

inaccuracies. We illustrate this only with the shiniest examples. The constellation Ara looks very beautiful in A. Dürer's map; however, we see that Ara is turned upside down in the sky, and its tongue is lowered instead of being raised, the torch burning upside down.

"Who of the authentic ancient stargazers imagined it in this form?" ([13], V. 4, p. 209).

Winged Pegasus is also very beautiful according to A. Dürer and is correct, i.e., not upturned in the plane representation. Nevertheless, if we take the map and look into real sky, then

"... from sunset to sunrise, Pegasus flies there with its legs upwards like a shot-down bird" (*ibid.*).

It is also clear that the ancient astronomers would have never represented this "winged" constellation as flying upside-down. It was, therefore, A. Dürer's blunder. Accordingly, Hercules is with its legs upwards if we apply the chart to the actual sky. Virgo is also represented erroneously, supine and setting with her legs upwards. Meanwhile, in pre-Dürer's and quite rough charts, it had normally been represented (standing), though with fantastic arrangement of other stars. It is important that all the inaccuracies vanish in the plane chart (Pegasus is standing up, etc.), i.e., the arrangement was chosen because of artistic requirements. A. Dürer's errors were natural: Having a plane chart, and not a real picture, he was drawing in order to make an impression on the art lover. Certainly, engraving was an enormous job; therefore, even if all these blunders did awe the author-astronomer, he could do no more than launch all the drawings into publication, especially since A. Dürer, who regarded them only as works of art, could bring the prints (made not later than 1515 A.D.) into circulation without waiting for the book to be published. A. Dürer's "Pegasus turned upside-down", e.g., clearly put Copernicus in trouble. Retaining its senseless position, he changed the order of the stars in his own star catalogue, thus showing the covert struggle of common sense against the nonsense of certain fragments of A. Dürer's charts consecrated by Ptolemy's authority.

Acknowledging the authorship of A. Dürer in all the blunders in the constellations' positions, we establish that any representation copying his errors must be post-Dürer. We now return to Ptolemy.

The *Almagest* positions the non-bright zodiacal stars not on the basis of their coordinates, but on verbal descriptions of the type: "in Aries' horn", "in Pegasus' mouth", "in the ankle of Pegasus' right leg", etc. It follows clearly that they refer to the charts, i.e., A. Dürer's pictures! Therefore, they could have all appeared in the *Almagest* only after 1515 A.D. Thus, not only the star catalogue, but the very text of the *Almagest* was created in its final form only in the 16th c. A.D., immediately before being printed.

The *Almagest* also touched other problems of astronomy (the theory of planets, eclipses, etc.), with the corresponding chapters not containing any proof of textual antiquity. Quite the opposite, the unusual fragmentariness of Ptolemy's reports of lunar eclipses, and their great scattering across centuries, catches one's eye. For example, of 41 eclipses which could be seen in the Mediterranean in the 2nd c. A.D., Ptolemy indicated four, with only one of them being total, and the other three partial. And this was done by a professional astronomer stressing that he had carried