

Structure of Industrial Revolutions (I)

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Abstract

Three distinct stages or types of industrial revolution are recognized in modern world history. The first industrial revolution began in England of the eighteenth century and the second one started from Germany and the USA at the latter half of the nineteenth century. Since the Second World War we have experienced remarkable impacts of the third industrial revolution. A lot of historical research identifies several characteristics common to all of these industrial revolutions.

This is an attempt to classify representative features of industrial revolutions and to reconsider how the concept of industrial revolution should be defined from a structural viewpoint. Each industrial revolution has its own structure that can be regarded as a set of four distinctive, but mutually related elementary structures. They consist of technology, machine, division of labour, and money-making, all of which construct a normal structure of production (NSP). Generally speaking, we can look at the history of industrial revolutions as a process of successive destruction and reconstruction of NSP.

N. B. The first two elementary structures (technology and machine) are to be treated in the present Number, and the second two structures (division of labour and money-making) will be discussed in the next Number.