

ESSAY QUESTION 2

(Suggested time—40 minutes. This question counts as one third of the total score for Section II.)

Here are two passages from the essays of the renowned physicist Albert Einstein. After reading them carefully, write an essay that analyzes and compares Einstein's use of language and rhetoric in each.

PASSAGE A

Physics deals with "events" in space and time. To each event belongs, besides its place coordinates x , y , z , a time value t . The latter was considered measurable by a clock (ideal periodic process) of negligible spatial extent. This clock C is to be considered at rest at one point of the coordinate system, e.g., at the coordinate origin ($x = y = z = 0$). The time of an event taking place at a point P (x, y, z) is then defined as the time shown on the clock C simultaneously with the event. Here the concept "simultaneous" was assumed as physically meaningful without special definition. This is a lack of exactness which seems harmless only since with the help of light (whose velocity is practically infinite from the point of view of daily experience) the simultaneity of spatially distant events can apparently be decided immediately.

PASSAGE B

I am convinced there is only one way to eliminate these grave ills, namely through the establishment of a socialist economy, accompanied by an educational system which would be oriented toward social goals. In such an economy, the means of production are owned by society itself and are utilized in a planned fashion. A planned economy, which adjusts production to the needs of the community, would distribute work to be done among all those able to work and would guarantee a livelihood to every man, woman and child. The education of the individual, in addition to promoting his own innate abilities, would attempt to develop in him a sense of responsibility for his fellow men in place of the glorification of power and success in our present society.

Nevertheless, it is necessary to remember that a planned economy is not yet socialism. A planned economy as such may be accompanied by the complete enslavement of the individual. The achievement of socialism requires the solution of some extremely difficult socio-political problems: is it possible, in view of the far-reaching centralization of political and economic power, to prevent bureaucracy from becoming all-powerful and overweening? How can the rights of the individual be protected and therewith a democratic counterweight to the power of the bureaucracy be assured?