
Did Angkor build itself to death? Integrating earth science, archaeology and network science to explain 'collapse'.

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Abstract

I will provide an example of a socio-ecological system that was iteratively and deliberately constructed into a state of precariousness over several hundred years. The medieval city of Angkor, in present day Cambodia, was the world's largest city by the 12th century C.E., and was characterized by a vast and intricate water management system. That infrastructural network became critically inter-dependent and, when perturbed by extreme monsoon variability during 14th and 15th centuries, precipitated a system collapse and the abandonment of the city. Angkor represents an important example of the unexpected consequences of climatic variability for a constructed landscape whose basin of attraction was rapidly shallowing.

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