EINSTEIN; HIS SPACE AND TIMES

Steven Gimbel DREVIEWED BY Michael Berry

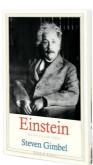
iscoveries in science have everyday consequences not anticipated by their creators. Einstein's physics is no exception. We navigate by the GPS, which is a direct application of his relativity theory; compact-disc players contain lasers, inspired by his ideas in quantum theory; our digital cameras record images using an effect first explained by him.

But Steven Gimbel's biography has a different emphasis: Einstein's perception of himself as a Jew. Was he religious? This is tricky. He often spoke of God - "the old one", who "does not play

dice with the universe", while describing the ultra-Orthodox as "dull-minded tribal companions", and himself as "a deeply religious nonbeliever". He was enthusiastic about Israel, but appalled by what he called "Jewish fascism", whose "approach to the Arabic problem is as ignoble as it is dangerous".

Casual antisemitism permeated Europe at the highest levels. Here is Arnold Sommerfeld, one of Einstein's admirers: "An Englishman would scarcely have produced this theory: perhaps it reflects... the abstract-conceptual character of the Semite." Gimbel points out that this is not only obnoxious but also unfair. Einstein developed his ideas using examples directly connected to the physical world. And the physics of his non-lewish contemporaries, including Sommerfeld, was equally imbued with the "abstract-conceptual" approach. Einstein celebrated Jewish scientific contribution, but emphasized it was due "to the...

> esteem in which intellectual accomplishment is held among the Jews". It is instructive to ask how much of our physics would exist if there were no Jews. The possibly unexpected answer is: almost all of it - the only exception being Einstein's magisterial theory of gravity, still stubbornly refusing to be integrated into the main body of science. Gimbel's book is a reliable and unusual introduction, especially for readers who are not scientists.



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