
Laws of the triple determination of scientific creativity

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The article discusses the main factors determining the discoveries and inventions in science and technology: intrascientific (logical-empirical), extrascientific (socio-cultural) and personal (mental). Their relationship and interaction are analyzed. It is shown that the first of them is studied in detail under internalism, second – under externalism, and personal factor is not sufficiently analyzed. To study the role of the personality in the scientific and technological progress it is proposed to use the category of mentality. The principles of the new concept of the triple determination of the creative process are justified. Connection of the noted three determinants can be called the law of triple determination of scientific and technical creativity.

Keywords: dynamics of scientific knowledge, mentality, internalism, externalism, scientific and technological progress, simultaneous discoveries, premature discoveries, the law of triple determination of scientific creativity.

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