

This diagram is from a text book. There are at least 6 errors in the diagram (Fig 1.10) or text regarding the Ptolemaic system. Can you find them?

Check P. 48+49 in Crowe's book.

"The Planetary System" Morrison + Owens (1987)  
 1.3 THE SLOW PROGRESS OF REASON

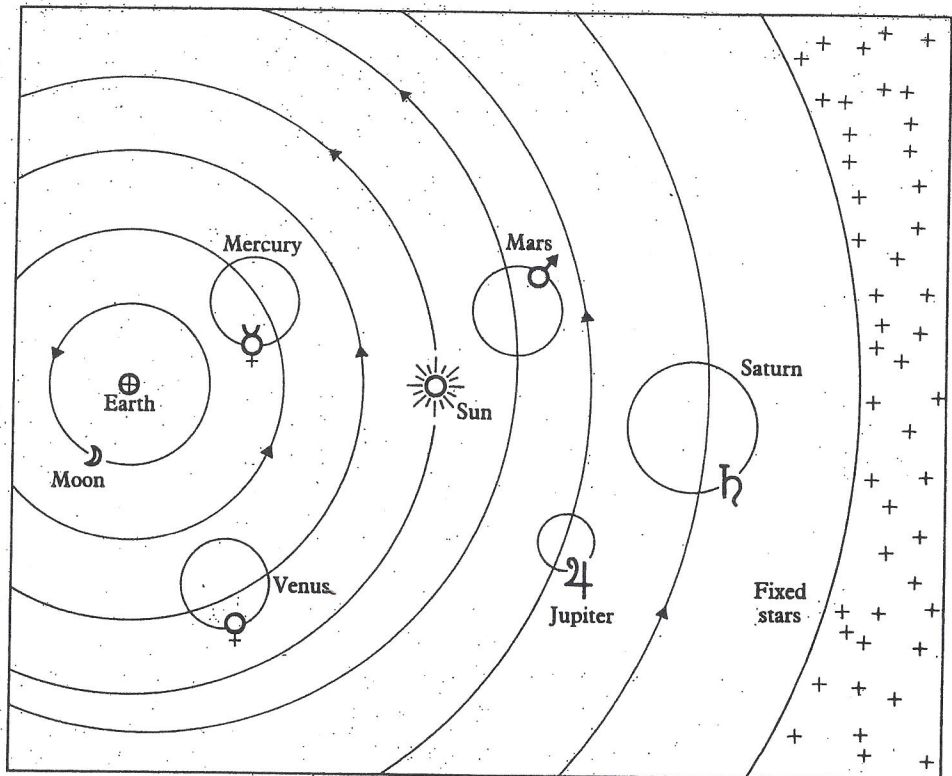


FIGURE 1.10. The Earth-centered or Ptolemaic system to explain the apparent motions of the Sun and planets. Each object except the Earth must move in small epicycles in addition to moving about the Earth.

thought to be caused by the planets' motion on small circles called epicycles that were centered on their circular orbits. Thus when a planet needed to go backwards, it just traversed the small circle in a direction opposite to that in which the big circle carried it. This complex arrangement may be compared with what happens when the Sun is at the center. Now the retrograde motion of the planet is not real, it is simply the effect seen by an observer on Earth as we overtake the planet in our journey around the

FIGURE 1.11 A copy of the original sketch of his plan for the solar system published by Copernicus note that only the Moon orbits the Earth, while the planets move around the Sun.

