

An important point to notice, and this is evident from the quotations we have presented thus far, is the association between the expansion of the market and industrialization. With its products being of low income-elasticity of demand, agriculture does not qualify itself for leading, after a certain stage, the process of development. A sufficiently big consumer market is necessary in order to gather the fruits derived from scale economies. Not only that, but that individuals in that market be possessed of enough income power to make their demand effective.

It also turns out that the composition of demand is a major factor in this episode. To structural changes in the productive apparatus correspond structural changes in aggregate consumption. The formation and promotion of a taste for non-agricultural products emerge as one of the catalytic elements of the transition to an industrial society. But it

27- In Parliament, Ricardo laid down his grand vision before his peers: "Nations grew old as well as individuals; and in proportion as they grew old, populous, and wealthy, must they become manufacturers. If things were allowed to take their own course, we should undoubtedly become a great manufacturing country, but we should remain a great agricultural country also" (vol.5, p.180).
is of course a consequence of that transition, i.e., it is both cause and effect in this whole event.

Some significative points thus come to light following this line of reasoning:

(i) As nations develop and turn rich they inevitably become industrial societies. This is seen as a "natural" outcome of the course of development. Development, therefore, ultimately implies industrialization. One always can imagine an economically powerful agricultural nation, but Ricardo is emphatic in discarding it as a concrete possibility;

(ii) This is so because development generates wealth, which in its turn begets new preferences that an essentially agricultural society cannot satisfy. The formation of a taste for, and the desire in obtaining, industrial goods are part and parcel of the unfolding of progress;

(iii) New tastes are, at the same time, cause and effect of progress. The "lace, china, and furniture" are all products of a diversified productive activity that causes individuals to feel allured by, and disposed to have possession of, them. On the other hand, that assorted supply is only feasible with the existence of a market capable of absorbing it;

(iv) The linkage between transformations in the structure of consumption and demand on one side, and development and growth on the other, is more complex, though. Growth is assisted not only by the extension of the market. Such extension is, clearly, of great importance. Beyond that, however, growth is stimulated by incentive effects related to
work. Individuals have now, with a view to gain an income large enough to get hold of their "new objects of desire", all the incentive necessary for exerting themselves to accomplish that objective, greatly increasing, by their efforts and specialization, productivity. As a result, the division of labour is intensified and capital accumulated in a more efficient manner. High rates of growth ensue;

(v) A larger market, scale economies, and productivity increases make the process of accumulation of capital more profitable and open to further and further expansion. This generates more and more "new objects" which stimulate demand, a fact that feeds back into the process of accumulation and growth through the extension of the market and productivity gains. This is the dynamic chain of cause and effect which keeps open the possibilities of continual progress.

In a nutshell, the process of accumulation and growth gives rise to an augmented and diversified supply and to an increased aggregate income. With these comes the stimulus to the development of new tastes and to work-related incentive effects, and the amplification of the market (via changes in the structure, and volume, of aggregate demand), which together act as encouragement to the furthering and acceleration of accumulation and growth.\(^{28}\) Notice that the

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\(^{28}\) This pattern of development we see in Ricardo's analysis is, to some extent at least, backed by some modern considerations about the process of industrialization expressed by some economic theorists interested in economic history. Hicks (1977), for example, highlights the importance of Adam Smith's remarks on the extension of the market and of the division of labour, and reminds us that the "division of labour, we should have learnt from Adam Smith, is limited by the extent of the market". And Kuznets (1973), in his
key idea in the above quoted passage is that which links the fact that "with wealth a desire for manufactures is excited" to the result that "this desire becomes a powerful stimulus to the accumulation of capital" because it is by this way that "the desire may be gratified".

Our next step is to consider in more detail the question of the structure and composition of demand in Ricardo.

1.3- Economic Development and the Nature of demand.

A pervasive idea concerning Ricardo’s economics is that which affirms his neglecting of demand in approaching the theory of value. Would it be fair, however, to extend such idea as to encompass the whole of Ricardo’s system? The preceding discussion has already given us motives to reject it. Here we examine the nature of demand in Ricardo and its relation to economic growth in order to bring in more elements in support of that rejection. Here, as in the whole of this work, we argue that Ricardo’s analysis draws on demand forces as important factors in the explanation of the process of accumulation and growth. The neglect of this fact is a major weakness of most of the accounts of Ricardo’s analytic scheme.

A first point is the concept of demand Ricardo held. Rather than base the discussion in terms of whether it is reflection on modern economic growth, points to some of its stylized features, which include high rates of growth in productivity, a shift away from agriculture to non-agricultural products, and structural changes in consumption.
conceived of as a schedule (curve), as Hollander (1979, p.119), for one, contends, or a single point in the commodity space, as neo-Ricardians insist it is (see Garegnani, 1983), we instead look at its definition from the point of view of its notional component parts. As it will be seen, this is particularly relevant to the purpose we have set ourselves, that is to say, the investigation into the relation between changes in the pattern of demand and the process of accumulation and growth.

Demand consists of two elements: the "will" and the "power". The first accounts for the desire of consumption, the second for the ability to realize it. A demand is effectual when both elements are present. Ricardo's analysis of demand, then, takes into consideration the disposition to consumption, which depends on individual preferences, and the power to accomplish it.

The pattern of individual preferences may be generalized on the basis of Adam Smith's conception of the nature of human consumption, which Ricardo whole-heartedly accented. Adam Smith laid down as a general rule that the desires (preferences) of consumption human beings display have a dual nature.

The desire for basic, agricultural products (food is the outstanding case) is limited by the satiable character of human basic needs, while the desire for non-agricultural products, markedly industrial ones, is not so constrained because of the insatiability associated to the consumption of
the so-called "conveniences and ornaments of human life".\textsuperscript{29}

Ricardo, following Adam Smith, held that men are always inclined, more and more, to add to their satisfactions above basic necessities (vol.6, p.134). To that extent, the "wants and tastes of mankind" are limitless (ibid).

This is an extremely important point. It is one of the factors linking the issue of the structure of demand and the course of development above delineated. The demand for products of the agricultural sector is limited in each individual on account of his/her primary needs (food essentially) being restricted. Note that Ricardo referred to agriculture chiefly in these terms, that is, as provider of basic foodstuffs.

Evidently, agriculture has also the important task of providing raw materials to itself and to industry. But we may conceive of food as one such raw material, since it is directed to the sustaining and reproduction of that most vital input of production: human labour.

The demand for non-agricultural goods, however, is not

\textsuperscript{29} In his \textit{Principles}, Ricardo quoted a famous passage from Adam Smith's \textit{The Wealth of Nations} where he affirms: "[The] desire of food is limited in every man by the narrow capacity of the human stomach, but the desire of the conveniences and ornaments of building, dress, equipage, and household furniture, seems to have no limit or certain boundary" (vol.1, p.293). This idea has persisted among economists. It became even a law: Engel's Law. More recently, Keynes himself, as we shall see in chapter 4 below, made that distinction. Such conception of human needs and preferences may be traced further back, though, at least to Aristotle. In \textit{Politics}, he laid down a distinction between "goods of the body", which relate to basic human needs, and "external goods", which "contribute to a desirable standard of living above and beyond the requirements of survival" (as quoted in Lowry, 1987, p.18).
subject to the same limitations which bound the agricultural ones. Above basic consumption, the desire to acquire and enjoy other commodities has no apparent limit. It is the holding of this, as it were, axiom that led Ricardo to state the following principle:

"Nature then has necessarily limited the amount of capital which can at one time be profitably engaged in agriculture, but she has placed no limits to the amount of capital that may be employed in procuring 'the conveniences and ornaments' of life" (vol. 1, p. 293).

The implication this principle carries is quite clear. During the course of development, as long as wealth is generated, capital is progressively allocated to the non-agricultural sectors to meet the demand for non-essential (in the sense of consumption not related to basic needs) products, which by its own nature is unlimited. Accumulation takes this shape because it is the most efficient manner of making money.

To realize his "money profits" and reproduce and increase his capital, the capitalist must produce "that which he has good reason to think he can sell at a remunerating price", that is to say, "a commodity that you know will be demanded" (vol. 8, p. 235-36). Money capital is lent or borrowed according to the outlook for realizing "money profits" through its application in production activity.  

30 - "The interest which a man agrees to pay for the use of a sum of money is in reality a portion of the profits which he expects to derive from the employment of a capital which that sum of money will enable him to obtain. In the
As capital accumulates and the system experiences growth, money capital, or what Ricardo calls "the floating capital", presents the tendency to be directed more and more towards the industrial sector of the economy given its brighter prospects concerning the state of its demand, actual and expected. This is the case of rich countries, where "there is a number of men forming what is called the monied class; these men are engaged in no trade, but live on the interest of their money, which is employed in discounting bills, or in loans to the more industrious part of the community. The bankers too employ a large capital on the same objects" (vol.1, p.89).

This "monied class" is interested in making money out of money and it is its "floating capital" which fuels and lubricates the economic activity. Its members are thus highly susceptible to changes in the direction of preferences and trade. They are merchants of money, and Ricardo's remark about the class of merchants, in general, also applies to them. He remarked that the "slightest fluctuations" in trade "are watched by a class of men[the merchants] proverbial for their shrewdness" (vol.3, p.181). They are practical men guided by observation of facts and experience, who then are alert to changes occurring in the economy. Economic resources follow that pursuit of making money.

Therefore, given that inherent nature of human preferences, a rich nation necessarily becomes interest which he is willing to pay he is guided solely by the probable extent of those profits" (vol.3, p.375).
industrialized. Agriculture cannot, on its own, sustain a process of accumulation and growth.

To make that demand effective, nonetheless, individuals must have an income capable of satisfying their desires of possessing goods.\textsuperscript{31} The wish for consumption is always present. In a society going through a process of growth and industrialization it is even constantly spurred on. The problem is to create enough purchasing power to make it possible to fulfil that wish.

To Ricardo, the purchasing power needed to make demand effective is generated in the action of production. It is through accumulation and investment in production that that power is created. The circuit is completed when one observes that, for accumulation and investment to be economically viable (through time), they should be oriented towards those sectors producing the set of commodities which individuals' preferences (wishes) reveal to be those most desired. Production must adapt itself to the state and composition of demand.

As the system grows, income is generated. Moreover, this (aggregate) income is increasing. As a result, more opportunities of consumption are open to individuals. New tastes are constantly created, and with them the desire of satisfying them. Notice here again the presence of incentive effects.

\textsuperscript{31} As Ricardo put it, "I should not call the mere desire of possessing a thing a demand for it, such desires are undoubtedly unlimited, -but by demand I should understand a desire to possess with the power of purchasing" (vol. 6, p. 56).
Recall the allocation problem we have mentioned before. It involves the mode by which the surplus is apportioned in the economic system. Recollect too that the generation of a reinvestable surplus is the key factor in explaining economic growth.

It thus make sense to refer to Ricardo's economics in terms of the "surplus approach" (see Garegnani, 1987). But it means a lot more. The creation and utilization of the surplus to accelerate growth incorporates a further question. This question is greatly relevant to our topic and has to do with the allocative mechanism. It is relevant because on it depends much of the dynamics we can observe the system to display. This question is that of the qualitative transformations which the appropriation and application of the surplus make society capable of undertaking. We saw how the economic resources at the disposal of society is allocated so as to make the realization of profits in the sphere of the markets possible. At a certain phase in the development of capitalism money capital assumes a major role in directing the course of resource allocation. It is so because the financing of production activities, which are multiplied along the path of accumulation and growth, cannot be made on the basis of personal funds only anymore. As Ricardo pointed out: "There is perhaps no manufacturer, however rich, who limits his business to the extent that his own funds alone will allow: he has always some portion of this floating capital, increasing or diminishing according to the activity of the demand for his commodities" (vol. 1, p. 89).
As those constituting the "monied class" are "proverbially shrewd" in their observation of the markets looking for the best possible way of making money, we have the following corollary:

"When we look to the markets of a large town, and observe how regularly they are supplied both with home and foreign commodities, in the quantity in which they are required, under all the circumstances of varying demand, arising from the caprice of taste, or a change in the amount of population, without often producing either the effects of a glut from a too abundant supply, or an enormously high price from the supply being unequal to the demand, we must confess that the principle which apportions capital to each trade in the precise amount that is required, is more active than is generally supposed" (vol.1, p.89-90).

Resources are thus allocated in such a way as to capacitate the economic system to endure the required structural transformations needed to supply the markets adequately and profitably. In the course of accumulation and growth, this means that, in what concerns us here, and as Ricardo highlighted in the above passage, the balance between the spheres of production and consumption implies the utilization of the surplus to meet the proliferation of new tastes and new demands.\(^3\)\(^2\)

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\(^3\)\(^2\)- In this connection, Keynes (1926, p.276) was very much felicitous in his observation that the "principle of the survival of the fittest could be regarded as a vast generalization of the Ricardian economics". This Darwinian view of Ricardo, and, for that matter, of the classical school in general, is quite apposite. Ricardo frequently accentuated "the great risk of miscalculation" as the basic source of "great mistakes ... in the application of capital" in production (vol.4, p.345). Thereby we have, as Keynes
We can look at this allocative problem which, it is well worth keep reminding, lies at the heart of Ricardo's analysis, in a slightly different way, one we shall explore more deeply in later chapters but which is helpful to touch on here.

A consequence of changes affecting individuals' habits of consumption towards a greater participation of industrial goods is to liberate the non-agricultural sectors from a strong dependence upon agriculture. In the initial position we have those sectors closely attached to agriculture and prevented from developing in the much faster pace they were capable of.

As it was said above, basic foodstuffs may be seen as entering the productive circuit as a kind of raw material consumed in the production of labour inputs. Being so, whatever affects food affects, by consequence, labour and production.

If it is the case that food comprises the larger part of the expenditures individual workers incur, and that its production is subject to increasing costs, it is obvious again wrote, "the efficacy, and indeed the necessity, of the opportunity for unlimited private money-making as an incentive to maximum effort. Profits accrues, under laissez-faire, to the individual who, whether by skill or good fortune, is found with his productive resources in the right place at the right time ... Thus one of the most powerful of human motives, namely the love of money, is harnessed to the task of distributing economic resources in the way best calculated to increase wealth" (Keynes, 1926, p.283-84).
that, ceteris paribus\(^3\), total costs, inside and outside agriculture, are driven up. Profits fall and accumulation and growth de-accelerate.\(^4\)

Therefore, the potential for expansion the non-agricultural, more dynamic sectors of the economy are supposed to have, would be considerably impaired since their development depends crucially on the conditions of the less efficient agricultural sector. This points to the fact of society’s resources not being used to their full power.

With the rise of new tastes in the form of an intense desire for the consumption of non-agricultural products, less food, proportionately to income, is demanded. Accordingly, a larger part of the surplus, economic growth gives rise to, is apportioned as investment in those more efficient sectors of the economy, the production of which is not subject to increasing costs\(^5\) as in agriculture. This is a story completely absent from the Ricardian models of growth. But more of that later.

Up to now we have refered to the individuals within society. But Ricardo’s society is a class society. Individuals must be grouped in their respective classes. We

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\(^3\)- We have in mind here especially the absence of substitution of capital for labour, which anyway would be needed on such an immense scale as to make this method higly implausible.

\(^4\)- This is of course the problem Ricardo started from. It constitutes what we call the basic Ricardian problem. We shall return to it again in the following chapter.

\(^5\)- Apart from those corresponding to higher labour costs due to diminishing returns in the production of food and raw materials.
basically have three classes: the working class, the capitalist class, and the landowner class. This demarcation need not be too rigid. Social mobility may not be ruled out. On the other hand, it is not unreasonable to assume that mobility was very much restricted in Ricardo’s time. There existed barriers that prevented it from being more fluid. One can think of the distribution of political power (representation in Parliament, for example) as one of such barriers.

The class division of society is of interest to pinpoint behavioural differences among individuals. In many respects the analysis of development is connected to habits, customs, tastes, and propensities, and they vary accordingly to the class background of the individuals.

From the very outset it is to be noted that all individuals, irrespective of which class they belong to, are consumers. Their propensities to consume (as a proportion to their income) and preference pattern of consumption, however, vary with their class position. Those differences, together with others, as we shall have the opportunity to see, constitute central aspects of Ricardo’s analysis.

All individuals being consumers, their increase and diversification in consumption as a whole is germane to the extension of the market and to economic growth. The diffusion of the consumption of industrialized goods need not be confined to any particular class. All three classes, in the progress of wealth, have their consumption of industrial products increased; all three of them are, in a greater or
smaller degree, vulnerable to the influence of fashions and to the appeal of new commodities.\textsuperscript{36}

To the conspicuous consumption of the higher ranks of the society corresponded the emulative consumption by the lower ranks. The novelty of manufactured commodities allured people, whatever their class standing, to raise their consumption of those novel and modish products.

Clearly, the bundle of goods the higher ranks consumed was not exactly the same as that the lower strata could afford to consume. However, similar goods to those rich people consumed were manufactured, made of less expensive materials and of lower quality, to reach the pockets of the great mass of individuals belonging to the lower echelons of the society.

This segmentation of the market is helpful to its diversification and extension. Through it industrial production could stretch so as to meet the needs of different levels of the population. It is also conducive to the spreading of the division of labour, the industrial sector being subdivided in conformity with the segment of the market the individual producer (or group of producers) directs his production to.

During the unravelling of accumulation and growth it is conceivable that both aggregate income and that of each individual class are rising. This is compatible with the picture Ricardo had in mind. Remember that to him,

\textsuperscript{36} There are some historical evidence that in Britain of Ricardo's time this was actually happening. See McKendrick, Brewer, and Plumb, 1983, chapter 1.
accumulation of capital creates the "power" to consume.

Workers, thanks to the boost in the demand for labour, have their wages increased. Capitalists\textsuperscript{37}, by stepping up production and facing an extended market, have their profits raised. Finally, landlords experience rises in their rents as long as competition for fertile lands increases.

The case, however, is not so simple. After all, Ricardo's analysis is famous for one notable characteristic: the distributive class conflict.

In absolute terms, all classes may experience income rises, but proportionately to total income the story may be somewhat different. Some individual share(s) may be rising at the expense of other(s). In Ricardo that is the case. Given the circumstances in which Britain found itself and the pattern of class behaviour, the line of development he envisaged necessarily implied the existence of a loser, at least in relative terms, but a loser all the same.

Obviously, that loser had to be the landowner class. Distribution, both in economic and political terms, had to favour the working and capitalist classes. Ricardo had his reasons to think it inevitable that that happened. It has to do, for instance, with the distinction between productive and unproductive consumption, or the existence of restrictive laws hampering the functioning of the economic system. This is a complex story the next chapters try to unfold. Here it suffices to mention the following point.

\textsuperscript{37}- For the sake of simplicity we are considering here only those recognized as producers.
Consumption by the higher ranks of society is important, since the amount of income the individuals in them receive is considerable. And as we have noted before, consumption increase by all classes was needed in fostering industrialization. Yet, so that the extension of the market was really significant, and scale economies and the division of labour promoted, it was imperative to bring in to the market the huge contingent of potential consumers represented by the working class.

Low wages would not permit workers and their families to participate in the new market for industrial products, markedly restricting the scope of the latter. Real wages had to rise to give the working class the necessary purchasing power to expend above mere subsistence and then coming to demand the products of the industrial sector, which would have the market for its products greatly enlarged.

Another reason for Ricardo to believe this should be the case is the fact that it would represent a meaningful improvement in workers’ living standards, which always constituted one of his main targets.

In this chapter we tried to convey an outline of the story respecting a grand vision of the process of development and some of the factors influencing it. That vision of Ricardo’s puts weight upon the unavoidable necessity of industrialization to come about as a nation evolves in wealth and productive power. It also stresses the role demand forces, through changes in society’s consumption pattern, play in helping industrialization to spread and consolidate.
The idea is that the structural change in demand brought about by increased wealth and income works in favour of the movement towards industrialization.

Usually, the debate over whether demand forces have any part to play in Ricardo's analysis has been confined to the realm of the theory of value. We find it more interesting to look at that question from the perspective of the analysis of growth, and from what we found out so far and from the ensuing discussion, we think it unjustifiable to ignore the place demand forces assume in Ricardo's view of economic development.

Here we could only sketch that vision. Subsequent chapters seek to work it out in detail in what concerns its relation to modifications in the structure of demand. We start off by examining the standard Ricardian models of growth and their failure in contemplating that vision and the function of demand forces in it.

Before concluding this chapter, and lest anyone misconceives the message it conveys, it would seem appropriate to make a last remark concerning the character of Ricardo's analysis. From what we have been arguing through the whole of this chapter one might infer that we are describing his analysis as one driven by the demand-side, instead of the supply-side, of the economy. Despite our disagreement with the more usual characterization of it as being essentially supply-side driven, we do not hold the polar position to it. Our position is in between these two extreme ones. The conditions of production do play an
influential role in Ricardo's analytical framework. However, we think that demand conditions form an essential part of it too. It is this aspect of Ricardo's writings we stress in the present work.  

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38- In this connection, it would not be proper to identify Ricardo's theory with, say, Kaldor's, which in fact is a demand-driven one. However it may be that some points of convergence between our reading of Ricardo's vision of the process of industrialization and Kaldor's theory of economic growth can be pointed out, in particular with regard to the fact that the latter renders the overall rate of growth of the economy dependent on the rate of growth of the demand for the products of the manufacturing sectors, the point remains that Ricardo, contrary to Kaldor, did specify the limitation of available resources, and thus the conditions of production, as a powerful influence over the general level of output. Of course there are more to be said about this issue than that, not the least the different historical conditions under which both of them were living. Our sole purpose in addressing this point is to draw attention to the risk of misapprehension one may be liable to incur in judging us to characterize Ricardo's analysis as essentially a demand-driven one. For details of Kaldor's theory of growth refer to Choi, 1983, chapter 6, and Blaug, 1990, essay 9, among others.
Chapter 2- RICARDIAN MODELS OF GROWTH.

A large part of the literature on Ricardo focuses on the formalization of the trajectories of growth derived from his analytical system. Today we can speak of trajectories, in the plural, instead of making reference to a single one. Recent studies of Ricardian models of growth have pointed out that Ricardo's analysis is of a far more complex nature than thought before, even in its simpler versions. They demonstrate distinctly how ambiguous is to talk of a unique growth path associated with an economy of the Ricardian type. Furthermore, they cast a doubt upon the correctness of specifying a neat path of convergence of the system to a stationary equilibrium.

These novel findings constitute a significant contribution of the new generation of Ricardian models of growth to the deeper understanding of Ricardo's theory. The models belonging to the labelled "new view" on Ricardo, which has questioned some of the central hypotheses lying at the bottom of the old models, particularly in what concerns the nature of wages in Ricardo's analysis, have been of special importance.

The typical Ricardian model of growth attempts to depict the convergence of the economic system to the stationary state. They invariably show how the system converges, in a more or less complex manner, to a motionless equilibrium.

1- Some writers, for example, dealing with simple models, have detected chaotic behaviour originating from their workings. Cf. Day (1983) and Bhadhuri and Harris (1987).
Another striking feature of those models is the conspicuous absence of demand forces in the analysis of the dynamics of the system. The usual procedure is to take demand and the composition of output as given from the outset. This results in demand forces being treated as exogenous elements (or at least as subordinate factors in the inquiry).

Two chief strands dominate the literature on Ricardian models of growth. One follows the road opened by Pasinetti in his 1960 classical article. This strand can be described as the traditional Sraffian one. For the sake of simplicity we might denominate it "the old view" of Ricardo, so as to differentiate it from the "new view". "Old" should not be taken totally literally, however. Chronologically speaking, the strand in question may be older, but it would be an error to consider it as having lost its current influence. On the contrary, its followers still comprise an important section of Ricardo scholars. We shall thus refer to it as the "Sraffian view" of Ricardo. The other strand we have already mentioned; it is the so-called "new view" of Ricardo.2

We are not interested in the formalization of Ricardo's analysis of the growth process. Our objective is to examine and emphasize the role demand forces play in the vision it implicitly embodies of the unfolding of the process of industrialization.

Nonetheless the consideration of what the Ricardian

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2- Needless to say, this division in two major strands is only a device to simplify the discussion. There is no total homogeneity within either camp.
models of growth portray, the framework of hypotheses from which they depart, and the conclusions they reach, are of great value to the clarification of the subject-matter of our discussion.

Two points are especially important:

a) their disregard of the essential connection Ricardo established between the process of accumulation of capital, growth, and creation of wealth on the one hand, and changes in the structure of demand on the other;

b) by doing so, they fail to capture what we regard to be the kernel of Ricardo's vision of development: the requisite drive to industrialization.

To begin, we lay down the major characteristics of the representative models of the two strands mentioned above. Unavoidably, we need to elect an archetype model for each camp, although, as we have observed, differences among models within each tradition may probably exist. Certain basic features and conclusions which are common to each specific line of interpretation, though, are always recognizable in the individual models of growth, and it is to them that we shall direct our attention. We start by considering the major features of the model following the Sraffian interpretation of Ricardo.

2.1- The Sraffian view of Ricardo on Growth.

The exemplar par excellence of this tradition is, doubtless, the 1960 model built up by Pasinetti (see
Pasinetti, 1974). It distinctly follows the hints Sraffa gave in his famous introduction to Ricardo's *Principles* (Ricardo, vol.1, introduction). Basically, Pasinetti translated the "corn model" rationalized by Sraffa into a "pure labour model", with quantities of labour acting as a substitute for quantities of corn as the unit of account.

Society is grouped into three classes of people: workers, capitalists, and landowners. The economic behaviour of these three classes is neatly defined. Workers supply their labour and spend all income (wages) earned in the consumption of "necessaries", the basic goods required for their individual (and their family) survival and the reproduction of their species (class). Capitalists constitute the dynamo supplying the motive power for the process of accumulation of capital; they are the entrepreneurs who consume only a very small fraction of their income (profits) and save and invest the remainder in productive activity. Landowners are, so to speak, the parasites of the system; they are "wealthy people who become richer and richer, and consume almost all their incomes [rents] in luxury-goods" (Pasinetti, 1974, p.6).

From this social design it emerges that economic growth is in the hands of the capitalists. For they are those who endow the system with the means (reinvestable profits) that finance and support the accumulation of capital and the increase in production.

Total output depends exclusively on this technical factor, the availability of a reinvestable surplus out of
profits to promote production through the combination and utilization of the inputs of labour and land. Technical conditions thus determine the growth of the system completely. Demand forces are inoperative here. This result, as we shall see in due course, has much to do with the character of class behaviour this approach relies on.

Economic growth, therefore, is centred on the formation of capital by way of reinvesting profits. This assumption, however, predetermines the arresting of economic growth at some point in the process. For it is intrinsic to that process that landowners become richer and richer at the expense of capitalists, with workers stagnating at the subsistence level.

We are dealing with a society in which agriculture predominates. It is true that it is a two-sector economy, comprising the agricultural sector and the luxury-goods sector. The latter, however, has no effect on the dynamics of the system. It is a sector of the economy which can be put aside since its product does not enter the production process as an input. It is a pure consumer good. Moreover, it is a good demanded and consumed, we may reasonably say, almost exclusively by landowners.³

Agriculture is the dominant sector. The conditions governing production in it have a decisive influence over the economic system. The outlook for economic growth hinges on

³- Capitalists may be said to consume a part of the total production of luxury-goods. It constitutes, however, a negligible amount since capitalists are intent on accumulation and not on conspicuous consumption.
the state of things prevailing in the agricultural sector. The system’s destiny is tied-up to what happens to that segment of the economy.

At this point the picture becomes gloomy. Agriculture is subject to the spectre of diminishing returns. Fertile and advantageously located lands are in short supply relative to the increasing population. As capital accumulates and the economy grows, inferior lands are brought into cultivation. Additional doses of capital are rendered less and less productive. Production costs, rents and money wages, all rise, and profits are slashed. Capitalists save and invest less. Accumulation and growth grind to a halt. Let us have a closer look at this problem.

Consider the agricultural sector. Its output, which we call food, can be represented thus:

\[ Y = f(N) \tag{1} \]

where

\[ Y = \text{total food production}; \]
\[ N = \text{quantity of labour (number of workers) employed in food production}. \]

The production function represented by (1) has the following important property:

\[ ^4\text{- To simplify the discussion, and by virtue of it being the ruler of the system’s destiny, we here concentrate on agriculture only, ignoring the luxury-goods sector.} \]
which says that at the beginning of the process of growth a surplus above necessary consumption \((w)\) is available. This surplus is used to keep the system going on.

Agriculture though is subject to diminishing returns, so that

\[
f'(N) < 0
\]

i.e., increasing doses of the labour input are necessary to yield the same level of output as lower quality tracts of soil are brought into cultivation.

Total profits can be defined as

\[
P = Y - R - W
\]

where

\[
R = \text{total rents};
\]

\[
W = \text{total wages-bill}.
\]

With less rich lands being incorporated into the productive process, land rents increase owing to a greater competition for more fertile lands. At the same time, with food production costs rising, that is, with more labour being required to produce the same level of output, the wages-bill
becomes swollen. Hence, with $Y$ in (4) constant, profits ($P$) decline because rents ($R$) and total wages ($W$) increase.\textsuperscript{5} The rate of profit, defined as the ratio between total profits and total capital applied in production, falls through time to a point so low as to discourage accumulation and lead the system to a stand-still, to the famous "stationary state".

In other words, the system described above converges to a static equilibrium position where

\[ f'(N) = w \] \hspace{1cm} (5)

that is to say, all the surplus, after the payment of rents, is swallowed up by wages.\textsuperscript{6}

This is a very simplified description of Pasinetti's model. It nonetheless captures some of its basic assumptions and conclusions which interest us most here (a more detailed examination of Pasinetti's model is postponed till after the presentation of the "new view"). For the time being we can observe the following points:

(i) Whatever happens to the system, the composition of the output remains unchanged. If the system grows more food is produced, if it shrinks food production is lessened;

(ii) What comes to pass in the non-agricultural sector does not affect the dynamics of the system;

\textsuperscript{5} More exactly, we should say that the rate of growth of the output is kept constant, while those of total rents and wages are increasing.

\textsuperscript{6} For a proof of this convergence to the stationary state see Pasinetti (1974, essay 1, appendix).
(iii) Wages are kept fixed at their natural (subsistence) level;

(iv) Population growth remains constant throughout the analysis; it is the accumulation of capital which has to adjust to the conditions of the economy;

(v) Demand considerations are completely absent from the analysis.

We now turn to the "new view" interpretation of Ricardo.

2.2- The "New View" of Ricardo.

Recently, there has appeared a strong reaction against Pasinetti-like renditions of the Ricardian system. The attack is principally directed towards the hypothesis about wages. As we saw, Pasinetti's model assumes that, during the period of growth, the wage rate remains constant at its natural level as a result of the population mechanism.

Therefore, any variation in wages driving them above their natural rate immediately triggers off that mechanism. Population grows and the wage rate is forced down back to its natural level. To all effects, then, wages are kept at the natural level. This is the so-called "fix-wage" interpretation of the Ricardian system.

The "new view" challenges this approach. Its adherents⁷ embrace the idea that holding wages fixed at their natural rate during the process of growth is an unwarranted

⁷- Among others, we can mention Casarosa (1978, 1985) and Hicks and Hollander (1977).
procedure, to the extent that Ricardo himself allowed wages to vary from their natural level for considerable periods of time. 8

Two basic propositions are put forward, namely,

(a) Along the path of economic growth the wage rate remains above its natural level;

(b) After a certain stage in that process, the wage rate starts falling until it reaches the natural level. This final stage corresponds to the stationary state.

While accumulation keeps going on wages are kept above the subsistence level, but when the stock of capital stops growing, that is, when the stationary position is arrived at, they recede to its natural rate.

The population mechanism is brought in, together with the mechanism of accumulation, to help explaining this part of the system's dynamics. We can represent both these mechanisms in a very simple form as follows:

\[ \Delta N = g(w' - w) \]  

where

\[ \Delta N = \text{variation in the level of population; } \]

\[ w' = \text{wage rate; } \]

---

8- The relevant passage from Ricardo's works backing this view is the following: "Notwithstanding the tendency of wages to conform to their natural rate, their market rate may, in an improving society, for an indefinite period, be constantly above it" (vol.1, p.94-95).
\( w = \text{natural wage rate} \)

and

\[ \Delta K = h(r' - r) \quad (6) \]

where

\( \Delta K = \text{variation in the stock of capital;} \)
\( r' = \text{rate of profits;} \)
\( r = \text{minimum rate of profits.}^9 \)

Equation (5) tells us that population grows according to the difference between the actual, market wage rate and the natural wage rate. The former is assumed to be above the latter as the system is accumulating and growing, leading thus to a rising population. Population increases until the economic system reaches the stationary state, when it stops growing.

Equation (6) asserts that capitalists save and invest in production as long as the rate of profit stands above the acknowledged minimum level of return. When it falls to that level the act of accumulating capital is discontinued. As Casarosa (1985, p.48) has pointed out, this condition "has been generally overlooked even by those who admit that in Ricardo the rate of profit is the motive behind the

\( ^9 \) This is the rate at which capitalists stop accumulating capital.
accumulation of capital". The expression in (6) thus establishes a floor below which the rate of profit cannot fall or else the process of accumulation is halted. Ricardo, indeed, affirmed that: "The farmer and manufacturer can no more live without profit, than the labourer without wages. Their motive for accumulation will diminish with every diminution of profit, and will cease altogether when their profits are so low as not to afford them an adequate compensation for their trouble, and the risk which they must necessarily encounter in employing their capital productively"(vol.1, p.122).

We are dealing with an economy which makes use of circulating capital only. Therefore, the stock of capital is identified with the total wages-bill:

\[ K = wN \]  \hspace{1cm} (7)

While the economy is growing \( K \) and \( N \) in (7) are rising. Furthermore, from (7) we can infer that variations in wages depend upon the difference between the rates of growth of the stock of capital and of population, that is,

\[ \Delta w = \Delta K - \Delta N \]  \hspace{1cm} (8)

The relation expressed in (8) represents a point of great importance. From it we can deduce that during the system's growing stage, when the stock of capital is increasing, wages rise above the natural level because the
population mechanism reacts with less intensity and speed than the variations in the accumulation of capital and in wages. In contrast with Pasinetti's model, which presupposes that mechanism working instantaneously, we have here a hiatus between the moment in which accumulation and wages increase and that in which population starts rising.

The economic system is ultimately driven towards the stationary state on account of the manifestation of diminishing returns in agriculture. After a certain stage in the process of growth productivity declines, affecting negatively the rate of profits. Accumulation slows down and wages fall. The system stops growing when the rate of profit drops to its minimum level, at the same time that wages are brought down to the natural rate and population stagnates.

In the initial position thus, when the rate of profit is in excess of the minimum level of return and accumulation is taking place forward, wages are driven up above the natural rate. But increasing agricultural costs cause wages and the rate of profit to fall continuously until the stationary equilibrium is attained.

The gist of the argument is that wages are determined by the interplay between the population mechanism and the action of the accumulation of capital.

This, in broad lines, is the description of the Ricardian system the "new view" puts forward.

Our next step is to take stock of what both Pasinetti-like and the "new view" approaches describe and discuss them in reference to the wider context of what we called Ricardo's
view of development, the grand story we considered in the previous chapter.

2.3- Models of Growth and Ricardo’s Vision of Development.

The two types of Ricardian models of growth we have been considering thus far have made a significative contribution to the elucidation of some contentious aspects of Ricardo’s thought.

Pasinetti has formalized in a rigorous way the original Ricardian problem, bringing into focus the adverse effects from serious difficulties in the production of some essential commodities, like food and raw materials, upon a closed economic system.

The distributive conflicts between rents and profits and between wages and profits (the wage-profit frontier), and the threat of the stationary state, are well illustrated in Pasinetti’s model. It, however, makes use of unnecessarily highly restrictive hypotheses which deprive it of the flexibility needed for accommodating alternative situations Ricardo himself gave thought to and that constitute, in many of the cases, crucial aspects of his analysis.

This is notably evident with respect to wages and the population mechanism. Pasinetti takes them as virtually fixed and already adjusted, respectively, since any discrepancy between the actual state of the system and the natural one is held to be instantaneously redressed so as to bring the system back to its natural equilibrium.
It is this natural equilibrium which forms Pasinetti's real object of study. He engages himself in examining the behaviour of the system in terms of the natural values of its constituent elements in order to demonstrate that it inevitably converges to the stationary equilibrium owing to the materialization of diminishing returns in agriculture. In other words, Pasinetti's formalization of the Ricardian system seeks to show that, from the very outset, it is already prey, and is necessarily and uniquely (in the mathematical sense) driven, to the stationary state.

In doing so, and in discarding, or at least playing down, any analytical relevance to be attributed to divergences from the natural state of the system, Pasinetti misses the opportunity of considering the proper dynamics inherently associated with the operation of the accumulation of capital and economic growth. In it, the relation among accumulation, wages, and population is richer, more interesting, and more relevant to the understanding of the evolution and transformations an economy of the Ricardian type is subject to.

The benchmark of the natural state, which Ricardo

10- Casarosa (1985, p.48) therefore is quite right in pointing out that the "basic idea is that in Ricardo the evolution of the wage rate over time is determined by the contemporaneous working of the population mechanism and of the process of capital accumulation, so that there is no reason why the wage rate should converge towards the natural level unless capital is stationary", and that, as a consequence, "the wage rate, the rate of profit and the rates of growth of population and capital are simultaneously determined by the interplay between the distributive variables, population growth and the accumulation of capital".
utilized as a way of stressing the conflicts and constraints existent within society, is elevated to the position of unique relevant object of study. This interpretation renders Pasinetti's model less appealing as a vehicle for the lively conception of development Ricardo outlined.

The great contribution of the "new view" of Ricardo is in calling attention to the more complex nature of Ricardo's perception of the growth process. Contrary to Pasinetti's model, mechanistically tied to the stationary state, the "new view" characterizes the approaching to that state as a dynamic process unfolding through time and accentuates the existence of several possible alternatives the system's growth trajectory may take form along that process.

The possibility of the existence of time-lags respecting the reactions derived from the relationship among the many component mechanisms of the system's dynamics, which play an important role in Ricardo, are thus brought back into use in the analysis of growth.

Consider, for instance, the following passage from Ricardo's *Principles*:

"It is undoubtedly true, that the fall in the relative price of raw produce, in consequence of the improvement in agriculture ... would naturally lead to increased accumulation; for the profits of stock would be greatly augmented. This accumulation would lead to an increased demand for labour, to higher wages, to an increased population, to a further demand for raw produce, and to an increased cultivation. It is only, however, after the increase in population, that rent would be as high as before ... A considerable period would have elapsed, attended with a positive diminution of rent" (vol.1, p.79-80).
This extract is symptomatic of the complex dynamics Ricardo's system incorporates. The reactions take time to materialize. Growth involves a chain of causes and effects taking place in time. There is nothing instantaneous about them. The action of accumulation of capital implies, initially, a rise in the demand for inputs of labour. But the population mechanism does not operate forthwith as assumed in Pasinetti's model. As said before, reactions take effect only after some time-lag. At first, then, demand for labour is in excess of supply, with wages increasing accordingly. It is only after the passing of an interval of time, when higher wages induce people to marry or enlarge their families, that population rises. Only then the demand for food increases and the necessity of resorting to less productive land arises. With increasing costs of production, rents and money wages rise and profits fall and accumulation slows down.

The "new view" gives room for this kind of chain-reaction to be integrated into the analysis of growth. In particular, it brings to the fore the variable nature of wages, above the subsistence level, along the growth path of the economy. No need any more to stick to the "iron law" interpretation of wages. What is more, it permits that accumulation and (real) wages increases, at least during a certain interval, go side by side, even when population is growing.

That is to say, despite of the fact that wage increases, resulting from the process of accumulation and consequent
rise in the demand for labour, eventually lead to population growth and to a rise in the supply of labour, this does not necessarily imply that wages start falling as soon as the supply of labour increases. The initial situation may be one in which wages are very low, perhaps near the subsistence level, and profits high.

In this case, there is enough room for the intensification of accumulation to push wages up for a considerable period (see Hicks and Hollander, 1977, in Hicks, 1983, p.45-46). Growth and welfare might be promoted pari passu, the conditions of the workers being susceptible of undergoing significant improvement without impairing the prospects for growth.

In one point, though, these two types of models are in agreement. The system is doomed to wind up entrapped in the stationary state, where the wage rate and the rate of profit fall to their minimum levels. This is the end-point common to both stories, whichever the hypothesis about wages. The story told by the "new view" is more elaborate and takes more into account the dynamics of accumulation than the simpler one incorporated in Pasinetti’s model, and yet the anathema of stationariness casts the same dominant shadow over the system.

The difference is that things look somewhat brighter in the scenario described by the "new view". During the whole period between the initial and the final position intervals may exist in which accumulation, growth and improvements in the standards of living occur simultaneously, in spite of the
fact that in the end things turn to the worse.

We are led then to agree with Hicks when he points out that from the "new view" we learn "that the Ricardian system is more sensible, and more useful, than it appears to be in the conventional presentations" (Hicks, 1979, p.134).

Nevertheless, the same observations we made above respecting Pasinetti's models still apply to the "new view". Structural transformations in the economy are not considered. Accumulation means more capital (and labour) being employed in the same way as before. The increased income is spent on the same commodities. It is true that, in the short-run, changes are allowed to happen, with people raising their consumption of goods and services which normally do not enter their wage basket. But this is temporary. People ultimately give in to the old habits, which almost always mean that they breed recklessly, conform to their old pattern of consumption, and help bringing the system to the brink of collapse.

In other words, we stay within the limits of the original, basic Ricardian problem. To Ricardo, however, that is not the whole story. Accumulation and growth entail structural developments both in production and demand. This point, a fundamental one to Ricardo, is absent from the Ricardian models of growth, whatever their denomination. They do not embrace that grand vision of development Ricardo held.

Two important points to our discussion are in place here. Firstly, accumulation and growth, in creating wealth, promote changes in the behaviour of individuals, among which
figure modifications in the pattern of consumption and of demand. Secondly, these latter assist in the continuation of accumulation and growth. The procedure taken by the Ricardian models of growth has been to ignore those aspects of the dynamics of development, even if, as in the case of the "new view", growth is supposed to raise wages above the natural level.

Some authors, it is true, have drawn attention to the import of the composition of workers' wage basket to the analysis of growth. Blaug (1958, p.25-26), as an example, has asserted that "Ricardo's system is based on the notion that the price of corn is kept up by the irrepressible forces of diminishing returns. But what of the importance of corn in the diet of the working class? Is it not probable that the growth of industry would gradually shift consumption patterns away from land-using products ... Hence the money rate of profit in industry would no longer be governed exclusively by the corn rate of profit in agriculture. As the composition of the wage goods basket changes, the compelling influence of diminishing returns on profits and rents must gradually peter out".

Hicks (1985, p.318), in his turn, observed that Ricardo, having showed how distribution changes along the growth path, and given the fact that the different classes consume goods in different proportions, could have gone on to infer that "the composition of the commodity 'bundle' must change

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11 See, for instance, Blaug (1958, p.31), and Hollander (1979, p.134, 145-46).
accordingly”. Consequently, with real wage increases, "and with labour having a greater propensity than non-labour to consume the things that were produced under diminishing returns, the 'overall bundle' would change in such a way as to accentuate the tendency to diminishing returns". He then goes on to stress that a "rise in real wages which was not accompanied by a rise in population would have the opposite effect".12

Ricardo, however, not only could, but actually did reason upon the subject in these terms. He dedicated a great deal of attention to this question and repeatedly emphasized the benefits associated with changes in the habits of consumption of the working class towards an increasing share of non-agricultural products in workers' goods basket. He, for instance, observed:

"Suppose the labourers were so well off, they would not demand more corn than they wanted for themselves, but yet none of their revenue would remain unexpended, an unusual quantity of luxuries and conveniences of the labourer would be demanded ... if the population do not immediately increase, there will be no additional demand for corn, but there will be an additional demand for other things ... labourers will choose what commodities they shall buy with their additional wages, we are quite sure corn will not be o-

12- Stigler (1965, p.449) has also advanced the same point: "Ricardo had no interest in the composition of wages between food and non-food. The fixed-coefficient approach ... made rigorous his main theorem on economic progress ... If non-food is substituted for food as the relative price of food rises, the natural tendency of profits to fall is abated (and in the extreme case of perfect substitution ... completely thwarted). One of Ricardo's major conclusions would thus be weakened if the demand for wheat were not zero-elastic."
ne of them, and as sure that some convenien-
ce or luxury will be chosen" (vol. 8, p. 274).

This is a revealing passage. It shows how aware Ricardo was of the operation of what we today call Engel’s Law. The pattern of workers’ expenditure is of a non-linear nature. As the economic system grows and drives real wages up, the proportion of workers’ expenditure on the different commodities changes.

Moreover, as seen in the previous chapter, that is an expected upshot of the creation and augmentation of wealth in the course of accumulation and growth and of the intrinsic nature of human needs and desires. That change would bring forth a substantial amelioration of the living standards of the far greater part of the population and would unfold a huge market for the products of the non-agricultural sectors of the economy. Growth and gains in welfare, it is not too often to remark, is at the root of Ricardo’s thought.

This point is not frequently kept in mind when approaching Ricardo. Yet demand forces are active in his analysis of accumulation and growth; it has a part in the

13- He continued the argument by saying: "Look into your own household and tell me what would be the effect of doubling your income. You would spend it all, but would you double your demand for every commodity you now consume in your family? ... No mistake can be greater than to suppose that the demand for every thing increases in the same proportion. You say the labourer is not a consumer of conveniences. Is this true? If he is not, must we not impute it to his poverty? Give him the means, and do you think he wants the inclination? Will he not improve his house and furniture, his clothing, and that of his wife and children—will he not purchase more fuel, and indulge himself in the enjoyment of better beer, tea, tobacco and snuff?" (letter to Trower of 3 October 1820, vol. 8, p. 274-75).
explanation of development and the rise of industry. Again the chain of cause and effect, of forces constantly feeding-back into one another, stands out in Ricardo’s analysis.

Variations in the wage rate are related, then, not only to the population mechanism, but they have a conceivable impact on the structure of demand as well. Together with advances in production methods via the division of labour and technical changes, modifications in the pattern of consumption, notably workers’, were held by Ricardo to be powerful instruments in fostering development and the general well-being.

The substance of Ricardo’s argument is this. If the working class developed a taste for non-agricultural products, development and prosperity would be greatly benefited because:

a) the demand for the products of the more efficient, non-agricultural sectors would be spurred (i.e., of the sectors not subject to diminishing returns);

b) population growth would tend to lessen in that workers now would prefer to diversify their consumption (more "luxuries and conveniences") rather than to rear numerous families.

To have a clear perception of this aspect of Ricardo’s analysis, a more thorough discussion of which we carry out in the next chapter, it will assist us if we start off by examining the basic problem Ricardo was concerned with.
2.4- The Basic Ricardian Problem.

The most pressing economic problem Ricardo diagnosed was that of population growth taking place when agriculture dominant sector of this economy, in the sense that its conditions govern the overall conditions of the system, and is subject to increasing costs. This is one of the constraints binding the economic system. Two other points important to us here, are the existence of restrictive laws and the shape of consumption preferences.

Population growth leads to a rise in the demand for foodstuffs that can only be met by increasing production in an ever costlier and inefficient manner. The country is dragged into producing food for a growing population by employing a great deal of the available capital with diminishing returns. Two major implications arise from this state of things:

(i) capital is prevented from being used with the purpose of advancing the non-agricultural sectors of the economy;

(ii) a greater part of the surplus is accrued to the landlords, which have a negligible propensity to save and invest.

This represents the opportunity cost incurred by society and can be measured by the rise in rents and the consequent shrinking of the surplus available to back up further accumulation and growth. As Ricardo put it:
"With every step in the progress of population, which shall oblige a country to have recourse to land of a worse quality, to enable it to raise its supply of food, rent, on all the more fertile land will rise" (vol. 1, p. 70). 14

As accumulation proceeds, population grows on account of higher wages brought about by the rise in the demand for labour. This means that the growth in population is identified with an augmented working class population. The pattern of consumption of this class is primarily formed by agricultural goods (food for short), so that their demand soars. That is the trouble, since "without an increase of demand, there could be no motive for employing so much capital on land" (vol. 1, p. 81-82).

In a long, key passage of his *Principles*, which due to its relevance we reproduce here in its entirety, Ricardo underscores categorically the importance of the structure of preferences to the appreciation of the problem.

"It is by giving the workman more money, or any other commodity in which wages are paid, and which has not fallen in value, that his situation is improved. The increa-

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14- Answering to Malthus, in a letter of 1815, Ricardo had already underlined this opportunity cost in terms of the trade-off between rising rents and lower profits. There he asserted: "You think that my theory of a diminishing rate of profit, in consequence of being obliged to cultivate poorer lands, is affected by my admission that there will be a greater quantity of surplus produce and a greater money value from the old land. This would be true, if any part of either the additional quantity or additional value, belonged to the owner of stock ... Before my theory is affected it must be shewn that the whole will not remain with the landlord, as if the farmer gets no share of it his rate of profits cannot be raised" (vol. 6, p. 209).
se of population, and the increase of food will generally be the effect, but not the necessary effect of high wages. The amended condition of the labourer, in consequence of the increased value which is paid him, does not necessarily oblige him to marry and take charge of a family—he will, in all probability, employ a portion of his increased wages in furnishing himself abundantly with food and necessaries—but with the remainder he may, if it please him, purchase any commodities that may contribute to his enjoyments—chairs, tables, and hardware; or better clothes, sugar, and tobacco. His increased wages then will be attended with no other effect than an increased demand for some of those other commodities; and as the race of labourers will not be materially increased, his wages will continue permanently high. But although this might be the consequence of high wages, yet so great are the delights of domestic society, that in practice it is invariably found that an increase of population follows the amended condition of the labourer; and it is only because it does so, that, with the trifling exception already mentioned, a new and increased demand arises for food. This demand then is the effect of an increase of capital and population, but not the cause—it is only because the expenditure of the people takes this direction, that the market price of necessaries exceeds the natural price, and that the quantity of food required is produced; and it is because the number of people is increased, that wages again fall” (vol. 1, p. 406-07).15

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15— Elsewhere (vol. 2, p. 302) he seems to deliver the same point concerning the connection between the arrest of accumulation and the pattern of consumption of society. He observed that accumulation could only continue "while the land last cultivated will yield more food than is consumed by the cultivators", and that "when it will not do that, there is an end on every system to all accumulation". He went on to remark that "if a society consisted of nothing but landowners, farmers, manufacturers of necessaries, and labourers, accumulation could go on to this point [the stationary point, that is], provided only that population increased fast enough". Note the emphasis on the characterization of this society as producing essentially "necessaries".
Notice that Ricardo states clearly that population growth, in spite of being spurred on by high wages, is not the necessary outcome of their increase. He does not transform a possibility into an inevitable effect arising from that event.

Wage increases lead to population growth, doubtless, but only if individuals exhibit a specific pattern of behaviour. In this particular context individuals feel irresistibly attracted by the "delights of domestic society", which invariably means that they end up marrying and constituting families. The shape of individuals' preferences, then, appears to be a basic element in this process. The problem itself is not so much that people, allured by the "delights of domestic society", are led to marry and rear a family. After all, population has to be reproduced. Rather, it is related to the institutional set up which conditions people's preferences. As we saw before, the desire for improving one's position and for possessing "superior goods" is seen as deep-rooted in human mind and can offset a too strong tendency for the population to grow recklessly. The great concern is with the barriers which prevent the realization of that pursuit, like the obstacles to accumulation and the check on the operation of the incentives to self-reliance.

For a while individuals direct their higher purchasing power to the acquisition of others products than agricultural ones. Soon, however, they sacrifice this extra utility, or the greater part of it anyway, to rear a family (or to enlarge an existent one). The demand for agricultural goods
starts rising again, whereas wages are bound to fall due to
the increased supply of labour, when children from larger
families come of working age.

In these conditions the possibility of major and deep
transformations in the economy, which accelerated the drive
to industrialization, occurring is slim indeed. The incentive
arising from an augmented demand for non-agricultural
products is but temporary. There is no continuity in the
operation of the stimulating force helping to bring about the
development of industry.

The incentive effect fades away as long as the urgent
need of producing food for an enlarged population obliges a
great part of capital at the disposal of society to be
allocated to the cultivation of poorer soils, at the same
time that, with wages falling (in real terms) and food
production costs rising, consumption and demand are
concentrated on the products of agriculture.

Why do things take that course? The explanation is
manifold. It comprises matters economic and non-economic
alike. Here we focus on the economic aspect of the question.

Initially, we have to bear in mind that the picture
drawn above is highly schematic and is used, like the case of
the stationary state, more in the manner of an expositive and
persuasive device. Ricardo, as noted before, saw Britain as
a rich nation already striding the path of industrialization.

Respecting the habits of consumption of society, non-
agricultural products already comprehended a significant part
of the total final demand. The working class’s wage basket,
for instance, was not made up of "corn" only. It was a multi-commodity bundle which included wheat, bacon, cheese, butter, tea, sugar, soap, candles, fuel, clothes, shoes, linen, housing, etc. (see vol.1, p.103-04, 306).

But "corn", the representative agricultural good, still weighs heavily in that basket. Ricardo sometimes assume that workers spent half their income on it (ibid). This is so due to the fact that, in general, the typical worker has to support a relatively large family and/or display an unsophisticated consumption pattern.

The problem, therefore, is to make workers, both through policy measures and their own spontaneous decision\(^\text{16}\), develop a taste for more sophisticated products of the non-agricultural sectors, and indeed a more sophisticated whole style of life, thus contributing to bring the rate of population growth to a more tenable level and slant the requirement of consumption on their part more favourably to the growth of the industrial sector.

To a certain degree the solution to this problem would not be so difficult since the "wants and tastes of mankind" are deemed to be unlimited concerning the consumption of non-basic goods. The difficulty resides in the acquisition of a purchasing power large enough to enable the worker to afford new products. Ricardo identified a series of barriers

\(^{16}\) "It is a truth which admits not a doubt, that the comforts and well-being of the poor cannot be permanently secured without some regard on their part, or some on the part of the legislature, to regulate the increase of their numbers, and to render less frequent among them early and improvident marriages" (Ricardo, vol.1, p.106-07).
checking the achievement of the desired changes. Those barriers were not infrequently erected in the shape of distorting economic policies and customs.

The change-in-taste argument, therefore, was often framed with reference to policy debates: of how determined policies prevented society from capitalizing over the potentialities of improvement and diversity in consumption, and of how this reduced the speed of the structural transformations the productive sector required for a sustained course of development to take place. We shall return to this question, in greater detail, further on.

In the next chapter we seek to examine the case for changes in the preference structure of society as a potential factor in boosting economic growth.
Chapter 3- DEMAND AND ECONOMIC GROWTH.

Before embarking upon the investigation into the bearing of changes in the configuration of demand to the unfolding of the course of accumulation and growth, it would assist us if we discussed the sort of impediment a still mainly agricultural society poses to the process of development. That is what we do next.

3.1- Limits to Growth in a Predominantly Agricultural Society.

The view in favour of industrialization rests to a large extent on the argument which stresses the natural limits to accumulation and growth a mainly agricultural society presents. Such limits have to do with the narrow possibilities open to that society in terms of scale economies and the division of labour. The latter, in its turn, depends heavily upon the growth and diversity of demand.

This is a crucial point. The chances of speeding up development are reduced by the small size of the market. Recall that the demand for primary products is bounded by the "narrow capacity of the human stomach". The market is constrained by that human biological limitation.

Suppose the same economic system Ricardo departed from but with one difference. Assume that, for one reason or

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1- That is, a circulating capital model with no technical change, no change in tastes, and trade-constrained.
another (better education, for example), population growth is stabilized, so that in net terms the variation in the size of population is balanced, i.e., its growth corresponds exactly to the requisite amount of the production system in order that the labour force be replenished appropriately. In other words, population growth adjusts itself to the state of the demand for labour. One may think of population growing according to what Harrod (1973) called "the warranted growth rate" of the economy. In this case, the amount saved by capitalists, and which is invested in production, sets the pace of the demand for labour and, consequently, of the population growth.

The pressure on food production would be eased, liberating the system from the necessity of resorting to poor quality lands to increase production. The scope for development, however, is still restricted because the market is confined.

With the demand for labour and the supply of it advancing proportionately, real wages are kept constant. Upon this circumstance we may expect the wage rate to settle at some point near its natural level, which is that one enabling workers "to subsist and to perpetuate their race" (vol.1, p.93) and that depends fundamentally on the real wage level. As the latter is supposed to stay constant and the labour force be "perpetuated" in a manner consistent with its demand, that expectation seems to be reasonable.
Land rents are also stabilized due to society not having to have recourse to the cultivation of its worst pieces of land. Increases in the demand for non-agricultural products on the part of the landowner class is improbable, consequently.

Profits stop falling but do not switch into rising continually. The more likely effect is for the rate of profit to settle down at a position which just permits the system to replace its stock of capital in the steady state mould. Consumption increase by capitalists, then, is unlikely.

Indeed, the system remains encapsulated in a quasi-stationary state, viz., expanding at a constant rate without any great alteration. The difference is that in the case of the stationary state proper, owing to the combination of a high rate of population growth and the manifestation of diminishing returns, accumulation, at the limit, ceases because the rate of profits falls near to zero and all incentives to saving and investment vanish, while in the present case accumulation proceeds since the rate of profits stays above the minimum level. In these circumstances, though, accumulation is just enough to keep the system working on the same conditions as before.

Growth and development in the sense that, we think, Ricardo had in mind, does not occur actually. For Ricardo,  

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2- It may happen that rents are lowered, since the system might produce enough food for its stably increasing population by cultivating its fertile lands more intensively and putting aside some of the marginal and least fertile tracts of soil. The fall in productivity could then be lessened, even though not eliminated.
that process would inevitably involve deep structural changes in the economic system and real growth of the output and of the welfare of society. In chapter 19, On Sudden Changes in the Channels of Trade, of his *Principles*, he made that clear while criticizing the argument of those who held that improvements in the conditions of production would imply the undesirable result that part of the stock of capital already employed in production would be lost. To this argument he answered thus:

"They do not see that the end of all commerce is to increase production, though you may occasion partial loss, you increase the general happiness. To be consistent, they should endeavour to arrest all improvements in agriculture and manufactures, and all inventions of machinery; for though these contribute to the general happiness, they never fail, at the moment of their introduction, to deteriorate or annihilate the value of a part of the existing capital of farmers and manufacturers" (vol. 1, p. 271).

Suppose now that the population control in force results in a material rise in workers' real wages. An excessive real wage increase may, in the end, depress profits. But we can concentrate on the short run period and think of a real wage increase considered as not being "excessive" by capitalists, that is, we might think of a wage rise that, despite representing a significant improvement as far as workers are concerned, would be kept within a band compatible with a commonly accepted rate of profit. This is in line with the idea expressed in the last chapter of a situation in which the actual level of the rate of profit is such as to permit
capitalists to afford a rise in wages without impairing their ability and disposition to save and invest.

Remember that nothing else in this economy has changed. What impact, then, the rise in real wages would have upon the growth of the system?

Workers have now an income surplus over their basic needs. As the pattern of consumption of the working class is assumed to be unsophisticated, there is no inclination on their part to use that extra purchasing power to demand non-agricultural products. The only alternative is for workers' savings to increase.

Capitalists could utilize that surplus to finance the expansion of accumulation and production. But they lack the motive to do so. Why enlarge production, viz., agricultural production\(^3\), if the market remains limited?\(^4\)

The case in question is an extreme one. It is, however, very useful to convey an idea. This idea is that the dynamic growth of the system is closely related to the structure of demand. Accumulation and growth call for simultaneous changes in the pattern of consumption.

The impossibility, so to speak, of a sustained process

\(^3\) We are ruling out the possibility of investing abroad.

\(^4\) One option might be to channel workers' surplus somehow to back an increase in landowners' consumption, the sole class with an important propensity to consume non-agricultural products. But this is quite an unricardian solution, as we shall see in the next chapter. The export of the food excedent would also constitute an unricardian outcome since, no great amount of imports flowing the other way round, it would make the stock of gold rise sharply and, as a result, bring about a steep increase in the price level, something Ricardo would not approve of.
of development to occur in the circumstances described above can be better understood in terms of the logic behind a competitive economic system. Producers supply goods in the market only if the costs (including profits) incurred in their production are, at least, recovered. This profitability condition may be represented by

\[ pm > pn \] 

where

\[ pm = \text{market price of a commodity}; \]
\[ pn = \text{natural(cost) price of a commodity}. \]

Market prices, however, depend on the interplay between demand and supply. Therefore, producers, to be successful, must always keep one eye on their costs of production and the other on the state, actual and prospective, of market demand. In the situation above, with the demand for agricultural goods being limited, they have no incentive to increase production. In Ricardo's own words,

"[The] market price of every commodity depends on the relation between demand and supply, and it is the interest of all the sup-

\[ \quad \text{[5] Ricardo, for instance, remarked that: "what producers look steadily at is market price, and its relation to natural price" (vol.8, p.256).} \]

\[ \quad \text{[6] Competition, though, would ensure that pm would tend towards pn. As Ricardo put it: "The general principle that regulated price where free competition operated was, that a commodity would be sold as cheap as the produce could afford" (vol.5, p.189).} \]
pliers of commodities to cease producing them when they fall below their natural value. The demand for corn, with a given population, is limited; no man can have a desire to consume more than a certain quantity of bread, if therefore more than that quantity is produced, it will fall in relative value to those commodities which are produced only in such quantity as is required" (vol.8, p.272).

The economic system risks to get drowned in the deep waters of superproduction. Without diversification of consumption the productive apparatus floods the market with commodities at a level above the normal needs of society, which are almost inelastic, and provokes the depression of profits. Ricardo, in the following passage, drives the argument home and points to the importance of changes in the structure of demand as the corresponding effect of accumulation in the course of development:

"If every man were to forego the use of luxuries, and be intent only on accumulation, a quantity of necessaries might be produced, for which there could not be any immediate consumption. Of commodities so limited in number, there might undoubtedly be an universal glut, and consequently there might neither be demand for an additional quantity of such commodities, nor profits on the employment of more capital" (vol.1, p.293).

This is the picture Ricardo had in his mind. The basic idea behind it seems to be that economic progress tends to bring about the branching out of the opportunities to accumulate due, to a great extent, to the alteration in the pattern of consumption and demand it causes. He thus goes on arguing that: "In a such a country as England, for example,
it is difficult to suppose that there can be any disposition to devote the whole capital and labour of the country to the production of necessaries only" (ibid).

In the case of accumulation being based on the increase of production of "necessaries" only, economic growth is bound to lose its momentum and, with great possibility, stagnate. On the other hand, it might be furthered indefinitely in the event of the market be expanded in the direction of the products of the non-agricultural sectors ("luxuries", as Ricardo put it).  

Ricardo's theory implies the idea of balanced growth, defined as the process by which the action of accumulation and investment takes place in such way as to proceed pari passu with the growth and structure of consumers' demand. In other words, new investments are allocated to those sectors having a growing demand.  

There exists then a mechanism which links the intentions to invest and accumulate to the state of the market and thus to the state of demand. That is the mechanism of allocation

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7 - Malthus himself noted this trait of Ricardo's argument. He asserted that "Mr. Ricardo acknowledges that there may be a limit to the employment of capital upon the land from the limited wants of society, independently of the exhaustion of the soil" (Ricardo, vol. 2, p. 324).

8 - If our conclusion is correct, Scitovsky's (1987, p. 177) contention that the "idea of balanced growth can be traced back to John Stuart Mill's qualified restatement of Say's Law" might be pushed further back to Ricardo since he outspokently qualified Say's Law so as to encompass a balance between the structure of production and the structure of demand. He was quite clear about that when he wrote that in "every state of society there will be a demand for some commodities, and it is these which it will be the interest of capitalists to produce" (vol. 8, p. 273).
of resources in a competitive economy. It is interesting, therefore, to look at it for a moment.

Ricardo's analysis is premised on the condition of free competition and the informational character of markets. It hinges crucially on the operation of the machinery of resource allocation whereby the interplay of demand and supply and of market and natural prices act as the key factor conditioning the economic system. There is nothing in it like the "sovereignty" of producers (supply creates its own demand). On the contrary, if any sovereignty exists, it is definitely on the side of consumers. Therefore, accumulation proceeds optimally when "those commodities only will be produced which will be suited to the wants and tastes of mankind, because none other will be demanded" (vol. 6, p. 148).

It may be that this seems but a great tautology. However, it transmits a message which is direct and simple: production activity should be conducted in accordance with society's consumption requirements. A corollary is that the structure of market demand unequivocally influences production. This is not an idea we find in the traditional renditions of Ricardo, though, and one which in itself is a result far remote from that implied by the "supply creates its own demand" view.

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9 - This is due not only to the competitive nature of the market, but to the proclaimed end of economic policies as well. Ricardo quoted Adam Smith in Parliament to stress this: "Consumption is the sole end and purpose of all production; and the interest of the producer ought to be attended to, only so far as it may be necessary for promoting that of the consumer" (vol. 5, p. 219).
The vision of a process of growth whereby accumulation is orientated so as to bring production in line with the composition of demand is part and parcel of Ricardo’s theory.\(^{10}\)

Therefore, it again comes to light the issue of the importance of the connection between structural change in production and in the composition of market demand, one influencing, and being influenced by, the other. How this occurs in the course of growth is our next topic.

3.2- Economic Growth and Changes in the Pattern of Demand.

One of the most commented on points of Ricardo’s analysis is undoubtedly the "fundamental theorem on distribution" (see, as one example, Hollander, 1979, p.7). This theorem establishes an inverse relation between the rate of profits and the wage rate and corresponds to the situation in which the system finds itself when the "basic Ricardian problem" is under way (given the conditions in which it is framed). Wage rate increases thus imply the fall of the rate of profits.

The appeal of that theorem has been enormous in the Literature on Ricardo (and on Sraffa, for that matter).

\(^{10}\) Consider Ricardo's following remarks: "No commodity is raised unless there is a demand for it. If it were raised without a demand, it would sink in value, and not afford the price necessary to remunerate the labour bestowed upon it, and to afford the usual profits of stock ... If any man wishes to increase his capital he produces that which he has good reason to think he can sell at a remunerating price" (vol.8, p.235).
Through it wage rises are transformed into the scourge of profits. Actually, it is land rents which should play that role. There is nothing in Ricardo that points to an innate conflict between capitalists and workers. Even in the case of the introduction of machinery into the production process, Ricardo, despite having identified possible short-run conflicts of interests, certainly did not distinguish so fundamental an antagonism as to cast one class against the other.\textsuperscript{11}

The essential conflict Ricardo stressed was that between landowners and capitalists, between the entrenched political power of the former and the emerging economic power of the latter. The foregoing discussion, which exhibited the high opportunity cost incurred by society associated with rises in rents, renders that plain.

But rents are only the quantitative factor highlighting that cost. It is not in itself the root cause of the problem. Restrictive and protectionist laws which impelled the system to produce inefficiently were at the bottom of it. Increases in wages and costs and fall in profitability were by-products of those constraints.

The rise in wages is something inevitable given the

\textsuperscript{11}- He then declared that: "I have before observed, too, that the increase of net incomes, estimated in commodities, which is always the consequence of improved machinery, will lead to new savings and accumulations. These savings, it must be remembered are annual, and must soon create a fund, much greater than the gross revenue, originally lost by the discovery of the machine, when the demand for labour will be as great as before, and the situation of the people will be still further improved by the increased savings which the increased net revenue will enable them to make"(vol.1, p.396).
necessity the system has of reproducing adequately its labour force. What is more, those wage increases do not represent real gains in workers' welfare. They may even experience a decline in their living standard in the process (vol.1, p.101-02). Those increases are purely nominal.

In the context of economic growth, however, Ricardo entertained no doubts about the possibility of both the real wage (reflecting welfare improvements) and the rate of profits growing simultaneously. No great conflict would there be between the recipients of wages and profits. Conflicts in terms of bargaining would clearly exist, but not a systematic opposition of interests. Capitalists and workers both have an interest in the course of accumulation and growth not being interrupted or retarded. The former because it reproduces and enhances the opportunities of realizing profits; the latter because it secures the continuity and rise of the demand for labour and makes room for their obtaining of improved conditions.

It is important to take note of that aspect of Ricardo's analysis, since many, perhaps even the majority, of his interpreters detect a, to us unjustifiable, pessimism in what concerns the prospects for a rise in the working class living standard within the Ricardian system. We defend the view that Ricardo's vision of development implies a welfare-improving process of growth, that is, one comprising progressive accumulation and enhancement in welfare (inclusive of, principally, that of the working class).

The debate over the feasibility of improvements in
workers' welfare within the Ricardian framework is old. Marshall was one of the pioneers in calling attention to the fact that Ricardo "was not only aware that the necessary or natural limit of wages was fixed by no iron law' but that "he was further keenly sensitive to the importance of a higher 'standard of living'" (As cited in Ashley, 1891, p.13).

This hint Marshall gave was severely criticized, among others, by Ashley, who wrote: "Can we not say that, although Ricardo concedes the bare possibility of a rise in the standard of living, the possibility is, in his mind, not sufficiently strong to influence the course of his subsequent argument; and that, although he recognises that the standard may be already higher in one country than another, he implies that in all it is but little above absolute necessities" (ibid, p.17).

More recently, Hollander has reassessed the debate affirming that "it may be shown that high and rising average income was for Ricardo a fundamental object of economic activity, subject to the vital qualification that working class living standards are specified in the statement of end" (Hollander, 1979, p.540).

If Ricardo’s own words are anything to go by, it is extremely difficult to deny his most sincere goal of having the working class participate in the sharing of the benefits, originating from the progress of wealth. He repeatedly expressed his desire to bear witness to the realization of that goal, and in Parliament he made that clear. There he once remarked "that the two great evils for which it was
desirable to provide a remedy, were, the tendency towards a redundant population, and the inadequacy of the wages to the support of the labouring classes" (vol.5, p.1).

This debate is significant to our discussion insofar as it raises the question of changes in the habits and tastes of the working class and its impact upon the path of development. We have previously examined the importance of changes in the structure of demand to economic growth, now we address their significance to workers' condition. Let us see how the argument is brought into play in the debate.

Ashley (1891) argued that, as far as Ricardo was concerned, when population pressed against the means of subsistence, the only remedy was

a) for rich countries: to reduce the number of people;
b) for poor countries: to resort to a more rapid accumulation of capital.

Furthermore, regarding poor countries, to accelerate the rate of accumulation of capital workers should:

- have a taste for "conforts and enjoyments";
- be stimulated in their exertion to procure them.

But as to rich countries, wherein room for new doses of accumulation of capital is lacking, the only practical measure is a reduction in the size of population.\footnote{\[As Ashley (1891, p.15) put it: "[Ricardo] had been distinguishing between 'rich' and 'poor' countries: for the latter, but not for the former, the remedy for distress is to induce the people to be more industrious ... to stimulate the desire for comforts is the remedy peculiarly suitable to poor lands".\]}\footnote{\[As Ashley (1891, p.15) put it: "[Ricardo] had been distinguishing between 'rich' and 'poor' countries: for the latter, but not for the former, the remedy for distress is to induce the people to be more industrious ... to stimulate the desire for comforts is the remedy peculiarly suitable to poor lands".\]}

Hollander (1979) agrees with Ashley in considering
Ricardo's appeal (vol.1, p.100-01) respecting the development of a taste for "comforts and enjoyments" on the part of workers as intended to apply only to poor countries. He, though, in opposition to Ashley, goes further and asserts that Ricardo held out prospects for rising workers' living standard by means of "moral restraint".\footnote{Hollander (1979, p.571) points out that: "In any event, when we take into account the very rapid contemporary growth rate of capital, it is not difficult to appreciate why Ricardo felt confident that the abolition of the poor laws, and the strengthening in prudential habits which he expected to accompany the measure, would permit labour to reap substantial benefits in the form of increased wages over the long run."}

The hub of Hollander's argument is that Britain's prospect for a continuing growth in the rates of accumulation of capital and of the demand for labour were quite good, if only the Poor Laws were scrapped. In this case, coupled with an educational program oriented towards developing the habit of prudence on the part of the poor, a stimulus would be given to population control which would have the effect of turning the labour market in favour of workers. Hollander then takes as granted that Britain was a country advancing in accumulation (and presenting an increasing demand for labour) and directs his attention mainly to the question of the outlook for rising workers' welfare within such conditions.

Yet the question of the link between changes in workers' behaviour and economic growth is not dealt with, at least directly or in any great detail, and despite the allusion to accumulation. Only in the case of poor countries does Hollander (and Ashley) refer explicitly to that link.
Therefore, the mutual positive effects that growth and increases in workers' welfare exert upon each other, in the general case, is not fully considered. We think that, as a result, there has been a tendency to put to a particular use a rule we consider to be quite general in the body of Ricardo's analysis.

The point is this. The cultivation of a more sophisticated pattern of consumption on the part of workers is seen as having a positive effect upon economic growth. So far so good. It happens, however, that the argument seems to be applied only in relation to poor countries. This, we think, is an unnecessarily narrow delimitation of it in that it is of a more general character in Ricardo, as the early account of his vision of development has revealed.

To base the discussion on the distinction between poor and rich countries is quite understandable when the object in mind is to examine the "empirical prospects in contemporary conditions, as envisaged by Ricardo, of rising living standards" (Hollander, ibid, p.555). Equally interesting is, we think, to frame the question in the context of the basic problem Ricardo faced so as to gauge what the implications are to the stylized results generated by the simple Ricardian model.

Hollander is quite right in tying real wages increases to population control over time. It would be interesting thus to examine to what extent improved workers' conditions rebound on the process of accumulation and growth. Nonetheless, as we have seen earlier, population control,
notwithstanding being a necessary condition for improving workers' living standard, may not be a sufficient one. It is crucial that the demand for labour be maintained at such levels as to make the realization of higher real wages possible. To ensure an adequate demand for labour, though, accumulation and growth have to be sustained. Hollander supposes that the system, which represents a rich country, enjoys both a rise in accumulation and in the demand for labour. Without changes in the pattern of demand, however, they may not be warranted at all.\footnote{One may suppose that in Hollander's case this assumption is implicitly taken. Be that as it may, it remains thus to be considered, explicitly, the interrelation between the growth process and changes in workers' conditions.}

That is to say, the argument that the increasing consumption of "comforts and enjoyments" by workers play an important role in fostering economic growth is a general one. It is not applied only to the case of poor countries. Ashley missed completely this point; Hollander did not give it its due weight. Let us consider the argument in detail.

As noted above, an initial effect of accumulation is the rise in real wages in the wake of an increased demand for labour without a corresponding increase in its supply. Workers use this additional income in the consumption of those products of the non-agricultural sectors heretofore inaccessible to them. Ricardo was keen to point that out. Writing to Malthus he remarked: "[D]oes not an increase of capital beget an increased inclination for luxuries of all description[?](vol.6, p.134). Elsewhere he was even more
"An increase of capital, then, and a demand for labour, does not necessarily produce an increased demand for food, but an increased demand for other things agreeable to the labourer" (vol. 8, p. 235-36).

This is a categorical refutation of the corn-raises-its-own-demand argument Malthus held. Ricardo stood firm by his idea that all commodities obeyed the same rule. All are, or should be, produced according to the level of the demand for them.\(^{15}\)

The case is this. In the initial period society is represented by the following class behaviour configuration:

- workers consume only "necessaries" (they neither save nor consume "luxuries");
- capitalists spend a small portion of their income on the consumption of "necessaries' and save and invest the remaining (greater) part of it;
- landowners spend all their income on the consumption of "necessaries" and, especially, "luxuries" and services.

Malthus argued that an excessive accumulation of capital would destroy the very motive underpinning it, that is, it

\(^{15}\) "The way most effectually to increase capital is to produce a commodity that you know will be demanded and consequently will not fall in value. Pray understand that I am answering Mr. Malthus who contends that there is something peculiar about corn which gives it a character of being able to raise up demanders different from all other things- I contend on the contrary, that there is no difference between them that nothing is produced until it is wanted unless from mistake and miscalculation" (letter to Trower of 15 September 1820, vol. 8, p. 236).
would lead to the diminution of profits. His explanation was that capital would tend to be applied in employments less profitable rather than being kept idle. Capital, for example, would be impelled to be employed in less fertile lands. He too demonstrated his preoccupation with an excessive growth of population which resulted in the fall of working class purchasing power and consequently of the effective demand that might provoke a superproduction of "necessaries".

Ricardo responded to Malthus' concerns by applying the idea referred to above of the mutually beneficial influence that accumulation and higher real wages have upon each other. He started by dismissing the implication of falling profits as a result of the process of accumulation: "It is here inferred that a fall of profits is a necessary consequence of an accumulation of capital. No mistake can be greater" (vol. 2, p. 132).

To Ricardo, capital would not necessarily be applied in less fertile lands thus reducing profits. This would only happen if it were necessary to raise food production due to either population growth or an increased demand for food by the same population. Both cases were deemed by Ricardo improbable. He was sure that the most likely outcome would be a rise in workers' welfare (real wages), rather than the explosion in population and decreased real wages envisaged by Malthus.

Therefore, accumulation and growth could continue without major problems because higher real wages induce workers to diversify their consumption, opening room for more
lines of profitable investments. Accumulation brings about higher purchasing power which opens the way to the extension of the market and the furthering of accumulation itself. As Ricardo put it:

"If labourers required less corn wages one can easily understand why their employers should be willing to employ the additional corn capital, which wd. revert to them, in manufactures; but one can see no reason why they should be induced to cultivate more, and poorer land. Why produce more of a commodity, if the consumption of it be not increased?" (vol.2, p.137).

The problem of the manifestation of diminishing return and the approaching to the stationary state might then be circumvented (or postponed indefinitely) in the case of workers diversifying the composition of their wage basket in the direction of a greater consumption of non-agricultural products. Symbolically, we can represent this idea as follow. Suppose, initially, the case where workers consume only basic goods of the agricultural sector and the other classes consume only non-basics, that is to say, we begin with the conventional assumptions of the Ricardian models of growth. From (4) above (see chapter 2) we have that

\[ Y = W + P + R \]

(10)

Total product (income) is divided into three categories of goods (expenditure): basic goods, luxury goods, and investment goods. Thus
\[
Y = N + L + I \tag{11}
\]

where

\begin{align*}
N &= \text{basic goods ("necessaries");} \\
L &= \text{luxury goods;} \\
I &= \text{investment goods.}
\end{align*}

Workers spend all their wages on the consumption of "necessaries". Therefore, subtracting \(N\) from both sides of (11),

\[
Y' = L + I \tag{12}
\]

which represents Ricardo's net product. We then have that

\[
P + R = L + I \tag{13}
\]

In terms of the basic Ricardian problem, accumulation of capital in agriculture, owing to resorting to poorer and less well located lands and the resultant manifestation of decreasing returns, causes rents (\(R\)) to rise and profits (\(P\)) to fall. As landowners spend all their income on consumption, principally on luxury goods, and capitalists alone save and invest, in these circumstances \(L\) increases and \(I\) diminishes in (13). Accumulation depending upon the rise in \(I\), growth decelerates.\textsuperscript{16}

\textsuperscript{16}- What is more, in this particular case, where the resorting to poor land is a response to population growth and the corresponding increase in the demand for food, the agricultural sector is constantly under a great pressure, widening this differential and pushing rents ever up. As the rise in wages leads to population growth, the demand for food
One might argue that the greater consumption of luxury goods by landholders would open ways for new doses of accumulation of capital. It is necessary to have in mind, however, that rent increases are obtained at the expense of profits. It is on account of utilizing more land of an inferior quality and of increased food production costs that the rate of profit falls. And rents depend exactly on the productivity differential on lands of good and inferior quality.  

To form a more precise picture of the negative repercussion that situation has on the rate of profits and accumulation, let us consider the following. Total product now is divided into the production of the agricultural and non-agricultural sectors. Thus

is augmented and agriculture is put under a higher pressure.

Moreover, it is reasonable to think that, the society being an eminently agricultural one, thus presenting an underdeveloped luxury goods sector, the rise in the consumption of luxuries may correspond to an increase in foreign luxuries imports rather than the expansion of domestic sectors. An increased demand for luxury goods could conceivably lead to a rise in their prices. Capital might thus be allocated to those sectors in response to the corresponding rise in profits. Would this result sustain an expansionary drive in those sectors? We think it would not. Capital (and we have labour particularly in mind) would have to be transferred from agriculture, reducing then the supply of "necessaries" (ignoring technical change). How, in this circumstance, would the system feed its growing population? Either population had to be reduced somehow, in which case the diminution in the supply of labour might have an adverse effect on profits due to the likely wages rise, or capital would flow back into agriculture on account of food price rise. Both cases would not constitute the best option from Ricardo’s point of view.
\[ Y = Ya + Yi \]  \hspace{1cm} (14)

where

\[ Ya = \text{production of the agricultural sector}; \]
\[ Yi = \text{production of the non-agricultural sectors}; \]

Confining the discussion to the case of a circulating capital model, we have that the level of output is a function of the quantity of labour employed on it. Hence

\[ Y = F(La) + F(Li) \]  \hspace{1cm} (15)

where \( L \) stands for the quantity of labour used in the production process.

Taking (10) into account, we can rewrite (15) as follows:

\[ F(La) + F(Li) = W + P + R \]  \hspace{1cm} (16)

Since

\[ W = wL \text{ (total wages bill)}; \hspace{1cm} (17) \]
\[ P = F'(Y)L - W; \text{ and} \hspace{1cm} (18) \]

\[ 18^- \text{ The wage rate thus is determined by the interplay between the demand for labour (represented by the stock of capital } K \text{) and the supply of it (represented by } L), \text{ that is, between the mechanisms of accumulation of capital and of population.} \]
\[ r \text{ (rate of profits)} = \frac{P}{W} \quad (19) \]

we have that

\[ P = \left[ F'(L)\La + F'(L)\Li - wL \right] \quad (20) \]

and

\[ r = \left[ F'(L)\La + F'(L)\Li - wL \right] / wL \quad (21) \]

To simplify (21) we can resort to the concept of composit output developed by Hicks. Supposing that the commodities of the agricultural and non-agricultural sectors are consumed in fixed proportions, the first produced under diminishing returns and the latter under non-decreasing returns, they may be aggregated into a single commodity bundle which is produced under diminishing returns (see Hicks, 1983, p.33; 1985, p.318). Therefore

\[ r = \left[ F'(L)\L - wL \right] / wL = \left[ F'(L) / w \right] - 1 \quad (22) \]

With population augmenting and agricultural productivity falling, \( F'(L) \) and \( r \) decline in (22). Accumulation thus is negatively affected.

However, as we have seen, people’s preferences are non-linear. Commodities are not consumed in fixed proportions over time. In the course of growth workers use their higher real wages to diversify their consumption. In the previous
situation their preferences had the following configuration:

\[ U = U(bN, cM) \] (23)

where

\[ U = \text{an index of preferences}; \]
\[ b = \text{proportion of income spent on "necessaries" (N)}; \]
\[ c = \text{proportion of income spent on "non-necessaries" (M), which can be taken to be zero in the above situation.} \]

With a higher living standard workers pass to manifest the following preference structure of consumption:

\[ U' = U'(b'N, c'M) \] (24)

where

\[ b' < b \]

and

\[ c' > c \]

indicating a shift in consumption in the direction of a greater, in relative terms, participation of products of the non-agricultural sectors in the wage basket and a reduction in the proportional share of "necessaries" in it as real wages increase. The problem of diminishing returns is consequently lessened, since not only workers now allocate the extra income power to the demand of non-necessaries, but also population growth is held up. And the general situation may be much better if the case is, as it probably is, that M
is produced under increasing returns, as Ricardo himself observed:

"From manufactured commodities always falling, and raw produce always rising, with the progress of society, such a disproportion in their relative value is at length created, that in rich countries a labourer, by the sacrifice of a very small quantity only of his food, is able to provide liberally for all his other wants" (vol.1 p.97).19

Not only workers' welfare would improve, but the market for the products of the more efficient, non-agricultural sectors would be greatly enlarged as well. Capital could then be increasingly allocated to those sectors, bringing about a powerful impact upon the growth of industry and of the system as a whole. In terms of the mechanism of allocation, capitalists would pass to accumulate and invest the greater part of their capital in the production of those goods on which the increased real wages would be spent. The rules of the competitive game induce them to proceed that way.20

19- This is so because "by the invention of machinery, by improvements in skill, by a better division of labour, or the discovery of new markets, where more advantageous exchanges may be made, a million of men may produce double, or treble the amount of riches, of 'necessaries, conveniences, and amusements', in one stage of society, than they could produce in another ..."(vol.1, p.273).

20- That this process rebounds on the process of accumulation is further reaffirmed by Ricardo when he wrote that "if population did not keep the pace with capital [which is the case supposed], labour would rise [that is, real wages] ... how then can Mr. Malthus make it appear that 'there will be a general want of demand both for produce, and population.' Mr. Malthus may indeed say that my operations will increase the quantity of corn faster than it will be required to feed the actual population", and then that "I
The expansion of the market would not be the sole positive outcome affecting growth. There is a second one just as powerful as the first that, operating through the desire inherent in every human being of bettering oneself, has significant impact on the production side. It has to do with the effect on labour productivity.

The manifest emphasis Ricardo laid on this matter derives from his view that "the great enquiries on which to fix our attention are the rise or fall of corn, labour, and commodities in real value, that is to say the increase or diminution of the quantity of labour necessary to raise corn, and to manufacture commodities" (vol. 9, p. 83). The reason for this especial concern with productivity growth lies in a broader context, though. Gains in productivity are linked by Ricardo to the human quest for self-betterment, which can only be accomplished by means of an amplified and assorted supply of goods and services brought about by a better employment of society's economic resources. He thus asserted that "mankind are only really interested in making labour more productive, in the enjoyment of abundance, and in a good distribution of the produce obtained by capital and industry" (ibid).

The dynamics of accumulation hinges critically on labour productivity. Ricardo called it the "productive powers of
The best way of growing is by means of productivity rises with a stable population. This way, accumulation and wealth creation would be substantially advanced, ensuring a process of growth-cum-welfare which characterizes the Ricardian optimal pattern of growth. Ricardo was unambiguous about this point.

He distinguished two ways by which capital and wealth could be augmented. Society, through parsimony, might allot a greater part of its revenue to the purpose of employing a larger quantity of productive labour and increasing production. In this case society would reduce its consumption expenditures (on "luxuries and enjoyments") and employ the excedent (savings) in productive activity. This is not the optimal method from the point of view of Ricardo's vision of development, though.

Savings thus created would have to be applied to the production of "necessaries". Furthermore, the demand for labour would be spurred, resulting, in the given conditions, in population growth. This is the usual problem Ricardo considered. In this case, development soon faces enormous obstacles to maintain its momentum.

Ricardo, indeed, favoured another method by which society might augment wealth and promote accumulation without encroaching on society's level of consumption. This alternative relies on making the existing labour force more

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21 As he pointed out: "In different stages of society, the accumulation of capital, or the means of employing labour, is more or less rapid, and must in all cases depend on the productive powers of labour"(vol.1, p.98).
productive. In other words, accumulation and wealth would be augmented "without employing any additional quantity of labour, by making the same quantity more productive" so that "with the same labour more would be produced" (vol. 1, p. 278). This might be achieved, for example, by "improvements in skill and machinery" (ibid, p. 279).

That is the best option because economic growth would be stimulated, while society would also experience a positive increment in its consumption of "luxuries and enjoyments". Workers will now earn higher real wages, and the demand for commodities other than "necessaries" being unlimited, the extra purchasing power will be devoted to the acquisition of "non-necessaries"^{22}, expanding the market for them. Capital would thus naturally flow to the non-agricultural sectors to back their growth.

The scope for the intensification of the division of labour and for technological advances is enlarged, bringing on new opportunities for accumulation, growth and the general good, not least because the tendency of real wages, in these conditions, is to keep increasing.^{23}

^{22}- It is conceivable that some part of the increased income would go to savings, as Ricardo himself acknowledged (vol. 1, p. 348, n.).

^{23}- It is interesting to note that Ricardo resorted to Adam Smith to stress this aspect of the influence of "wants and tastes on profits", and thus on accumulation and growth. He quoted the following Adam Smith's remark: "The increase of demand, besides, though in the beginning it may sometimes raise the price of goods, never fails to lower it in the long run. It encourages production, and thereby increases the competition of the producers, who, in order to undersell one another, have recourse to new divisions of labour and new improvements of art, which might never otherwise have been
Some of these non-agricultural products can, by reason of a modification in the habits and customs of people, upon which the minimum level of wages greatly depends, pass to become an integral part of the basic wage basket of workers, representing thus a permanent improvement in their living standard. And those products being produced in conditions of non-decreasing returns, they contribute to keep the level of money wages "moderate" and to promote accumulation. This reflects the fact that accumulation is now oriented towards the growth of industry.

On the other hand, rises in the standard of living prompt workers to increase their efforts yet more in order to raise their participation in the consumption of "luxuries and enjoyments". They are led to strive and intensify their exertions, thus enhancing the growth of productivity. As Ricardo wrote:

"An increased demand for labour is not immediately supplied by an additional number of people—higher wages induce the same number of people to do more work" (vol. 8, p. 235).

The interpretation of this passage is not obvious. One might argue that "to do more work" simply means that more hours of work are supplied, in which case gains in

\[ \text{thought of} \] (vol. 6, p. 148, n.1).

\[ \text{24} - \text{Ricardo explicitly refered to the case where "wages have been kept moderate by the improvements in those manufactures which supply the poor with the necessaries on which a part of their wages are expended" (vol. 6, p. 194).} \]
productivity would not follow directly. Higher wages leading to an increase in the supply of working hours is a result consistent, for instance, with the neoclassical theory of the supply of labour. But we think this does not correspond to the meaning Ricardo wanted to transmit in the passage above and to the overall nature of his analysis.

Firstly, to obtain the neoclassical result "higher wages" had to mean higher money wages but not higher real wages (which is supposed to stay constant).\(^{25}\) In Ricardo, however, "higher wages", in the wake of accumulation, also means higher real wages. It being so, what motive would workers have to supply more hours of work?

In addition, the idea of more working hours being supplied does not take into consideration the fact that workers, in fact, do not have the power to determine the length of the working journey, which is in the hands of the capitalists.\(^{26}\) To these latter it could be that the intensification, rather than the extension, of the journey, through the heightening of the division of labour, improvements in workers' skills, introduction of machinery, etc., represented a better choice.

In short, to us, keeping in mind the general picture of Ricardo's analysis, "to do more work" means gains in

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\(^{25}\) In the case of variations in real wages the neoclassical theory does not give a straightforward answer to what will happen next (Holanda Barbosa, 1985, p.108-09).

\(^{26}\) On the other hand, the situation may be that the working journey is already too lengthy to afford employers to lengthen it even more.
productivity associated with the intensification of productive labour, which translate itself into rising workers’ condition and economic growth.

This emphasis placed on individual effort is important. It is the Smithian "invisible hand" working in favour of the general welfare through the acts and interests of individuals. Individual workers apply themselves with greater exertion to secure the means by which they can get hold of those products that raise them above the mere satisfaction of basic needs.

The stimulus then exists for them to become more productive, to become more specialized, and to strengthen their skills, contributing thus to the rise of productivity and the division of labour within the economic system. As capital (and then labour) would tend to switch to the unfolding industrial sector, those improved skills would chiefly mean improved industrial productivity, thereby helping reduce the price of manufactured goods and causing them to become of easier access by workers, reinforcing yet again their motivation to raise their exertion and productive

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27 - This belief in, and reliance on, individual exertion to fulfil individual desires is, for instance, at the root of Ricardo’s criticism of Robert Owen’s utopian (in Ricardo’s eyes) designs: "He, Mr. Preston, and Mr. Owen, appears to think nothing necessary to production, and to happiness of a crowded population, but land. We have land; it may be made more productive, and therefore we cannot have an excess of population.- Can any reasonable person believe, with Owen, that a society, such as he projects, will flourish and produce more than has ever yet been produced by an equal number of men, if they are to be stimulated to exertion by regard to the community, instead of by regard to their private interest? Is not the experience of ages against him?" (vol.8, p.46).
Society, consequently, should stimulate the satisfying of those personal wants. The fruits likely to be reaped by way of the unleashing of individual activity would be enormous. The impulse derived from individual attempts at climbing the social ladder is a compelling driving force setting in motion the economic engine.

Ricardo revealed himself a stout adversary of restrictive habits and laws which prevented the smooth operation of the social machinery by interfering with the "natural" rule governing individual behaviour and which constitutes the oil that lubricates that machinery.28

Two factors identified by Ricardo as preventing the system from working properly were the Poor Laws and the trade-restricting laws. Let us consider them to assess their impact upon individual preferences and growth.

3.3- Poor Laws and the Economic Process.

Ricardo and his fellow political economists generally recognized the poor relief system known as the Poor Laws as one of the prime distortionary influences on the economy, in the British society of the time. It was thought to have two main deleterious effects on the running of the economy.

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28- This of course is a perennial topic pervading classical political economy, and one Ricardo constantly stressed: "It is self-interest which regulates all the speculations of trade" (vol.3, p.102; see also p.56, and vol.6, p.64).
Having to afford the payment of the relief, the State saw the burden of such commitment to rise rapidly owing to the widespread distress which accompanied the post-Napoleonic wars period. The increased monetary cost associated with the Poor Laws system meant that government had sometimes to appeal to either tax rises or extra borrowing, thus encroaching upon the net revenue of the nation, raising the national debt, and impairing the funds which otherwise could be directed to support accumulation.

The criticism though was not only levelled against the monetary burden that the system generated. A great concern was manifested regarding the pernicious consequences on the labour market. The Poor Laws, its critics maintained, had the negative effect of discouraging self-reliance among the poor. In addition, the allowance system was seen as an stimulant of reckless breeding, bringing to the fore the ghost of the Malthusian population threat. Apart from that, it had a deeper consequence affecting the working of the economy. It provoked a stiffening of the mechanism of resource allocation.

The labour market became inflexible due to the restrictions to the mobilization of labour and to the lack of incentives to seek a better job, therefore erecting a barrier to a more efficient allocation of resources in the economy and debilitating the system's productive potentialities.

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29- For historical details of this period in what concerns the Poor Laws, refer, for instance, to Rose (1981, p.272-73).
Ricardo's writings echoed all those misgivings about the poor relief system voiced at that time and contributed much to shaping the formal position of the political economists towards it.

A basic criticism directed against the Poor Laws was its stimulating of the population mechanism. People's minds were impregnated with the idea that they had a right to be supported by the government. This then acted as an incentive to rear large families. The difficulties associated with the basic Ricardian problem would follow.

On the other hand, workers' conditions would suffer a severe blow. Population growth and larger families contributed to push them down to (or very near) the subsistence level. What is more, their motivation to exert themselves to achieve a better situation would be eroded. The result was the generation of a "demoralizing effect" upon the working population.\(^{30}\)

The Poor Laws system was, therefore, conducive neither to the improvement in the conditions of the poor nor to the control of population growth. It only resulted, it was argued by its critics, in a vast drain of public resources and in the undermining of the motive for self-support and independence on the part of the poor\(^{31}\)


\(^{31}\) Ricardo thus wrote: "The clear and direct tendency of the poor laws, is in direct opposition to these obvious principles: it is not, as the legislation benevolently
The latter point is of great importance for our discussion of the extent to which the Poor Laws were held responsible for robbing workers of all incentives to exertion and prudence, and for inhibiting the development of new tastes among the poor. Checking thus the blossoming of new demands, while giving inducement to the constitution of larger families, those laws acted against the process of growth.

Ricardo's indictment against the poor relief practice could hardly be more vehement. He opposed it in the following terms:

"The principle of gravitation is not more certain than the tendency of such laws to change wealth and power into misery and weakness; to call away the exertions of labour from every object, except that of providing mere subsistence; to confound all intellectual distinction; to busy the mind continually in supplying the body's wants; until at last all classes should be infected with the plague of universal poverty" (vol.1, p.108).

Ricardo's concern seems to be with the inhibition of the development of new tastes on the part of workers. The Poor Laws contributed to that because if "by law every human being wanting support could be sure to obtain it, and obtain it in intended, to amend the condition of the poor, but to deteriorate the condition of both poor and rich; instead of making the poor rich, they are calculated to make the rich poor; and whilst the present laws are in force, it is quite in the natural order of things that the fund for the maintenance of the poor should progressively increase, till it has absorbed all the net revenue of the country ..." (vol.1, p.105-06).
such a degree as to make life tolerably comfortable" (ibid), people would attach themselves to that feeling of security and would conform to the life conditions, low though it may be but that afforded the "necessaries" required, that system would give rise to.

The development of a more sophisticated taste and lifestyle among the lower ranks of society, which needed to be steadied and encouraged, was not given scope. It was undermined by the fact that the Poor Laws imposed constraints on the poor's self-motivation to climb above the level of supplying themselves with the bare essentials of subsistence only.

No large-scale market for the products of the non-agricultural sectors could then arise, at the same time that the degree of labour exertion would be kept at very low levels. All this went against the behavioural pattern Ricardo prescribed for the working class.

Workers should develop an appreciation for self-reliance. They should learn to link their welfare to their own effort and labour. They should be frugal and economical. They should long for security based upon their self-control and moderation. In sum, they should be the agents of their own progress and well-being.\(^{32}\)

\(^{32}\) - To Ricardo, the "nature of the evil points out the remedy. By gradually contracting the sphere of the poor laws; by impressing on the poor the value of independence, by teaching them that they must look not to systematic or casual charity, but to their own exertions for support, that prudence and forethought are neither unnecessary nor unprofitable virtues, we shall by degrees approach a sounder and more healthful state" (vol.1, p.107).
The message is quite clear. By rises in productivity and the practice of prudence workers might reach a stage that enabled them to enjoy a greater and more varied set of goods and services and establish a fund (savings) destined to secure them against any future difficulty. With that in mind, Ricardo backed and encouraged the creation of "savings banks", which were institutions aiming at fostering the habit of saving among workers.33

Ricardo, however, also thought it important that wage rises should occur. He clearly perceived that, without gearing up workers' purchasing power, the very existence and purpose of those institutions would be at stake. It was necessary to increase the workers' share in the national income in order to give them, besides the disposition, the power to save. He thus observed that those banks would not manage to obtain the good results they were intended to "unless we at the same time raise the general rate of wages by confining the operation of the poor laws to cases of extreme necessity ... Every thing would go well if we could rescue the lowest labourers with families from the habitual reliance on the rates"(vol.7, p.134).

The Poor Laws interfered with the operation of the labour market and thus the "natural" rule of wages determination was violated. For like "all other contracts, 33 - Ricardo thought that these institutions "will tend to introduce economy and forethought amongst the poor, which may in time check the propensity to a too abundant population, the great source from whence all the miseries of the poor flow in so profuse a stream"(vol.7, p.26).
wages should be left to the fair and free competition of the market, and should never be controlled by the interference of the legislature" (vol. 1, p.105), exactly the opposite the poor relief system achieved. Those laws restricted the movement of labour across the country. Each person had to be registered with the parish where he belonged and could not move to the area of another parish under the threat of not being eligible to receive the relief.

Labour hence could not be apportioned in correspondence with the requirements of the competitive mechanism of allocation, which was thought of as the most efficient way of distributing the system's resources among the several sectors and geographical areas of production. Besides the legal restrictions to movement, the lack of incentive among the poor to exert themselves so as to enter into the possession of superior objects of consumption inhibited their own motivation to seek better employment elsewhere.

If the labour market was left free to reflect the real needs of the process of accumulation and the actual state of supply and demand for labour, workers would be favoured, if case their "habits and customs" were improved, inasmuch as real wages would have the tendency to increase in response to the new attitude on their part of reproducing themselves and raising their efforts according to the demand for them.

Capitalists, on the other hand, would benefit by the higher productivity arising from workers' greater exertion, since higher wages would not be translated into diminished profits.
This of course is our now familiar mutually advantageous relationship among accumulation, growth, the division of labour, welfare improvements, changes in the pattern of demand, and the extension of the market. To the extent that the Poor Laws stood as a barrier to those interconnections, it comes as no surprise that Ricardo opposed them vigorously.

3.4- Foreign Trade, Taste Differentiation and Growth.

The justification for a country's engaging in international trade has, as far as the Ricardian theory of international trade is concerned, usually been founded on the argument underscoring the gains derived from taking advantage of the structure of comparative costs among nations. This is a mainly static argument which puts weight on the fact that countries committed to foreign trade experience a steep rise in the amount of goods available to their population. Therefore, it is the welfare-improving result that hit the headlines. This has constituted the traditional approach to the Ricardian theory of international trade.\(^{34}\)

Recently, however, there has been an interest not in that static welfare argument respecting foreign trade in the Ricardian system, but in the dynamic gains associated with it. It is said that the essence of Ricardo's position for

\(^{34}\)- That Ricardo envisaged a role to be played by foreign trade in these lines is quite evident from his remark that it "will very powerfully contribute to increase the mass of commodities, and therefore the sum of enjoyments"(vol.1, p.128).
international trade revolves around the dynamic gains in terms of growth it gives rise to. From this point of view\textsuperscript{35}, economic growth is assisted by the country in question buying cheaper food and raw materials abroad, thus reducing internal costs of production, raising profits, and stimulating accumulation.\textsuperscript{36}

But these views are clearly not conflicting. It has been less noticed that dynamic gains both in welfare and in growth are intertwined in Ricardo's analysis. The static welfare argument can be made dynamic and rebound on the growth process. International trade is an effective instrument to prod and diversify consumption. The options in terms of consumption disclosed by trade act as appetizers operating on, and transforming, human wants.

International trade would then complement the domestic manufacturing sectors in making available an assortment of new products which would be conducive to promoting taste differentiation. The development of new tastes in its turn, by raising demand, would engender the necessary incentives to accumulation and growth in the manufacturing sectors of the economy and to the advancing of foreign trade, with the country being able to share the benefits of the furthering of

\textsuperscript{35} Refer, for example, to the theoretical exploration of the dynamic aspects of Ricardo's open model carried out by Findlay (1974).

\textsuperscript{36} This view also finds support in Ricardo's writings. He, as an illustration, affirmed that if "by the extension of foreign trade, or by improvements in machinery, the food and necessaries of the labourer can be brought to market at a reduced price, profits will rise" (vol.1, p.132).
the international division of labour and the evolving of its more efficient sectors of production.

Ricardo’s general view on the subject is well conveyed in the following observation of his:

"[T]herefore foreign commerce modifies the quality and increases the variety of productions which compose the mass of wealth, and only adds to the natural growth of its quantity by giving a more beneficial employment to labour" (vol. 3, p. 332).

Apart from the well known stimulus to a more efficient division of labour, notice the weight Ricardo lays on the higher quality and diversity of goods as an aftermath of engaging in foreign trade. It is true that this aspect has already been recognized in the literature on Ricardo’s international trade theory. The link of that greater quantity and better quality with taste differentiation, changes in the structure of demand, and development, though, is generally overlooked.

It is not only then a question of abundance of known commodities, but also of multiplicity and superiority of new goods brought to market. An important aspect therefore is that "foreign commerce modifies the quality and increases the variety of productions which compose the mass of wealth" (vol. 3, p. 332).

By making food cheap the great mass of people would now be able to "apply a part of their earnings to the purchase of luxuries" (vol. 5, p. 50). We are back to the argument that rising workers’ condition leads to modifications in the
composition of their wage basket, whereby the latter would be rendered "moderate" in terms of money wage and more diversified towards non-agricultural goods.

Foreign commerce brings about taste differentiation and modifications in the pattern of demand by putting cheaper, original, fashionable, and sought-after commodities within reach of the wider spectrum of the population, and thus "it increases the amount and variety of those objects on which revenue may be expended" (vol. 1, p. 133). For "what we are anxious about is to possess an abundance of conveniences and luxuries" (vol. 2, p. 206).

The pattern of demand is then altered by the accessibility of new and cheaper products. As a consequence, the part of the agricultural sector in the course of development is redefined. The industrial sector takes the lead, as it is favoured by those modifications in the structure of demand.

Such structural transformation in the economic system and the accompanying stimulus to accumulation and growth were deemed unlikely to be forthcoming in the event of the protectionist laws standing as they were. In his 1822 pamphlet, *Protection to Agriculture*, attacking the barriers erected against free trade, Ricardo pointedly sought to expose the adverse effects brought into being by trade-distorting policies on development.

His position turned upon the idea that, in the existing conditions of the time, the viable path of expansion otherwise open to the system was blocked by the undue volume
of resources poured into the agricultural, less efficient sector of the economy. A set of regulations which restricted individual initiative and weakened the growth potential of the system was embedded in that economic type of organization. His condemnation of agricultural protectionism was thus that:

"Besides the impolicy of devoting a greater portion of our labour to the production of food than would otherwise be necessary, thereby diminishing the sum of our enjoyments and the power of savings, by lowering profits, we offer an irresistible temptation to capitalists to quit this country, that they may take their capitals to places where wages are low and profits high" (vol.4, p.237).

Here lies one of the reasons why Ricardo fought so much the restrictions upon foreign trade then in place in Britain. They obstructed the drive to industrialization. They stood in the way of opening up new markets, at home and abroad, for the products of the non-agricultural sectors.

The Corn Laws was the object in question. By imposing restrictions upon the importation of food and raw materials those laws damaged deeply the capacity of the domestic non-agricultural branches of the economy to grow. They kept food price, money wages and rents high and profits down. The protection of the domestic agricultural sector would not result in an increased demand for its own products, which we saw is limited. Rather, one of its main implications was the constraint it placed on the development of the market for industrial goods. By making food dear, the Poor Laws
contributed to push workers' conditions down, incapacitating the system from taking advantage of an increased demand (what is more important, of a varied demand) and of a broader market. On the other hand, by making labour and raw produce dear, they also discouraged accumulation and growth.

Ricardo saw a freer trade as an essential measure to break up the powerful agricultural interests which held back the growth of industry and the pace of development. He was determined to show, in refutation to Malthus, that

"To allow the free importation of corn, would lower rents, but would be no indication of poverty and decline ... The adoption of a cheaper food would throw land out of cultivation, without being necessarily accompanied with poverty, for the people might have a greater desire for articles of dress and furniture, and might expend what they saved in the article of food, on these enjoyments. This would not be poverty and decline"(vol.2, p.161).

Making food cheap would raise workers' real wages. This increment then could be spent on the consumption of industrial goods. Accumulation in those sectors would be served both by lifting the upward pressure on money wages and by the extension of the market for their products. Besides, the fall in the price of raw materials would reduce still further the cost of manufactured goods. As Ricardo put it:

"The facility of obtaining food is beneficial in two ways to the owners of capital, it at the same time raises profits and increases the amount of consumable commodities. The facility in obtaining all other things, only increases the amount of commodities"(vol.4,
Notice Ricardo’s remark about the increase of the demand for "non-necessaries" on account of cost reductions in the production of food. Cheaper food means workers having now a greater ability to acquire other goods, of the non-agricultural sectors, that is. This is a further evidence of Ricardo being perfectly aware of the importance of changes in the structure of demand to raise the level of profitability in the economy.

Moreover, foreign trade would extend further that market and open more opportunities for the industrial sectors to enjoy scale economies. That is to say, by "carrying on manufactures on a large scale you may undoubtedly increase the real riches of a country, and the exportation of manufactured commodities will encourage their production, and augment their quantity" (vol. 3, p. 331).37

In this chapter we discussed the limits to growth a predominantly agricultural society faces, and how important changes in the structure of demand are to the development of industry. We reviewed Ricardo’s arguments for the promotion of workers' welfare and taste differentiation as instruments for accelerating accumulation in the more efficient, non-agricultural sectors, and his opposition to pieces of legislation standing in the way of such reforms. In the next

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37- "An Increase of [foreign] Demand is serviceable to a Country, inasmuch as it procures for it a more extensive Market, and enables it to get a greater Quantity of Foreign Goods in Exchange for its own ..." (vol. 5, p. 435).
chapter we consider Ricardo's critical observations on Malthus's view of the progress of wealth, which will throw further light into his vision of the process of development.
CHAPTER 4- RICARDO ON MALTHUS ON THE PROGRESS OF WEALTH

When Malthus published his *Principles of Political Economy*, in April 1820, Ricardo carried out a thorough scrutiny of it, which came to be published later as *Notes on Malthus*.¹ These notes are very helpful to those interested in grasping the nature of the criticism that Ricardo levelled against the economic analysis developed by Malthus. The observations made by Ricardo with respect to the arguments put forward by Malthus in the chapter entitled On the Immediate Causes of the Progress of Wealth (Chapter 7) are particularly relevant to our analysis here and clarify some of the points we have considered in the previous chapters. It gives us more textual evidence of the ideas we have been advancing so far and furnishes more details of Ricardo's analysis.

It is especially important in that it throws light on the question of why Ricardo, in opposition to Malthus, did not regard the increase of landlords' demand as a proper way of extending the market and promoting growth, and instead preferred to see the increase and diversification of workers' consumption as a better way of achieving the same result. This difference has to do with the distinction between productive and unproductive consumption and constitutes a

¹- They were first published in 1928 by J. H. Hollander (Baltimore: John Hopkins Press), and then in 1951 by P. Sraffa (Cambridge: Cambridge University Press) as part of his edition of *The Works and Correspondence of David Ricardo*, vol.2, which is the text we draw on here and to which all the references in this chapter refer, unless otherwise stated.
major point of divergence between Ricardo and Malthus on the causes promoting the course of economic advancement.  

In this chapter then we examine Ricardo's critical comments on Malthus concerning the causes of economic growth so as to reinforce our point that in Ricardo we distinctly have the view of a strong complementarity between economic growth and the evolution of tastes/changes in the structure of demand.  

We also draw attention to a less noticed point in the history of economics literature, namely the fact that it is Ricardo's view of economic development, not Malthus's, that seems to come closer to Keynes's own vision in reference to consumerism and its relation to the economic process, that is to say, Ricardo and Keynes may be said to have shared the view of mass consumption-oriented growth as a means to prop up the process of economic development.

4.1- Ricardo Versus Malthus On the Role of Unproductive Consumption in the Course of Development.

Malthus's objective in chapter 7 of his Principles was to investigate the catalytic forces behind the progress of wealth. He demonstrated a certain reserve with regard to the

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2- As Ricardo remarked in a letter to Malthus: "The part of your book to which I most object is the last. I can see no soundness in the reasons you give for the usefulness of demand, on the part of unproductive consumers. How their consuming, without reproducing, can be beneficial to a country, in any possible state of it, I confess I cannot discover" (p.301). We shall return to this question.

3- All references to Malthus's Principles refer to Sraffa's edition of it in vol.2 of Ricardo's collected works.
conception of economic growth which as arising from parsimony and accumulation. He argued that such a process is bound to cause a lack of effective demand for the increased output. The reason for that is given in the form of two main arguments:

a) that the consumption and demand by workers are not sufficient to absorb the increased output and to sustain accumulation;

b) that capitalists, landlords, and other high-income recipients, being parsimonious, hold back their consumption out of income.

The outcome is that accumulation and growth soon run into difficulties in that the increased supply is not paralleled by a proportional increase in demand. As a consequence, either prices would have to fall below costs, in which case profits would be slashed, or the rich classes would have to increase their consumption through reduced savings.\(^4\)

At the base of Malthus’s argument is the idea that "[t]o

\(^4\)- Malthus reasoned thus: "But it has already been shewn that the consumption and demand occasioned by the persons employed in productive labour can never alone furnish a motive to the accumulation and employment of capital; and with regard to capitalists themselves, together with the landlords and other rich persons, they have, by the supposition, agreed to be parsimonious, and by depriving themselves of their usual conveniences and luxuries to save from their revenue and add to their capital. Under these circumstances, I would ask, how it is possible to suppose that the increased quantity of commodities obtained by the increased number of productive labourers, should find purchasers, without such a fall of price as would probably sink their value below the costs of production or, at least, very greatly diminish both the power and the will to save"(p.302-03).
justify the employment of capital, there must be a demand for the produce of it, beyond that which may be created by the demand of the workmen employed" (p. 300). His explanation seems to be this. At any given time the total labour force is divided into productive and unproductive labourers; accumulation of capital means the transformation of part of the stock of unproductive labour into productive labour, and thus increased production; as the total demand by workers has not changed, and as the demand by the higher classes has been reduced in proportion to the amount saved by them, the question arises of who will demand the additional output (p. 308, 309). Notice that the total supply of labour remains unchanged throughout the argument.

For Malthus, "from the nature of population, an increase of labourers cannot be brought into the market, in consequence of a particular demand, till after the lapse of sixteen or eighteen years" (p. 312). Accumulation then may, if pushed too far and too rapidly, not be accompanied by an increase in the supply of labour, and the system may face the situation in which the "funds for the maintenance of labour" increases faster than the supply of labour, and "whenever this occurs, there may be a universal glut of commodities" (ibid).

We have here a variation from the usual problem of population growth in that rather than being excessive, it is seen as not accompanying the course of accumulation. Due to the lag between the time when capital increases (and raises the demand for labour) and when a new batch of workers makes
its appearance in the market, total demand for commodities does not change immediately, thus provoking a glut of commodities on the market and the possible collapse of accumulation and growth.

The important point for us is Malthus's supposition that during the process of accumulation workers' consumption pattern does not experience modification. They continue demanding only "necessaries". On the other hand, capital, for lack of alternative markets, is accumulated in the agricultural sector in the expansion of the supply of "necessaries". There are no incentives for structural change in the productive sector of the economy because none takes place in the structure of demand.

Ricardo did not accept Malthus's chain of reasoning and did not share his anxieties about the impending threat to economic progress coming from a too rapid and parsimony-based accumulation of capital. For him, the real problem was not whether accumulation occurred too rapidly or too slowly; accumulation was always a good thing in that it meant heightening the productive powers of society and the possibility of improving the general welfare. The real problem to him was whether accumulation occurred in correspondence with the pattern of preferences of individuals in society or not. In other words, whether the allocation of resources happened accordingly to the "wants and wishes" of society.

He did not see any problem as far as the level of effective demand (understood as the general level of demand)
was concerned, but envisaged a possible difficulty in relation to the composition of demand. At the macroeconomic level, he thought, demand did not pose any difficulty; the process of accumulation generated the necessary income to give effect to an effective demand for the increased production. This is Say's Law as Ricardo held it. It was at the microeconomic level of the composition of the output and of demand that he saw room for difficulties since

"Mistakes may be made, and commodities not suited to the demand may be produced- of these may be a glut; they may not sell at their usual price; but then this is owing to the mistake, and not to the want of demand for productions ... What I wish to impress on the readers mind is that it is at all times the bad adaptation of the commodities produced to the wants of mankind which is the specific evil, and not the abundance of commodities. Demand is only limited by the will and power to purchase" (p.305-06).

In Ricardo's theoretical scheme parsimony does not imply a reduction in consumption but rather an alteration in the group of people who consume out of the income created by the amount saved and invested. The story told in the previous chapters follows, with the increased purchasing power of workers being one of the chief upshots of that process, and

5 - As Ricardo remarked: "I deny that the wants of the consumers generally are diminished by parsimony- they are transferred with the power to consume to another set of consumers" (p.309).

6 - He rebuked Malthus thus: "Mr. Malthus talks of 'an economy of consumption, and a discouragement to the indulgence of those tastes and wants which are the very elements of demand'. The whole matter in dispute is centered in these few words. Mr. Say, Mr. Mill, and I say that there
with their increased demand for new products constituting an extra force working upon the course of production. In his own words:

"I indeed say 'that of commodities so limited in number [that is, "necessaries"] there would be an universal glut.' But could such a state of things exist? Would only such a limited number of commodities be produced? Impossible, because the labourers would be glad to consume conveniences and luxuries if they could get them, and in the case supposed to promote the very object of the masters it would be their interest to produce the commodities for which their labourers had the will and power to pay" (p.313).

Malthus, in his turn, had great doubts over the existence of an, so to speak, unsatisfied demand for "luxuries" on the part of workers at the ready. He criticized Ricardo for not taking into due consideration the "influence of so general and important a principle in human nature, as indolence or the love of ease", and for assuming quite arbitrarily that "luxuries are always preferred to indolence", when in reality "an efficient taste for luxuries, that is, such a taste as will properly stimulate industry, instead of being ready to appear at the moment it is required, is a plant of slow growth, the history of human society shews" (p.313-14).

This question raised by Malthus is relevant because it

will be no economy of consumption no cessation of demand ... The will to consume exists wherever the power to consume is. Mr. Malthus proves that this power is not annihilated but is transferred to the labourer. We agree with him and say wherever the power and will to consume exists there will necessarily be demand" (p.311).
regards the relationship between changes in the structure of demand, productivity increases, and economic growth. Ricardo, in opposition to Malthus, firmly believed that accumulation brought about the right relationship automatically and was stimulated by them. He admitted the possibility of certain individuals expressing a preference for indolence, but as a general tendency he thought the desire to fulfil "superior" preferences of consumption to prevail upon what Malthus called "the love of ease", with the effect that the economic resources were used more productively. In the following passage he expressed himself in these very same terms:

"We do not say that indolence may not be preferred to luxuries. I think it may ... But Mr. Malthus supposes the motive strong enough to produce the commodities, and them contends there would be no market for them after they were produced, as there would be no demand for them."

"... Mr. Malthus brings forward a case of a society not accumulating, preferring indolence to luxuries, not demanding labour, not cultivating their lands as a proof of the evil effects which would result from the very opposite course; where capital would be accumulated, where activity would take place of indolence, where there would be the greatest demand for labour, and where lands would be made the most productive; for all these are included in the meaning of the word accumulation" (p.313-15). 7

7 Ricardo thus emerges as having, as it were, a premonition of the consumer society of the future, of the consumerism of modern capitalism. Conspicuous consumption by the higher classes spills over into the lower ranks of society and generates among them the desire for a "superior" way of life in the form of imitative consumption and miming the influence of advertising which, in our times, counteracts the "love of ease" but was unknown to Ricardo. For a historical account of the rise of a "consumer society" in England see Chapter 1 of McKendrick, Brewer, and Plumb.
To Malthus, the foundation of economic progress rested on the employment of the surplus created in the agricultural sector, a notion which Ricardo would not reject (at any rate not as the point of departure of the analysis). Malthus, however, advocated that the surplus should largely find its way into the hands of the class of landowners to prop up effective demand. By being used in the consumption of "luxuries and conveniences", he reasoned, it would stimulate the continuing advance of the economic system. In this way the demand for non-agricultural products would be maintained and even increased, while that for "necessaries" would not rise disproportionately.

If, on the other hand, agricultural surplus was primarily used in the formation of savings to boost accumulation, the situation would worsen. The non-agricultural sectors would have their expansion impaired by the lack of markets and workers would eventually start being laid off, further contributing to the reduction of effective demand and to the worsening of the problem.

Malthus's reasoning is as follows (p.316-17). If landowners allocated the agricultural surplus to the purpose of expanding accumulation, which to Malthus means employing more and more labour in the agricultural sector, and given the unchanged pattern of consumption prevailing among workers, that is to say, they only consume "necessaries", the overall level of demand would fall short of that required to absorb total production, since

(1983).
(i) "if the business of that part of the society which
was not engaged in raising raw produce, consisted merely in
preparing the other simple necessaries of life, the number
required for this purpose being inconsiderable, the rest of
those whom the soil could support would be thrown out of
work";
and as a consequence,

(ii) "[h]aving no means of legally demanding a portion
of the raw produce, however plentiful it might be at first,
they would gradually decrease in numbers and the failure of
effective demand for the produce of the soil would
necessarily diminish cultivation, and throw a still greater
number of persons out of employment";
with the result that

(iii) "[T]he possessors of land would have no sufficient
stimulus to cultivate well; and a country such as our own
which had been rich and populous would, with such
parsimonious habits, infallibly become poor, and
comparatively unpeopled".

From the point of view of Ricardo’s vision of
development, there are two difficulties with the argument
laid down by Malthus. In the first place, it seems to suggest
that new doses of capital are inevitably applied to
agriculture unless the demand for "luxuries" by the class of
landowners gives the incentive for diversification. Secondly,
it implies that the sole consumers of "luxuries" are those in
the richer classes, chiefly landowners.

For Ricardo, everyone has the wish to consume "non-
necessaries", the only question being whether one had enough purchasing power. Whereas Malthus favoured less parsimony and more consumption of luxury goods by the richer classes, Ricardo saw accumulation as a way to, among other things, afford a population desirous of consuming non-food articles the ability to do so. He therefore could not share Malthus's misgivings about the possibility of new opportunities of investment outside of agriculture to materialize on account of the effective demand problem.  

Savings transformed into capital and employed in productive activities would, he maintained, promote the growth of national income, and of the share of wages in it. The problem of effective demand identified by Malthus, thus, did not trouble him given his conception of the feed-back effect between accumulation and growth, on the one hand, and real income increases and the evolution of tastes, on the other.

A startling difference between these two visions of the economic process is that Malthus seems to associate workers' gains with capitalists' losses.  

8- Ricardo argued thus: "The farmers Mr. Malthus says could not employ their capitals in any other way than on the land- I contend that they would employ them another way for in that way they would not be productive of profit. Either capitalists or labourers would have the right to demand the produce of labour. What they demanded would be produced"(p.325).

9- For instance, he says: "But, even taking into consideration the increased consumption likely to arise among the labouring classes from the abundance and cheapness of commodities, yet as this cheapness must be at the expense of profits ..."(p.326).
of commodities thrown into the market reduces prices and profits since the level of effective demand is supposed to continue the same. Malthus, indeed, assumed a "given consumption" throughout his argument. Ricardo, on the contrary - and this is the basic idea the present work has been trying to show - maintained that real wage increases open the way to the rise of the non-agricultural sectors and to the promotion of further accumulation and growth.\textsuperscript{10}

Both Ricardo and Malthus knew that productivity increases were an essential factor in the expansion of the economic system and that a greater part of those increases should be directed to the development of the industrial sector of the economy. It happens that Ricardo foresaw a radical transformation of agriculture (either by the rise in the productivity of domestic agriculture or by the acquisition of cheaper and better food and raw materials from more efficient agricultural countries or both) as something of fundamental importance in initiating and transmitting the developmental impulse to the non-agricultural sectors. Yet,

\textsuperscript{10} - "What we should desire is to increase the quantity of commodities without increasing their value. The mass of commodities may then be of the same money value as before, and if labour falls from 2/-, to 1/8. [per] day, the labourer may be better off, as with 1/8 he may get more than he got with 2/- before. The rate of profits will be increased in the same way as before, but it will not be at the expence of the labouring class,- it will follow from the increased productiveness of labour"(p.373). Through equation (22), chapter 3, we can see that, even with money wages constant, productivity increases leads to a rise in the rate of profit. Money wages may even rise if the growth in productivity is greater than the variation in wages. Furthermore, with increases in the productivity of the wage goods sector, money wages may even fall without a corresponding reduction in real wages (Ricardo’s example above).
Malthus appears to have entertained grave doubts about the appropriateness of rendering the sector yielding the workers' basic goods more productive.

Malthus's reasoning is interesting in that it helps to highlight Ricardo's own distinct position. Malthus considered a kind of production of "necessaries" so difficult as to be quantitatively constrained and thus to be ultimately a good thing, since "necessaries" being scarce in relation to the needs of workers would impel the latter to increase their efforts in the production of luxury goods\textsuperscript{11}, not for themselves but to satiate the demand of the higher classes. In doing so they would be able to meet their basic needs and at the same time increase the supply of "luxuries" demanded by the other classes.

Progress would then occur accompanied by the full-employment of the labour force, and with the general level of profit being kept high enough to ensure continued accumulation and production. In this case, the demand for "luxuries" by the rich, foremost among whom would be the

\textsuperscript{11}- He asserted that it "is the want of necessaries which mainly stimulates the labouring classes to produce luxuries; and were this stimulus removed or greatly weakened, so that the necessaries of life could be obtained with very little labour, instead of more time being devoted to the production of conveniences, there is every reason to think that less time would be so devoted"(p.333-34); to which Ricardo answered: "Under the present circumstances of England, would not Mr. Malthus think that the situation of the labourer would be improved, if he could produce more necessaries in the same time, and with the same labour"(p.334). Therefore, Malthus and Ricardo speak here at cross-purposes. Malthus seems to believe that poverty makes the workers more industrious, hence more productive, Ricardo that higher productivity makes workers richer and thus able to consume luxury goods.
landowners, would constitute the chief economic force within the system. And Malthus was very sceptical of the likelihood of that demand being substituted by an increase in demand by workers.

Rents were thus seen as a factor contributing to economic stabilization since the appropriation by the class of landowners of the surplus generated in agriculture in that form was a "gift of nature". With it landowners might sustain the level of demand in the system.

But to Ricardo all this was, as it were, a great heresy which ran directly against, for example, his theory of rent, wherein rents reflected the presence of bottlenecks in the productive system, and thus in the process of wealth creation. Rents are here viewed as a deduction from, not an addition to, the net product generated by the economy, which is the source of savings and investment.

Ricardo put far greater weight on the increase of workers' real wages and consumption. Likewise, instead of considering the facility in producing "necessaries" as a factor negatively influencing workers' exertions, he saw it rather as a necessary condition to stimulate them to exert themselves in a greater degree. Facility of production, by lowering rents and raising real wages and profits, was thus counted on to speed accumulation, raise the effective demand of the mass of the people, and boost productivity.

Let us explore this divergence between these two analyses a little further. Malthus thought that a quite probable effect of the greater facility of producing workers'
basic goods would be the proliferation of "habits of indolence" among the working class. This would lead them to prefer "the luxury of doing little or nothing, to the luxury of possessing conveniences and comforts" (p.337).

Workers, he concluded, would have their situation worsened. The surplus time they would now command would not be allocated either to producing "luxuries" or to obtaining extra quantities of "necessaries". Rather, they would choose to stay idle.

Apart from this psychological component, i.e., the idea that workers would not be disposed to increase their efforts so as to acquire luxury goods but would rather prefer the "luxury of doing little or nothing", what Malthus clearly wanted to stress was the possibility that idle resources could obtain in the economy on account of a too rapid accumulation of capital. Cost reductions in agriculture would not be in line with the rise of the non-agricultural sectors which might absorb the surplus capital and labour thus generated.

That would follow not only because there would prevail a lack of skills appropriate to non-agricultural expansion, but also because the inclination to act in such a manner would be absent anyway. It is in fact a vicious circle of underdevelopment. The only practical way of escape in sight is for landowners' rents to keep rising, since it would be via the increase in the consumption of this class that the level of demand could be brought to a level consistent with the application of capital in productive activity and a
stable process of development thus achieved.

Difficulties in the production of "necessaries", therefore, were basically seen as something good in that they stimulated an increase of surplus in the form of rents, raised landlords' income and fully employed workers in the production of "necessaries" for themselves and "luxuries" for the richer classes.12

Ricardo, however, strongly objected to Malthus's chain of reasoning. To him, accumulation, distribution (from rents to wages and profits), growth, and general welfare increases went hand in hand in the optimal process of development. Accordingly, he was dismayed with Malthus' opinion which he understood to be opposed "to giving new facilities to the production of corn in England" and seeking "to prove that it would not be expedient that [corn] should be cheap, on account of the moral effects which it would have on the people" (p.337-38).

A great complaint Ricardo made was that Malthus resorted to examples of backward societies to support his misgivings about the process of accumulation in general, including the British case. Ricardo did not share Malthus's apparent defence of the status quo of society (a predominantly agricultural one) as a means of minimizing the problems

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12- In connection to the debate about the Corn Laws, for example, Malthus thought they "were justified because they were favourable to the poor ... They were so, Malthus said, because they kept the price of bread high ... A high price of bread is a good thing, Malthus went on, because when bread is dear the poor save more by not buying it than when it is cheap" (Grampp, 1974, p.280). Malthus's argument assumed that workers' money wages accompanied the rise in the price of bread (ibid).
originating from structural transformations in the economy and of obtaining a more stable growth.

Ricardo saw this as tantamount to holding back the process of development itself, to promoting inefficiency and inequality within the system. He acknowledged that in a society at low levels of development the requisite transformations were checked by the intrinsically limited nature of the available alternatives in terms of skills, tastes, habits, trade, market size, and so on, open to it. Growth in this type of system would be more problematic and slow during the initial stages. But in a fairly developed society like Britain, the potential for accumulation and growth was enormous and was there to be taken advantage of if only "sensible" policies were adopted.

The market, for instance, might be expanded considerably through making "necessaries" cheaper. The taste and demand for "non-necessaries" could then easily be developed, while skills in trade and industry already existed. He thought the desire to consume "luxuries' would prevail upon the desire to procreate and upon the (weaker) preference for indolence among the working class. This was in tune with his own desire to bear witness to the improvement of general welfare:

\[\text{\textsuperscript{13}}\text{ As he put it: "Much of this statement respecting South America might be answered - the whole might be shewn to be perfectly consistent with the principles which it is brought to overturn, but it is so little applicable to countries with a dense population abounding in capital, skill, commerce, and manufacturing industry, and with tastes for every enjoyment that nature, art or science will procure, that it does not require a serious examination"(p.340-41).}\]
"Now this is the point in which society is chiefly interested, it is desirable that the actual means of enjoyment should be increased, and that in the distribution of those enjoyments a smaller quantity should not fall to the share of the most numerous class of the people. We have seen that the same money capital will be employed in the support of labour, and as the people are not supposed to have increased or diminished, they will have the same money wages."

"But commodities will altogether be in greater abundance and cheaper, consequently each man's wages will procure him greater enjoyments" (p.353-54).

The nature of tastes is one of the major points of discord between Ricardo and Malthus. The latter was convinced that the development of a taste for "non-necessaries" among workers was a very difficult task and that the appeal of indolence was stronger. Therefore, the "peasant who might be induced to labour an additional number of hours for tea and tobacco might prefer indolence to a new coat" (p.355-56). Ricardo, on the other hand, retorted thus: "Would none of us like more and better clothes, an increase of furniture, more carriages and horses, and better and more commodious houses? While we have not too much of these things no facility of production can ever be indifferent to us" (p.355).

The facility in the production of "necessaries" would release resources to back the growth of the industrial sector of the economy. Moreover, there would exist people in sufficient numbers who were inclined to increase their exertions in the development of that sector because a desire for its products already existed in a great degree in society:
"[T]here are hundreds, and thousands, in such a country as this, who under any degree of improvement that can be contemplated as probable would be happy to furnish the activity and attention necessary to obtain commodities, which to them must be sufficiently desirable ..."

"... from what circumstance is it that gold plate, jewellery, and lace derive their great value but from the quantity of labour that has been employed on them? and yet there are those who think no toil too great to obtain it" (p. 357).

In the final analysis, Ricardo and Malthus agreed that an appropriate level of demand was essential to giving vent to the production powers of the system. What they differed in is that Malthus, contrary to Ricardo, mistrusted the ability of the process of accumulation and the obtaining of new, more productive methods of production to bring into effect an increased effective demand.  

All these divergences, however, converge into a greater difference between them. From Malthus's observations it appears as though he had doubts about the process of industrialization itself, while Ricardo entertained none.  

14 - Malthus thus singled out three causes "most favourable to production", namely "accumulation of capital, fertility of soil, and inventions to save labour", and affirmed that "as they all tend to facilitate supply, without reference to demand, it is not probable that they should either separately or conjointly afford an adequate stimulus to the continued increase of wealth, which can only be kept up by a continued increase of the demand for commodities" (p.366-67).

15 - Maybe it is unfair to Malthus to say that he favoured the strengthening of agriculture over industry, but this is the impression gathered from remarks such as the following: "We must content ourselves therefore with referring generally to the amount and value of national produce; and it may be subsequently stated as a separate, though very important
Underlying Malthus’s view is the question of the role of agriculture in the course of growth. Malthus, as we have already seen, endorsed the idea that the agricultural sector had the important function of generating a surplus, which in the form of landowners’ rents acted as a powerful agent in the expansion of demand.

Ricardo, in his turn, maintained that rises in rents constituted a great obstacle to the process of growth and saw the role of agriculture as being that of producing food and raw materials cheaply with a view to releasing resources to finance the unfolding of the industrial sector.

The problem for Ricardo, then, was to find ways of helping the accumulation of capital in the industrial sector and ensure that the wealth thus created was distributed in such a manner so as to bring about an increase in demand which, in turn, reflected back upon accumulation and growth (the feed-back effect mentioned in the previous chapters).

Malthus was apparently aware of this question, to wit, that a broader distribution of wealth had a beneficial effect on its creation, but he thought it improbable to occur in practice beyond a point (p.384-85). There would always exist unsurmountable limitations to the broadening of distribution on account of the effective demand problem. It was imperative consideration, that particular countries, with the same amount and value of produce, have a larger or smaller proportion of that produce disposable. In this respect, no doubt, a country with a fertile territory will have a prodigious advantage over those whose wealth depends almost entirely on manufactures. With the same population, the same rate of profits, and the same amount and value of produce, the landed nation would have much the largest portion of its wealth disposable" (p.380).
to preserve landowners' purchasing power; this was a key point of his theory of development and of his social bias.

It is here that what appears to be the crucial point of the disagreement resides. It has to do with the status to be assigned to unproductive consumption and to unproductive labour, which are closely associated concepts within the classical analytical framework\(^{16}\); both of them refer to groups of people who are thought not to contribute to the generation of a reinvestable surplus but to simply consume what is produced by other productive workers.\(^{17}\)

Malthus's theory relies on the employment of unproductive labour or the maintenance of an adequate proportion of unproductive consumers to initiate and sustain both economic progress and the full-employment of the labour

\(^{16}\) - Malthus, for instance, asserted that one of the chief causes "which tends to keep up and increase the value of produce by favouring its distribution is the employment of unproductive labour, or the maintenance of an adequate proportion of unproductive consumers" (p.421).

\(^{17}\) - Another way to perceive the close link between unproductive consumption and unproductive labour is by looking at the connection between the unproductive spending of landowners and the unproductive employment of "menial servants" and the like. The former's unproductive consumption was thought to be the latter's main source of employment. This is not to deny that landowners might not consume productively and "menial servants" might not be productive at all, or, on the other hand, that capitalists and workers might not consume and be productive. But as a general rule, and as Marx remarked, "[t]hese landed proprietors do not have to engage in production and do not on the average do so. It is significant, that insofar as they spend money on labour, they do not employ productive workers but menial servants, mere fellow-consumers of their fortune ..." (Marx, 1975, p.51), and unproductive workers "will for the most part be performing only personal services, and only an inconsiderable part of them ... will produce material use-values" (Marx, 1969, p.159).
force.\textsuperscript{18}

All this was baffling to Ricardo. He considered Malthus's ideas as being absolutely contrary to economic growth and to the welfare of society as a whole. To him, the growth process hinged crucially on the employment of productive labour in order to generate new productions and enhance the system's productive powers.\textsuperscript{19, 20} Accordingly, he steadfastly rejected Malthus's ideas:

"A body of unproductive labourers are just as necessary and useful with a view to future production, as a fire, which should consume in the manufacturers warehouse the goods which those unproductive labourers would otherwise consume"(p.421).

Malthus had in mind a particular type of social design in which "the great laws of nature have provided for the leisure of a certain portion of society", namely the class of landowners. Furthermore, "if this beneficent offer be not

\textsuperscript{18} The following passage illustrates Malthus's thinking well: "It follows that, without supposing the productive class to consume much more than they are found to do by experience, particularly when they are rapidly saving from revenue to add to their capitals, it is absolutely necessary that the country with great powers of production should possess a body of unproductive consumers"(p.421).

\textsuperscript{19} As Bacon and Eltis (1978, p.167) have pointed out, in the classical view "[g]rowth requires that the unproductive sector be smaller so that part of the surplus of the productive sector can be invested".

\textsuperscript{20} It is interesting to notice that Ricardo, when he came to prepare the third edition of his Principles, felt it necessary to lay a greater stress on this division between productive and unproductive labour. As one can see by referring to Sraffa's footnotes on pages 150-51 (vol.1), Ricardo on several occasions introduced the qualifications "productive" and "unproductive" into the text.
accepted by an adequate number of individuals, not only will a positive good, which might have been so attained, be lost, but the rest of the society, so far from being benefited by such self-denial, will be decidedly injured by it" (p.422).

Ricardo though found it erroneous to associate unproductive labour (consumption) with economic progress. For him, unproductive labour "may be useful for other purposes but not in any degree for the production of wealth" (p.422).

To understand Ricardo's opposition to Malthus it is necessary to bear in mind his own conception of productive and unproductive consumption in contrast to Malthus's. The latter acknowledged that only productive labour contributed to the creation of wealth\(^\text{21}\), but yet assigned a prominent role to unproductive workers, in their function as consumers, in assisting, indirectly, the generation of wealth.\(^\text{22}\)

To Ricardo, on the other hand, consumption by landlords and by unproductive workers is in no way helpful to the process of accumulation and growth. For him, it is strictly unproductive consumption, that is to say, consumption without a corresponding productive exertion.\(^\text{23}\) Here we can

\(^{21}\) - His definition of productive labour thus is "that labour which is productive of wealth, that is, so directly productive of it, as to be estimated in the value of the objects produced" (p.23).

\(^{22}\) - According to him, "[u]nproductive labourers are of great importance in the production of wealth indirectly, as demanders, but they cannot, with propriety, be said to create wealth which pays them" (p.22).

\(^{23}\) - Productive exertion in the classical sense may be defined, in its most basic meaning, as an activity which results in the production of material objects (wealth) which are useful to human beings. This definition though is not to
appreciate the close association between unproductive labour and unproductive consumption we referred to earlier. Landowners, who consume unproductively, hire unproductive workers, who in order to consume perform activities not linked to the production of wealth.\(^{24}\)

In this view, unproductive consumers simply destroy the stock of goods which falls in their hands and do not return anything in terms of productive exertions directed to sustaining and increasing the flux of production of those goods (wealth). In other words, they do not add what Ricardo called "positive value" (meaning the reproduction and amplification of the stock of goods and capital) to the economic system.

Regarding productive labourers, however, their

\(^{24}\) See footnote 16 above. Cf. also Marx (1969, p.159), who pointed out that "only a quite insignificant part of these unproductive labourers can play a direct part in material production once the capitalist mode of production has developed".
consumption, or rather their power to consume, derives from the wages they earn from engaging in productive activities that generates wealth. To consume, they exchange their capacity of reproducing and increasing the stock of goods and capital. Consequently, besides reproducing the capital which was the source of their employment, they generate a surplus, which in the shape of profits accrues to capitalists and is the basis of the process of accumulation and growth of wealth.25

To capitalists, it is important that the surplus be employed so as to generate the necessary conditions for the reproduction of capital and, one may say, of their own existence as a class.26 By utilizing the existent stock of capital to employ productive labourers and increase the production of wealth, they secure not only the development of the market for their products, but concomitantly, during the realization of the productive effort, the creation of the surplus requisite to the continuation and expansion of their activities and the survival of their own "species". In criticizing Malthus's defence of unproductive consumption, Ricardo pointed out:

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25- As Marx (1969, p.152) put it, productive labour, "in its meaning for capitalist production, is wage-labour which, exchanged against the variable part of capital (the part of capital that is spent on wages), reproduces not only this part of the capital ... but in addition produces surplus-value for the capitalist".

26- Cf. Marx (1969, p.152): "The mere existence of a class of capitalists, and therefore of capital, depends on the productivity of labour ...".
"In what way can a man’s consuming my produce, without making me any return whatever, enable me to make a fortune? I should think my fortune would be more likely to be made, if the consumer of my produce returned me an equivalent value."

"... what advantage can it be to me that another man who returns nothing to me shall consume my goods? How does such a consumption enable me to realize profits?" (p. 422-23).

We can see here the reason why Ricardo did not consider viable the expansion of the industrial sector via an increased consumption of "luxuries" by landlords viable. What matters is not only consumption, but consumption plus reproduction. Landlords’ expenditure is not productive in the Ricardian sense because there is no corresponding reproduction of capital, either by the formation of savings or by any personal effort.

They earn their income on the basis of monopoly power over land, not by exerting themselves in productive activity. What is more, they support an army of unproductive workers (menial servants, retainers, etc.) who do not contribute to the reproduction of capital and only consume what was already produced by others. These unproductive workers, therefore,

27- "The word accumulation misleads many persons and sometimes I think it misleads Mr. Malthus. It is by many supposed that corn is accumulated, whereas to make such a capital productive and to increase wealth it must be constantly consumed and reproduced" (Ricardo, p. 320, n.). Clearly, this same dynamic argument concerning accumulation is equally applied to other kinds of capital.

28- The doubts Ricardo held about the landlords’ contribution to economic development were thus based on his misgivings about whether it would be likely that they would forfeit part of their revenue for the purpose of capital accumulation. Rebutting J. B. Say, he asserted that "a
are "paid not out of 'capital' but out of the consumption category 'revenue'" (Boss, 1990, p.47).

With reference to productive workers the case is an altogether different one. They contribute to the process of growth through their consumption and productive effort.

This being so, capital may be increased by either of two basic methods: increased output, or the diminution of unproductive consumption, that is, the consumption "by those who do not reproduce another value" (vol.1, p.151, n.). These two measures are intertwined in as much as the latter implies the use of additional revenue to employ additional productive labourers. 29

Ricardo's position seems to implicitly embody a moral dimension which is inseparable from the objectives of economic progress and individual realization. To have a moral right to participate in the social consumption - viz., the consumption of commodities produced under the social division of labour - and to thus fulfil his desires and needs, the individual is expected to participate in that social division of labour and in the effort of production.

Those desires and needs being taken for granted, there

landlord has no means of employing his assiduity, economy and skill [which Say referred to], unless he farms it himself; and then it is in quality of capitalist and farmer that he makes the improvement, and not in quality of landlord. It is not conceivable that he could so augment the produce of his farm by any peculiar skill on his part, without first increasing the quantity of capital employed upon it" (vol.1, p.187).

29- "When we say that revenue is saved, and added to capital, what we mean is, that the portion of revenue, so said to be added to capital, is consumed by productive instead of unproductive labourers" (Ricardo, vol.1, p.151, n.).
is no lack of predisposition to consume. The problem is to make individuals productive. Hence the importance, as seen in the last chapter, of an institutional framework that generates the necessary incentives to individual exertion and self-reliance. Ricardo thus asserted that

"... a man must produce before he can be entitled to consume, and the difficulty is to induce him to produce—there will be none in inducing him to consume after he has produced" (p.428).

It is on these grounds that Ricardo determinedly took a stand against Malthus’s suggestion regarding the relevance of an increased expenditure by the government. This, in his eyes, was to recommend unsound economic action, since government expenditure is recognized in general as falling within the class of unproductive consumption, and thence the precept that the government intervention in the economic sphere should be minimal and its spending kept as low as its essential activities required.

The realm of government economic action was deemed very restrictive indeed, and most of the time looked upon with distrust. In addition, it would compete with the private

30 A recurrent suspicion Ricardo entertained was that the government was ever too apt to make use of the country’s fund of capital to finance dubious enterprises (wars, for instance): "Parliament have something more to do than to furnish ministers with the means of preserving the greatness and glory of the country. It is their duty to take every security that the resources of the country are not misapplied 'by the arrogant and ambitious conduct of our government', or 'used for the purpose of ambition, rapine, and desolation'" (Ricardo, vol.4, p.199).
sector for the available capital and thus curtail the means at the disposal of society for the financing of productive activities.

Government intervention also means that its expenditure raises the necessity of imposing taxes, which interferes with the incentives to production. Taxes are but a part of the national income or "of the labour of the country which was before at the disposal of the contributor to the tax", and that now "is placed at the disposal of the State, and cannot therefore be employed productively" (vol. 1, p. 152). It is a transfer of purchasing power from individuals to government, thus evincing an alteration in the pattern of consumption towards unproductive consumption, which has a negative effect on the material conditions upholding economic growth since:

"Taxes which are levied on a country for the purpose of supporting war, or for the ordinary expenses of the State, and which are chiefly devoted to the support of unproductive labourers, are taken from the productive industry of the country" (ibid, p. 244).

Ricardo’s verdict on tax-and-loan-financed public expenditure was that it represented in general an inefficient manner of using the country’s capital. And on the assumption that the individuals bearing the tax are engaged in productive consumption, the result of imposing a tax is to give rise to incentive constraints which discourage saving on their part and thwarts the course of accumulation and growth. The shift towards unproductive consumption thus confers a
severe disincentive to the unfolding of the economic system.\textsuperscript{31}

4.1- \textbf{Ricardo and Malthus: Two Views of the Process of Development}

From the discussion carried out in the last section, it seems that two fundamentally different views of development lie at the centre of the controversy between Ricardo and Malthus. The conflict regarding productive and unproductive labour, and productive and unproductive consumption is rooted in fact in two opposing visions of the institutional setting of the process of development.

As mentioned before, Ricardo and Malthus were speaking at cross-purposes. The latter had in mind the preservation of the old structure where the aristocratic values of landed proprietors constituted the ruling, pervasive principles that encrusted the economic system and society as a whole, whereas Ricardo envisaged a new system based on the strength of the emergent industrial capital, free markets, and of political reforms directed at broadening the participation of the people in the structures of power and decision-making.

Malthus considered the interest of the landlord as closely linked to the general interest of society.\textsuperscript{32} This

\textsuperscript{31}- This is so because revenues raised through taxation are generally "wastefully expended ... and either diminish capital or retard its accumulation" (vol.1, p.221-22; see also p.152).

\textsuperscript{32}- He then wrote that "the interest of no other class in the state is so nearly and necessarily connected with its wealth and power, as the interest of the landlord" (p.208).
view was predicated upon his more general idea of the existence of a "natural order" which, by some divine design, placed a "bountiful gift of Providence" in the form of rent\textsuperscript{33} in the hands of landowners. Such a gift had the important function of supporting unproductive consumption and lending stability to the system by maintaining an adequate level of effective demand.

By virtue of that consumption an entire lot of unproductive labour such as those employed in government, the civil service, the church, and the army - which for the most of the time were connected to the landed aristocracy - plus the army of servants and retainers put at their disposal, was supported.

The working and preservation of this institutional construct, however, relegated the bulk of the people to a living barely above subsistence. But rather than deeming this state of things, regrettable as it might be, as an obstacle

\textsuperscript{33} - Cf. Malthus (p.126-27): "It may be laid down, as therefore, as an incontrovertible truth, that as a nation reaches any considerable degree of wealth, and any considerable fullness of population, the separation of rents, as a kind of fixture upon lands of certain quality, is a law as invariable as the action of the principle of gravity; and that rents are neither a mere nominal value, nor a value unnecessarily and injuriously transferred from one set of people to another; but a most real and essential part of the whole of the national property, and placed by the laws of nature where they are, on the land, by whomsoever possessed, whether by few or many, whether by the landlord, the crown, or the actual cultivator". Ricardo, however, saw things from a completely different point of view: rent was a transfer of surplus from capitalists to landlords: "A part of what in future will be rent forms now the profits of stock. It is incorrect I think to talk of rent forming at any time the profits of stock, rent is formed from profits of stock, it was not rent when it was profits"(p.123).
to development, Malthus appears to regard it as a "natural" trait of that divine design\footnote{He then affirmed that "it is quite obvious that some limit to the production of food, or some other of the necessaries of life must exist ... It is not easy to conceive a more disastrous present- one more likely to plunge the human race in irrecoverable misery, than an unlimited facility of producing food in a limited space. A benevolent Creator then, knowing the wants and necessities of his creatures, under the laws to which he had subjected them, could not, in mercy, have furnished the whole of the necessaries of life in the same plenty as air and water" (p.209).}

As we saw, Malthus counted on the relative degree of food scarcity to act as a stimulant for workers to work harder in the production of "luxuries and conveniences" demanded by the higher classes of society. In this way, workers would not be idle and the desires of consumption of that part of society Malthus regarded so important, landlords and their sect of unproductive workers, would be kept alive and satisfied. With no idle resource and no lack of effective demand, the system could continue on its stable path of progress.

One implication of such reasoning is that rising living standards among the working class, given that changes in the consumption preferences of workers are both slow and uncertain, are tantamount to the nurturing and to the spread of the habit of indolence widely within society.

Following this line of thought, an altogether preferable situation would be for workers to toil harder and harder, so as to prevent themselves from committing the sin of idleness, and produce the means of satisfying the "superior" needs of the "superior" classes, upon whom divine order has bestowed
the privilege of conspicuous consumption and idleness - a privilege which turns out to be one of the central elements of the stability and progress of the whole system\textsuperscript{35}.

To Ricardo, though, this state of affairs only reflected the fact that workers were being confined to low levels of living and completely unable to find alternatives to that dismal situation\textsuperscript{36}.

Furthermore, he did not regard that state as a "natural" one. He not only saw room for transformation to a state in which workers might enjoy higher standards of living, but he indeed believed that such a transformation was vital for the continuing accumulation and growth.

If this picture is accurate, as we think it is, it seems that the difference between Malthus and Ricardo is this: Malthus appears to have emphasized the exploitation of labour in favour of an aristocratic capitalism, while Ricardo may be

\textsuperscript{35} As Marx (1975, p.57) pointed out, "Malthus is interested not in concealing the contradictions of bourgeois production, but on the contrary, in emphasising them, on the one hand, in order to prove that the poverty of the working classes is necessary (as it is, indeed, for this mode of production) and, on the other hand, to demonstrate to the capitalists the necessity for a well-fed Church and State hierarchy in order to create an adequate demand for the commodities they produce". Also, that "[t]hus there must be lower classes in order that the upper ones may fear to fall there and that there must be upper classes in order that the lower ones may hope to rise. In order that indolence may carry its own punishment, the worker must be poor and the rentier and the landlord, so beloved of Malthus, must be rich" (ibid, p.62).

\textsuperscript{36} As he wrote: "If the labourers wages were high he might do as he pleased - he might prefer indolence or luxuries - but if his wages were low, and profits high, he has not a choice, he must produce conveniences and luxuries for his master or starve; and their amount and quality would depend on the facility, and time, which might be required to produce them" (Ricardo, vol.2, p.332-33).
said to have been a precursor of consumer-oriented capitalism\textsuperscript{37}.

It is crucial, too, to have in mind that Ricardo was among those who were pressing for radical institutional reform in Britain at that time - like the removal of trade barriers and of restriction to labour mobility, and the extension of voting rights - while Malthus seemed to have rallied with the more conservative part of society\textsuperscript{38}.

In this light it becomes more apparent why Ricardo opposed Malthus's defence of landlords' rents. Rising rents epitomised an institutional framework which protected a small part of society, associated with unproductive consumption, to the detriment of the well-being of the larger, more productive part of population (productive workers) and of the profits of capitalists, whose savings out of profits constituted the driving force behind the dynamics of accumulation and growth.

We saw in the first three chapters how Ricardo envisaged

\textsuperscript{37} - This being so, it turns out that Malthus would be of more help to Marx with regard to the doctrine of increasing impoverishment of the working class than Ricardo's growth-cum-welfare vision of the development of capitalism.

\textsuperscript{38} - Cf. Marx (1975, p.53): "... Malthus assailed in Ricardo that tendency of capitalist production which is revolutionary in relation to the old society ...". He also wrote that "Malthus's book On Population was a lampoon directed against the French Revolution and the contemporary ideas of reform in England (Godwin, etc.). It was an apologia for the poverty of the working classes"(ibid, p.61). And as Rashid (1987, p.289) has remarked, "[p]olitical considerations however prevented Malthus from seriously advocating systematic redistribution as a cure for economic recovery. Another possible remedy, and one much more amenable to Malthus's partialities, was the existence of a large group of 'unproductive consumers'...".

a way of avoiding the problem of rising rents through the dismantling of trade barriers and the import of cheaper food and raw material from abroad, coupled with increases in productivity due to the spread of the division of labour and technological change. By thus reducing the cost of production of "necessaries" and consequently increasing workers' real wages, a mass-consumption society could arise and grow.

To counter Malthus's misgivings about the existence of a "mechanism for 'updating' the desires of consumers" (Rashid, 1987, p.288), Ricardo relied upon the conviction that individuals' drive for self-betterment (and thus for a better lifestyle) was a real and strong enough force to match and stimulate the system's productive powers. Ricardo's foresight of a consumerist society that kept alive the inducement to investment thanks to its insatiable desire for "superior" goods should lead one to question the presumption that Ricardo is as far apart from, as Malthus is said to be close to, Keynes.

Keynes himself, however, explicitly manifested his dislike for Ricardo and his admiration for Malthus. He thus wrote that "the almost total obliteration of Malthus's line of approach and the complete domination of Ricardo's for a period of a hundred years has been a disaster to the progress of economics" (Keynes, 1933b, p.98).³⁹

³⁹- He also remarked that "it was Ricardo's more fascinating intellectual construction which was victorious, and Ricardo who, by turning his back so completely on Malthus's ideas, constrained the subject [economics] for a full hundred years in an artificial groove" (Keynes, 1933b,
The main source of Keynes's criticism of Ricardo may be said to be the latter's alleged neglect of the problem of effective demand. But while it is unquestionably true that there are a great deal of theoretical differences between their analyses, in at least one point they appear to concur, namely, the fact that for a capitalist economic system it is vital that new channels of consumption are constantly being created and stimulated. As Keynes (1936, p.xxxiii) observed:

"[T]he actual level of output and employment depends ... on the current decisions to invest and on present expectations of current and prospective consumption;"

and that, at least up to the point of full employment,

"the growth of capital depends not at all on a low propensity to consume but is, on the contrary, held back by it ..."(ibid, p.372-73); so that

"[c]onsumption - to repeat the obvious - is the sole end and object of all economic activity. Opportunities for employment are necessarily limited by the extent of aggregate demand"(ibid, p.104).  

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40 - According to Keynes (1936, p.33), the "celebrated optimism of traditional economic theory, which has led to economists being looked upon as Candides ... is also to be traced, I think, to their having neglected to take account of the drag on prosperity which can be exercised by an insufficiency of effective demand".

41 - As Vicarelli (1984, p.148) has put it: "Aggregate demand from households, firms, government, and the outside world is obviously the motor driving income and production".
Such a view, though, does not conflict with Ricardo's own depiction of the working of the economic system. On the contrary, as already pointed out in the previous chapters, Ricardo made it clear that decisions of production depended on the present and future state of market demand. Ricardo's analysis, for instance (as shown in chapter 3), distinctly indicates the limitations to continuous growth in a predominantly agricultural society on account of problems of effective demand.

In addition, both Ricardo and Keynes shared what we have called the dual nature of the human desire for consumption. The classical concepts of "necessaries" and "luxuries and conveniences" in fact correspond to Keynes's concepts of "absolute needs" and "relative needs". Keynes (1930, p.326) thus wrote:

"Nor it is true that the needs of human beings may seem to be insatiable. But they fall into two classes - those needs which are absolute in the sense that we feel them whatever the situation of our fellow beings may be, and those which are relative in the sense that we feel them only if their satisfaction lifts us above, makes us feel superior to, our fellows. Needs of the second class, those which satisfy the desire for superiority, may indeed be insatiable; for the higher the general level, the higher still they are. But this is not true of the absolute needs - a point may soon be reached ... when these needs are satisfied ...".

Keynes also emphasized changes in tastes as a factor affecting accumulation ("the scale of production") and

42—He then wrote that among the "considerations upon which expectation of prospective yields are based" are those related to "the tastes of the consumer" and "the strength of
singled out increases in consumption as the "only radical cure for the crises of confidence which affect the economic life" (Keynes, 1936, p.161).

As far as the above-stated points are concerned, there does not seem to be great divergence between the views of Ricardo, Malthus and Keynes. In fact, there is, broadly speaking, a point of contact in their analyses: demand (and its composition) acts as a powerful constraint upon economic activity.

However, if the development and strengthening of the desire for consumption is fundamental to the continued accumulation and growth, Ricardo's vision of a consumer-oriented society appears to be of more significance to Keynes than Malthus's aristocratic capitalism.

However, Keynes, as we recollect, expressed his preference for Malthus's line of analysis. In his General Theory, he asserted in the context of the underconsumption thesis that after some contributions found in "sixteenth- and seventeenth-century thinking [that] doctrine did not reappear in respectable circles for another century, until in the later phase of Malthus the notion of the insufficiency of effective demand takes a definitive place as a scientific explanation of unemployment" (Keynes, 1936, p.362).

In accepting Malthus's line of reasoning, Keynes was trapped in to supporting unproductive consumption or "the utility of luxury" (Keynes, 1936, p.358). He thus refers to
a French writer, Laffemas, who in 1598 "denounced the objectors to the use of French silks on the ground that all purchasers of French luxury goods created a livelihood for the poor, whereas the miser caused them to die in distress" (ibid, p.358-59). In addition, he quotes William Petty (1662) who "justified 'entertainments, magnificent shews, triumphal arches, etc.', on the ground that their costs flowed back into the pockets of brewers, bakers, tailors, shoemakers and so forth" (ibid, p.359).

Taking Malthus's work as a reference wherein landowners are the main source of unproductive consumption, Keynes was bound to agree with Malthus on the importance of landowners' expenditures in sustaining the level of effective demand. Ricardo, on the other hand, we recall, saw landowners and their sect of unproductive workers as almost parasites who took advantage of bottlenecks in the economic system, monopoly power over economic resources and special favours obtained by means of their political clout, in order to derive an income.

Thus, landowners, as idle rentiers, are very much like the financial rentiers Keynes so much deplored, and as Lavoie and Seccareccia (1988, p.149) have correctly pointed out, it is curious that he himself established that connection. He hence wrote:

"That the world after several millenia of steady individual saving, is so poor as it is in accumulated capital-asset, is to be explained, in my opinion, neither by the improvident propensities of mankind, nor even by the destruction of the war, but by high
liquidity-premiums formerly attaching to the ownership of land and now attaching to money" (Keynes, 1936, p.242).

Malthusian aristocratic capitalism would result in a similar state of affairs. Landowners were interested not in building up the stock of capital but primarily in the consumption of "luxuries" and unproductive services. Malthus seemed to favour this course of events at the expense of, principally, relegating workers to the task of toiling harder and harder to supply those luxury goods and to feed the army of unproductive workers providing those unproductive services required by landowners, while they themselves had to be content with a subsistence level of living.

However, this fettering of the consumption power of workers - which Ricardo in his turn wanted to see ended - was not in accordance with Keynes's own general principles. For instance, that inhibition of workers' power of consumption is tantamount to a redistribution of purchasing power from workers to the other classes, specially to landlords. In terms of Keynes's analysis, the "transfer from wage-earners to other factors is likely to diminish the propensity to consume [for the community as a whole]" (ibid, p.262).

In drawing attention to the "outstanding faults of the economic society in which we live", Keynes stressed "its failure to provide for full employment and its arbitrary and inequitable distribution of wealth and income". Apart from matters moral or just, the correlation of those "faults" to the fettering of the power of consumption of the larger part
of society (i.e., wage-earners) is apparent.

It is interesting how Keynes's observation resembles that made by Ricardo himself on the malaise of Britain in his time: "Mr. Ricardo thought, that the two great evils for which it was desirable to provide a remedy, were, the tendency towards a redundant population, and the inadequacy of the wages to the support of the labouring classes" (vol.5, p.1).

To make people consume more, that is to say, to make the larger part of society participate in mass-consumption was Keynes's position in intentio.\(^\text{43}\) His vision of the progress of human civilization towards societies where a higher standard of living was the norm is, we think, akin to Ricardo's own vision of development. According to Keynes:

"From the earliest times of which we have record - back, say to two thousand years before Christ - down to the beginning of the eighteenth century, there was no very great change in the standard of life of the average man living in civilised centres of the earth".

"This slow rate of progress, or lack of progress was due to two reasons - to the remarkable absence of important technical improvements and to the failure of capital to accumulate".

"From that time until today the power of accumulation ... is such as to stagger the imagination".

"All this means in the long run that mankind is solving its economic problem. I would predict that the standard of life in progre-\(^\text{43}\) As Boss (1990, p.25) has remarked, "[i]n Keynes, people are not afraid to prefer more to less, especially when labour and capital lie idle ...".\)
ssive countries one hundred years hence will be between four and eight times as high as it is today ... It would not be foolish to contemplate the possibility of a far greater progress still" (Keynes, 1930, p.322-26).

It may be said that Keynes saw mass-consumption only as a transitory phase towards a more enlightened one where an aesthetical attitude to life should predominate and which would represent the apogee of human civilization. Mini, for one, has sharply criticized what he calls the "[t]he transformation of the Keynesian vision into consumerism" (Mini, 1991, p.206).

For Mini, "consumption as the mover of the Keynesian system is the final distortion of Keynes's ideas. Viewed as the end of economic activity, it has become very nearly the end and purpose of life. It has undercut the evolution toward the 'possibilities' of civilisation and has neutralized the wider economic reforms that Keynes proposed" (ibid, p.201).

While this disenchanted vision of where material progress could lead us to is in conformity with some of Keynes's writings, it is also true that he, as the above

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44- Keynes himself observed that: "Our problem is to work out a social organisation which shall be as efficient as possible without offending our notions of a satisfactory way of life" (Keynes, 1926, p.294). He also asked: "Why should not we begin to reap spiritual fruits from our material conquests?" (Keynes, 1927, p.318).

45- In his My Early Beliefs, for instance, Keynes wrote that "[w]e were not aware that civilisation was a thin and precarious crust erected by the personality and the will of a very few, and only maintained by rules and conventions skilfully put across and guilefully preserved" (Keynes, 1938, p.447).
extracts suggest, saw the spread of consumption as a vital element in underpinning the development of the material forces that opened the way to the development of an intellectual and aesthetic view of life - something which is not totally different from Ricardo's vision of human progress⁴⁶.

Nonetheless, the great problem generally overlooked by Ricardo and, we may say, by Keynes himself, was the problem of unproductive labour. What was to be done with it? To Ricardo, one possibility was that, given the prevalence of the yearning for a higher standard of living among the population, the process of accumulation would result in a fairly stable rate of growth of the population and unproductive labour would increasingly be transformed into productive labour.

But increasing prosperity and wealth could introduce new contradictions that ressurected the problem of unproductive labour. As Mini (ibid, p.204) has pointed out, in Keynes for example, "[t]he glorification of personal consumption also undermined the reformist qualities of The General Theory. For one thing, it has made the rentier indispensable. Miserliness for possessions has led to a great increase in consumer

⁴⁶- Ricardo saw the confinement of workers to a living at or barely above the subsistence level as one great obstacle in the progress of wealth and then in the development of a more enlightened, intellectual way of life. Criticizing the Poor Laws he stated, in a passage already quoted but worth repeating, that "the tendency of such laws [was] to change wealth and power into misery and weakness"; to call away the exertions of labour from every object, except that of providing mere subsistence; to confound all intellectual distinction; to busy the mind continually in supplying the body's wants; until at last all classes should be infected with the plague of universal poverty"(vol.1, p.108)
borrowing, hence to secularly high interest rates", leading thus to results that are "anti-Keynesian", i.e., that the "rentier prospers" and that "domestic investment does not extend to a level productive of full employment".

Also, and this applies to Ricardo's case as well, there may occur "a shift in the symbols that indicate a person's worth. More is no longer better", so that "[t]here are now different ways of indicating one's social worth which have come to be preferred" (Hamouda and Tarshis, 1988, p.205). "Positional goods", like "an original Van Gogh", "an ancient castle", "a rare Cape of Good Hope stamp", may take the role of symbol of "social worth" (ibid).

Therefore, if the demand for "positional goods" increases as society becomes richer and richer, "the output of most positional goods will, at best, increase slowly; but their prices will rise ever more rapidly. In such a society it follows too that the demand for 'material goods' will normally increase less quickly" (ibid). The demand for productive labour, thus may slow down, and an increase in unproductive labour corresponding to an increase in the unproductive consumption for "positional goods" may occur.

All in all, what emerges clearly from the above discussion, is the fact that Ricardo and Keynes, despite substantial differences in their analyses, may be said to have had at least one point in common: the analytical insight that widespread consumption among the mass of the people had a powerful effect on the process of accumulation and growth.
The idea that the development in the pattern of consumption accompanies the unfolding of the process of economic growth constitutes a major characteristic of much of the economic literature which antedates Ricardo's work. Particularly important is the period beginning in the last decade of the seventeenth century and spanning the whole of the eighteenth century.

Before this period, with the dominance of the mercantilist thought, that idea carried little weight in the explanation of economic growth and the creation of wealth. But by the turn of the century it came to be conspicuously present in the body of the economic literature. Authors like Nicholas Barbon and Dudley North started putting forward the view that increasing spending and diversification of consumption actually promoted, or rather helped to promote, economic progress.

In this chapter we review some of this literature which precedes Ricardo's writings. Our goal is to highlight this

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1- "At the beginning of the seventeenth century prevailing economic idioms were trapped in the mercantilist balance-of-payments explanation of how a nation's wealth grew. Writers like Mun, Malynes, Misselden and Vaughan remained largely blind to the benefits of increased spending" (McKendrick, Brewer and Plumb, 1983, p.13-14).

2- N. Barbon, A Discourse of Trade (1690); Dudley North, Discourses upon Trade (1691).

3- See Appleby (1976) and McKendrick, Brewer and Plumb (1983, chapter 1) for a review of this, mainly seventeenth century literature.
tradition, which Ricardo carried on, of taking taste differentiation and changes in the structure of demand as important economic variables in the course of economic growth.

Our attention will be focused primarily on two outstanding intellectual influences on Ricardo's work: the writings of David Hume and Adam Smith. However, we shall also take into consideration some other writers who may be said to have influenced Ricardo. We begin with the contribution of David Hume.

5.1- David Hume.

David Hume belonged to that great tradition of thinkers associated with the so-called "Scottish enlightenment". Although he is known more for his contributions to philosophy, he also left an important collection of economic essays wherein one can discern many of the ideas commonly ascribed to the classical school of political economy. To that extent, we may consider it proper to enlist his name among those comprised in the classical school. ¹

What most strikes the readers when poring over Hume's economic writings is his deployment of a wealth of knowledge put to the service of a deep investigation of human affairs. His analysis utilizes historical, psychological,

¹- There is no suggestion, though, of a complete convergence either of conceptions or of analytical frameworks among these authors, whom we characterize as belonging to a "school".
sociological, and political elements in trying to give an account of economic activity and progress. Powerful general insights are thus generated which bear the mark of an interdisciplinary approach, one that in the successive stages of the development of economics was curtailed down to the point of a nearly complete specialization.

Hume's economic essays furnish an examination of economic progress in its relation to "human passions". This trait of his work, as we shall see, led him to give prominent place to taste differentiation in economic analysis. Another significant feature of Hume's writings is the fact that, notwithstanding his seeking the establishment of general laws, an awareness is ever present in him of the relativity of circumstances. This prompted him to advise care in drawing general conclusions from particular facts and phenomena.

One may say that the main theme of Hume's economic essays is the analysis of the process of economic growth, its underlying causes and likely effects. His approach to growth lays emphasis on the spread of commerce, both domestic and

5- Stressing this multisided character of Hume's approach, Haney (1949, p.209) wrote that the "chief characteristics of Hume's economic thought are the prominence given to labour, the attention given to changes or transitions, evidence of historical spirit, and the interrelation of economic and other social facts and forces". For a more general assessment of Hume's work refer to Rotwein (1955, 1989).

6- All references hereafter are taken from the LibertyClassics edition of Hume's Essays Moral, Political and Literary (E. Miller, ed.; Indianapolis, 1987).

7- He, for instance, remarked that "all general maxims ... ought to be established with the greatest caution" (quoted by Rotwein, 1955, p.xxix).
foreign, and its connection with the character of human nature. The strength of the State and the welfare of its inhabitants depend to a great extent on the advancement of commercial activities.⁸

According to Hume, men engage in economic activities owing to a facet of human nature linked to the need of fulfilling certain desires inherent to the human constitution, among which we have the wish of consumption.

The drive to satisfy their consumption needs induces men to embark on economic activity, and this pursuit, along the periods of the history of mankind, is fundamentally influenced by the evolution of human behaviour and preferences, which are in an ever-flowing condition.⁹

It is quite apparent from Hume's writings that he regarded men's "wants and wishes", their desires and habits, as key explanatory factors in accounting for the economic progress of mankind and its general welfare. Needs and actions, the wishes of consumption and economic activities are intertwined, responding to each other's transformation.

Demand forces, therefore, comprise an explanatory variable of great importance within his theoretical design.

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⁸ - "... as private men receive greater security, in the possession of their trade and riches, from the power of the public, so the public becomes powerful in proportion to the opulence and extensive commerce of private men" (Hume, 1987, p.255).

⁹ - Hume thus observed that "[t]hose who consider the periods and revolutions of humankind, as represented in history, are entertained with a spectacle full of pleasure and variety, and see, with surprize, the manners, customs, and opinions of the same species susceptible of such prodigious changes in different periods of time" (quoted in Rotwein, 1955, p.xxix).
Economic action is seen as the means to achieving the satisfaction of human wants through the providing of useful goods and services and other non-material needs. Cast in these terms, the analysis plays up the vital relationship between economic growth and "human passions".

In his analysis of the development of commerce and the rise of the manufacturing sector, Hume put forward the same basic idea which Ricardo so much tried to emphasize, namely, that economic growth based only, or primarily, on agriculture is bound to loose ground on account of the inherent limitations present in an predominantly agricultural society.

Initially, agriculture is the leading sector of the economy, capable of generating a surplus above the requisite production to sustain the population and reproduce the means of production. The picture is the following:

"The bulk of every state may be divided into husbandmen and manufacturers ... As soon as men quit their savage state, where they live chiefly by hunting and fishing, they must fall into these two classes; though the arts of agriculture employ at first the most numerous part of the society. Time and experience improve so much these arts, that the land may easily maintain a much greater number of men, than those who are immediately employed in its culture, or who furnish the more necessary manufactures to such as are so employed"(p.256).

The increase in the productive power of agriculture translates itself into the formation of a surplus-labour, that is, a contingent of labour force which exceeds the requirements of the agricultural sector. A central question
thus arises of how that surplus will be employed. Hume identified two possibilities of employing it. It could:

a) either be employed in the production of "luxuries";
b) or in the formation of fleets and armies.

In the initial stage of the analysis, society only consumes agricultural products and a few, mainly "unsophisticated", manufactures linked to the satisfaction of basic needs. But now society has before it the opportunity for promoting the rise of the industrial sector of the economy through the application of the surplus-labour originating from agriculture in the production of more sophisticated manufactures ("luxuries"). But it also has the option to strengthen itself militarily by applying that surplus to the expansion of its armed forces.

The proportion in which the surplus-labour will be employed in those two activities depends crucially on the prevailing structure of consumption of society. A more refined pattern of consumption allows the greater part of that surplus to be applied to the development of industry. On the other hand,

"It is certain that the fewer desires and wants are found in the proprietors and labourers of land, the fewer hands do they employ; and consequently the superfluities of the land, instead of maintaining tradesmen and manufacturers, may support fleets and armies to a much greater extent, than where a great many arts are required to minister to the luxury of particular persons" (p.256-257).

The optimal trajectory of development open to the
economic system prescribed by Hume is, in essence, the same as that advocated by Ricardo, namely, that the surplus created in the agricultural sector should be mainly directed at promoting the industrial sector of the economy. For Hume, this is "the most natural course of things", so that the best policy would be "to comply with the common bent of mankind, and give it all the improvements of which it is susceptible" (p.260).\(^{10}\)

Notice that, as with Adam Smith and Ricardo, Hume seems to have considered individuals' desires of consumption as virtually limitless, hence the idea that in the "natural course of things" the rise of manufactures is the logical outcome of the process of economic progress, the latter seen as a response to the inborn character of human needs, which encapsulates a longing for "luxuries" as long as the system advances through its path of development.

At the level of individual behaviour, this shift to the production of manufactured "luxuries" leads people to heighten their productive efforts. Their exertions and skills are powerfully spurred by the desire of consuming "luxuries", the lack of which begets "indolence"\(^{11}\) on the part of individuals and prevents the increase of productivity. Hume thus observed that

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\(^{10}\) But though the want of trade and manufactures, among a free and very martial people, may sometimes have no other effect than to render the public more powerful, it is certain, that, in the common course of human affairs, it will have a quite contrary tendency" (Hume, p.260).

\(^{11}\) Hume thus, as with Ricardo, is contrary to Malthus with respect to the effects of the desire for luxury consumption on the individuals' disposition to work.
"Where manufactures and mechanic arts are not cultivated, the bulk of the people must apply themselves to agriculture; and if their skill and industry encrease, there must arise a great superfluity from their labour beyond what suffices to maintain them. They have no temptation, therefore, to encrease their skill and industry; since they cannot exchange that superfluity for any commodities, which may serve either to their pleasure or vanity. A habit of indolence naturally prevails" (p.260-61).  

Hume's thought here is much alike what we described in previous chapters as being Ricardo's vision of development. We remember that Ricardo, in refuting Malthus's fears about the predominance of the "love of ease" over the desire of consuming "luxuries", argued that the latter is more likely to prevail in the "natural course of things". Idleness is seen as the consequence, on the one hand, of the lack of will and the power of demanding non-basic products, that is to say, the prevalence of a "unsophisticated" pattern of consumption and a weak purchasing power among individuals, and, on the other, of the scantiness of the supply of products other than "necessaries", reflecting the undeveloped stage of industry.

In Hume the promotion of a "superior" pattern of preferences is also a factor of primordial importance in that it acts as a springboard for the launching of the non-

12- Moreover, "Every thing in the world is purchased by labour; and our passions are the only causes of labour. When a nation abounds in manufactures and mechanic arts, the proprietors of land, as well as the farmers, study agriculture as a science, and redouble their industry and attention. The superfluity, which arises from their labour, is not lost; but is exchanged with manufactures for those commodities, which men's luxury now make them covet" (p.261).
agricultural sectors of the economic system. Either by education, habit, fashion or pure emulation, tastes are developed in such a way that bring with them the unravelling of individuals' ability and society's to produce a more variegated array of goods and services.

This is so because men strive to fulfill their own self-interests and wishes, and because this is the "natural bent" of the human character. The human state of affairs is that one ruled by individuals' "passions", of which the passion for achieving a "superior" way of life, marked to a great extent by an increased and more diversified consumption, is an outstanding one. According to Hume,

"Education, custom, and example, have a mighty influence ... [in promoting] a relish for action and pleasure, [and thus] they are so far favourable to human happiness. In times when industry and the arts flourish, men are kept in perpetual occupation, and enjoy, as their reward, the occupation itself, as well those pleasures which are the fruit of their labour. The mind acquires new vigour; enlarges its powers and faculties; and by an assiduity in honest industry, both satisfies its natural appetites, and prevents the growth of unnatural ones, which commonly spring up, when nourished by ease and idleness. Banish those arts from society, you deprive men both of action and of pleasure; and leaving nothing but indolence in their place ..."(p.270).

The increased demand arising from individuals' efforts to satisfy their passion for consuming "luxuries" and reaching a higher stage in life greatly contributes towards the extension of the market which, coupled with an enhanced productivity, enables producers to supply their products at
low prices, further adding to the unfolding of the market and the increase in productivity.

Hume thus pointed out that "as low profits arise from the encrease of commerce and industry, they serve in their turn to its farther encrease, by rendering the commodities cheaper, encouraging consumption, and heightening the industry" (p. 329). The rationale behind Hume's idea is that, first, an extended market "produces opulent merchants, and renders the monied interest considerable", increasing thus the stock of money capital in the economic system and pushing down the rate of interest on it. Secondly, a greater market brings about "rivalships among merchants, which diminish the profits of trade, at the same time that they encrease the trade itself" (p. 302). We shall return to this question of the link between the expansion of the market and the level of profits later on in this chapter, when considering Adam Smith's contribution, since it brings to the fore a significant difference between Ricardo and Hume on the one hand, and Adam Smith and Malthus on the other.

However, it is not only the domestic trade which is boosted by the shift from a mainly agricultural society to an industrial one. Foreign trade is given a strong incentive, too. For the reason that the preference structure of consumption of individuals has undergone, in the process of economic growth and development, substantial changes towards more elaborated products, they are increasingly demanding in terms of the quality of the goods and services they buy. Domestic producers suffer competition from foreign ones for
that increased demand coming from refined tastes of consumption. This competition gives rise to incentives to improvements in the conditions of production and the supply of commodities, contributing to advance the system’s productive powers. As Hume put it:

"The inhabitants, having become opulent and skilful, desire to have every commodity in the utmost perfection; and as they have plenty of commodities to give in exchange, they make large importations from every foreign country. The industry of the nations, from whom they import, receives encouragement: Their own is also increased, by the sale of the commodities which they give in exchange" (p.329).

From the evidence gathered so far it appears to be quite clear that there are many similarities between Hume and Ricardo with respect to the spread of trade and of the market and the concomitant changes in individual tastes. But the scenarios envisaged by both of them differ in important ways, reflecting differences in the historical context they were working in and in the ultimate goal of their analysis.

In the general body of his works, Hume demonstrated a particular interest in the examination of the relationship between what he called the human passions and the development and refinement of tastes and customs. Since among those human passions are the passions for gain and for consumption, and since it is through commerce that much of these two passions are realized, it is no surprise that he came to investigate the bearing of the unravelling of trade on the transformation of customs and tastes within the society.
But Hume gave little thought to that question which was at the foreground of Ricardo's analysis, viz., the accumulation of capital. To that extent, and despite the fact that he saw perfectly well the importance of changes in tastes and preferences to the heightening of productivity, the direct connection between growth and accumulation on the one hand, and changes in the composition of demand on the other, is only apparent, not the least because in Hume we do not have any theory of profits nor any account of the mechanism of resource allocation. In Ricardo, on the contrary, we have a very explicit relationship, including feed-back effects, among the process of accumulation of capital, the working of the allocation mechanism, and modifications in the structure of demand along the growth path.

Another point of difference between Hume and Ricardo is the place accorded to distributional matters in their analyses. Hume certainly noted the significance of a fair distribution of wealth among people, but placed the weight on the moral aspect of the question. An equally balanced distribution of "happiness" among the members of society represents the just state of affairs.\textsuperscript{13}

\textsuperscript{13} Hume, for instance, stated that "as the multitude of mechanical arts is advantageous, so is the great number of persons to whose share the production of these arts fall. A too great disproportion among the citizens weakens any state. Every person, if possible, ought to enjoy the fruits of his labour, in a full possession of all the necessaries, and many of the conveniences of life. No one can doubt, but such an equality is most suitable to human nature, and diminishes much less from the happiness of the rich than it adds to that of the poor" (p.265).
Hume however did not link the issue of distribution to the process of accumulation and growth. We saw how important it was in Ricardo that distribution shifted from rents to profit and wages so that that process was given impulse forward. Hume’s economic analysis, though, does not materially incorporate the class division so prominent in the rest of the classical political economy literature. The class conflict issue which Ricardo greatly emphasized, and which in his analysis is closely related to the question of changes in the structure of demand of society, is thus a missing link between Hume’s analysis and Ricardo’s.

The conditions of production also appear to have entered very little in Hume’s economic inquiry, while they are of overwhelming importance in Ricardo’s. In the latter, we have seen that alterations in the pattern of social consumption towards a greater participation of industrial products in it constitute a critical phenomenon in that they help the economic system circumvent the problem of diminishing returns in the agricultural sector. Hume may be said to have discerned the diminishing return problem agriculture faced at his time\(^\text{14}\), nonetheless he made little use of the phenomenon in his overall analysis, and what is more, did not link it to the change-in-tastes argument.

Finally, we have the population question. Hume did not significantly incorporate the population growth mechanism into the fabric of his economic investigation. Rather it

\(^{14}\) He noted: "In ENGLAND, the land is rich, but coarse; must be cultivated at a great expence; and produces slender crops ..." (p.266).
stands quite apart in his more historical account of the differences in the population level between ancient and modern (to his time) nations.

He did somewhat associate population growth with people's living conditions\(^{15}\), but nowhere specified the correlation between the population mechanism and that of the accumulation of capital. Furthermore, he seems to have advocated government intervention to ease the conditions of people and guarantee population growth.\(^{16}\)

This of course goes completely against Ricardo's view of the subject. Ricardo priviliged the development of a "responsible" attitude towards procreation among people, so that population increased according to the economic system's effective demand for labour. For that to occur, it was crucial that people cultivated a more sophisticated pattern of consumption preferences, with the desire for "superior" commodities outdoing that for children. Moreover, this would relieve the system from being obliged to constantly produce increasing quantities of food at ever increasing costs.

This picture is completely absent from Hume's analysis.

\(^{15}\) He then wrote that "[a]lmost every man who thinks he can maintain a family will have one; and the human species, at this rate of propagation, would more than double every generation"(p.381).

\(^{16}\) Consider his following remarks: "For as there is in all men, both male and female, a desire and power of generation, more active than is ever universally exerted, the restraints, which they lie under, must proceed from some difficulties in their situation, which belongs to a wise legislature carefully to observe and remove", so that "every wise, just, and mild government, by rendering the condition of its subjects easy and secure, will always abound most in people, as well as in commodities and riches"(p.381-82).
He believed that material advancement would provide a firm basis on which population growth might be sustained and encouraged. He mentioned the occurrence of plagues which might prevent the multiplication of mankind, but this halt was only temporary since "in a generation or two, the destruction was not perceived; and society had again acquired their former number. The lands which were cultivated, the houses built, the commodities raised, the riches acquired, enabled the people, who escaped, immediately to marry, and to rear families, which supplied the place of those who had perished" (p. 382).

The tension between population growth and the availability of adequate economic resources to render it possible to feed the rising population is almost completely absent from Hume's reasoning, in stark contrast with the scenario depicted by Ricardo's analysis.

Despite all these differences, however, one thing emerges quite clearly in view, namely, the recognition by Hume and Ricardo of the central role variations in taste and in the composition of demand play in the economic analysis of growth and development.

5.2- Adam Smith.

Adam Smith was surely the single most powerful intellectual influence on Ricardo. It was through the reading of The Wealth of Nations that Ricardo's attention was drawn definitively to political economy. With respect to the
subject of our discussion, one can hardly deny the considerable weight Adam Smith's ideas carried upon Ricardo's own view of the question, whose central line of reasoning, as we saw earlier, rested on Adam Smith's dual characterization of human needs.

To understand Adam Smith's conception of the role of tastes and preferences in the operation of the economic machinery\(^\text{17}\), though, we need to refer back to his early masterpiece, *The Theory Of Moral Sentiments*.\(^\text{18}\)

There he set out to give an explanation of what lies behind human passions and actions and of how to judge them from the point of view of the "impartial spectator". And there we found several notions which underlie his (and Ricardo's) way of thinking on economic matters.

One such notion, a vital one to the understanding of human economic actions, is what Adam Smith called "that great purpose of human life", i.e., the quest for "bettering our condition" (p.50). This represents a prime mover of mankind's exertions; it lies at the very heart of human desires and compels individuals to make efforts towards the attainment of that "great purpose".

But a crucial question he raised was: why is there such

\(^{17}\)- For a detailed and very interesting discussion of this point refer to Rosenberg (1968).

\(^{18}\)- The first edition of the TMS appeared in 1759. In all it had six editions, the last one, which is the text we draw on here, having been published in 1790 shortly before Adam Smith's death. For editorial details of the TMS see the introduction to it in the Glasgow edition (LibertyClassics, 1982) of the *Works and Correspondence of Adam Smith*, vol.1, to which all the quotations which follows refer.
yearning in human beings for bettering themselves? A run-of-the-mill answer to it is that people always prefer a "good" life to a "bad" one; everybody wants to be as far as possible from the state of poverty. On the face of it this answer is a perfectly reasonable one and reflects much of the behaviour of people around us. Adam Smith, however, went deeper into the matter and came up with an explanation which is both compelling and "empirically" observable (meaning that we are capable to relate it to the recognizable behaviour of people surrounding us).

He argued that sought-after self-betterment was the natural drive taken by individuals in response to that mighty aspiration governing human action: ambition. Ambition reflecting the ardent innermost desire for distiction. The love of distinction is, indeed, a basic feature of human nature in the fabric of Adam Smith's analysis. As he pointed out:

"It is because mankind are disposed to sympathize more entirely with our joy than with our sorrow, that we make parade of our riches, and conceal our poverty... It is chiefly from this regard to the sentiments of mankind, that we pursue riches and avoid poverty" (ibid).

This search for improving one's condition is then used to explain much of human activities. In his own words:

"For to what purpose is all the toil and bustle of this world? What is the end of avarice and ambition, of the pursuit of wealth, of power, and preheminence? Is it to
supply the necessities of nature? The wages of the meanest labourer can supply them. We see that they afford him food and clothing, the comfort of a house, and of a family. If we examine his oeconomy with rigour, we should find that he spends a great part of them upon conveniences, which may be regarded as superfluities, and that, upon extraordinary occasions, he can give something even to vanity and distinction" (ibid).

As a corollary of this ambition-driven human action, we have that "it is vanity, not the ease, or the pleasure, which interests us" (ibid).19

All this helps us understand why what Malthus most feared, that is, the "love of ease" leading to indolence, was of little concern to Adam Smith and, particularly, Ricardo. We recall that Ricardo, in answering Malthus, stated that it was possible to imagine that some individuals would prefer to stay idle than to toil in some productive activity, but that the thing most likely to happen was for them to exert themselves so as to reach a superior way of life. This was seen as the natural choice to be made by individuals, manifesting their inborn longing for bettering themselves.

Notice also that Adam Smith's remarks point clearly to his not holding of the subsistence-wage hypothesis. "Conveniences" and "luxuries" are allowed to enter into the wage basket. But this raises the question of the ability of workers to consume non-basic goods. The will is taken for

19 - This is a rule deemed of a quite general application to the average human being, since "rank, distinction pre-eminence, no man despises, unless he is either raised very much above, or sunk very much below, the ordinary standard of human nature" (p.57).
granted to exist in all individuals. What about the power?

The answer is that, the desire of possessing and enjoying "superior" goods being so prevailing and effective, the individuals are led to strive and do their utmost to acquire the means that permit them to afford the consumption of those goods. Low-income persons, then, apply themselves to a greater exertion in order to get hold of such wished-for "conveniences" and "luxuries". In the following passage Adam Smith conveys exactly this idea:

"The poor man’s son ... admires the condition of the rich ... He is enchanted with the distant idea of this felicity. It appears in his fancy like the life of some superior rank of beings, and, in order to arrive at it, he devotes himself for ever to the pursuit of wealth and greatness" (p.181).

Adam Smith is very subtle in his argumentation. He does not see that "felicity" as the certain result of all the toil and pursuit of wealth and distinction. It may be but an delusive pursuit. Said that, it represents nonetheless the driving force which impels individuals to strive and labour and which makes society to advance and flourish. It being so, that pursuit of a better and higher way of life, in the natural course of things, constitutes a welcome characteristic of "human passion". It should be allowed to run its course in order to open the way to human progress.

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20 - "The pleasures of wealth ... strike the imagination as something grand and beautiful and noble, of which the attainment is well worth all the toil and anxiety which we are so apt to bestow upon it" (p.183)
"And it is well that nature imposes upon us in this manner. It is this deception which rouses and keeps in continual motion the industry of mankind. It is this which first prompted them to cultivate the ground, to build houses, to found cities and commonwealths, and to invent and improve all the sciences and arts, which ennable and embellish human life; which have entirely changed the whole face of the globe, have turned the rude forests of nature into agreeable and fertile plains, and made the trackless and barren ocean a new fund of subsistence, and the great high road of communication to the different nations of the earth. The earth by these labours of mankind has been obliged to redouble her natural fertility, and to maintain a greater multitude of inhabitants" (p. 183-84).

It is at this juncture that he introduces, in anticipation of the same argument laid down in his *The Wealth of Nation*, the dualistic concept of human desires. He asserted that the capacity of the stomach bears no relation to the "immensity" of one's desires, that "the eye is larger than the belly" (p. 184).

Viewed in this light, the demand for food and other "necessaries" is overshadowed by that for non-basic products, which mainly refer to those goods originating from the industrial, more capitalist sectors of the economic system. It is then natural to conceive of the rise and expansion of industry as the logical outcome of the pursuit of wealth and distinction, of the desire for a superior way of life. Consequently,
"When the legislature establishes premiums and other encouragements to advance the linen or woolen manufactures, its conduct seldom proceeds from pure sympathy with the weaver of cheap or fine cloth, and much less from that with the manufacturer or merchant. The perfection of police, the extension of trade and manufactures, are noble and magnificent objects. The contemplation of them pleases us, and we are interested in whatever can tend to advance them" (p.185).

At the level of individual behaviour this desire induces people to be prudent and accumulate (or save) with a view to achieve the realization of that aim. This is considered to be a virtue of the highest order and to contribute to the perfection and advance of society.\(^21\)

In *The Wealth of Nations*\(^22\), Adam Smith returned to several of the above points, now embedded in his investigation into the process of economic growth.

Right from the outset, in the introduction to his book, he put forward two fundamental ideas concerning the basis of any course of economic progress. First, he points to the generation of a surplus over and above the primary needs of the economic system, which is a major characteristic of "civilized and thriving nations" as against those "savage

\(^{21}\) This behaviour renders itself the object of esteem and commendation since in "the steadiness of his industry and frugality, in his steadily sacrificing the ease and enjoyment of the present moment for the probable expectation of the still greater ease and enjoyment of a more distant but more lasting period of time, the prudent man is always both supported and rewarded by the entire approbation of the impartial spectator, and of the representative of the impartial spectator, the man within the breast" (p.215).

nations of hunters and fishers" (p.10). This of course corresponds to the same idea of Hume's that agriculture gives rise to a surplus which is able to be used to lever the economic activity up and to increase the wealth at the disposal of the society, and which constitutes one of the chief traits of the works in the classical tradition.

It is that surplus which enables the majority of individuals in society to enjoy a standard of life well above the mere satisfaction of basic needs, if only the virtue of being prudent and parsimonious is by them cultivated.\(^{23}\) It is then possible for individuals, along the growth path of the system, to experience a rise in their conditions, mirrored in the improvement and diversification of their consumption.

Secondly, Adam Smith established a principle which would come to form part of the backbone of Ricardo's analysis (and of his critique of Malthus), namely that the demand for labour is contingent upon the accumulation of capital, and that the surplus depended crucially on the ratio of productive to unproductive labour (p.11-12).\(^{24}\)

\(^{23}\) According to him, "[a]mong civilized and thriving nations ... the produce of the whole labour of the society is so great, that all are often abundantly supplied, and a workman, even of the lowest and poorest order, if he is frugal and industrious, may enjoy a greater share of the necessaries and conveniences of life than it is possible for any savage to acquire" (p.10).

\(^{24}\) He then wrote that the "number of useful and productive labourers ... is everywhere in proportion to quantity of capital stock which is employed in setting them to work, and to the particular way in which it is so employed" (p.11). He also stated that the "demand for those who live by wages ... necessarily increases with the increase of the revenue and stock of every country" (p.86).
Economic advancement and welfare improvement bring into being wide structural transformations in the economic system. The pattern of consumption changes and with it, both as cause and effect, the configuration of production. The industrial sector rises to prominence. The inevitability of this occurring is expressed by Adam Smith in the following passage:

"The most opulent nations, indeed, generally excel all their neighbours in agriculture as well as in manufactures; but they are commonly more distinguished by their superiority in the latter than in the former" (p. 16).

Why is this so? The argument employed by Adam Smith to support his view is, initially, that industry is more capable of giving effect to the increase in the productive powers of labour through the division of labour.\(^\text{25}\)

The boost in production and its diversification that the division of labour brings about are regarded as the main cause of "that universal opulence which extends itself to the lowest ranks of the people" (p. 22). Economic growth, therefore, gives rise to an enhanced level of individual welfare.

But the division of labour is not the product of

\(^{25}\) "The nature of agriculture, indeed, does not admit of so many subdivisions of labour, nor of so complete a separation of one business from another as manufactures", so that this "impossibility of making so complete and entire a separation of all the different branches of labour employed in agriculture, is perhaps the reason why the improvement of the productive powers of labour in this art, does not always keep pace with their improvement in manufactures" (p. 16).
technical, supply-side factors only. To put it into practice something else is required, and that is a market large enough to render it lucrative. Demand-side factors are not left out of the explanation. Adam Smith framed this question thus:

"As it is the power of exchanging that gives occasion to the division of labour, so the extent of this division must always be limited by the extent of that power, or, in other words, by the extent of the market" (p.31).

The extent of the market is linked to an intrinsic feature of "human nature", that is, the inclination towards the exchange of commodities to meet individual needs (p.25).

As in the course of growth the real wages of workers rise, those needs take the form of increased and more diversified consumption, chiefly of non-agricultural items.26 This has two material consequences to the system.

In the first place, it is conducive to productivity growth insofar as higher wages and improved living standards induce workers to be "more active, diligent, and expeditious" (p.99). Accumulation of capital, the main cause of higher wages, therefore tends to give effect to increments in productivity, that is to say, "to make a smaller quantity of labour produce a greater quantity of work" (p.104).

26- As Adam Smith pointed out, the "common complaint that luxury extends itself even to the lowest ranks of the people, and that the labouring poor will not be contented with the same food, clothing and lodging which satisfied them in former times, may convince us that it is not the money price of labour only, but its real recompence, which has augmented" (p.96).
The qualification of "a smaller quantity of labour" is important and has to do with the second material consequence of the improved condition of workers, i.e., its impact on the mechanism of population growth. The spread of the consumption of "coveniences" and "luxuries" among workers have a tendency of arousing in them the appetite for those "superior" goods, with the result that the "demand" for rearing a family and for children is considerably lessened.\textsuperscript{27}

A taste for luxury goods leading to the unfolding of the industrial sectors may be appreciated in the context of an open economy where foreign trade introduces "luxuries" into the domestic market and a progressively increasing demand for them is elicited. The increased demand for "luxuries", in rendering ever profitable the production of industrial goods, opens the way for the domestic industrial sector to develop and expand and compete with the foreign suppliers for it. A part of the money capital which hitherto had been applied to the import and distribution of foreign "luxuries" in the domestic market is now employed in the production of similar and competing home products.\textsuperscript{28}

\textsuperscript{27}- This is especially significant concerning women. Adam Smith stated that "[l]uxury in the fair sex, while it enflames perhaps the passion for enjoyment, seems always to weaken, and frequently to destroy altogether, the powers of generation" (p. 97).

\textsuperscript{28}- According to Adam Smith: "A taste for the finer and more improved manufactures, was in this manner introduced by foreign commerce into countries where no such works were carried on. But when this taste became so general as to occasion a considerable demand, the merchants, in order to save the expence of carriage, naturally endeavoured to establish some manufactures of the same kind in their own country" (p. 407).
Despite all these remarks of his, which are akin to those made by Ricardo, Adam Smith, in a characteristically physiocratic manner, acknowledged the superiority of the investment in agriculture on the grounds that it "puts into motion a greater quantity of productive labour than any equal capital employed in manufacture ... [and] adds a much greater value to the annual produce of the land and labour of the country, to the real wealth and revenue of its inhabitants" (p. 364). Consequently,

"Of all the ways in which a capital can be employed, it is by far the most advantageous to the society" (ibid).

This conclusion is quite in opposition to what Ricardo, as we saw, understood to be the real case. The fact that agriculture adds a higher value to its production is, in Ricardo's eyes, the reflection of increasing costs of production. In this particular situation, which was the case of Britain in Ricardo's time, that means that agricultural costs, on the margin of cultivation, are higher than the corresponding ones in industry. For Ricardo, a higher value means that a greater quantity of labour is required to carry out production, and in the agricultural sector, owing to the manifestation of diminishing returns, an ever increasing quantity of capital is necessary to obtain a given quantity of output. Therefore, greater value was not equated to
greater wealth, that is, a greater quantity of commodities. To Ricardo, then, for the reason that agriculture was comparatively less efficient than industry, investment in the latter was seen as the most advantageous to the increase of wealth.

To better understand the difference in the perspectives of Adam Smith and Ricardo respecting that point, consider the former’s following statement:

"Every increase in the real wealth of the society, every increase in the quantity of useful labour employed within it, tends indirectly to raise the real rent of land. A certain proportion of this labour naturally goes to the land. A greater number of men and cattle are employed in its cultivation, the produce increases with the increase of the stock which is thus employed in raising it, and the rent increases with the produce" (p.265).

As a result of such a view, increases in rent are deemed to go hand-in-hand with economic advancement and the general welfare (ibid). This is strikingly different from Ricardo’s position. In the latter, rises in rents are the consequence of increasing agricultural costs and impair the prospects for

29- Accordingly, Ricardo, in refuting Malthus’s contention that "the labours of agriculture" was "the most productive", remarked that "[t]he produce before obtained from the land might be of greater value in consequence of any new difficulty in the production of corn, and the consequence of this rise of value would be a different distribution of the produce, a larger portion going to rent a smaller portion going to profit. But this value would not add to the greatness or power of the country- for the country would have been richer and greater if the new difficulty in producing corn had not occurred, and consequently if the price had not risen" (Ricardo, vol.2, p.18).
future accumulation since they represent an encroachment on profits. That is to say, they weaken the process of growth. In doing so they ultimately end up weakening the powers of production of the system and the creation of wealth. Moreover, with a lower level of accumulation the outlook for improvements in workers' conditions becomes gloomy.

Adam Smith's view led him to conclude that the interest of the landowners and working classes were dependent on each other and on the interest of society as a whole, while that of the capitalist class "has not the same connection with the general interest of the society as that of the other two" (p. 266). The reason given is that "the rate of profits does not, like rent and wages, rise with the prosperity, and fall with the declension of the society" (ibid).

In Ricardo, on the contrary, it is the interests of the class of landowners which are in opposition to the general interest of the society. Its only by exerting a monopoly power and by benefiting from restrictive trade laws and economic inefficiency that landowners are able to enjoy higher rents, at the same time that profits are lowered and the condition of the workers is made worse by rising food prices and lower real wages.

Let us take up a point we mentioned earlier when considering Hume's contribution. We saw there that there is a dynamic reciprocal effect between the extension of the market and business profitability. Competition and increased production, Hume and Ricardo advocated, leads to lower unitary prices of manufactured commodities. But this does not
mean that the level of industrial profitability is lowered. The expansion of the market means that the quantity demanded is increased and gross profits with it.

Adam Smith (and Malthus) defended the position that profits fall in the course of accumulation, an idea that Ricardo rejected. To Ricardo, profits would fall only in so far as the case was that capital was employed in greater doses in agriculture with proportionally less return on the capital invested. He thus criticized Adam Smith for not considering the vital qualification of an "increasing difficulty of providing food for the additional number of labourers which the additional capital will employ" (Ricardo, vol.1, p.289). If the case was, however, that "the necessaries of the workman could be constantly increased with the same facility, there could be no permanent alteration in the rate of profits or wages, to whatever amount capital might be accumulated" (ibid).

The real case for Ricardo though was that increasing costs prevailed in the production of "necessaries". He counted on changes in the structure of preferences towards industrial products and the development of industry as powerful factors in bringing about the continuing of the process of accumulation and growth, and the improvement of the general welfare of society.
5.3- Other Contributions.

5.3.1- Turgot.

Turgot is often treated as a physiocrat by historians of economic thought. It would be more appropriate, however, to consider him as "a nonphysiocrat with physiocrat sympathies" (Schumpeter, 1954, p.244). For Turgot had the keen vision of discerning the changes the economic system was undergoing, with the commercial and industrial activities becoming progressively more important, and thus undermining the physiocratic view of agriculture as the only productive sector, and this despite his assertion that agriculture was the more productive sector (Turgot, 1973, p.128 and 180).

He assigned a significant role to entrepreneurs and to those economic agents Hume and Ricardo denominated "the monied class", viz., those who live on interests on money lent to other agents.

Turgot’s economic analysis of growth amounts to the investigation of the interrelationship among the agricultural, commercial, and industrial sectors and its bearing on the process of accumulation and economic progress. This brings into question distributional issues, since the furtherance of the creation of wealth is seen as dependent on the amount of capital invested, which in turn hinges fundamentally on the reinvestment of profits. For Turgot, the capital invested in production is the result of accumulation and savings made out of profits.
As with the classical writers in general, Turgot put strong emphasis on trade development as a basic factor explaining progress, and a progressive society is typically one

"where commerce is very brisk, where there are many products and much consumption" (p.137).

Human desires, needs and preferences, always changing in time, are held to be an important element in approaching the analysis of progress, too. These human "passions" are elevated to the condition of "mainspring of action and consequently of progress" (p.70). They help promote the development of a desire for a superior way of life, which in turn spurs creativity and ability, or what Turgot called "genius" (p.88-89).

The possibility of meeting all these increasing and refined desires are brought about by developments in agriculture which give rise to the generation of a surplus capable of being employed outside it in the expansion of the non-agricultural sectors and the promotion of the division of labour. The agricultural surplus, then, is considered to

30- As Turgot put it: "The succession of mankind ... affords from age to age an ever-changing spectacle. Reason, the passions, ans liberty ceaselessly give rise to new events" (p.41).

31- He thus asserted that "[t]illage increases the permanence of settlements. It is able to feed more men than are employed in it, and thus imposes upon those whom it leaves idle the necessity of making themselves either useful or formidable to the cultivators. Hence towns, trade, the useful arts and accomplishments, the division of occupations,
be the "prime mover" (p. 122, also p. 123 and 151).

The growth of the non-agricultural sectors gives way to the strengthening of the desire for non-basic goods, and could not possibly have risen without the development of the latter. As an illustration, Turgot affirmed that there would be impossible for trade to have grown if each individual consumed only "what was necessary for his own support" (p. 119), that is, if every person lived at the subsistence level. Not only no surplus would become available, but tastes also would stay undeveloped.

We have it thus that a major characteristic of Turgot's analysis was the connection between taste development and the growth of commerce and industry.

But Turgot differed in a crucial aspect from Ricardo: he did not regard the prospects for the rise of workers' conditions to be very likely. He envisaged a situation in which workers, having their own labour capacity as the only source of earnings in their possession, were "obliged to vie with one another and lower their price", with the result that "it is bound to be the case, and in actual fact is the case, that the wage of the Workman is limited to what is necessary in order to enable him to procure his subsistence" (p. 122).

His argument implies that the working population is growing at a rate greater than the rate of growth of the demand for labour, with both money and real wages being driven down as a consequence. He seems not to have visualized the differences in education, and the increased inequality in the conditions of life" (p. 43).
the case, conspicuous in Ricardo, of the labour force adapting itself to the level of accumulation and of real wages being pushed up through population control and taste development among the working class. It was the "husbandman" who was the principal actor in the process of taste refinement and whose demand above his basic needs was the principal force in stimulating the growth of the non-agricultural sectors.32

5.3.2- James Steuart

In his An Inquiry into the Principles of Political Economy (1767), Steuart, in a very Malthusian way laid down the principle that population growth went hand-in-hand with the supply of food.33 But on the other hand, now in a very Ricardian way, he wrote that what "encourages multiplication, but a great demand for people; that is, for their work?"(p.137).

The apparent contradiction is resolved by appealing to the idea of an optimum growth path in which the number of

32- According to him, [a]s soon as the labour of the Husbandman produces something over and above his needs, he is able, with this surplus over and above the reward for his toil which nature affords him as a pure gift, to purchase the labour of the other members of the society. The latter, when they sell to him, earn no more than their living; but the Husbandman obtains, besides his subsistence, an independent and disposable form of wealth ... [which] animates all the industry of society..."(p.123).

33- "[T]he numbers of mankind must depend upon the quantity of food produced by the earth for their nourishment ..."(p.36). References hereafter are from A. Skinner's edition of Steuart's Principles, 1966.
"husbandmen" are exactly enough to "provide food for all the state", while the size of population is kept at such a level as to bring about "the full employment of them" (p. 93).

In a more dynamic context Steuart singled out the relationship between taste differentiation and the rise of manufactures as one of the mainstays of his growth analysis. Again the surplus originating from agriculture is the point of departure. It is the creation of the latter that gives room for the diversification of tastes, which is the natural upshot of the inherent feature of the "wants of mankind". The growth of manufactures follows suit and rebounds on the evolution of tastes through the stimulation of new wants (p. 89-91).

The correlation between taste differentiation and the increase of demand, on the one hand, and the development of commerce and industry, on the other, is clearly depicted in the following passage of his:

"[T]rade will facilitate industry ... [and] industry will support trade. Both the one and the other however depend upon a third principle; to wit, a taste for the superfluity, in those who have an equivalent to give for it. This taste will produce demand, and this again will become the main spring of the whole operation" (p. 151).

But as with Turgot, and differently from Ricardo, he did not contemplate a bright prospect for workers. What is more, he appears not to have considered the case in which workers would gain access to the consumption of "luxuries" as a helpful one. He thus stated that:
"Luxury, among those who live upon a revenue already got, and who, by their rank in the state, are not calculated for industry, has the good effect of affording bread to those who supply them; but there never can be any advantage in having luxury introduced among the lower classes, because it is then a mean only of rendering their subsistence more chargeable, and consequently more precarious" (p.302).

Therefore, he did not envisage any substantial change occurring in the contents of workers' wage basket. The taste differentiation argument did not apply to the "lower classes".

5.3.3- James Mill.

The division of labour occasions an enormous quantity and variety of productions which excites the desire for "enjoyments" in every human being. This is one of the main messages of James Mill's *Commerce Defended* (1808). 34

Once more we come across the view that economic progress is directly associated with changes in the structure of consumption and demand. Growth through accumulation and the division of labour are matched, on the demand side of the economic system, by the springing up and flourishing of a

34- "How limited would be his enjoyments were he confined to the raw produce of the soil! How much are those enjoyments, how much is his wellbeing, promoted by the various productions of art which he has found the means of providing! The simple, but at the same time the great and wonderful contrivance to which the civilized life of man abounds, is the division of labour" (p.103). We rely on D. Winch's edition of the *Selected Economic Writings* of James Mill (1966) for all the references to his works.
taste for more sophisticated products, and as a result an increasingly larger quantity of economic resources are employed in the satisfaction of these non-basic needs.\textsuperscript{35}

One point on which James Mill differed from Ricardo was in his advocacy of the idea, expressed in his \textit{Essay on the Corn Laws} (1804), that "[n]o proposition is better established than this, that the multiplication of the human species is always in proportion to the means of subsistence", to wit, that "in whatever quantity food be produced, a demand will always be produced still greater than the supply" (p. 55-56). The Malthusian principle of population prevailed upon workers and the poor, and he came to lay great emphasis on the education of the lower classes as a means to overcome the problem of overpopulation. Ricardo, as we saw, also agreed with this measure, but equally relied on the "natural" desire for a superior way of life to bring that effect about along the path of growth of the system. James Mill did not quite connect both strands of the argument, that is, the interrelation between growth and changes in workers' consumption pattern.

This account of some political economists' ideas about the relationship between economic growth and changes in the structure of consumption and demand served to highlight an aspect of strong correlation among various of the writings

\textsuperscript{35} - To James Mill, "[w]henever a country advances a considerable way beyond the infancy of society, it is a small portion of the members of the community who are employed in providing the mere necessaries of life. By far the greater proportion of them are employed in providing supply to other wants of man" (p. 109).
around Ricardo's time. Next, in the light of this tradition of thought and the findings we have reached thus far, we proceed to the assessment of a very influential line of modern interpretation of Ricardo, namely the Sraffian rendition of him.
CHAPTER 6- THE SRAFFIAN INTERPRETATION OF RICARDO:
A CRITIQUE.

One of the most entrenched conceptions in the study of the history of economic thought is the close association of Ricardo's analysis with Sraffa's. Indeed, the tendency to associate both authors closely has been so strong that there is a near identification. For a long time we have been told by neo-Ricardians, Sraffa's heirs, that the history of economic doctrines can be divided into two main lines: one starting with Adam Smith (and the physiocrats) and developing through the works of Ricardo, Marx and Sraffa, and the other having its roots in the so-called "marginalist revolution" of Menger, Walras and Jevons, and going down through Marshall to modern general equilibrium analysis. The former is termed the "surplus" approach, the latter the "neoclassical" one.

Neo-Ricardians based their contention on Sraffa's interpretation of Ricardo contained in his celebrated introduction to Ricardo's *Principles* (Sraffa, 1951) and in his own *Production of Commodities by Means of Commodities* (Sraffa, 1960).

The fact that we have a Sraffian version of the history of economics is not, in itself, a bad thing. It is healthy to have alternative views of the subject. What is worrying about it is its reductionist character and the associated danger of misrepresenting past theories while sorting out qualitatively

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1- Eatwell and Panico (1987, p.451), as one example, have remarked that "Sraffa's analysis is a triumphant restatement of the classical analysis of value and distribution".
different analyses to fit in above-mentioned Great Divide.

In this chapter we attempt a critical assessment of the standard Sraffian interpretation of Ricardo bearing in mind the findings of the previous chapters.

It should be noted that we are not criticizing Sraffa’s work in itself, but rather the view that it represents a "magnificent rehabilitation" of classical economics. We thus strongly disagree with Meek’s assertion that both "Sraffa’s model and Classical models are concerned with the investigation of one and the same set of properties of an economic system" (Meek, 1967, p.161). We think they are not. Sraffa’s is not the canonical Ricardian model; it is not a revival of the classical standpoint; in particular, it is not a return to Ricardo’s standpoint.

As pointed out above, the following assessment is based on the discussion in the preceding chapters of the role of tastes and demand in the explanation of the economic process. We begin by outlining the basic hypotheses and arguments underlying the Sraffian (or neo-Ricardian) interpretation of Ricardo.


In his highly influential book of 1960, Sraffa - who in his 1951 introduction to his edition of Ricardo’s Principles had laid down the foundation of the neo-Ricardian view of Ricardo - set forth an alternative analytical model of the economic system to the neoclassical one. There he affirmed
that his was the method of analysis used by the old classical economists; in other words, that he was reviving the classical approach to economics.

In the preface, singling out a major feature of his book, he stated that:

"The investigation is concerned exclusively with such properties of an economic system as do not depend on changes in the scale of production or in the proportion of 'factors'" (Sraffa, 1960, p.v).

And he went on to assert that:

"This standpoint, which is that of the old classical economists from Adam Smith to Ricardo, has been submerged and forgotten since the advent of the 'marginal' method" (ibid).

The economic system is analysed by selecting one point in time and proceeding to determine the relations among its variables at that particular moment. At the beginning of the analysis, then, we have a set of data describing the system. The vital data are (Eatwell, 1983, p.99):

a) the size and composition of output;
b) the method of production;
c) the real wage.

The above data, representing the physical state of production, are thought to be sufficient to determine the relevant characteristics of the system.

From this representation of the economy, a
straightforward deduction is made. With output taken as given, no relationship exists between quantities and prices, as for example in terms of variations in demand. Changes that might happen in quantities and prices would come about as a result of variations in the conditions of production, exclusively (ibid).

Moreover, this picture of the system is said to correspond to its long run, natural position. The linchpin of the neo-Ricardian argument is to attribute to Ricardo the sole concern with that long period position of the economic system. "Accidental and temporary deviations", mere short run phenomena, are left out of the analysis since, as Pasinetti (1981, p.8) has put it, "in the long run they become irrelevant". Those deviations only contribute to obscure the analysis, not influencing substantially the relevant relationships within the system nor the final, long run position of the economy, which is completely determined by the natural level of the variables, which in turn depends solely on the conditions of production.

What Pasinetti has called the "fundamental picture" of the system, the one depicting its natural state, may be symbolized as follows (Pasinetti, 1977, p.73):

\[ \mathbf{p} \mathbf{A}(1+r) + \mathbf{lw} = \mathbf{p} \]

where

\( \mathbf{p} \) = the row vector of prices

\( \mathbf{A} \) = the matrix of technical coefficients
r = the uniform rate of profit  
\mathbf{l} = the row vector of inputs of labour  
w = the wage rate  

Prices depend only on the material conditions of production, i.e., the technique $[\mathbf{A}, \mathbf{l}]$ of the system. One of the distributive variables, r and w, is determined outside the model and thus taken as a given. As a consequence, neo-Ricardians assume value and distribution as two separate spheres for the purpose of economic analysis.²

From the given wage rate one determines the rate of profits through the device of the wage-profit frontier. Then, together with the technological information provided by the given data, one determines the prices of commodities. These are said to be "prices of production", that is, prices which do not depend on market conditions but on production conditions only. They are the ruling long run prices which guarantee the reproduction of the system.

We can thus see why the Sraffian model is a "production-oriented" one. The system is a system of production, the task of the model being to understand the "socio-economic relations between men in the sphere of production" (Meek, 1967, p.208); that is to say, the analysis should be "anchored to man's activities and relationships as a producer" (Meek, 1974, p.250).

²- Garegnani (1987, p.561) thus has affirmed that what the classical authors "had in common" was the general idea "of a real wage governed by conditions (often of a conventional or institutional kind) that are distinct from those affecting the social product and the other shares in it, and are therefore best studied separately from them".
In this system of production, the concept of surplus is the centre piece on which the working of the economy hinges (Garegnani, 1987, p.560). The idea is that the output obtained from the application of labour and capital to production in a specified way (method of production) not only replaces these inputs but yields a surplus besides, which is used to gear up production, so that it is the production of goods which "increasingly characterize and condition the emerging industrial societies" (Pasinetti, 1977, p.3). Accordingly, we have the following principle:

"In the relationship between men and things it is the objective process by which men produce goods which is crucial and not the subjective and individual valuation of these goods" (Levine, 1974, p.311-12, n.4).

From the stipulation of the technique in use, \([A,1]\), and the corresponding output, \(y\), we arrive at the surplus product \(s = y - b^3\), with its distribution being determined through some exogenous mechanism. The next step is to find out what vector of prices assures the existence of the equilibrium position of the system - i.e., a situation where uniform prices of commodities and an equalized rate of profit prevail throughout the economy, and in which the composition and level of output are directly linked to the requisite reproduction of the system.

What then is the neo-Ricardian verdict on the role of demand in the economic process? This is the point we address

\(^3B\) is the augmented input matrix.
6.2- Demand in the Sraffian Framework.

One of the outstanding traits of the Sraffian model is the complete absence of demand considerations in the analysis. Prices, as we saw above, are a pure production phenomenon. Demand and market prices (which depend on the state of demand) as well are viewed as an epiphenomenon susceptible to be cast aside. Let us take a closer look at this argument.

Garegnani (1983, 1987) has put forward the most detailed account of the question of demand in classical economics, particularly in Ricardo, from a Sraffian point of view. His chief contention is the following:

"[T]he price system and the rate of profit ... are determined independently of any demand functions for the products" (Garegnani, 1983, p.311).

This non-substitution-theorem-like principle is better understood if we disaggregate it thus (Garegnani, 1987, p.563-64):

i) demand and preferences are immaterial for price formation given the fact that the wage rate is treated as a datum; and

ii) this is so due to the separation between distribution and value theories.

Unlike the traditional non-substitution theorem which
requires the assumption of constant returns to scale, Garegnani claims that in classical economics the determination of prices with no reference whatsoever to demand is possible even in the case of variable returns. He, however, does not elaborate upon this observation and gets round the problem by resorting to the usual Sraffian procedure of assuming that the level and composition of output is given from the outset. Actually, these depend on the income level, the technical conditions of production, and the distribution of income, but as they are taken as given, it follows that the level and composition of output are given as well.

One might still argue that both the level and composition of output are contingent upon the choices made by individuals manifesting their preferences, and consequently upon demand. But Garegnani appeals to the world outside his model and presupposes that the "content of consumer tastes" is also a datum, its study being the concern of psychologists or sociologists. Demand consideration is thus chopped off the model entirely.

Garegnani however does concede that some kind of relationship between output and prices may be put forth when "relevant". But even so he remarked that such correlation can be accommodated without any need to resort to demand. He instead advances a recursive mechanism which operates via a step-by-step process from changes in prices to output and vice-versa (ibid, p.564-65).

Furthermore, he considers demand in classical economics
as a "single definite point" in the price-quantity space corresponding to Adam Smith's concept of "effectual demand", that is, the quantity demanded at the natural price. With the level of effectual demand taken as given, any shortage or excess of supply results in the deviation of market price from the natural one, but the last (and thus effectual demand) is itself independent of market conditions.⁴

From this statement of the neo-Ricardian position on the question of demand in classical economics, and that of in Ricardo in particular, we shall proceed to an assessment.

6.3- Demand in Ricardo: A Critique of the Sraffian View.

Neo-Ricardians single out price determination as the main object of economic analysis. The theory of value is what Sraffian economics is about, and the price which really matters to them is the natural price or the price of production. By definition, this price is completely independent of demand, as Ricardo himself acknowledged⁵. For him the natural price was nothing but the cost price, and thus dependent exclusively on the conditions of production. The economic phenomenon that neo-Ricardians profess to have an interest in is hence the reproduction of the economic

⁴- As Garegnani (1987, p.565) has put it, "in the classical economists the interplay of 'demand and supply' only explains the oscillation of actual prices and the normal outputs, equal to the 'effectual demands', where these normal levels are known independently of any such interplay".

⁵- "By the very definition of natural price, it is wholly dependent on cost of production, and has nothing to do with demand and supply" (vol.8, p.207).
system, to which we turn now.

6.3.1- Reproduction in the Sraffian model: the lack of market considerations.

The phenomenon of reproduction may be analysed by studying the conditions under which real-world economy would behave like the given economic model assumes it would. In the Sraffian model, as we saw before, the basic task is to calculate, from the input-output data of the system, the set of prices that would guarantee equilibrium, the natural state of the system.\(^6\)

However, although production is what matters in the Sraffian model, it contains no mechanism by which production decisions are taken. The quantities produced and their distribution among the several sectors are just fixed from the beginning without any explanation as to why that particular set of quantities has been produced; prices are but technical coefficients required to give a solution, in terms of general equilibrium, to the system.

The prices arrived at through the solution of the Sraffian equations are adequate to replicate the system identically as displayed at the beginning of the

\(^6\) It is also called the long run position, but this seems to be an odd thing since there actually is no process by which to say that the system reached that point in time. The answer neo-Ricardians commonly give is that that position represents a "centre of gravity" to which the system tends.
Sraffa (1960, p. 9) likens these prices to the classical "prices of production", and if so they should reflect the outcome of decisions taken by producers in the past with respect to issues such as the quantity of labour to be employed, the commodity to be produced, the method of production to be chosen, the investment to be made, etc.

Yet the fundamental question of how producers decide what to produce and invest is not tackled in the Sraffian approach. All that we have is the profit rate equalization rule, that is to say, the assertion that the production process is carried out in such a way as to bring about the equalization of the sectoral rates of profit throughout the economy.

This is in marked contrast to Ricardo, who distinctly established a link between that process and the state of markets (and consequently of demand).

The equalization of the rates of profit is the outcome of the competitive process that rules economic affairs and which has as its main instrument the mechanism of resource allocation. However, the latter is lacking in the Sraffian model. The uniformity of the rates of profit is assumed from the very outset but the process of competition among producers that brings it about is not mentioned.

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7- There is then "a unique set of exchange-values which if adopted by the market restores the original distribution of the products and makes it possible for the process to be repeated ..." (Sraffa, 1960, p.3).

8- "... a commodity is not supplied merely because it can be produced, but because there is a demand for it" (vol.1, p.385).
In Ricardo, the uniformity result is achieved by means of the movement of capital and labour among the sectors of production in response to price changes. In Sraffa, on the other hand, it seems that profit rate equalization is the result of the fact that

a) the capital advanced by each sector or industry must be replaced; and

b) the mass of profits must be distributed accordingly to the capital advanced in each sector or industry.

This also applies to Ricardo's analysis, but the difference is that, as Sraffa takes the structure of production (and thus the "proportion of the factors of production" in each industry) unchanged period after period, the mechanism of resource allocation has no role in his model. In Ricardo's system, however, it is of fundamental importance.

Lacking the apparatus of resource allocation and the framework of individual decisions of production, the Sraffian model leaves aside one basic characteristic of Ricardo's analysis, namely, the competition among capitalists as a prime force moving the economic system.

What is more important, in the Sraffian scheme of things, as Pivetti (1987, p.873) has rightly pointed out, competition is not related to the problem of distribution. The distribution of profits is, so to speak, predetermined by

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9- Neo-Ricardians would not deny that capital mobility plays an important role in Ricardo, but the fact that they take the level and composition of output and the proportions of factors as constant renders it unimportant in their model.
the fixed original arrangement of production, that is, by the "proportions of the factors of production" correspondent to the initial set-up of the economy, and not by the working of the (competitive) economic apparatus, which, in Ricardo, determines the division of the mass of profits among the sectors and the proportionalization of the rates of profits.

In Ricardo it is the perpetual competition among producers that ensures balanced growth. Furthermore, in the course of the process of economic growth the relative power of the different branches of capital changes position. Money and industrial capital plus commercial capital (linked to foreign trade) rise to prominence, while the more traditional forms of capital, like agricultural capital, lose ground and become (relatively) less important to the economy.

All this is missing in the Sraffian approach which portrays a system which undergoes no transformation at all. But the congealment of the conditions of production and of the level and composition of output (and thus demand) is an external imposition on Ricardian analysis, which frames the economic system in a constant state of change and transformation. The notion of the "centre of gravity" as the long run standing of the economy, we contend, is not part of the Ricardian framework.

In it, the concept of gravitation around the natural position is merely as a reference for producers while allocating their capital to the most profitable of the many alternative possibilities of investment. Such an allocation necessarily involves contrasting that referential price (the
Ricardian remunerative price) with the market price in force.

All these problems with the Sraffian model are compounded by its sheer inability to deal with the case of an "improving society", which is, after all, the cornerstone of Ricardo's system.

The Ricardian setting is that of a society experiencing a process of continuous accumulation and growth marked by changing conditions of production and modifications in its "habits and customs". Rather than taking these as given and proceeding to determine prices, the Ricardian approach aims to understand the sequence of events and feed-back effects that occur in the course of growth. The focus of the Ricardian approach is thus strikingly dissimilar to the Sraffian one.

Take what we have called before the basic Ricardian problem as an illustration. Accumulation of capital, the growth of population, increases in demand and in the cost of production and changes in distribution, all are outstanding elements of the analysis from which Ricardo departed and developed his investigation of the operation of the economic system within the context of growth.

The stationary state is the full description of the Sraffian model. Indeed, the stationarity of the conditions of production and of all the other elements is its distinctive mark, and is so from the very outset of the analysis, whereas in Ricardo this situation is only reached, if reached, upon very restrictive conditions and only after a long process has taken place in time (contrast this with the ahistorical,
static nature of Sraffa’s system).

What is highlighted here is the fact that the Sraffian approach is short of any relation of cause and effect among the elements and spheres constituting the economic system. In Ricardo we see how accumulation leads to population growth and rising demand for food, and how these in turn force the system to operate under diminishing returns in the agricultural sector. There is a chain of events, of causes and effects, of processes, in contrast to the Sraffian method of regarding everything as immutable.

6.3.2- The unchanging nature of consumption in Sraffa.

There is hardly any reference to consumption in Sraffa’s model. What may be inferred from its assumptions is that a certain pattern of demand exists remains frozen throughout the analysis. What is produced is consumed, in what seems to be a strict application of Say’s Law, but there is nothing that explains why such-and-such commodities are produced.

Instead of the view held by Ricardo and the classicals that production is a means of satisfying the desires of consumption of society, in Sraffa we have the reductionist view that production is by, and for the sake of, production. What is produced merely serves to reproduce the physical

10- This is a criticism that Joan Robinson levelled against Sraffa. She, for example, remarked that "[t]here is no causation [in Sraffa’s] model. The prices corresponding to a given share of wages in net output yield a uniform rate of profit on capital only because Sraffa says that they shall. There is no mechanism in the system to make them so" (Robinson, 1980, p.xi).
characteristics of the economic system. Consumption considerations, if any, are thus only incidental to the analysis.

The Sraffian economic system is thus built as though the consumption needs are already and always perfectly matched by production. But while this *ex ante* balance between demand and supply is what one may deduce from the Sraffian data set, and the Sraffian system of equations stipulates the requirements for the physical reproduction of the system, nothing is said about the satisfaction of individual preferences for consumption.¹¹ Are the individuals satisfied with the current level and composition of their consumption? What are their aspirations in terms of consumption?

It really appears that there are no consumption goods in the Sraffian world, only inputs of production and final goods which are but produced means of production. Even the subsistence goods which enter the wage basket are reduced to the role of inputs of production, that is, the (re)production of labour.

Thus, something that is fundamental to the dynamics of Ricardo’s system, and for that matter to all the classical literature, is completely missing in the Sraffian model, namely, the individual motivation of people to exert themselves in the activities of production.

Undoubtedly, one might say that the plain fact that the categories of wages and profits are present in Sraffa’s model

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¹¹- As Garegnani (1987, p.561) has remarked, "[t]he commodity composition of the social product ... was studied mainly from the angle of the needs of reproduction".
is sufficient to demonstrate the existence of motivations for people to engage in productive activities. However, we think that the way in which Sraffa frames his system leads to the impression that the only motivation one can find behind the concepts of wages and profits is the necessity to secure the physical reproduction of the production system.

Wages paid to workers thus serve the purpose of reproducing the labour input in the same way as profits accrued to capitalists serve the purpose of replacing capital advanced. While this image may be broadly consistent with Ricardo's analysis, the latter, however, has an another crucial dimension, one that is completely missing in Sraffa.

We recall that in Ricardo such motivation is influenced to a great extent by the desire to consume from the fruits of their effort, viz., the aspiration individuals have of possessing those things which can fulfil their "wants and wishes". This desire affects, and is affected by, the functioning and growth of the economic system. It is, in short, a powerful force moving the economy. And yet it is entirely submerged under the givens of the Sraffian model. In other words, an element of prime importance in the Ricardian analytical construction is conspicuous by its absence in the Sraffian framework.

The reproduction of the material basis of the production structure of the system certainly is the bedrock of the process of accumulation and growth which Ricardo was primarily interested in, and he manifestly based his examination of economic events on a system where
reproducibility of both the physical structure of production and the commodities (means of production and final goods).

The reproduction of the system, though, Ricardo took for granted. Even in the case of the stationary state, the system would continue to be reproduced, but not expanded.\textsuperscript{12} His concern was with the conditions bringing about the expansion of the economy, i.e., with the prerequisites for securing accumulation and economic growth. The level of profits major among those requirements, but these also included the spreading of the division of labour, the increase in productivity, the amplification of the market, etc., all factors which, as we saw earlier, are tightly connected with the diversification of tastes and consumption and the consequent rise in demand.

It may be said that Sraffa and the neo-Ricardians would not deny this connection, but argue that it was not the main point. The problem is that Sraffians always tend to convey the message that demand considerations are unimportant in Ricardo. The contention is made notably with respect to (natural) price determination, but as they see Sraffa's procedure as the basis of the study of the reproduction and accumulation of the (capitalist) economic system (Dobb, 1967, p.163), that argument is, implicitly at any rate, extended to the analysis of growth.

Demand might conceivably be introduced into the Sraffian system. When the composition of output is allowed to vary due, say, to changes in distribution, an additional set of

\textsuperscript{12} This is indeed the state depicted by Sraffa's model.
equations could be added to the model (see Robinson, 1980, p.148; Kregel, 1971, p.39).\textsuperscript{13} But again that is not the crucial point. Neo-Ricardians would still maintain that demand factors play only a minor, secondary role in economic analysis. They would appear as dependent elements, subordinated to what happened to the physical conditions of production, and not as factors capable of influencing either those conditions or the process of accumulation and growth.

The Sraffian or surplus approach in the words of a sympathetic commentator, characteristically "seeks to comprehend systemic property directly, without the intervention of human subjectivities" (Howard, 1983, p.143). This is seen as a sign of the strength of Sraffian theory and taken to represent the basic feature of the classical economists. To be sure, appeals to "human subjectivities" seem to be anathema to neo-Ricardians and may in part be explained by their ideological and theoretical battle against the neoclassical school, which strongly relies on individual subjective preferences in approaching economic phenomena.

Yet "human subjectivities", or what David Hume called "human passions" constitute a significant part of the interpretative corpus of the classical school of political economy. Desires, aspirations, "wants and wishes", ambitions, interests, emulations, were all recognized by the classical writers as integral components of the cultural,

\textsuperscript{13} - What precisely would be the mathematical problems attendant on this procedure are not quite clear, but as Kregel (1971, p.38) has pointed out, it would greatly increase the complexity of Sraffa's system.
psychological, and institutional fabric of human society and thus having a bearing on the dynamics of the economic system. In fact, as the discussion in the previous chapters has shown, they served to set in motion growth-inducing effects in the economy.

It is curious that neo-Ricardians prefer to ignore this underlying feature of the classical school, when the writings in this persuasion are abundant with explicit details of it. One has only to bear in mind the importance of Adam Smith's *The Theory of Moral Sentiments* to the understanding of political economy to perceive a glaring example of what the Sraffian restatement of the classical analysis lacks in comparison to the original construction. There seems to be no human motivation behind the economic phenomena that Sraffa's model attempt to depict; there are classes of income but not really classes of individuals. In Ricardo it is perfectly clear what kind of motivation drives the action and interests of landowners, workers, and capitalists (and, to some extent, of the different types of capitalists): Landowners resist threats to modify the status quo of society (which in Ricardo's scheme would be tantamount to putting the agricultural interest behind that of the emergent industrial sector and to cutting back the political power and influence of the landed aristocracy); workers yearn for an improved standard of life and are likely to increase their exertions

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14 - In this respect, it seems that classical economics is not that much different from neoclassical economics, despite the latter's more abstract conceptions of "economic man" and of "consumer sovereignty".
in order to fulfil that desire; and capitalists, in turn, stimulated by the prospect of realizing profits, carry on the accumulation of capital.

Another contrasting point between the two approaches concerns the destination of the surplus. In Ricardo it may be directed either to consumption or investment purposes, depending on which class takes hold of it. Or, more precisely, the proportion of the surplus directed to either of those options depends on the share of each class in it. If landowners seize most of the surplus, according to Ricardo’s class-behaviour assumptions, it is principally employed in unproductive consumption; if capitalists manage to secure the greater part of the surplus, then savings and investment and accumulation and growth are boosted; and if it is workers, their aim is to improve their condition through a combination of both savings and higher and more diversified consumption.\(^{15}\)

In Sraffa, on the other hand, the logical result of his assumption of an unchanged scale of production is that the surplus is not used to expand production but must necessarily be employed in consumption. Indeed, Sraffa asserted that with "the emergence of a surplus ... there is room for a new class

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\(^{15}\) That Ricardo expected workers to be able to save part of their wages during economic growth is evident in his support, as we have seen in chapter 3 above, for the establishment of "savings banks", seeking to encourage more prudent financial behaviour on the part of workers (see Ricardo, vol.7, p.26, 134-35, 248). See also his remark in the Principles (Ricardo, vol.1, p.348) that, in general, workers had access to a part of the surplus product which could be directed either to extra consumption or to savings or to the defence of the country.
of 'luxury' products" (Sraffa, 1960, p. 7). This corresponds to the picture drawn by Ricardo as far as the class of landowners is concerned, but what about the other two classes?

The share of the surplus which falls in the hands of the capitalists is also assumed to be wholly allocated to the consumption of "luxuries", in stark contrast with Ricardo’s behavioural assumptions, which say that capitalists have a high propensity to save and invest. Positive profits are the mainspring of accumulation and growth in Ricardo, while in Sraffa, who framed his system in a growth-less setting, they only serve to increase the consumption of luxury goods by capitalists.\(^\text{16}\)

In the case of the working class, Sraffa allows for wages to be variable (ibid, p. 9), in which case wages may incorporate a part of the surplus or net product. As the latter is related to luxury products, the wage basket is likely, if distribution favours labour, to include them.

At first sight this result appears to conform with Ricardo’s analysis. However, Sraffa’s result is derived from a pure abstraction, markedly different from Ricardo’s frame of reference wherein workers are able to increase and improve

\(^{16}\) Again, neo-Ricardians would not deny that in classical economics reinvestment of the surplus is the basis of accumulation and growth. The fact remains, nonetheless, that the Sraffian school has been unable so far to extend Sraffa’s model to the growth context, apart from the development of the value theory and of the critique of neoclassical economics, areas in which it has proved quite fertile.
their consumption, and it arises from his device of the wage-profit frontier, represented by the following expression (ibid, p.22-23):

\[ r = R(1-w) \]

where

- \( r \) = rate of profit
- \( R \) = "standard ratio" or the maximum rate of profit
- \( w \) = proportion of the surplus that goes to wages

Theoretically, \( w \) may assume any value between 0 and 1. Why any particular level of \( w \) is taken is, however, not explained by the model; it is an exogenous variable. The upshot is that the different values \( w \) may take along the \( w-r \) curve cannot in any meaningful way be related to one another as in a process occurring in time. The points along that curve thus refer merely to different alternative cases, and not to a sequence of events\(^{17}\).

By what means can wages rise? Sraffa's approach is silent on this point except in so far as it refers to the world outside its model, viz., "historical conditions" to explain how the initial level of wages is set (Garegnani, 1987, p.561).

\(^{17}\) This is by now a very common criticism of Sraffa's model. Joan Robinson (1980, p.146), for instance, pointed out that "[w]e are only to compare the effects of having differing rates of profit, with the same technical conditions and the same composition of output".
Undoubtedly, historico-sociological conditions are important aspects of the study of wage determination. They are so in Ricardo and in the classical school in general. But to suppose wages to be determined wholly exogenously, valid as this method may be to the examination of some particular problem, is not consonant with Ricardo's procedure, wherein wage determination depends on three main factors, namely

a) the "habits and customs" of the people, which shape the contents of the wage basket;

b) the cost of producing that wage basket; and

c) the interplay between the demand and the supply of labour, that is to say, between the mechanism of population growth and that of the accumulation of capital.

Wages are determined not exogenously but from within the main body of the Ricardian model. Furthermore, the elements which their determination hinges on are interrelated. Not only are changes in the composition of the wage basket allowed for, but are explicitly linked to the process of accumulation and growth through rises in the real wage and taste differentiation which develop among workers as a consequence of improved conditions and habits. This brings us to the question of the relation between alterations in the pattern of demand and economic advancement.

In Sraffa the only kind of goods which have an impact on the level of profitability of the system are the so-called "basics", viz., commodities that enter in the production of each and every commodity. One could say that "basics"
constitute the means of production (the inputs) of the production system. Luxury goods are excluded from this category, because they are pure consumption goods. In fact, they are called "non-basics", and they do not affect profits. Subsistence goods entering the wage basket are, however, included among the "basics" of the system since they are indispensable for the reproduction of labour.

In this sense "luxuries" may be severed from the core of the analysis in that they are irrelevant for the purpose in view, that is, to determine the Sraffian prices of production of commodities produced by means of commodities (means of production).

This practice has its logic within the Sraffian model. But in the market-ruled, competitive system of Ricardo that rationale does not quite apply.

It is true that Ricardo wrote that in so far as the case is that workers do not consume "luxuries", these latter do not affect the rate of profit. But this in fact may not be so much a general rule as much as a particular case. In general, reflecting the fact that wages increase along the system’s growth trajectory, workers are able to diversify their consumption. But Sraffa also allowed for wages to include a part of the surplus, which in his case means access to luxury goods.¹⁸

¹⁸- He however continued to maintain that such goods would not affect the core of the system. Wages, then, would be separated into two parts, as we saw already: one comprising the "necessaries" of workers and included among the inputs of production (that is to say, they are considered
The vital difference between Ricardo and Sraffa, however, is that the former understood this to be a major step towards significantly extending the market for the goods of the industrial sectors and thus making them more attractive for capitalists to invest in. Ricardo gave great weight to market relations (unlike Sraffa, for whom there is no discernible market at all). He then made it clear that the extension of the market (taste differentiation and increases in demand) was of crucial importance for securing adequate conditions for the accumulation of capital and the realization of growth. In Sraffa, on the other hand, consumption changes towards "luxuries" seem not to affect the system, that is to say, there is no link between alterations in the pattern of demand and the transformation of the structure of production; no feedback effect of the kind present in Ricardo and the classical authors.

A further problem with the Sraffian model is that the scale of production is assumed not to change throughout the analysis. While it is claimed that the generation of a basic goods and thus influence prices and the rate of profit); the other comprising the "surplus part" corresponding to the consumption of luxury goods and which does not influence prices and the rate of profit. As Sraffa (1960, p.9-10) put it, "We have up to this point regarded wages as consisting of the necessary subsistence of workers ... We must now take into account the other part of wages since, besides the ever-present element of subsistence, they may include a share of the surplus product. In view of this double character of the wage it would be appropriate ... to separate the two component parts of the wage and regard only the "surplus" part as variable; whereas the goods necessary for the subsistence of the workers would continue to appear, with fuel, etc., among the means of production".
reinvestable surplus is a basic feature of the classical approach rescued by the Sraffian one, "surplus" in Sraffa appears to refer only to an increased supply of luxury goods which do not affect the proceedings at the core of the economy, i.e., the reproduction of the means of production necessary to allow the system to keep going on the same basis as before.

But from the Ricardian perspective some means of production will certainly be subject to diminishing returns, land and the production of agricultural raw produce for example, so that even if we allow that the surplus is allocated with the purpose to increase production, problems of scale crop up inevitably.

Such issues were central in Ricardo’s analysis. Ricardo contrasted the diminished returns characteristic of (domestic) agricultural production with the non-diminishing returns feature of the non-agricultural sectors of production in order to highlight the necessity of expansion in the latter sectors. Since the role of the pattern of demand in bringing that about, as seen in the precedent chapters, is central, assumptions about the scale of production and demand consideration may be after all unavoidable in any attempt at extending Sraffa’s model to the standard case of Ricardian analysis, viz., of an improving society undergoing structural changes along its growth path.

It seems that the task would require profound changes in the underlying Sraffian edifice so as to accommodate the
alterations necessary to deal with the question of accumulation and growth.\textsuperscript{19}

The great problem with Sraffa's model is the freezing of the system from the very outset. This procedure renders it unfit for the analysis of the process of accumulation and growth and of the structural transformation it engenders.

It is true that in so far as Sraffa's model treats production as a circular process, it bears some similarity to the classical approach. However, one of its main characteristics - the examination of the economic system in a frozen situation - is not, in general, reminiscent of the point of view of the classical political economists whose dynamic analysis is set aside in favour of the static analysis of value and distribution.\textsuperscript{20}

\textsuperscript{19} Considering the possibility of such an extension of Sraffa's model to the broader context of growth, and commenting on the issue of choice of techniques, Vicarelly (1990, p.30) rightly asserted that "one definite consequence of the interdependency between technical coefficients and distribution is that dynamic extensions of Sraffa's original model can no longer be seen in terms of a 'natural economy'". Vicarelli also rightly emphasized that in such a case demand matters, since the "importance of the composition of demand is not ... that it invalidates the 'non-substitution theorem' ... but rather that it determines the availability of techniques among which to choose" (ibid). See also Vicarelly, 1989, on this question.

\textsuperscript{20} As Burmeister (1977, p.69) has pointed out, in a critique of the Sraffian approach, by taking "the size and composition of output as given data in every situation, most of the interesting economic questions concerning the equilibrium relationship between [the rate of profit and the wage rate] are assumed away at the very outset. On is left with mere description of given data with no theory about the effects of changes in that data". Eatwell, a neo-Ricardian, has rightly observed that the "classical theory of accumulation is founded on a conception of the economic roles of social classes ... hence the distribution of the product
The unfreezing of some of the model's data is necessary if the reformulation of the starting point of Sraffa's model is to be carried out and the course of economic growth investigated. In particular, its shunning of subjective factors, like those linked to taste formation and differentiation we have been dealt with in the present work, may have to be reconsidered radically so as to bring it in line with the classical approach.21 Indeed, this step will be of profound consequence for the neo-Ricardian view of between the classes of the society is the causal antecedent to the dynamic behaviour of the economy" (Eatwell, 1977, p.62), but the freezing of the structure of the system in the Sraffian approach leads exactly to the neglect of that "dynamic behaviour of the economy".

21- Even the physiocrats, often taken by neo-Ricardians as champions of the objective approach, had a role for subjective factors in their analyses. As Ingrao and Israel (1990, p.43) have stated, the "right of man to enjoy objects that can provide jouissance underlies the concept of natural law as understood by Physiocrats. The continuous reproduction and distribution of the goods required by man's needs are the prime object of the order established through natural law by the creator of nature". They quote Quesnay, for example, as saying that the "natural laws of the order of society are precisely the physical laws of the perpetual reproduction of the goods necessary for man's subsistence, conservation, and well-being" (ibid). Production, reproduction, and distribution, thus, are not only connected to the replication of the physical conditions of the system of production through the production of commodities like in Sraffa, but importantly, also to the satisfaction of man's needs as individuals seeking to better themselves. As Turgot (again quoted by Ingrao and Israel) wrote: "Experience shows us one cause truly productive of movement, and only one: namely the arbitrary will of sensitive and interesting beings ... which is not primitively determined but which determines itself, not by motions but by motives, not by mechanical causes but according to final causes. I maintain that these feeling, thinking, and willing beings, proposing their own ends and choosing their own means, constitute an order as real and as certain as that of entities considered purely material and agitated by purely mechanical means".
economic phenomena.

From this outline of a critique of the Sraffian interpretation of Ricardo, we conclude that it does not correspond to the overall, and we think most significant, characteristic of Ricardo's analysis, namely, the examination of the causes and consequences of the process of accumulation within the context of growth and structural transformations, an exercise which involves demand considerations in a critical way.

Moreover, any attempt to extend the basic Sraffian model along the lines of the classical analysis of accumulation, distribution, and growth seems bound to involve important reconsiderations of some central assumptions and views underlying it, not the least the limitation of its analysis to the case of a "natural economy"²², the outcome of which is not completely discernible as yet.

²²- See footnote 18 above.
CONCLUSION

Rosenberg (1968, p.361), in an article about Adam Smith’s economics, asked the following question: "Adam Smith’s neglect of demand in explaining the determination of natural price is well known. But is it also true, as it is often inferred or assumed, that demand forces play no important role in the Wealth of Nations?" His answer was in the negative. He reasoned that "[a]s an analytical matter the traditional interpretaion is certainly a defensible one. If one confines oneself to the theory of value, the pickings are distinctly lean in that book ... [but] if one is interested also in inquiring into the nature and causes of the wealth of nations - and it is at least arguable that Smith possessed such an interest - it is possible that demand side forces may be utilized in an important way".

It has been the object of this research to argue that a similar question, answer and reasoning may be applied to David Ricardo’s economics.

While it is quite clear that in Ricardo natural price determination is a purely supply side (production) phenomenon, it can be argued - as present analysis has attempted - that demand forces enter in a significant way in his analysis of the process of accumulation and growth.

The main conclusions reached in this research are the following:

a) underlying Ricardo’s vision of the process of accumulation and growth is the need for changes in the
pattern of consumer demand to accompany the structural transformations occurring in the production process;

b) this need arises from the requisite expansion of markets, especially for the products originating from the non-agricultural sectors of the economy;

c) it has to do also with the necessity of generating motivation for individuals to exert themselves more and develop their skills (so as to extend the division of labour and increase labour productivity) and to stabilize population growth;

d) real wage increases on account of rises in productivity, particularly in the wage goods sector (in connection with the production of "necessaries"), are an important factor in bringing about market expansion;

e) a feed-back effect is then established between the process of accumulation and growth, on the one hand, and changes in individuals' consumption preference structure, on the other - which is crucial to the continued course of development;

f) this idea of the importance of changes in the society's consumption patterns for economic growth is quite common in the political economy literature preceding Ricardo's writings, two conspicuous examples being the work of David Hume and Adam Smith;

g) It is possible, on the basis of that idea, to outline a critique of the standard, Sraffian interpretation of Ricardo, especially in its neglect of the fundamental classical notion of individual motivation and self-interest
(which is closely linked to the question of preference patterns of consumption and its evolution) and its relation to the working of the economic system.

Therefore, as a general conclusion, we argue that attempts to deal with Ricardo's analysis of growth, in opposition to his theory of value, should recognize and incorporate his views on the role of consumer tastes in the course of development in order to comprehend his overall analytical system more fully.


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