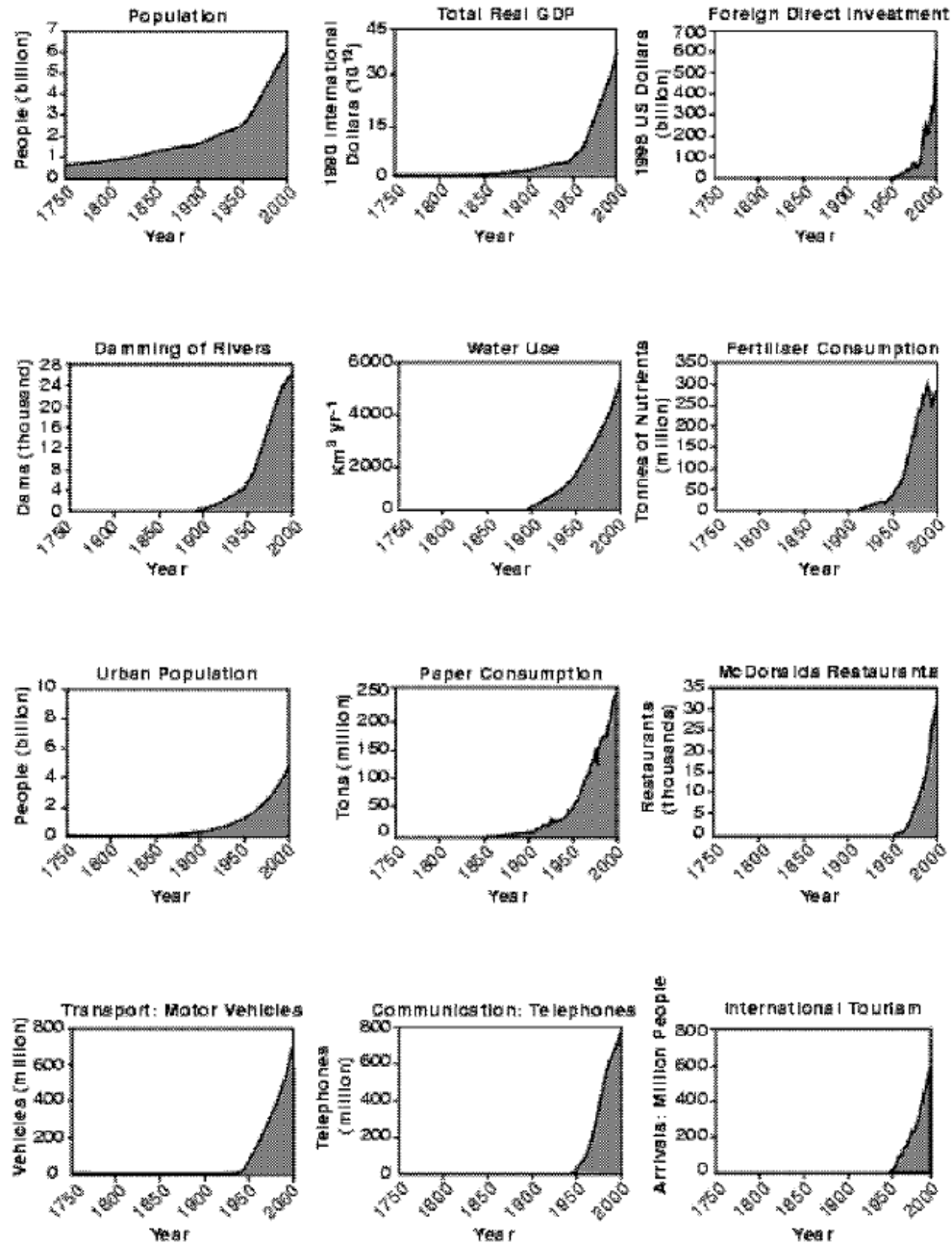


Energy Systems and Technology in the Past and Present: The social dimension



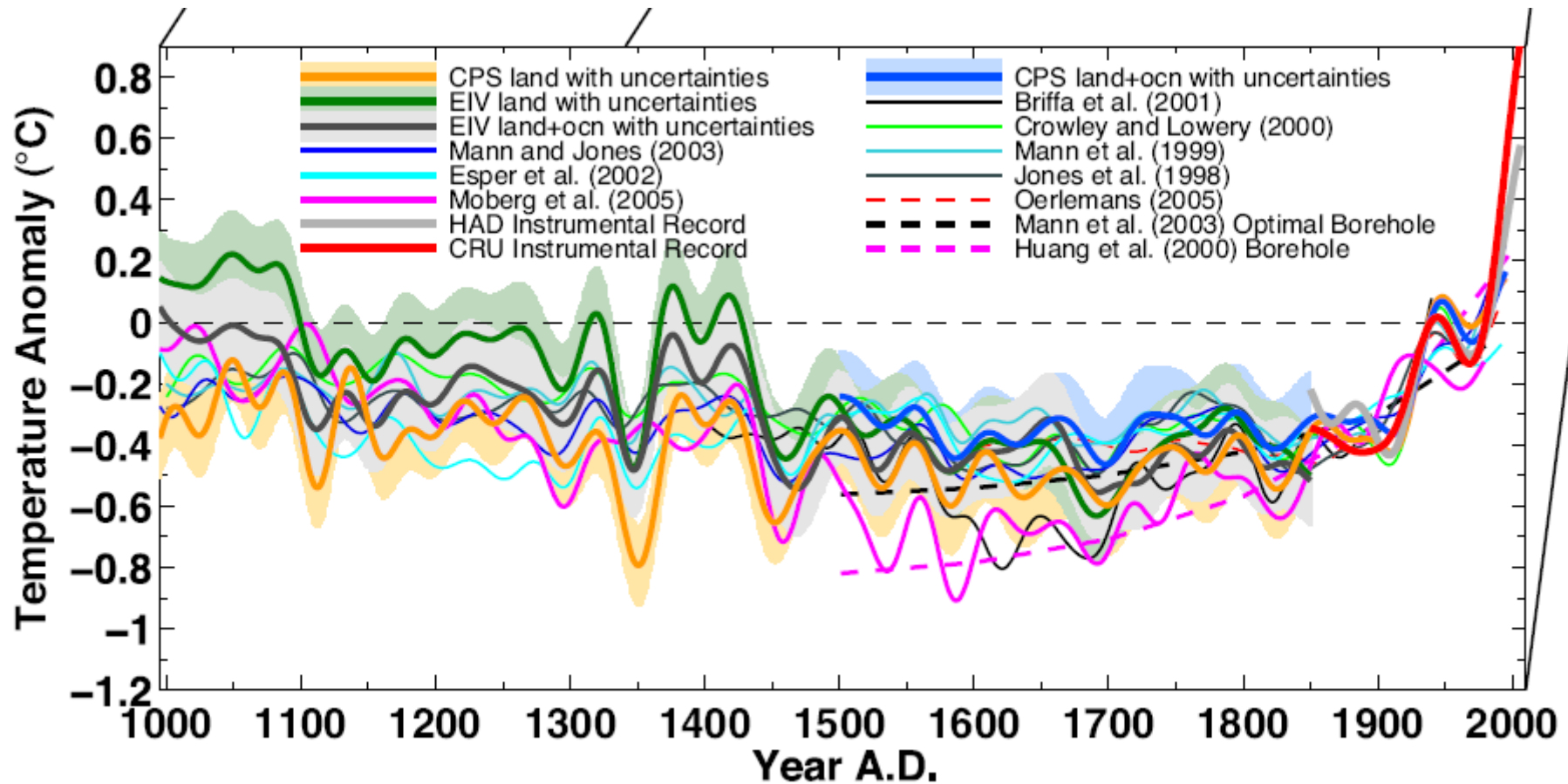
Changing Times: the

Anthropocene

(P. Crutzen)

Population, Total Real GDP, Foreign Direct Investment, Damming of Rivers, Water Use, Fertilizer Consumption, Urban Population, Paper Consumption, McDonalds Restaurants, Motor Vehicles, Telephones, Tourism – 1950ies onwards (Crutzen/Steffen 2003)

The current face of the Climate ,Hockey stick‘



Mann et al. 2008

Changing Times

Premodern and High Modern Times

Impression of gaining control

Capitalizing Nature

**Technological Systems as Tools to
colonize Nature**

**Main aims and purposes of
progressive action are clearly
distinguishable from side effects**

„Anthropocene“ since 1950ies

Impression of losing control

**Capitalizing Pollution (e.g. Emission
Certificate Trading)**

**Technological Systems interweaving
with Man and Nature as hybrids**

**Side effects and main functions of
technical developments and
planning are not clearly
distinguishable**

Changing Technologies, Changing Social Attitudes

„Electricity“ has many faces now

→ Necessity of choice



Technologies to save the World

Who saves?

Who decides who knows how to save?

Who wants to be saved how?

global
young
faculty

facing climate change



www.facing-climate-change.org