

THE REVIEW OF RECONSTRUCTION DESIGNS OF ZHANG HENG'S SEISMOSCOPE

Kuo-Hung HSIAO¹, Hong-Sen YAN²

ABSTRACT: This paper reviews the development of reconstruction designs of the lost Zhang Heng's seismoscope. Historical background of Zhang Heng's seismoscope including the biography of Zhang Heng and existing historical archives is presented. Available reconstruction designs, which are classified into external shape, suspended pendulum, direct contact, inverted pendulum, and authors' approach, are presented. Based on the proposed approach, all feasible design concepts that meet the science theories and techniques of the subject's time period can be recreated. And, this provides a logical foundation for the reconstruction designs of Zhang Heng's seismoscope before new evidences are found.

Key Words: Zhang Heng's seismoscope, Reconstruction design, Seismograph