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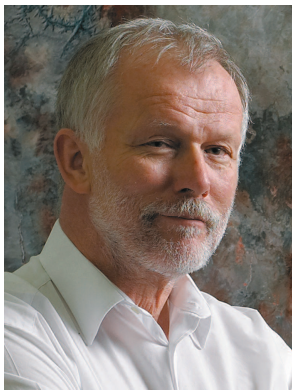
Sander van der Leeuw **Climate and Society. Lessons from the last 10,000 years**

discussants

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This presentation distinguishes three major 'revolutions' in the socio-environmental interactions that reflect growth in the extent to which human beings invest in, and modify their environments.

The first of these is the 'Neolithic' revolution, when people settled in villages around 8000 years ago. As they settled, they introduced agriculture and herding, and began investing in the environment, rather than merely exploiting it. This led to a shift in emphasis in their survival strategies, from mobility to sociality.

The second 'revolution' is the emergence of cities, which changed human societies by (1) creating dependencies between more and more distant regions, (2) increasing the degree of aggregation of human populations, (3) narrowing the range of subsistence resources on which people depended, and (4) increasing further their investment in the natural environment and in material culture.

Altogether, urbanization drove human social systems further and further away from flexibility and rapid adaptation to environmental change, while increasing the demands on the social system, including major increases in energy and matter to support urban populations. In the process, there was a shift from responding to environmental change by moving to dealing with it by problem solving.

The Imperial revolution brought together economically and politically different societies in a large system that enabled the center of the Empire to draw upon the resources of a very large area, thus enabling the population at the center to amass riches which they could not otherwise have laid their hands upon.

We must thus look at the long term history of human societies as a co-evolution of the social and the environmental dynamics. These revolutions occur after a buildup of shifts in the social and environmental risk spectra due to the human-environmental interactions, and should be seen as social challenges rather than environmental ones. These are generally due to the fact that the society in question has invested so much in a particular way of life that it cannot innovate itself out of difficulty before time runs out. This implies that we have to shift our thinking about socio-environmental issues, from 'population thinking' to 'organization thinking'. In this perspective, a crisis does not imply the disappearance of the people involved, but a transformation of the organization that links them. That has important consequences for the way in which we try and extricate ourselves from the current 'sustainability' crisis.

the lesson will be held in English