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IFLAME

**RESEARCH
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EMPOWERING CHANGEMAKERS FOR A BETTER SOCIETY

‘SOLAR ECLIPSES AND THE ORIGINS OF CRITICAL THINKING AND COMPLEXITY’

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ABSTRACT

This paper relates curiosity to economic development through its impact on human capital formation and technological advancement in pre-modern times.

More specifically, we propose that exposure to inexplicable phenomena prompts curiosity and thinking in an attempt to comprehend these mysteries, thus raising human capital and technology, and ultimately, fostering growth.

We focus on solar eclipses as one particular trigger of curiosity and empirically establish a robust relationship between their number and several proxies of economic prosperity.

We also offer evidence compatible with the human capital and technological increases we postulate, finding a more intricate thinking process and more developed technology among societies more exposed to solar eclipses.

Among other factors, we study the development of written language, the playing of strategy games and the accuracy of folkloric explanations for eclipses, as well as the number of tasks undertaken in a society, their relative complexity, and broad technological indicators.

Lastly, we document rising curiosity both at the social and individual level: societies incorporate more terms related to curiosity and eclipses in their folklore, and people who observed a total solar eclipse during their childhood were more likely to have entered a scientific occupation.



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