Preface

1 INTRODUCTION

The fundamental concepts of modern science, matter, space, time, and motion, all profoundly changed by contemporary developments, but persist as presuppositions. Difficulties of comprehension of presuppositions. Need to study these in their origin and development. Importance of sixteenth- and seventeenth-century thought. Significance of Aristotelianism for beginnings of modern developments. Consequence of modern split between science and philosophy. The sources of the modern developments: theory of the elements and of chemical combination. The new conception of 'matter' in early seventeenth century. The consequent problems: the relation of the mathematical and the physical; atomism and the questions of divisibility and indivisibility, of continuity and discreteness, of infinity and finitude. Crucial rôle in modern developments of new concept of the infinite of Nicolaus of Cusa.

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