A Mechanized Society in Charles Dickens’s *Hard Times*

A Dissertation Submitted in a Partial Fulfilment of the Requirements for the

Master Degree in British and American studies

Supervised by: Mr Mohamed Yachir

Written by: Mr Nadir Meddouri

*June 2010*
ACKNOWLEDGEMENT

Above all, I thank God for his help. I address also my thanks to my parents, brothers and sisters for their material and immaterial support. I send my thanks to all the members of the Department of English, including the teachers. As I show also my gratitude to my supervisor Mr. M. Yachir for his considerable help during work. And, thanks for all the students of English and others who sustained me.
DEDICATION

I dedicate this work to my parents, brothers and sisters, to the Department of English, including teachers and students.
This work deals mainly with the mechanization and dehumanization of the English society during the industrial revolution through Charles Dickens’s *Hard Times*. It comes to show this and to emphasize how the ignorance of the morals and emotions leads to inhumane relations between people; employers and employees, teachers and students, and turns men to heartless ones, interested in concretes and materials, leaving aside a great deal of their lives, the human values and principles. This work, also, provides us with the after aftermaths of the industrial revolution, especially on British society, and with an account about the early, middle and late Victorian thoughts and interests.
RESUME

L’objectif de cette étude est de montrer principalement la mécanisation de la société anglaise durant la révolution industrielle. L’étude est basée sur le roman de Charles Dickens *Hard Times*. L’étude vient pour démontrer la mécanisation et se concentrer sur l’ignorance des morales et des émotions qui engendré les relations inhumaines entre les gens (le peuple), les employeurs et les employés, les enseignants et les étudiants, elle a rendu en hommes impitoyables. Ils sont devenus matérialistes en ignorant une partie primordiale de leur vie : les valeurs et les principes humains. Cette étude décret notamment des méfaits des révolutions industrielles, particulièrement la société anglaise en se basant sur les idées et les intérêts qui dominaient pendant l’âge Victorien.
ملخص

هذا البحث يتطرق أساسا إلى آليّة و اللامسانيّة المجتمع الإنجليزي خلال الثورة الصناعية الإنجليزية. وهذه الدراسة النقدية ستكون خلال رواية الإنجليزي تشارلز ديكنز Hard Times. جاءت هذه الدراسة لتوضيح هذه الظاهرة مركزا على أهمية القيم الأخلاقية والعواطف الإنسانية و دورها في بناء مجتمع متوازن. و تأتي هذه الدراسة كذلك لتوضيح و تفسر السلوكيات الناجمة عن غياب هذه القيم الإنسانية في المجتمع الإنجليزي سواء بين الموظفين و أرباب العمل أو بين المدرسين و تلاميذهم. هذه العلاقات أصبحت مبنية على المادية و المحصورات التي جعلت من الفرد الإنجليزي لا إنسانيا منكرة العنصر الأساسي في الحياة ألا و هي تلك الأخلاق الإنسانية. هذا البحث كذلك يدرس عواقب الثورة الصناعية في المجتمع الإنجليزي متطرفا إلى أثارها على طريقة تفكيرهم و اهتماماتهم خلال زمن الملكة فيكتوريا.
Table of Contents

Acknowledgement ........................................................................................................ i
Dedication .................................................................................................................. ii
Abstract ................................................................................................................... iii
Table of Content ......................................................................................................... vi
General Introduction.................................................................................................. 1
Chapter One: The Industrial Revolution between 1760 and 1850 ......................... 5
Introduction ............................................................................................................... 5
  A. Industrialization and Economic Results (1760-1850) ..................................... 6
  B. Industrialization and Human Results (1760-1850) ....................................... 11
Conclusion .................................................................................................................. 16
Chapter two: Industrialization and Mechanization of Humans in Dickens’s Hard Times……………….. ................................................................. 18
Introduction ............................................................................................................... 18
  A. Dickens; his life, works and experiences ......................................................... 19
  B. Mechanization and the Educational System ................................................. 20
  C. Mechanization in Factories and Mills ............................................................ 24
Conclusion .................................................................................................................. 27
Chapter Three: The Victorian Era (1837-1901): Thoughts and Interests. ............ 28
Introduction ............................................................................................................... 28
  A. Early and mid-Victorian .............................................................................. 28
  B. Late Victorian .............................................................................................. 32
Conclusion .................................................................................................................. 36
General conclusion .................................................................................................. 36
Bibliography ............................................................................................................... 39
General Introduction

This work is a critical description of a mechanized society from Charles Dickens’s *Hard Times*. This work comes to emphasize and intensify the importance of the emotional and fictional side of the lives of English people, in general, and Dickens’s characters, especially. Interpreters tended to interpret the novel into industrialism and its bad effects in life. As it is clear in the novel’s text, they refer to heart versus head, fancy versus fact and showed the intention of attack of those conditions of life in England’s industrial cities.

My choice of writing about mechanization is not only to describe how this mechanization of the society is but, to show the importance of fancy and fiction in the life of people. It is, indeed, the factor of social stability, which sows relations of help, morality, love and affection. Whereas, that materialized life is exposed to disappear like those ‘short-lived sparks that so soon subsided into ashes’. Thus, fiction and fancy in Dickens’s novel is not strictly limited to ‘nonsense’, as Mr. Gradgrind define it, nor to physical mechanization of humans as some critics claim, but it bears and evokes all those features of ‘human being’, which defines him above all as human, then as a social one, who needs to live in relation with the members of his society; “Graham Wallas, in his excellent book *Human Nature in Politics*, points out that man who live in a crowded area such as London develop a defense mechanism of social behavior designed to protect them from an unwelcome excess of human contacts” (Bertrand Russell).

Here, I find some interpretations overlooked or did not emphasize human values, which by its loss; men become an organic system designed for producing power in mills and factories. They work under and dangerous conditions for long hours, up to sixteen hours a day. It is, without a shadow of doubt, the exploitation of the workers by their masters, but women and children at the age of twelve to sixteen years old. These masters are interested in
materials, wealth and figures and ignoring social and further human values and principles. Where, the working people are working in humid, dirty and miserable factory conditions. Some estimation calculated that forty-nine thousand children were working under these conditions.

Dickens had been living also under these conditions. Because his father was jailed, leaving him without money supply, a thing that forced him to enter the work force by the age twelve. And this is also what helped him to form his view on how the other ‘half-lived’ people of his time. After his mother had died, leaving enough money with which Dickens’s family reestablished itself, Dickens joined again school. His education gave him the opportunity to obtain a job, observing and documenting parliamentary meetings during the reform movement meetings during the reform movement. Dickens characterizes life in the industrial revolution as the mechanization of the society with a need for the balance between fact and fiction, noting that each class represents different morals.

Dominic Hyland in his book *Hard Times* emphasizes that the education of those days seems to have been much emphasis acquiring facts and an absolute neglect of developing sensibility. He added that the central theme of the novel is the clash between fact and fancy in children’s education. In the same book Hyland claims that the primary concern of Dickens in his novel is the industrial abuses that affect society at that time. F.R.Leavis says, in *K.J. Fielding’s studying Charles Dickens (1986)*, that Dickens’s primary intention was commenting on special characteristics of Victorian civilization. Dickens is concerned with the difference between fact and fancy; that ‘mere fact’ leaves half of our lives out of account is not only sterile but extremely destructive of all those moral virtues.

*The Oxford Companion to English Literature*, edited by Margaret Drabble may give us a general and interrelated summary of the characters, their features, and ideologies which
reflect the theme of mechanization shaped by ‘practical beliefs, cynical thoughts, and the misguided exponent of Utilitarianism’.

To tackle the issue of my work, I deliberately divided my work into three chapters. The first is entitled ‘The Industrial Revolution between 1760 and 1850’. When we refer to revolution in industry; we mean that change from rural Britain to industrial society and to urbanization. Industrialism at that time affects people to regard the materialized life upon social and moral considerations. Industrialism, indeed, achieved unprecedented materialized progress, but its impact on the people’s being reached its bitterness. In this part, I would like to display the economic and human results brought by industrialization, and to show how this revolution and its impact became an area of concern for most writers and historians of that time.

The second chapter is a “genre” of critique of industrialism and its bad effects on the society. I found of Dickens’s life and his novel *Hard times* a good sample to refer to the mechanization of humans during the industrial revolution. Dickens was an eye witness of the period; his novel is, thus, more realistic portrayal of how the English society had been living. Though, by investigating Dickens’s ideas, descriptions and fictional elements, in the novel, we will discover the harshness of life during that period. This chapter is entitled ‘Industrialism and the Mechanization of Humans in *Hard Times*’. Here, it is useful to include the life of Dickens and his deeds and then critically depict how mechanization is at the level of schools (education) and factories. Workers are working side by side with factory machines; children are taught only facts and figures, hindering the development of their emotional and fictional side of their lifves. People’s living is crippled; they work continually without rest, with less wages and condemned to live in miserable and oppressed conditions. They are treated by their employers like items but not humans.
The third chapter is about the Victorian way of thinking, their interests in life, writing and ground of investigating, between early, middle and late Victorianism. In it, I explain social Darwinism and how it affects society. It is, in fact, especially after 1850, a period marked by an emphasis on ‘rationality rather than tradition and scientific inquiry instead of unquestioning religious dogma’.
Chapter One: The Industrial Revolution between 1760 and 1850

Introduction

It was until the middle of the 18th century that the industrial revolution transformed rural Britain into an industrial society, which led at the end to economic development. This revolution began first in England because it involved all the equipments necessary for it. Britain possessed overseas markets, fluid capital, banking and province, internal free trade, political stability and even sufficient wood fields.

The period of the industrial revolution was characterized by a wide range of inventions. This was because of the considerable growing population in the field of fuel supply, metal melting, cloth and food manufacture, James Hargreaves invented the spinning machine in 1767, because the output cottage spinning wheels had become unequal to the demand. It was improved, later on, by Richard Ark Wright, who invented a water power driver machine. James Watt invented the steam engine, after the discovery of coal, which revolutionized the field of transport and further contributed to the success of the industrial revolution.

However, the fundamental characteristic of the industrialization process was the introduction of mechanical power to substitute human and animal power. The application of mechanical power to production brought with it the efficiency of the workers productivity; it made goods abundant and cheap. Yes the industrial revolution brought substantial progress and prosperity, which should have been bettered people’s life but unfortunately.

Asa Briggs, an English social historian, sees that the industrial revolution affected more and more people’s way of living, thinking and feeling (223). And, since this impact was morally
and socially disapproving, Briggs adds that “much of the early critique of industrialization was moral and sociological rather than economic” (224).

A. Industrialization and Economic Results (1760-1850)

The coming of industrialization and urbanization implies changes in agriculture. It was the advancement of non-agricultural sectors of economy and the decline of agriculture. Before the mid-eighteenth century, agriculture was the largest provider sector for industry in economy, concerning raw materials. As it was also the greater contributor sector in the savings of economy by more than 60 per cent; from landlords’ rents and farmers’ profits. This raised collected capital designed for investment in and outside agriculture. It was indeed the most profitable field of investment at that time. Investment outside agriculture was mainly in transport, but after the introduction of the banking system, investment was widely spread in the rest sectors of economy, thus, agriculture and industry knew mutual capital flows.

Like this, industrialization rose with its problems; labour force and food supply. This was because of the incompatibility in the growth of labour force in industry, in agriculture, and population growth. The stability of this latter led, by its stable and constant demand for agricultural output, by the sector of agriculture to diminish, thus the migration of labour force to other sectors, especially industry, and then to an excessive demand for jobs in industry and less food growers. As a result, food prices rose with the less paid wages provoked food rioting, political problems in the towns, then the necessity of importing food on behalf of raw materials and equipments for industry. And high proportion of the wage bill was absorbed by those high prices, which turns the workers into breadwinners.

Agricultural failure was a short-termed bad harvest, when payment for corn imports caused a reduction in domestic income. This situation lasted until the second half of the
nineteenth century, when a small proportion of the population still relying in its food on the imported food supplies, because the total output rose in agriculture. By the early nineteenth century, there was a ‘depression’ in British economy, caused by abundant harvest with lower prices, where the only losers were the farmers and landowners. This “bulk of increase in productivity” (Hobsbawm76) was due to the full mechanization of agriculture and farming land, and because of technological innovations and improvements, that is the total modernization of farming (Ibid).

In addition to the mechanization of farming, governmental policies played an impressive role, by its Acts, in the regression of agriculture. Government was rationalizing private properties and holdings, and striping peasants’ holdings and lands, and letting labourers out of work, and rendering landowners wage labourers. This was through ‘enclosures’¹ and ‘poor laws, around 1835(Webb109, 140).

In 1801, the agricultural contribution in the national income was nearly one third, which is the efficiency of 36 per cent of labour force. Whereas, this proportion decreased to 20 per cent in 1851, and to 6-7 per cent in 1901, a decline that had never been witnessed by the world’s countries. After seventy years of expansion, before 1815, the British farming entered its ‘golden age’. In 1850s, the conditions of the labourers changed from worst to better. This was not because of agricultural developments but thanks to the growing of railways, mines, cities and overseas, which absorbed the working hands and caused rural labour shortage and slightly higher wages.

¹ A process known in many European countries by which commonly held or unoccupied lands or wastelands passed into private ownership. Stimulated by improved agricultural methods, the rise of a landlord class that farmed for profit rather than for subsistence, and the growth of cities as large markets for agricultural products, enclosure resulted in a tremendous increase in agricultural productivity and income. The process also resulted in problems for tenants farmers, who were often displaced without reason or compensation by landlords who wanted the land to serve their own interests. However, in its broadest aspect, enclosure was a key element in the transition from feudal, subsistence agriculture to modern, commercial agriculture (Encarta 2009).
Industrial innovations that had been occurred during the life of the industrial revolution were those techniques and instruments introduced in industry. The secret of the industrial strategy, in production, was the endurance and the rapidity of the engine force. No one can deny that employing the steam engine and iron machinery was the giant step in industrial and technical progress and dominance. The achieved technological level in Britain, around 1800, due to a coming together of a set of factors; mineral fuel technology, cheap iron and coal and skilful mechanical engineering and accurate metalworking (Webb 111-12).

James Watt invented the steam engine, Mushet and Neilson’s invention was in the iron industry, Telford and Loudon Macadam appeared in transport, and Nesmith and Fairbairn in engineering. During 1790s a score of engineers in Cornwall, Lancashire, Northumberland, Birmingham, Scotland and London were developing stressful locomotives, engines, boat engines, bench engines and steam carriages. Watt’s engine was the most reliable, since 1800, around five hundred Watt engines had been made up a considerable part of the total 1200 to 1330.

These great innovations were not reached through a mere scientific, based on scientific rules, or educational techniques. It was due to some non-scientific, careless and might be hazardous thinking and attitude of the inventors such as; intense curiosity, hard determination, quick wits, luck, capital, and intelligence. Those innovations and developments came out of practical thinking, a thinking that discovers, correct and ameliorate the defects and shortcoming of the available devices to make of them more sophisticated and efficient. The inventors and innovators of that time were those inspired unprofessional and skilled artisans worked as clock-makers, mill-wrights, and black smiths. They were not scientists, but men interested in scientific things and who practically react towards particular problems.
Like this, it appears that the efficiency of the steam engine increased gradually by almost three-fold, and helped other separate and small innovations to improve. By 1850, these skills and techniques were not introduced until the development in strategic industries, such as iron and textiles, created the requirement of these skills in the production of iron machinery and other new forms of power.

The effects of all these innovations during 1700s were considerable. Agricultural and industrial output flooded the markets, which led prices to decline and then to less profit savings at the industrialists. The industrialists were complaining the lower profits, and tried to reduce production to raise prices and cut costs to invest on the latest machinery. Investing more on machinery innovation allowed more complicated, big machinery to be built, and more powerful engines. This was due to Watt’s development of the ‘double-acting low pressure engine’. This large and developed mechanization of industries could lead to larger production, and provide transport with the power needed to carry goods and materials. Cotton loom was, also, a great machine, which had been used in weaving and cotton industry. This machine was issued by Arkwright in 1785.

Between 1700 and 1850, steam power, coal mineral fuel technology, iron machinery, engineering skills, and a deliberately located industry near cheap coal. Steam power was the standard engine power for every industry and transport. All these innovations could overcome the natural difficulties that hindered the economy, and get rid of those traditional processes of industry to replace man and animal muscle power with water and wind power.

However, the real application of the railway was in 1830, by the opening of Liverpool and Manchester railway, through parliament. This was because of the insufficient canal transportation. The increasing need of merchants and manufacturers need to distribute their output from Liverpool and New Orleans to Manchester. Liverpool and Manchester railway
was considered the first modern railway. Railways were the only means of transportation able to satisfy the social and economic needs, especially with the rising of the urban revolution and mechanized industry. The increasing development of the railways associated with the industrial revolution and industrialization, and reached its revolutionary transformation. It achieved about six thousand miles long, between 1830 and 1850 (Hobsbawm 88).

The importance of the growing of the railways was that it was a stimulus for economic activities, a job creator, a capital investor and economic resources exploiter. This is well illustrated in the following citation:

An entirely new kind of mobilization of labour was needed---from the gangs of navies to build the lines to the skilled and responsible men who drove the engines and operated the signals …. These magnificent enterprises had a striking impact on the economy, the ways of life, and the sensibilities of the entire country. Railway construction employed huge numbers of workmen and the vast expenditures---Capital outlay on railways by 1865 equalled half the amount of the national debt---created booms in those industries notably iron and engineering, that supplies the materials. (Webb 269)

The railways, indeed, achieved, during the period between 1830 and 1850, a revolutionary development. The Railway Act of 1844 was a prominent indication of laissez-faire triumph in the early Victorian period. It is said that a free economy existed in the eighteenth-century England. But, by the social, human and material results of industrialization, state intervention came to expand quickly (271).

The triumphant of laissez-faire policy was in 1850. The greatest reason to its legislation was ‘an attempted defence against the vagaries of economic dislocation’. It was because of the surrounding and pressing problems of the foreign markets, domestic industry, shipping, and the absolute idea of economic dogma, which is mercantilism. This was individualistic doctrine, and a programme transformer of the English common law system and judicial
procedure. Those circumstances of laissez-faire emergence were the result of the preached doctrine: ‘the greatest happiness of the greatest number’ (Thomson 30).

The rise of industrial capitalism stressed innovation, competition and then individualism. For Adam Smith “people of the same trade seldom meet together, even for merriment or diversion, but the conversation ends in a conspiracy against the public, or in some contrivance to raise prices” (Ashton 103). This citation clarifies the condition of competition between the competitors among them, and its impact on the innocent public. It was, in fact, ‘a dog eats dog’ policy, that dominated the behaviour of the competitors and this quotation suggests this: “The smaller productive units in metal mining had less economic power. In the middle years of the eighteenth century the copper-miners of Cornwall were, indeed, themselves exploited by the smelters of Bristol and Swansea, who had associated to press down the price of ore” (Ibid).

It was the condition in other fields; markets and employment. The doctrine of Smith’s laissez-faire expanded from economy to the whole society. The economic story of the industrial revolution came to be a social one. The spread of individualism in the society was enhanced by material and educational divisions, a thing that worsened the social relationships. In general, the impact of the industrial revolution on the society was very oppressing.

**B. Industrialization and Human Results (1760-1850)**

The changes brought in Britain during the industrial revolution created new orders in social life. It led to a matrix of social classes; “the acceleration of proletarianization, urbanization, technological and organizational change in both agriculture and industry may well have enhanced the formation of class in this sense during the industrial revolution” (Hudson 202). This order of social stratification and the struggling for power and existence set
a new mode of life. The emergence of a new type of class society, the Middle class, with its features and new social identities is very striking and affective in this process. The relationship between these classes based on the power of wealth, level of education and parliamentary influence.

The upper or the aristocratic class was little affected by the industrial revolution, but it was bettered. It was the landed aristocracy whose source of income was came mainly from rents. These rents increased with the expansion of cities, factories and railways on the extent of their estates (Hobsbawm 58). This was because is a primordial element either in agriculture or in industry, and before and during the industrial revolution. And investing on this land is beneficial for them.

They had an absolute self-confidence, assumption and ability to lead the society. Their feeling of material and educational superiority, and even their parliamentary influence made them living aloof as one class (Harrison 93). This is what Edward P. Thompson (1924), a British historian, referred to as “class position and class feeling” on the class construction, following the same interests and having the same destiny, when struggling against other classes.² (Hudson 204).

The process of industrialization brought with it a new social class. It was the new rising class of industrialists and merchants, which was absorbed into the ranks of the Middle class. It was the successful wealthy class people who would become ‘gentlemen’ with a country house, a seat in parliament and Oxbridge education for their children (Hobsbawm 61). It was the most beneficiary class of the changes brought by the industrial revolution.

The challenge of the Middle class with the upper class was not to worsen and aggravate the political tensions between the partials of the powerful and rich class, or to

destroy their benefits and virtues, but rather it disagreed on the political leadership of the society. If the aristocrats, or the landed gentry, benefited from the wealth of those industrialists, the Middle class would enjoy the virtues of ‘social prestige’ that was measured by the extension of land owned.

Within this class itself, there was assimilation between its elements, but the merchants and overseas tradesmen were more respectful and praise-worthy comparing to their peers of the industrialists, whose richness were mainly the rewards of factories, Mills and foundries, which covered the northern skies of Britain with dark fog and smokes. Their social and political elevated status was due to their economic power.

This economic power allowed them access to shift up into the aristocratic class (landed society) throughout two ways; marriage and purchasing lands to belong to the landed society. Likewise, the children of the landed and non-landed classes brought up side by side with the gentry aristocratic children. Thus, the new Middle class adopted some attitudes and forms of gentility and retain some interest in business (Harris 6-7, 69). So, the rising industrial Middle class could undermine, with its economic power, the landed class, and this latter made capital out of the material prosperity brought by the middle class to reinforce its traditional ruling elite for nearly the whole nineteenth century.

After 1830, it felt with its strength to rise up to the ranks of the aristocracy. Despite of its traditional non-Anglican stocks and poor labouring origins could carelessly rank into the Middle class. The industrial revolution provided them with a solid ground to develop their traditional ethics, such as ambition, thrift, hard work and self-reliance. These characteristics helped them to better their life, establishing a satisfactory material and spiritual means for life. Money that was earned from their expanding business became no more a problem
That is, the Middle class’s wealth and social prestige paved to it the way to rise to the ranks of aristocracy.

The raise of industrialization ruined the traditional way of life of the labouring poor and turned them into working class or proletariat. Those poor were breadwinners, who work with their hand for a cash wage. Industrialization pressed upon those labouring poor a new and repeatedly boring ways of work based on “the tyranny of the clock” (Hobsbawm 64), when the workers were not used to adopt these new ways of life. They were working under rigid and unchangeable work discipline, fines and low wages, which hardly kept them alive.

The industrial labouring environment was the big cities, where miners, weavers, nail and chain-makers activities occurred. Likewise, large areas of the countryside were disfigured, deteriorating the physical conditions of life in the overpopulated cities in north England. John Ruskin “felt that industry not only disturbed human relations but led inevitably to the deterioration of the physical environment” (Briggs 225). In this way, the social change brought by industrialism was largely appeared in the problems of overpopulation, pollution and the spread of epidemics of Cholera, Typhoid and the intestinal diseases that destroyed the society.

It implies that most of the population, more than 50000 inhabitants, was living in the industrial cities rather than rural areas. Those people migrated in masses to these cities in quest for employment and adequate public services for a stable life. But, the overpopulation in countryside made employment better and gave more opportunities in cities rather than in agricultural areas. This was because of a large spread of industrialization and the factory system.

The industrial revolution, with its factory system, set up a great gap between poor and rich, and between the industrial class, which owned the means of production, and the working
class. It was followed by a ‘rift’ between capital and labour. In the nineteenth century, the domination of machinery use ruined the working class; workers were replaced by women and children. Their working and living conditions were extremely bad; they worked for unbroken and long hours, up to sixteen hours a day; children were working in miserable Cotton mills; women left home tasks and children to harness for tracks, under appalling conditions in dark dampness and humidity.

Some critics of industrialization felt uneasy about these conditions under which those workers were “obviously not better-off” (Briggs 224), and others consider them as “an agency of social (particularly family) disorganization” (220). However, greedy employers pretend to consider their suffering and poor and horrible situation, especially when these high prices were to be paid, as ‘the greatest happiness of the greatest number’, under this misleading utilitarian philosophy of the early Victorian. Here, it was the employers’ self-deception, which they cannot bear to surrender to this hypocritical utilitarian philosophy.

The paradoxical story of material and social life of these working paupers, in comparison with the well-off industrial class, does not really differ from that is in Charles Dickens’s *A Tale of Two Cities*. This paradoxical in the lives of rich and poor of that period is presented by E.J. Hobsbawm in: some are more in need than the others, and some are lived in more comfort than the others (Engels 12-13).

The situation of poverty and social pauperization led to popular unrest. This social and economic revolt emerged from what is conceived ‘conscience social’ by the Marxist thinkers, which was due to certain factors resumed in:

Morals are a changing social phenomenon through history, which are designed by those objective social conditions of life; by social relationships, economic relations, especially
between social classes, the development made in the social cultural evolution, and the prevailing social system (Drobnitski 10).

Likewise, in 1840s, people started burning factories and destroying machines, and as a result, this economic unrest was joined with a new political ideology shaped by the wealthy class consciousness; trade unionism and socialism. But in some factories, the practical system followed was based on Adam Smith’s principle. This new system, the capitalist socialism, still stays used by the wealthy class to keep the monopoly and exploit labour.

**Conclusion**

At the end, it is recognizable that the coming of the industrial revolution and industrialization is, in fact, accompanied with remarkable changes, starting by the mid-eighteenth century. These changes are divided, to serve the theme of this work, into economic and human (social) results or changes. The economic changes were mainly those innovations, such as the large machines and the railway entry, and the domination of urbanization by the built up of factories and mills, setting up huge industrial cities.

The human changes or results were highly considerable, and what is dealt with in this chapter is just a small portion from the whole. The most important of these human results was the new stratification of social classes and their conditions of life, which brought with it a new social order. Where, social considerations were replaced by economic ones. What is more prominent also in this new social order is the emergence of individualism and the spread of “laissez-faire” policy.

The English industrial period was a prominent in the history of England. It was an interesting field for social, historical and economic investigations; this is why most of the historians and writers of that period, and even those of the period after, had more or less
important things to say about it. It was an area of concern for many writers, when their writings came to be realistic portrayals of life conditions. And in the following chapter, we are going to discover other human results of the industrialization. This is through Charles Dickens’s *Hard Times*, a fictional portrayal of real life in England during the industrial revolution.
Chapter two: Industrialization and the Mechanization of Humans

in Dickens’s *Hard Times*

**Introduction**

As it is clearly displayed in the first chapter of this work, England’s nineteenth century witnessed a rise of industrialism. It was at that time that capitalism first stretched, accompanied with the ‘old-fashioned labour laws’, which ranked the socioeconomic classes. It caused also a lot of if not a complete destruction and disorder on the lives of masses of people. However, these issues of the industrialization, and other sub-issues, which might seem less important in the eyes of some writers and historians, were the mere interest of many writers and thinkers. Among them, some are realists, such as George Meredith, Thomas Hardy, Charles Reade and George Borrow, and others are satirists and social reformers as William M. Thackeray, Benjamin Disraeli, Charles Dickens and others.

Charles Dickens is a famous satirist and social reformer. He wants behind most of his novels social change and reform, and the cure for social ills, which are known as ‘Condition-of-England question’. Dickens is also well known for his *Hard Times*, the satirical portrayal of hard moments of the industrial revolution.

And, since the historical and realistic novels are merged together on one side in literature, *Hard Times* may involve something historical. To justify this, it is enough to consider the industrial revolution a historical event. And then, even though *Hard Times* is a fictional piece of writing, it may be more realistic than fictional.

This chapter is devoted to Dickens’s *Hard Times* since the mechanization of human being during the industrial revolution through *Hard Times* is the core of this work. In this chapter, and according to the theme, it is better to give at least hints about the life of Charles
Dickens, his works and experiences, because he lived the period of the industrial revolution. And then, to shift to critically analyse the issue of mechanization at the level of school (education), and factories, that is the mental and physical mechanization of people which turns them into zombies.

**A. Dickens; his life, works and experiences**

Charles Dickens (1812-1870) was a self-made man, who raised poor and succeeded to reach fame and to establish a happy life. Despite the obstacles he encountered, he could overcome them. After his parents’ financial support declined, he left school to work in a shoe blacking factory in London to sustain his life at the age of eleven. Afterwards, when his family had established itself, he joined the school again. His education allowed him to obtain a job as a parliamentary reporter in 1830.

His past experiences as a working child among common people under the pressures of their cynical entourage must had been able to feel what they feel and to know about their inner pains. And his working as an observer and reporter of parliamentary meetings paved him the way to learn more about the political system and the socioeconomic policy of the authorities towards his people. Some people say that Dickens has a very “hypersensitive imagination” (Westland 118), and the Victorians were “extremely sentimental” (119), but this might be explained as a result of the industrial revolution and its impact on the inner side of Dickens and his people. This is why the industrial revolution came as a turning point in the social history of England, which brought new feeling and way of thinking that began to change just by the beginning of the Victorian age. Where, the domination of Church and religion started to decline.
The decline of religious domination remarked in the decline in the number of church goers and chapels. Those who did not attend were mainly the members of the working class. And this phenomenon began in the towns of industrial areas (Harrison 124). This was a very striking aspect of change brought by industrialization.

Dickens’s witnesses and experiences for social realities of his time were his main source of his inspirations. His *Sketches by Biz* (1836) about London life is a set of successful collected essays from his readings of the novels and journalism of the eighteenth century. He wrote many novels starting by *The Pickwick papers* (1836-37) to end with *Mystery of Edwin Drood* (1870). Dickens is known for his *Hard Times* (1854), *Oliver Twist* (1837), *Barnaby Rudge* (1841), *Bleak House* (1852), *A Tale of Two Cities* (1859) and others. In most of his novels Dickens feels deeply with the social injustices of his day. He had been travelling and giving public reading inside and outside England; in Paris, United States, Canada and elsewhere. The motivation behind his activation was to reach social improvement (Westland 119-20). Dickens’s *Hard Times* (1854) is a critical piece of writing for the utilitarian ethics and Manchester business theories. Manchester is referred to by his fictional town Coketown, including the whole industrial cities of north England. In these cities people of the working, poor and even young children were working and living under oppressive and dazzling life.

**B. Mechanization and the Educational System**

In *Hard Times*, Dickens speaks of a mechanized society, which is presented and embodied in his fictional characters. In this work, when referring to the mechanization of humans, it is not strictly limited to the physical mechanization, but it involves even mental mechanization. This is because physical and mental mechanization generally go together; the mechanical behaviour of a person is likely done without thinking. In other words, it is done carelessly without taking into consideration the results the person’s behaviour.
Likewise, the process of mechanization of the society in *Hard Times* does not begin in the workplace, but rather in the school system. Where, the basic principle of Thomas Gradgrind’s educational system is only facts and nothing else that might encourage the development of the children’s imagination and creativity. Dickens chooses to explain Gradgrind’s, the central character, theoretical proceedings. He disapprovingly personifies the utilitarian philosophy through conveying the ideals and evils, good and bad of the utilitarianist teacher. In this sense, Kevin Manton, politician and historian from the university of London, indicates that socialists of late nineteenth century “frequently condemned both working-class parents and teachers for exploitative brutal behaviour in part to environmental influences” (Pederson³).

From the beginning of the second chapter of the novel, Thomas Gradgrind is presented as “a man of facts and calculations” (Dickens 2). Dickens characterises him as “a man who proceeds upon the principle that two and two are four and nothing over, and who is not to be talked into for allowing for anything over”( 2). Mr. Gradgrind is a well known person in Coketown. He considers himself an “an eminently practical” (9) man and believes that nothing is important in life apart from facts and figures.

In Dickens’s *Barnaby Rudge (1841)*, the eighteenth-century man is described as a “polished gentlemanly, heartless and false” (Pollard 2). According to this description, the eighteenth-century man is nearly the same as Gradgrind in his character, and this rigidity of mind and heart justifies his mental mechanization.

The story of the novel consists of different scenes. The first chapter of *Hard Times* takes place in a schoolroom, where Mr. Gradgrind, a school owner, sees that children should

³ Joyce Senders Pederson is an Associate Professor in British History at the University of Southern Denmark, Odense. She has written a number of monographs on the history of education and women’s history in England and is currently working on a study of men and women’s friendship in 19th century England.
be taught only facts. He explains his educational philosophy in the first chapter of the first part (book) saying: “Now, what I want is, facts…. Facts alone are wanted in life” (Dickens 1).

This citation shows that Gradgrind begins to insert his thoughts and ideas in the minds of his children. To testify the extent to which his educational system is successful, Gradgrind asks the lady Sissy Jupe, a working-class child, to define a horse. She provides him with an acceptable and reasonable definition as most of her mates do except Bitzer. Mr. Gradgrind, thus, becomes disapproved of Sissy and her answer.

Another student, Bitzer, succeeds to provide Gradgrind with a mathematical definition based on calculation and figures as follow: “Quadruped. Graminivorous. Forty teeth, namely, twenty-four grinders, four eye-teeth, and twelve incisive. Sheds coat in the spring; in marshy countries, sheds hoofs, too. Hoofs hard, but requiring to be shod with iron. Age known by marks in mouth” (Dickens 4). Bitzer by his definition makes of Gradgrind happy. Gradgrind replied, praising him saying: “Very well”… “That’s a horse” (5). Here, Gradgrind succeeds to manipulate Bitzer, and press upon him his thoughts and ideas. But, he does not manage to influence Sissy. Thus, Education is a very sensitive means to influence and change the society. Through education, Gradgrind begins in the first step to “brainwash society” and turn its members into working zombies.

However, it is easy to recognize the children’s condition during the industrial revolution, how they were treated and shaped by their environment, and Dickens was a witness on that, including education as the case of Gadgrind’s education. And the following citation displays well the role of education in shaping the society: “Every human being, after the first few days of his life, is a product of two factors: on the one hand, there is his
congenital endowment; and on the other hand, there is the effect of environment, including education” (Russell)⁴. 

Sissy Jupe represents the qualities of imagination and heart in social life. These natural feelings are indeed undeniable either in individual or social life. This is why Gradgrind failed to impress her, and she does not accept his principles, and she leaves his school. Sissy, thus, is a symbol of the necessity of human values either in social or economic life, and reality could justifies that, for example communism prevents invention, which comes out of imagination, and capitalism makes of people mechanically behave to acquire as much as possible of money. This is the role of human values in life in general.

Sissy’s rejection for Gradgrind’s factual instructions is also a sign that those human values and feelings are natural, and no one can deny them in life, and especially when it is the matter of the relationships of social life. And, this is what Gradgrind is trying to do, but unfortunately with Sissy Jupe. However, respecting these natural features of men is, indeed, a factor to establish individual and social life in a right way. And, Russell, the British philosopher, indicates in this context that “the moralist is tempted to ignore the claims of human nature, and, if he does so, it is likely that human nature will ignore the claims of the moralist”⁵

Like this, Dickens in his novel *Hard times* tries to picture how the social and economic reality was, and pushes us to understand how should it had been, aiming to make us, through his descriptions for the setting and the characters of the novel, understand whether such life, a life without emotions of help, friendship and sympathy between rich and poor, teacher and student, and employee and employer, is possible or not.

---

⁴ Check the idea in the introduction of Russell, B. *Human Society in Ethics and Politics*. New York: Rockefeller Center, 1955
⁵ The citation is taken from the introduction of Russell, B. *Human Society in Ethics and Politics*. New York: Rockefeller Center, 1955
Louisa is another victim of Gradgrind’s oppressive instructions. She is influenced by his thoughts; she is crippled in her natural features, heart and imagination. Here, Dickens wants to show the shortcomings of the prevailing educational system of the nineteenth century. England’s nineteenth century industrialization, in fact, reached a revolutionary level till it made of human beings like machines, by hindering their emotions and imagination. The process of mechanization can be seen at Gradgrind’s attitudes, and his manner with which he treats his children in his school. As it can be remarked at Bounderby’s treatment for the workers in his factory, regarding them as objects among the factory equipments designed for exploitation for personal interests.

In the fifth chapter of the first book (part), Dickens describes the life of Coketown’s people as a boring and cyclical one. Workers are working side by side with machines like the “head of an elephant in a state of melancholy madness” (19). And, are condemned to live like this, without hope and uncertain future since “every day was the same as yesterday and tomorrow, and every year the counterpart of the last and the next” (Ibid).

C. Mechanization in Factories and Mills

Among Dickens’s purposes in *Hard Times* is to attack the life conditions in England’s industrial cities. His fictional town of Coketown is modelled on Manchester in the north on England. These industrial cities, such as Manchester and London, contributed to produce England’s wealth and made the industrial power of the mid-nineteenth century, but the cost in human happiness was great also.

Coketown was an “ugly citadel, where Nature was as strongly bricked out as killing airs and gases were bricked in” (Dickens 56), this quotation hints to the risky factory life of the workers. For Engels, the German political economist, the factory hands work long hours
under oppressive and threatening condition, which may lead to their death that is more violent than that by sword or gun-shot (Engels 139). These witnesses from Dickens and Engels, and the way are portrayed, are enough to believe the seriousness of the conditions brought by the industrial revolution.

They live in narrow, unsanitary hoses, and their lives never change; each day is the same as every other day. There is also a strict uniformity in everything, and the workers do not have even time to relax and enjoy themselves. The following citation from the novel clearly portrays this:

> It had a black canal in it, and ... and where the piston of the steam-engine worked monotonously up and down like the head of an elephant in a state of a melancholy madness. It contained several large streets all very like one another, and many small streets still more like one another, inhabited by people equally like one another, who all went in and out at the same hours, with the same ... every day was the same as yesterday and tomorrow, and every year...the last and the next. (Dickens 19)

Regarding the style in which the workers’ life is modelled; that uniformity in time and space, and their movements are conditioned by “the tyranny of the clock” each morning and evening, and by their working side by side with the machine, clearly displays the mechanization of the workers’ physical side of their lives.

T.S. Eliot, in his “The Waste Land”, refers to London as a waste land, because of such mechanical life of its people. And the relationships between them are physical, lacking for emotions, especially in the marital life, which is justified by the spread of prostitution. This physical relationship outside marriage, in London, is morally polluted. This sinful relationship never be washed even by “soda water”. This is what suggests the absence of spiritual life, such as love, at that time. There is also the ‘typist’ of letters for her whole life makes of her mechanical in doing other tasks;
The typist home at teatime clears her breakfast, lights
Her stove, and lays out food in tins

Josiah Bounderby of Coketown represents the utilitarian attitude, and he is the bad character of the novel, and he is the subject matter of dickens’s criticism for his factory-policy towards the workers. Dickens describes Bounderby as a powerful and wealthy self-made man, after he had been a starving vagabond (14). To emphasize Gradgrind’s way of thinking, Dickens makes reference to the two English economists; Adam Smith, who advocated free trade and “laissez-faire” policy, and the English economist and churchman, Thomas Robert Matthews, who advocated population control (Hyland 18).

A primary working class theme is found throughout Hard Times. They are the managers, such as Bounderby, whom unjustly live in the top of luxury at the expense of the workers, and the following quotation clarifies this: “The inhuman economics of commercial and ‘advanced’ farming strangled the human values of social order. What is more, the very wealth of the increasingly prosperous farmers, with their piano-playing daughters, made them ever more remote even inspirit, from the pauperized labourers” (Hobsbawm 82). This quotation shows that wealth makes the well-off people spiritually raising up from the reality lived by the working class. And wealth was in the eyes of the early Victorians as “the sole end of man’s existence” (22).

Whereas, those “lower creatures of the seashore, [who are] only hands and stomachs” (Dickens 56) are suffering just as breadwinners to sustain their lives and those of their families. They work for the whole day for little wage, because it is, without doubt, the masters’ exploitation for them, following “the end justifies the means”, ignoring the humanity of those workers. In reality, and during the industrial England, many entrepreneurs and
managers made capital out of cheap labour to enrich themselves. But, they were risking their money when investing increasingly huge amounts of money, following their greediness.

**Conclusion**

The butter of discussing this chapter is those relationships between the novel’s characters, either between teacher-student or master-worker do not established on humanitarian relations. By these relations, Dickens wants to refer to those among the industrial society. When stylistically analysing the novel’s text, within language and tone, Dickens is disapprovingly criticizes the industrial society. He refers to the mechanization of the society not only to bring the outlook picture of social life, but rather he wants to show that the thing that makes of the society mechanized is the lack or the disappearance of those moral and emotional values, which define the man as a real human.

The industrial society seems that it had been living under the roof of the utilitarianism, but in fact it was not. In *Hard Times*, it is a hypocritical utilitarian philosophy, which its supporters and followers pretend to have moral standards in social life. Such hypocritical behaviour seems to do not endure because of this hypocrite feature at those people. It was just an interrupting transition in the social history of England. The early and mid-Victorian thoughts and interests were mainly the result of religious domination for social, economic and political matters. But, by the late Victorian, scientific thinking came to doubt and question those old-fashioned principles imposed by religious dogma.

The following chapter is an account of the Victorian thoughts and interests from the early to the late Victorian era. After the material prosperity and full employment, religious control began to decline increasingly. And by the advance of science, religious control was destroyed during the late Victorian, a transitional era from Evangelicalism to agnosticism.
Chapter Three: The Victorian Era (1837-1901): Thoughts and Interests

Introduction

Victorian Britain was the period lasted from 1837 to 1901, the period through which Queen Victoria reigned for a longest period in the history of England. It was an era of prominent mental and ethical changes and scientific developments, which had been rooted in the socioeconomic changes of the industrial revolution.

The material prosperity brought by the industrial revolution and the scientific achievements joined with sociological and psychological changes during the industrial revolution, and by the march of the events, new thoughts and ideas appeared by the late Victorian age. Harris Jose, a professor of modern history from Oxford University, says in this sense that “material improvements were accompanied by psychological and emotional change” (82).

This chapter will show that the attitude of early Victorian period was nearly the same as that of preindustrial one, and the mid-Victorian was just a transitional period to the late Victorian. This is why this chapter is divided into two periods, early and mid-Victorian, and late Victorian, to analytically depict its social thoughts and interest, showing how was the shift from period to another, revealing the transitional causes of transformation of ideas and thoughts from religious to scientific ones.

A. Early and mid-Victorian

The early and mid-Victorian times witnessed a considerable change. As it is stated in the first chapter, this change was materialistic by the beginning and followed immediately
with psychological and emotional change. This latter implied that change in morals and values. The widespread mental values, during the early and mid-Victorian period, were mainly hard work, thrift, respectability and self-help (Encarta). These ethics were merely puritanical sustained by Evangelicalism. Hard work and self-reliance were the stimulus that helped the middle class to rise to the social upper ranks. Thus, these features were ‘gospel’ in the Victorian life. These characteristics were reinforced by optimism, stability and the prosperity realized through scientific achievements, which were celebrated in the Great Exhibition in Hyde Park (1851).

Religion during the early and mid-Victorian age was the frame of the Victorian thinking that is the social life was controlled by religion (Harrison 123). This is noticed in the spread of churches, chapels, and Methodism for people’s educational and moral development. But, after the materialistic prosperity reached its peak, and the industrialization became full, which led to full time working, religious control over society started to decline. And, people began to think otherwise, observing the environment around them, their nature, existence and their destiny.

In Charles Dickens’s *Hard Times*, there are hints to what preoccupied people’s thinking during the Victorian era in the following quotation:

It was a disheartening circumstance, but a melancholy fact, that even these readers persisted in wondering. They wondered about human nature, human passions, human hopes and fears, the struggles, triumphs and defeats, the cares and joys and sorrows, the lives and deaths of common men and women! They sometimes, after fifteen hours’ work, sat down to read mere fables about men and women, more or less like themselves, and about children, more or less like their own.

(44)

---

6 Worldwide Protestant movement dating from 1729, when a group of students at the University of Oxford, England, began to assemble for worship, study, and Christian service. Their fellow students named them the Holly Club and “Methodists”, a derisive allusion to the methodical manner in which they performed the various practices that their sense of Christian duty and Church ritual required (Encarta 2009).
According to this statement, people do not read the bible or religious matters. Their thinking seems more or less independent from religion.

It was from 1840s onwards that the role of religion apparently started to decline due to many factors. Among these factors were those considerable divisions within the Church of England, between Evangelicals, Church Tractarians, who revived Catholicism within the Church of England centred in Oxford, and Methodists. These tree divisions had conflicting beliefs about the nature of religious authority and the way religious practices should be done (Haight xix-xxx). Respectively, there were also rational challenges to religion, such as the philosophical utilitarianism and the development of science, within biology and geology, which disrupted the Christian orthodoxy and respectively threatened those religious movements.

Many interest groups were in the same row of those who sustain the Victorian values and attitudes. Among these groups the ‘religious agnostics’ who doubted Christian beliefs. There was also George Eliot, a great non-Christian novelist, who saw that man’s nature is not in need for religious rules and laws for doing moral duties. She said in this sense that “the moral law spoke from inside: it was not imposed” (Briggs 280), and she added that “it was necessary to be good for the sake of good, not for God” (279).

The emergence of printing distorted all the traditional behaviours of the oral tradition and the traditional ways of thinking. Printing replaced those abstract theories based on verbal skills by written language, which is conceived ‘paper system’ by John Henry Newman (Pollard 1). This was through literature and the writings of those who were worried a lot by the factory life of the workers and children of the English society. Print also paved the way for women, and even those from the working class, to express their feelings and portray their
living and working conditions, and as an opportunity to ask for their rights. Here, print became a kind of liberation for many oppressed writers and women.

Public reading was spreading accordingly to the growing of the number and type of printing materials, and with the improved technological techniques of printing. Reading also differed according to the level of education, social class and income rate. The working class was gradually increasing as the public libraries spread and its working hours reduced, whereas the upper classes had all the means to do reading and enjoy themselves.

Printing at that time affected a “serious literature on religious issues, socioeconomic theory, scientific developments, and general information of all sorts” (Henderson 584). According to this statement, print was a very influential factor in changing and shaping the thoughts and opinions of the English society including writers and readers. It was even used, after it played the role of press, by the authorities to manipulate public opinion to reach their personal objectives.

All the factors that are mentioned just above; from the rise of industrialism to the decline in the role of religion, because of those divisions in the Church of England, the rise of rational philosophical and scientific thinking, challenging religion, and the emergence of printing with its role in shaping public opinion, brought about the identification of the early and mid-Victorian character and way of thinking.

Like this, the “Crisis of Faith” that had been caused by deficit in religious considerations. Eventhough, science came to defeat religion, there were among the thinkers and writers, who still insist on the importance of religion. And the following statement shows that:

Most Victorian authors and intellectuals found a way to reassert religious ideas. Thus, George Eliot, for instance, maintained that an Evangelical sense of duty and ethics was essential as social
“glue” to prevent the disintegration of society in the absence of religious authority….Tennyson hoped man might transcend animality by encouraging his divine soul…Thomas Huxley who coined the word “agnostic”, also celebrated August Comte’s positivism and “the Religion of Humanity”. (Henderson 574)

In general, religion stays just an element for spiritual life, but science became a new ground of investigation for the late Victorian thoughts and interests.

**B. Late Victorian**

1870s was a decade of doubt and hesitation and those early and mid-Victorian beliefs and principles came to be doubted. It was by 1870 that the Church of England completely lost its role and control over life (Harris 161). It was a period when a big question mark was put on both the gospel bible, and the nature of human species on earth.

1870 was an apparent break between mid and late Victorian periods, where the characters of “self-help” and respectability turned to be not satisfactory in life, but came to be questioned, and to doubt every phenomenon around the Victorians. However, “habits of thought and modes of feeling were deeply influenced” (Pollard 20) and shaped by those scientific achievements of Darwin and others.

Before the industrial revolution came, British society had been living dependently on religion (worshiping) and land (farming) (Briggs 273), but after the industrial revolution began, people’s life came out of this limitations. This is why the industrial revolution came as a landmark in the social history of England. The mentality of the industrial revolution of asking more for “Facts” and materialism and concreteness, which is described in *Hard Times* and portrayed by history, evokes the idea of scientific thinking which believes in physical existence.
This new thinking brought by the coming of the industrial revolution may be recognized clearly in the late Victorian period in “Darwin’s ideas concerning evolution and natural selection brought impacts about revolution in human thought; they radically transformed our sense of our place in the universe” (Henderson 702). Eventhough the bible’s ideas and beliefs were the first subject to doubt as Darwin’s belief that “species were fixed forever at the moment of their creation, as described in the bible” (704), that scientific thinking could go beyond the bible’s theoretical claims.

Respectively, Darwin did not stick to the abstract ideas and beliefs occurred in the bible, but he acted to prove them in reality. In short, he practiced what the bible preaches. Darwin’s achievements and discoveries were given considerable importance in his time and further “habits of thought and modes of feeling were deeply influenced” (Pollard 20), and attention of the English people was taken away from religion to be absorbed by scientific achievements.

In the same context, Darwin’s achievements about the nature of species could change the social view for the bible; through “further undermining the biblical account of creation [with which], Darwin, shook the faith of his contemporaries” (Henderson 704). Likewise, he refuted that the bible is a gospel truth.

The British scientist Charles Darwin spent many years, after he had explored the Galapagos Island, investigating different types of fossils, studying the evolution of plants and animals. As a result, he produced On the Origins of Species (1859). He applied his theory of the evolution of species to people in his work The Descent of Man (1871).

Through the ‘fossil evidence’, Darwin proved that earth was very old more than the previous estimations had claimed. He discovered that man was a recently existed on earth comparing with animals. This was because animal fossils were found in the lower layers of
the earth, and these fossils had been changing from one layer to another, that is from period to period, suggesting the developing of animal species through ages. Where, the man was found in the upper layer of the earth. This suggests also that man was the result of the development of animal species and insects (Pollard 18-19).

This discoveries and achievements invaded the English society, and absorbed the attention of many of the thinkers of that time, including the English sociologist Herbert Spencer. Spencer interpreted Darwin’s biological theory into ‘social Darwinism’ and applied it in social, political, educational and economic life. He described the competition occurred within the industrial social groups as the “Survival of the fittest”.

In the same context, and in social sciences, Spencer compared moral, mental and social improvement to that evolution in Darwin’s theory. And evolution in his view was the progress, which was resulted from competition (Thomson 106). Here, it sounds clearly that Herbert Spencer was a liberal individualist, who supported capitalism, and attacked government intervention in social and economic life.

The *On the Origin of Species* or what Spencer conceived the ‘survival of the fittest’ embodies the meaning of struggle for existence either at animals or humans. It means that the survival is for the stronger (Thomson 106). This suggests the coming of the industrial revolution with its mentality based on laissez-faire, individualism and capitalism during the first half of the nineteenth century. But, by the second half of the nineteenth century social character and thinking, which had been purely Evangelicalism, was replaced by objective social science (Harris 248). The strong disagreement of political and religious ideas turned to a clash of ideologies.
Conclusion

The rise of industrialism and the decline in the role of religion, because of those divisions in the Church of England into different ideological movements, the rise of rational philosophical and scientific thinking challenged religion, and the emergence of printing with its role in shaping public opinion, brought about the identification of the Victorian era with its new thoughts and interests.

The Victorian era may be interpreted as an evolutionary step forward in the social history of Britain as Darwin’s theory of evolution came vehemently to challenge that unquestioning religious dogma, and brought people’s minds out of the sterile circle of thoughts. He opened many minds and invited people to doubt the whole existence.

Late Victorian was an era of doubt and rigid criticism. Oscar Wilde, in this respect, argued for the supreme creativity of the autobiographical critic-as-artist said that “That is what the highest criticism really is, the recorded of one’s own soul” (Henderson 586). This was through literary work, such as prose and poetry.
**General Conclusion**

As it is clear in the whole life of this work, the most prominent changes brought by the industrial revolution are more social and human ones than economic. Social conditions and British people’s state of being did not know stability from the very beginning of the industrialization to the late Victorian age. The economic and materialistic results of the industrial revolution may be considered, because of its influential impact, as causes, more than consequences themselves, for social and human changes.

The industrial revolution with its materialistic and environmental changes brought about the social, human and mental disruption. The emergence of a new social class caused a new social-class stratification, and then a new social order, when material considerations dominate everything. In favour of materialism and material life, the philosophy of the “ends justify the means” was applied, ignoring social values and human principles.

The English industrial period is important, according to this work, because it was a turning point in British mental and social developments, affected by industrialization and the economic system prevailed. In *Hard Times*, the factory system does not reveal any importance and respect for the workers. They are treated like heartless and emotionless objects by heartless and emotionless exploiters. Children at Gradgrind’s school are treated like ‘calculating machines’, programmed for a specific attitude. The two scenes of school and factory lives, under which the society is, reflect the mechanization of humans at the time of the industrial revolution.

At that period, society was devoid of feeling and sentiments. People did not feel each other, and no one sympathizes the other neither the employees for the employers, nor other people among the others. Behind the mechanization of the society, Dickens wants to show the
necessity of fancy and feeling in life, a matter which the English society lacked during the industrial revolution.

Likewise the consequences of the industrial revolution of material prosperity and the necessity of innovation to meet the British social needs paved the way to a scientific thinking by the mid-Victorian era. The mid-Victorian era was an era of doubts about religion and industrialism, required a clash of ideas within the Church of England between religious men and thinkers.

During the Victorian era religious dogma came to decline to be challenged by scientific thinking due to several factors. The first factor was the decline of the number churchgoers caused by industrialization and full time employment. Second, the divisions occurred in the Church of England between Evangelicalism and Tractarianism about religious practices and political conduct. And, the appearance of different ideological and scientific developments undermined religious ethics. In addition, the invention of printing and press played a considerable role in forming and manipulating public opinion.

The “Facts” and “logic” referred to in *Hard Times* hint to this scientific thinking and those material considerations hint to scientific objectivity. British social ethics and thoughts combined with the period’s scientific achievements that were evoked by the industrial revolution.

Asa Briggs, a British professor of modern history, is right when she says: “the impact of the industrial revolution on the way people lived, thought and felt was greater than that of most political revolutions, and there never was-nor could have been-one single response to it” (223). This can be justified through these two contradicting opinions of famous English presidents: “People don’t realize that the Victorian age was simply an interruption in Britain’s history” (Harold Macmillan), and “Victorian values were the values when our country became
great” (Margaret Thatcher) (Briggs 266). This means that the Victorian period was a complicated period, which brought good and evil for British society.

Generally speaking, the Victorian period was prominent for its scientific thinking, famous for Darwin’s biological and geological discoveries about the origins of species and the evolution of man from animals and insects. This theory of evolution was interpreted by Herbert Spencer into the “survival of the fittest”, applying it on the social struggle. He believed that completion was the best method to bring development. He influenced many thinkers within and outside Britain, and applied it even on education.
Bibliography


