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**RUSSELL**

**RELIGION**

**AND SCIENCE**

*With a New Introduction by Michael Ruse*

Religion  
&  
Science

BERTRAND RUSSELL

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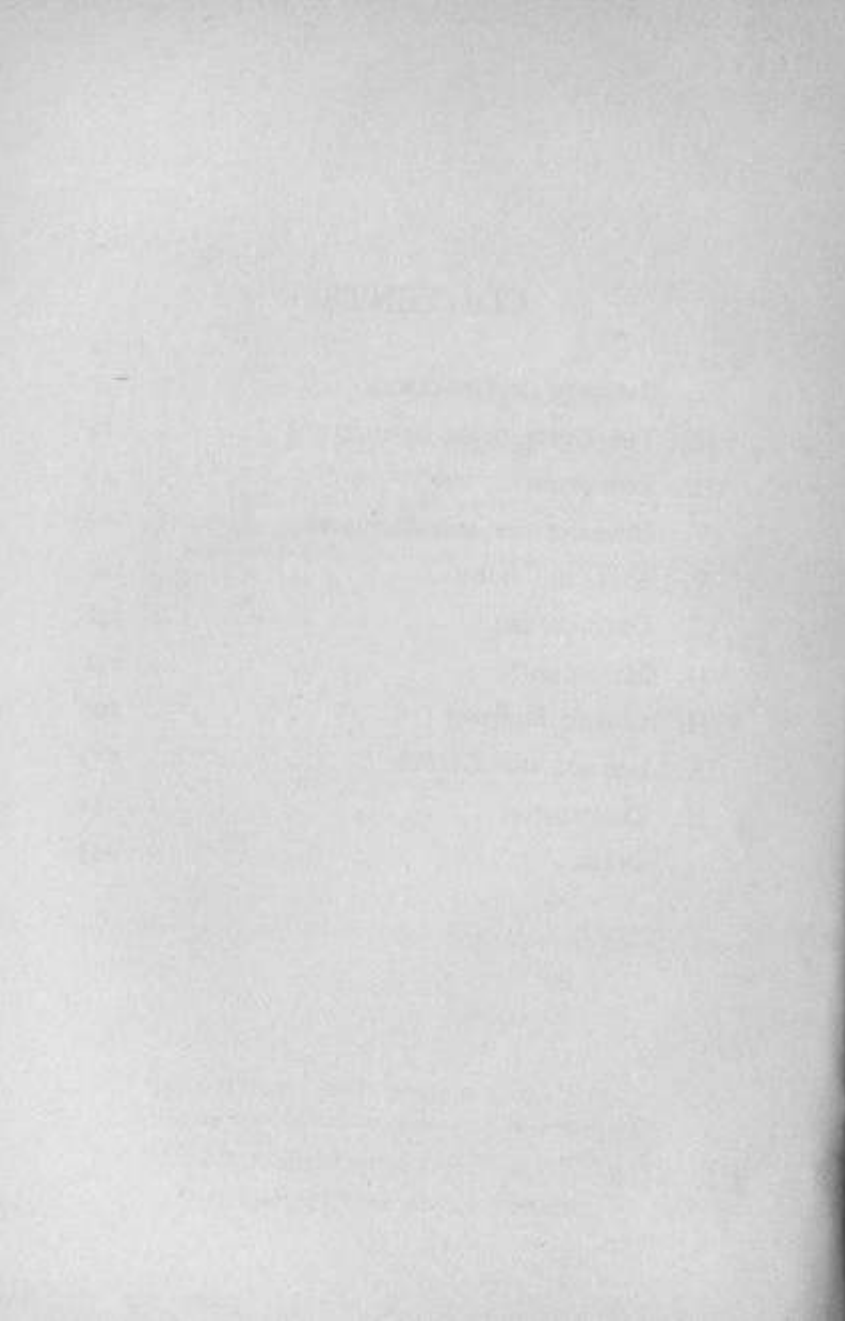
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## CHAPTER I

### GROUNDS OF CONFLICT

RELIGION and Science are two aspects of social life, of which the former has been important as far back as we know anything of man's mental history, while the latter, after a fitful flickering existence among the Greeks and Arabs, suddenly sprang into importance in the sixteenth century, and has ever since increasingly moulded both the ideas and the institutions among which we live. Between religion and science there has been a prolonged conflict, in which, until the last few years, science has invariably proved victorious. But the rise of new religions in Russia and Germany, equipped with new means of missionary activity provided by science, has again put the issue in doubt, as it was at the beginning of the scientific epoch, and has made it again important to examine the grounds and the history of the warfare waged by traditional religion against scientific knowledge.

Science is the attempt to discover, by means of observation, and reasoning based upon it, first, particular facts about the world, and then laws connecting facts with one another and (in fortunate cases) making it possible to predict future occurrences. Connected with this theoretical aspect of science there is scientific technique, which utilizes scientific knowledge to produce comforts and luxuries that were impossible, or at least much more expensive, in a pre-scientific era. It is this latter aspect that gives such great importance to science even for those who are not scientists.

Religion, considered socially, is a more complex phenomenon than science. Each of the great historical religions has three aspects: (1) a Church, (2) a creed, and (3) a code of personal morals. The relative importance of these three elements has varied greatly in different times and places. The ancient religions of Greece and Rome, until they were made ethical by the Stoics, had not very much to say about personal morals; in Islam the Church has been unimportant in comparison with the temporal monarch; in modern Protestantism there is a tendency to relax the rigors of the creed. Nevertheless, all three elements,

though in varying proportions, are essential to religion as a social phenomenon, which is what is chiefly concerned in the conflict with science. A purely personal religion, so long as it is content to avoid assertions which science can disprove, may survive undisturbed in the most scientific age.

Creeds are the intellectual source of the conflict between religion and science, but the bitterness of the opposition has been due to the connection of creeds with Churches and with moral codes. Those who questioned creeds weakened the authority, and might diminish the incomes, of Churchmen; moreover, they were thought to be undermining morality, since moral duties were deduced by Churchmen from creeds. Secular rulers, therefore, as well as Churchmen, felt that they had good reason to fear the revolutionary teaching of the men of science.

In what follows, we shall not be concerned with science in general, nor yet with religion in general, but with those points where they have come into conflict in the past, or still do so at the present time. So far as Christendom is concerned, these conflicts have been of two kinds. Sometimes there happens to be a text in the Bible making some assertion as to a matter of fact, for example, that the

hare chews the cud. Such assertions, when they are refuted by scientific observation, cause difficulties for those who believe, as most Christians did until science forced them to think otherwise, that every word of the Bible is divinely inspired. But when the Biblical assertions concerned have no inherent religious importance, it is not difficult to explain them away, or to avoid controversy by deciding that the Bible is only authoritative on matters of religion and morals. There is, however, a deeper conflict when science controverts some important Christian dogma, or some philosophical doctrine which theologians believe essential to orthodoxy. Broadly speaking, the disagreements between religion and science were, at first, of the former sort, but have gradually become more and more concerned with matters which are, or were, considered a vital part of Christian teaching.

Religious men and women, in the present day, have come to feel that most of the creed of Christendom, as it existed in the Middle Ages, is unnecessary, and indeed a mere hindrance to the religious life. But if we are to understand the opposition which science encountered, we must enter imaginatively into the system of ideas which made

such opposition seem reasonable. Suppose a man were to ask a priest why he should not commit murder. The answer "because you would be hanged" was felt to be inadequate, both because the hanging would need justification, and because police methods were so uncertain that a large proportion of murderers escaped. There was, however, an answer which, before the rise of science, appeared satisfactory to almost everyone, namely, that murder is forbidden by the Ten Commandments, which were revealed by God to Moses on Mount Sinai. The criminal who eluded earthly justice could not escape from the Divine wrath, which had decreed for impenitent murderers a punishment infinitely more terrible than hanging. This argument, however, rests upon the authority of the Bible, which can only be maintained intact if the Bible is accepted as a whole. When the Bible seems to say that the earth does not move, we must adhere to this statement in spite of the arguments of Galileo, since otherwise we shall be giving encouragement to murderers and all other kinds of malefactors. Although few would now accept this argument, it cannot be regarded as absurd, nor should those who acted upon it be viewed with moral reprobation.