

## Which path into sustainability? – FS 2015 (M. Dittmar)

<http://ihp-lx2.ethz.ch/energy21/Uebungen.html>

### Exercises Serie 10 (Energy and environment in the 21. century (II))

*Discussion: May 22, 2015*

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#### **Thinking about past sustainable cultures: what can be learned for our future?**

Tribal cultures, more or less nomadic, dominated the human way of life at least during the last few hundred thousands years. Perhaps one could argue that the successful ones, like the Bushmen culture, lived sustainable for at least some 20 000 years in the Kalahari desert. Many others would probably be still around, if their way of life would not have been made impossible by invaders from outside.

However, only little archeological evidence exists about sustainable agrarian cultures. Perhaps the best documented example of an egalitarian and agricultural culture, is the Cucuteni-Trypillian culture. Please read the Wikipedia article and perhaps have a look into other related documents [http://en.wikipedia.org/wiki/Cucuteni-Trypillian\\_culture](http://en.wikipedia.org/wiki/Cucuteni-Trypillian_culture) to discuss the following questions:

- Try to estimate the population density of the Cucuteni-Trypillian culture with the ones from nomadic tribal cultures and with hunter-gatherer Neolithic cultures.
- According to the article the Cucuteni-Trypillian culture shared common features with other Neolithic societies, including:
  - An almost nonexistent social stratification and with a lack of a political elite.
  - Rudimentary economy, most likely a subsistence or gift economy
  - Pastoralists and subsistence farmers and almost no division of labor.

What are the apparent main differences with hunter gatherer tribes and with with later societies of the Bronze Age which had noticeable social stratification.

- Try to find some explanation why their “religion”(?) might have favoured that their settlements “underwent periodical acts of destruction and re-creation, as they were burned and then rebuilt every 60-80 years”.
- Identify some other facts about “their way of life”? Was their way of life perhaps more attractive than the one from other cultures, prior to our industrial dominance period.