

## THE COSMOLOGY OF PRODICUS.

THANKS to Plato's satirical genius Prodicus has long been associated in the minds of students with petty verbal distinctions rather than with broad physical theories. Even so recent a historian as Windelband still treats him merely as a superficial moralist and etymologist. Welcker indeed recognised the importance of the Sophist of Ceos three-quarters of a century ago; but his juster appreciation was long overborne in Germany by the authority of Zeller. Dümmler took up the subject again in his *Akademika* (1889); and his researches have received some attention from such historians as Gomperz and Döring, whose tone as regards the Sophists in general is quite opposed to the tradition represented by Zeller; but while admitting that Prodicus taught something about nature, they look on the question what it was that he taught as insoluble.

Nevertheless, I believe that this interesting point is, like the name of Hecuba's mother and what song the Sirens sang, not beyond the reach of all conjecture. That our Sophist had a cosmology of his own is rendered highly probable, if not absolutely certain, by a well-known reference in the *Birds* of Aristophanes where we are promised a new theory of creation which is to send Prodicus away howling (*Προδικὸν παρ' ἐμοῦ κλέειν εἶπητε τὸ λοιπὸν*, Bothe, 653). Now to have such an overwhelming effect it seems evident that the new explanation must be constructed on the same lines as that with which it is put in competition; for otherwise why should one speculation be singled out for defiance where so many disputed the field? And that other explanation must have been well known at Athens if an Athenian audience was to appreciate the force of the parody. Let us see then what Aristophanes has to say about the birth of the world. He describes it as first of all a process of spontaneous generation. In the beginning all was darkness and void, without earth, air or heaven. Night, dwelling in the infinite gulfs of Erebus, produces a wind-egg, whence "Love breaks forth flower-fashion, a bird with gold on his wings". Then from the union of Love with Chaos proceeds the whole race of birds. After these at the instigation of Love a universal pairing sets in, resulting in the birth of heaven, ocean, earth, and all the gods. Here the primordial nature of Love is borrowed or rather quoted from Hesiod's *Theogony*; the originality lies in the dignity attributed to birds as older even than the very elements, and the gods themselves. They are further represented as conferring great benefits on mankind by foretelling the changes

of the seasons, and more generally by furnishing auguries of future events.

In this last part of the panegyric on birds Dümmler finds a direct reference to the argument reported in Xenophon's *Memorabilia* (bk. iv., chap. 3), which, however, he does not regard as a genuine utterance of Socrates; and of this argument he supposes Prodicus to have been the real author (*Akademika*, pp. 156 *sqq.*). But Dümmler's view seems to suffer from two fatal weaknesses. In the first place the notion that Xenophon can no more be relied on than Plato as an exponent of the genuine Socratic teaching has failed to hold its ground even in German criticism. And in the second place there is no reason for believing Prodicus to have been a teleologist, but rather the contrary. At least we know on the authority of Persæus, a pupil of Zeno the Stoic, that he looked on the gods as mortals deified and worshipped for such useful discoveries as bread and wine (*Doxographi*, p. 544); while the more doubtful authority of Epiphanius credits him with the view that the gods were personifications of the elements and of the sun and moon—an otherwise not improbable tradition (*ibid.*, p. 591). Besides it is, so to speak, as an evolutionist not as a describer of what is now going on that the comic poet enters into competition with the great Sophist.

I think we shall find a safer clue to what Aristophanes is talking about in certain fragments from the lost tragedies of Euripides. In some eloquent verses of unknown *provenance* Aphrodite (not Eros) is celebrated as a great cosmic power whence all living things together with their means of sustenance are derived (Fr. 839 in Wagner's ed.). Another passage from a chorus in the *Chrysisippus* describes earth, the universal mother, as impregnated by rain from heaven, and giving birth to men and beasts. On their dissolution that which is of earth returns to earth, and that which is of heaven to heaven, for nothing really perishes, but is merely separated, and reverts to its proper form (Fr. 833). Finally, a third fragment (487), quoted from a play called *The Wise Melanippe*, describes heaven and earth as having originally formed a single body, on the break-up of which they reunite and give birth to trees, birds, beasts, fishes and men. Taken together these passages present a general view of creation fairly resembling that of Aristophanes. The principal points of difference are (1) that Eros takes the place of Aphrodite in the comic version, and (2) that birds come first instead of second or (possibly) third in the order of production. The two changes are closely connected, Eros being represented as "a bird with gold on his wings," for the greater glory of the feathered tribe. The fact, however, that Prodicus rather than Euripides should be named as the philosopher on whom the winged chorus is improving seems to show that the author of *Melanippe* was indebted to the Sophist for his heroine's remarkable lecture on the natural history of creation. And there seems to be something like a hint at such an obligation in Melanippe's admission that her

learning is derived from her mother, a daughter of that famous teacher the Centaur Cheiron. In this instance Cheiron may possibly symbolise no less a personage than Empedocles, from whom Euripides would have derived his cosmogony—as also would Aristophanes—through some loose and popular adaptation set forth in the lectures of Prodicus. The original union of all things in a single uniform body, assumed by Melanippe, is, in my opinion, much more obviously related to the Sphairos of “the great Sicilian” than to the primordial confusion of Anaxagoras with which it has been identified by some critics; while the Aphrodite of fragment 839 is still more obviously the uniting cosmic power of Empedocles, who indeed calls it over and over again by the name of the love-goddess. But what makes the dependence (direct or indirect) of Euripides on Empedocles nearly certain is the close agreement of the younger with the older poet in his enumeration of the classes called into existence by Love. In Melanippe’s speech these, as I have said, are trees, birds, beasts, fishes, and men. In the poem *On Nature* they are trees, men and women, beasts, birds, fishes, and gods (Diels, 21, and again in the same order in 23). One may suppose that gods were omitted from the stage version out of deference to the feelings of an Athenian audience, who would perhaps have found this lumping-up of gods with beasts and fishes—what indeed it is—somewhat disrespectful. Moreover Empedocles, as a systematic thinker, feels himself under the necessity of providing a distinct set of inhabitants for each of his four elements. Earth leads off with three kinds, trees, human beings, and beasts, while air, water, and fire follow with one each, birds, fishes, and gods, thus giving a sort of balance and symmetry to the whole. Euripides, on the other hand, not being concerned with the four elements but only with the generations of heaven and earth, has no use either for fire or its denizens and simply copies out the remaining items without any sort of logical order in their enumeration.

I do not think that he copied directly from Empedocles, but rather from Prodicus, whom we must therefore suppose to have given a sort of popularised version of the Sicilian cosmogony in his lectures at Athens, whence Aristophanes and Euripides both drew for their respective purposes. That Prodicus followed Empedocles is made otherwise very probable by his theory of religious origins already referred to. If we could accept the report of Epiphanius that he regarded the gods as personified elements there could be no doubt about the matter, for that is just what the Acragantine philosopher does. And, even apart from such evidence, his rationalistic identification of Demeter and Dionysus with bread and wine was probably suggested by the ascription of divine names to the four elements in the poem *On Nature*.

Aristophanes gives us an author without a theory, Euripides a theory without an author. By fitting the two together I have tried to supply a missing link in the history of thought.

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