

P R E F A C E

Worlds in Collision is a book of wars in the celestial sphere that took place in historical times. In these wars the planet earth participated too. This book describes two acts of a great drama: one that occurred thirty-four to thirty-five centuries ago, in the middle of the second millennium before the present era; the other in the eighth and the beginning of the seventh century before the present era, twenty-six centuries ago. Accordingly, this volume consists of two parts, preceded by a prologue.

Harmony or stability in the celestial and terrestrial spheres is the point of departure of the present-day concept of the world as expressed in the celestial mechanics of Newton and the theory of evolution of Darwin. If these two men of science are sacrosanct, this book is a heresy. However, modern physics, of atoms and of the quantum theory, describes dramatic changes in the microcosm—the atom—the prototype of the solar system; a theory, then, that envisages not dissimilar events in the macrocosm—the solar system—brings the modern concepts of physics to the celestial sphere.

This book is written for the instructed and uninstructed alike. No formula and no hieroglyphic will stand in the way of those who set out to read it. If, occasionally, historical evidence does not square with formulated laws, it should be remembered that a law is but a deduction from experience and experiment, and therefore laws must conform with historical facts, not facts with laws.

The reader is not asked to accept a theory without question. Rather, he is invited to consider for himself whether he is reading a book of fiction or non-fiction, whether what he is reading is invention or historical fact. On one point alone, not necessarily decisive

for the theory of cosmic catastrophism, I borrow credence: I use a synchronical scale of Egyptian and Hebrew histories which is not orthodox.

It was in the spring of 1940 that I came upon the idea that in the days of the Exodus, as evident from many passages of the Scriptures, there occurred a great physical catastrophe, and that such an event could serve in determining the time of the Exodus in Egyptian history or in establishing a synchronical scale for the histories of the peoples concerned. Thus I started *Ages in Chaos*, a reconstruction of the history of the ancient world from the middle of the second millennium before the present era to the advent of Alexander the Great. Already in the fall of that same year, 1940, I felt that I had acquired an understanding of the real nature and extent of that catastrophe, and for nine years I worked on both projects, the political and the natural histories. Although *Ages in Chaos* was finished first, in the order of publication it will follow this work.

Worlds in Collision comprises only the last two acts of the cosmic drama. A few earlier acts—one of them known as the Deluge—will be the subject of another volume of natural history.

The historical-cosmological story of this book is based on the evidence of historical texts of many peoples around the globe, on classical literature, on epics of northern races, on sacred books of the peoples of the Orient and Occident, on traditions and folklore of primitive peoples, on old astronomical inscriptions and charts, on archaeological finds, and also on geological and paleontological material.

If cosmic upheavals occurred in the historical past, why does not the human race remember them, and why was it necessary to carry on research to find out about them? I discuss this problem in the Section "The Collective Amnesia." The task I had to accomplish was not unlike that faced by a psychoanalyst who, out of disassociated memories and dreams, reconstructs a forgotten traumatic experience in the early life of an individual. In an analytical experiment on mankind, historical inscriptions and legendary motifs often play the same role as recollections (infantile memories) and dreams in the analysis of a personality.

Can we, out of this polymorphous material, establish actual facts? We shall check one people against another, one inscription against another, epics against charts, geology against legends, until we are able to extract the historical facts.

In a few cases it is impossible to say with certainty whether a record or a tradition refers to one or another catastrophe that took place through the ages; it is also probable that in some traditions various elements from different ages are fused together. In the final analysis, however, it is not so essential to segregate definitively the records of single world catastrophes. More important, it seems, is to establish (1) that there were physical upheavals of a global character in historical times; (2) that these catastrophes were caused by extraterrestrial agents; and (3) that these agents can be identified.

There are many implications that follow from these conclusions. I refer to them in the Epilogue, so that I can omit reference to them here.

A few readers went over this book in manuscript and made valuable suggestions and remarks. In chronological order of their reading they are:

Dr. Horace M. Kallen, formerly Dean of the Graduate Faculty of the New School for Social Research, New York; John J. O'Neill, Science Editor of the *New York Herald Tribune*; James Putnam, Associate Editor of the Macmillan Company; Clifton Fadiman, literary critic and commentator; Gordon A. Atwater, Chairman and Curator of the Hayden Planetarium of the American Museum of Natural History, New York. The last two read the work at their own request after Mr. O'Neill had discussed it in an article in the *Herald Tribune* of August 11, 1946. I am indebted to all of them but I alone am responsible for content and form.

Miss Marion Kuhn cleared the manuscript of grammatical weeds and helped in reading the proofs.

Many an author has dedicated his book to his wife or mentioned her in the preface. I have always felt this was somewhat ostentatious, but now that this work is being published, I feel I shall be most ungrateful if I fail to mention that my wife Elisheva spent almost as much time on it at our desk as I did. I dedicate this book to her.

The years when *Ages in Chaos* and *Worlds in Collision* were written were years of a world catastrophe created by man—of war that was fought on land, on sea, and in the air. During that time man learned how to take apart a few of the bricks of which the universe is built—the atoms of uranium. If one day he should solve the problem of the fission and fusion of the atoms of which the crust of the earth or its water and air are composed, he may perchance, by initiating a chain reaction, take this planet out of the struggle for survival among the members of the celestial sphere.

New York, September 1949.

Immanuel Velikovsky.