

One-third of Europe dead of the plague

THE BLACK DEATH. By Philip Ziegler. John Day. 319 pp. \$6.95.

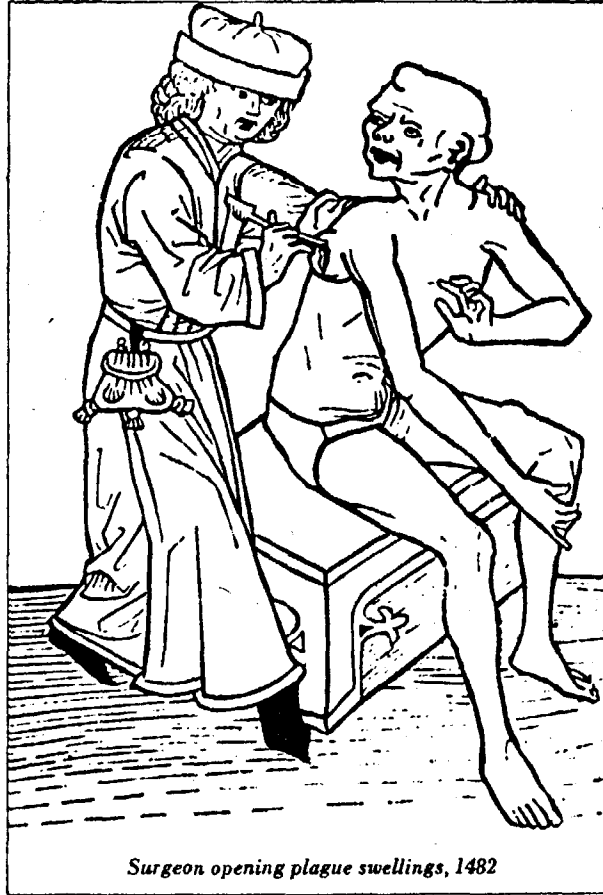
By Joshua Lederberg

The plague has always slumbered here and there around the world. About the year 1340, it flared up in Central Asia near Lake Issyk Kul, to the east of Tashkent. Its ravages in Asia and India are uncounted. By 1346 it had reached the Crimea, a scene of brush-fire conflicts between the Genoese and Tartar empires. With an intuitive sophistication in bacteriological warfare, the Tartars infected the Genoese fort by catapulting their own corpses over its walls. The stricken Genoese fled back to Italy, carrying the plague with them and igniting an epidemic, known to history as the Black Death, that spread rapidly across Europe. During the next two-and-a-half years it is estimated that about one-third of Europe's population was killed by it. But we do not have accurate statistics, and other guesses vary from 20 to 60 per cent, which seems a reasonable range for the plague's impact on different communities. The survivors were beset by repeated but much milder outbreaks for the next sixty years.

In this excellent book, Philip Ziegler suggests that Europe had been weakened by several decades of economic and agricultural decline, but we have very little scientific information to explain the ferocity of the epidemic. Most specialists believe that the present-day plague bacillus would be quite capable of a similar recrudescence except for the availability of antibiotics and pesticides to control rat fleas, if not the rats themselves, both of which maintain the potential contagion.

Fourteenth-century Europe only dimly understood the role of contagion, and was told by its leaders that

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Surgeon opening plague swellings, 1482

the plague was above all a visitation of a vengeful God for vaguely specified sins. In Central Europe the Jews were persecuted as scapegoats, according to long-established custom, but the persecutors discovered no immunity to plague by that route.

One historical side effect of the Black Death in Scandinavia may have been a weakening of support for the dying colonies of Norsemen in Greenland. This foot-

hold collapsed before the rediscovery of the New World by a Genoese in 1492 — and the fact that we celebrate Columbus Day is at least one historical consequence.

Ziegler tells the story with ample but not stifling documentation and with an engaging balance of detached statement and illustration. The statistical arguments about the mortality percentages are a necessary building stone and, happily, are assembled in one chapter. With equal discretion, Ziegler has written another chapter devoted to a fictional synthesis of the experience of a composite village in England. Though the primary data are sparse and Ziegler takes proper pains to point this out, he builds a most credible, restrained account.

His larger view brings out few conclusions that will surprise anyone who has read shorter accounts of the Black Death (like William L. Langer's in *Scientific American*, February, 1964) or chapters in history texts and encyclopedias.

The surprising thing about the Black Death is that it was assimilated into the historical life of the period without working any extraordinary change in its larger institutions. Despite the misery of individuals and families, most communities survived; government rarely broke down; inheritance taxes were dutifully collected on the suddenly increased numbers of estates; there were few direct challenges to authority or shifts in centers of power. One can speculate about the role of the Black Death in accelerating the breakdown of feudalism, but it is hard to substantiate an influence commensurate with the mortality figures. The Black Death was an unprecedented source of private bereavement, but it had minimal social impact, perhaps because it visited rich and poor alike, with little discrimination. Ziegler points out that the loss of teachers and clergy may have sped up the vernacularization of education and of the liturgy. We might also guess that it inspired some skepticism about faith in the power and truth of the Church, but this assumes a degree of rational intellectual commitment that is rarely evoked by real distress. *