

Needham question

[Countries](#), [China](#)



Noel Joseph Terence Montgomery Needham, 9 December 1900 – 24 March 1995, also known as Li Yuese, was a British scientist, historian and sinologist known for his scientific research and writing on the history of Chinese science. His grand question is: Why was China overshoot by the West in science and technology? What happened in the history of China that made developing science and technology less important? What happened in Europe that made developing science and technology more important?

What are the factors that caused China to be overshoot? Needham's question has intrigued many generations of scholars and philosophers. It's an important question to ponder over. 1- Introduction During the Renaissance and into modern times, the west countries took a leading role in scientific discovery and invention, while China stagnated. Boasting one of the world's most glaring agricultural civilizations, China's agriculture began in the remote antiquity when there was still no written history.

China's economy system emphasized agriculture, whereas Western countries enjoyed growing trade and manufacturing. 2- Reasons One of the convincing answer to those questions attributes Western dominance to the rise of capitalism. Even the most militant enemies of capitalism credit it with creating previously undreamed of productivity and progress. The capitalist system was " the first to show what man's activity can bring about. " Capitalism achieved that miracle through regular reinvestment to increase productivity, either to create greater capacity or improve technology.

Although many factors might contribute to the emergence of capitalism and modern science in the West: openness of economy and society was a necessary condition for developing to the capitalism and modern technology.

<https://assignbuster.com/needham-question/>

There was an astonishing contrast between the openness of the Western economy and the closeness of Chinese society. Encouraging foreign trade and protecting city business was the traditional policy of European countries in the middle ages. But the Chinese government had controlled city commerce since the 8th century B. C. and tightly had carried out a closed-door policy in the Ming and Qing dynasties.

Then, Western civilization arose around the Mediterranean Sea, which serves as the main trade route between the East and the West. China is basically an inland country, and most areas are not accessible to the sea. So, developing transportation and division of labor was, therefore, much easier for the Europeans than for the Chinese. Dairy products and meat are the main staples in the Western food structure. However, Chinese agriculture consists of a simple structure of intensive farming since grain and vegetables are the main foods for the majority of Chinese people.

The history of Chinese civilization has many distinctive characteristics: the gigantic bureaucratic system of the long-lasting Centralized Chinese Empire, its hostile policy toward the merchant class, and its cyclic dynasties and peasant rebellion. Chinese society was characterized by its self-sufficient economy and labor-intensive agriculture. Compared with the Western pluralistic society with its open economy and developed division of labor, traditional Chinese society was a rather simplistic, monolithic society with remarkable structural stability which had endured and cyclic turbulence overtime.

Also, emphasis on wholeness in community thinking and respect to elders meant that children and even college students could not question teachers.

<https://assignbuster.com/needham-question/>

One of the difficulties noted is the challenge of teaching critical thinking to Chinese college students. Though these, students are gifted, bright and as fully capable of intelligence as their Western counterparts. So, it is considered extremely disrespectful to offer second opinions that differ from the primary physician in charge of a case. Then, a desire to maintain strong cultural identity discouraged new developments in favor of keeping a traditional way of doing things.

To Needham, China's culture and its philosophy and religion just was not interested in the high paced dramatic age of discovery in the West. David Landes says, " If we learn anything from the history of economic development it is that culture makes all the difference . . . what counts is work, thrift, honesty, patience, tenacity". Landes explains that culture might include attitudes as willingness to challenge the natural environment, rebel against ancient traditions of how to make things, emulate the customs and techniques of otherwise despised foreigners.