

Traditional Mediaeval Indian Sea-Charts

B. ARUNACHALAM

Marco Polo, in his return voyage from China to Venice through the North Indian Ocean towards the end of 13th century, is reported to have seen the use of sea-charts by Indian seamen. Two centuries later, Vasco da Gama, for his passage from East African shores to the Indian coast made use of a Gujarati seaman, after satisfying himself of the latter's sea-wisdom and seeing in his possession a map of "the whole coast of India". The use of sea-charts as an aid to practical navigation was in vogue much before the advent of the European colonial traders in the North Indian Ocean is almost an accepted fact. Yet, such sea-charts do not appear to have survived on the Indian, Arab or African shores.

Apart from being an aid to navigation, traditional sea-charts were the way to wealth, and hence were prized treasures, guarded in secrecy from rivals and competitors. Totally removed from an academic realm, a sea-chart is practical and functional in approach, with little room for theory. They were sparse details, including just what was relevant and essential to the sailor for a safe voyage in a short time; they ignored the rest of the details.

The history of evolution of sea-chart on the Arabian Sea coast is difficult to trace, because of the limited availability of records and that too in local seamen's language dialects. These records of sea-wisdom, sea-lore and navigational aids reflect immense cumulative wisdom of sea, borne art of continuous interaction with other seamen, practical experience, field observations of the skies and stars, the weather and winds, in short anything of direct utility and relevance for safe sailing.

The present paper examines and evaluates the nature of such knowledge of sea-charting that could be gathered from sections of west coast of India, especially Kutch, Saurashtra, Gujarat, Malabar and Lakshadweep from seamen of traditional sailing vessels through oral testimony and inherited records about 200 to 400 years old. Primary field data have been gathered over a period of a decade.

Different phases in the evolution of these sea-charts can be traced: development of azimuthal stellar roses and wind roses as compass cards; individual port/harbour oriented charts; charts of limited coastal stretches and large area charts. All these phases are demonstrated through illustrative examples.

The varied techniques of nautical cartography employed in such charting and dead reckoning are explained, with a brief allusion to the hand tools employed. In conclusion, a comparison is made of the contemporary European traditions.