

Synopsis of the History of Chinese Science

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Continuous tradition

The Chinese maintained their cultural isolation fairly well in most of the time. Surrounded by high mountains, wastelands and oceans, China is effectively isolated from the rest of the world, save some nearby satellite countries like Korea and Japan, to such an extent that this geographical insulation is largely compelling a long-standing continuous culture – from the second millennium B. C. down to almost present time – without substantial interruption. This continuity is one of the most outstanding characteristics of Chinese science, forming a striking contrast with the main current of Western scientific development, in which the center of its activity shifted from Babylonia to classical Greece, to the Hellenistic world, to India, to the Islamic world, to the Renaissance Europe and so on. Thus, we find in Chinese science a process of gradual development on a single established traditional line rather than discrete scientific revolutions which were by no means the product of one race or continent and often resulted from active intellectual confrontation with an equally high culture. For science in which intellectual feedback is indispensable, cultural isolation meant a lack of challenge. Perhaps, the chief merit is that this long continuous tradition provides to the modern researchers – seismologists, astronomers and other scientists – invaluable records of uninterrupted observations of eclipses and other portents extending over two millennia.

We can go back to oracle bones of the Yin dynasty (mid fifteenth century B. C.) in tracing the evidences of some basic characteristics of the Chinese science. During the Chou period – the Warring States period (the fourth to third centuries B. C.) in particular – philosophic thought appeared – not only the humanism and naturalism of Confucius and Lao Tzu, but also systems like Mo Ti's which attempted to integrate axioms of optics, mechanics and semantics. The Mohist

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