## Free essay about the industrial revolution

History, Revolution



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The industrial revolution is a revolutionary change in the means of production and its organization, which led to the transition from preindustrial to an industrial society. The classical and the earliest example of the industrial revolution is considered England of late 18th - early 19th centuries.

The term " industrial revolution" emphasizes fast and explosive nature of the changes that occurred at the turn of 18-19 centuries, first in England and then in other countries of Europe. For the first time this concept was used in 1830 by a French economist Adolphe Blanqui. Since 1840, it has become widely used by Marxists: the first volume of Das Kapital by Karl Marx gave a detailed analysis of the revolutionary changes in the means of production, which became the foundation of the capitalist system. Among the non-Marxist historians, the term " industrial revolution" received universal recognition in the late 19th century, influenced by " Lectures on the industrial revolution" of the famous British historian Arnold Toynbee. Along with a narrow interpretation of the Industrial Revolution as an event related only to the genesis of capitalism, there are wider interpretations, when by the industrial revolution can be called any profound qualitative changes in the industrial sector. Proponents of this approach say not about one revolution, but about many of them. However, such a broad interpretation is not broadly accepted.

The debate about what exactly should be considered as the main content of the industrial revolution of 18-19 centuries has not yet finished. The important changes of the industrial revolution era are following: the emergence of a fundamentally new means of labor - machines (mechanization of production); the formation of a new type of economic growth - the transition from slow and unstable one to high and selfsustaining; completion of the formation of a new social structure transformation of employers and employees into the main social classes. Machines were not something completely new in Western Europe. Even in ancient times were invented many mechanical devices, up to the use of steam power. In the Middle Ages, there were also known many attempts to use machines to manufacture. These facts show that in terms of purely technical opportunities of inventions, the industrial revolution might occur much earlier.

Explanation of " belated" mass adoption of technical inventions lies in the fact that it was required to carry out some social innovations. For the introduction of machines, in particular, it was necessary first to eliminate the medieval guild system, which prohibited the competition, and to establish a system of legal protection of the rights of the inventor. In the Middle Ages, the same technical inventions were unique samples: the introduction of technology opposed by the guild of craftsmen who were afraid of losing their jobs, and inventors, for fear of losing income from the use of their discoveries, in every possible way to hide them, and often carried away their secret to the grave.

The most important prerequisite was the invention of machines was a " patent revolution" of 18-19 centuries. Until this period, the English patent system was fundamentally flawed (Bottomley, 21). Then special laws were adopted to protect the inventor exclusive rights to use its achievements. Ingenuity was to bring income, not persecution. As a result, many inventors

(Arkwright, Watt, Fulton, and Stephenson) could become major employers; earn profit on the exploitation of their discoveries. Without laws to protect intellectual property rights invention could not acquire a broad scope. The era of the Industrial Revolution also gualitatively changed economic growth. In pre-industrial societies, economic growth was unstable and low: periods of growth were alternated with periods of recession, resulting an average growth rate hovered around zero. A new look at the era of the Industrial Revolution, with the concept of transition to self-sustaining growth, was formulated in 1956 by an American economist Walt Rostow. He proposed interpretation of the Industrial Revolution that offers as the point not new machines, but new high growth rates (More, 18). Indeed, the industrial revolution led to the acceleration of the pace of annual growth of the main economic indicators, but it was gradual, not sharp. Leftist economists and especially Karl Marx saw the main content of the industrial revolution not in the invention of machines and not in the economic growth, but in social change in the qualitative characteristics of the process of labor and social structure. Factory production, based on the co-operation of machines, formed a fundamentally new type of worker. He was required not to produce goods from the beginning to the end, but to perform repetitive operations with a machine, constantly working side by side with other employees. As a result, even saving money, such an employee could not become an independent producer, as his skills made him a " cog" of unified workforce, managed by owner. This, according to Marx, was the real subjection of labor to capital, when an employee could not return to the number of self-employed (Marx, 355). And it is now

entrepreneurs and employees are the main social classes. Among other important social effects, it is worth noting that machine production, simplifying labor operations, allowed to engage in the process of labor not only the adult male labor force, but also women and children. In the late 18th - early 19th centuries there is a reduction of the average wage of workers due to the involvement of female and child labor. A negative side effect of this was the rapid growth of infant mortality. At the same time, society realized the need to introduce primary education for children up to 14 years and to protect them from hard and harmful work.

## Sources:

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Marx, K. Capital: a Critique of Political Economy (p. 355). Moscow, USSR: Progress Publishers.