

of nature, Parmenides and Empedocles, and from thence into the works of prose writers. We will not here enter into a discussion of the manner in which, according to the Pythagorean views, Philolaüs distinguishes between Olympus, Uranus, or the heavens, and Cosmos, or how the same word, used in a plural sense, could be applied to certain heavenly bodies (the planets) revolving round one central focus of the world, or to groups of stars. In this work I use the word Cosmos in conformity with the Hellenic usage of the term subsequently to the time of Pythagoras, and in accordance with the precise definition given of it in the treatise entitled *De Mundo*, which was long erroneously attributed to Aristotle. It is the assemblage of all things in heaven and earth, the universality of created things constituting the perceptible world. If scientific terms had not long been diverted from their true verbal signification, the present work ought rather to have borne the title of *Cosmography*, divided into *Uranography* and *Geography*. The Romans, in their feeble essays on philosophy, imitated the Greeks by applying to the universe the term *mundus*, which, in its primary meaning, indicated nothing more than ornament, and did not even imply order or regularity in the disposition of parts. It is probable that the introduction into the language of Latium of this technical term as an equivalent for Cosmos, in its double signification, is due to Ennius,\* who was a follower of the Italian school, and the translator of the writings of Epicharmus and some of his pupils on the Pythagorean philosophy.

We would first distinguish between the physical *history* and the physical *description* of the world. The former, conceived in the most general sense of the word, ought, if materials for writing it existed, to trace the variations experienced by the universe in the course of ages from the new stars which have suddenly appeared and disappeared in the vault of heaven, from *nebulae* dissolving or condensing—to the first stratum of cryptogamic vegetation on the still imperfectly cooled surface of the earth, or on a reef of coral uplifted from the depths of ocean. *The physical description of the world* presents a picture of all that exists in space—of the simultaneous action of

\* See, on Ennius, the ingenious researches of Leopold Krahnert, in his *Grundlinien zur Geschichte des Verfalls der Römischen Staats-Religion*, 1837, s. 41–45 (Outlines of the History of the Decay of the Established Religion among the Romans). In all probability, Ennius did not quote from writings of Epicharmus himself, but from poems composed in the name of that philosopher, and in accordance with his views.