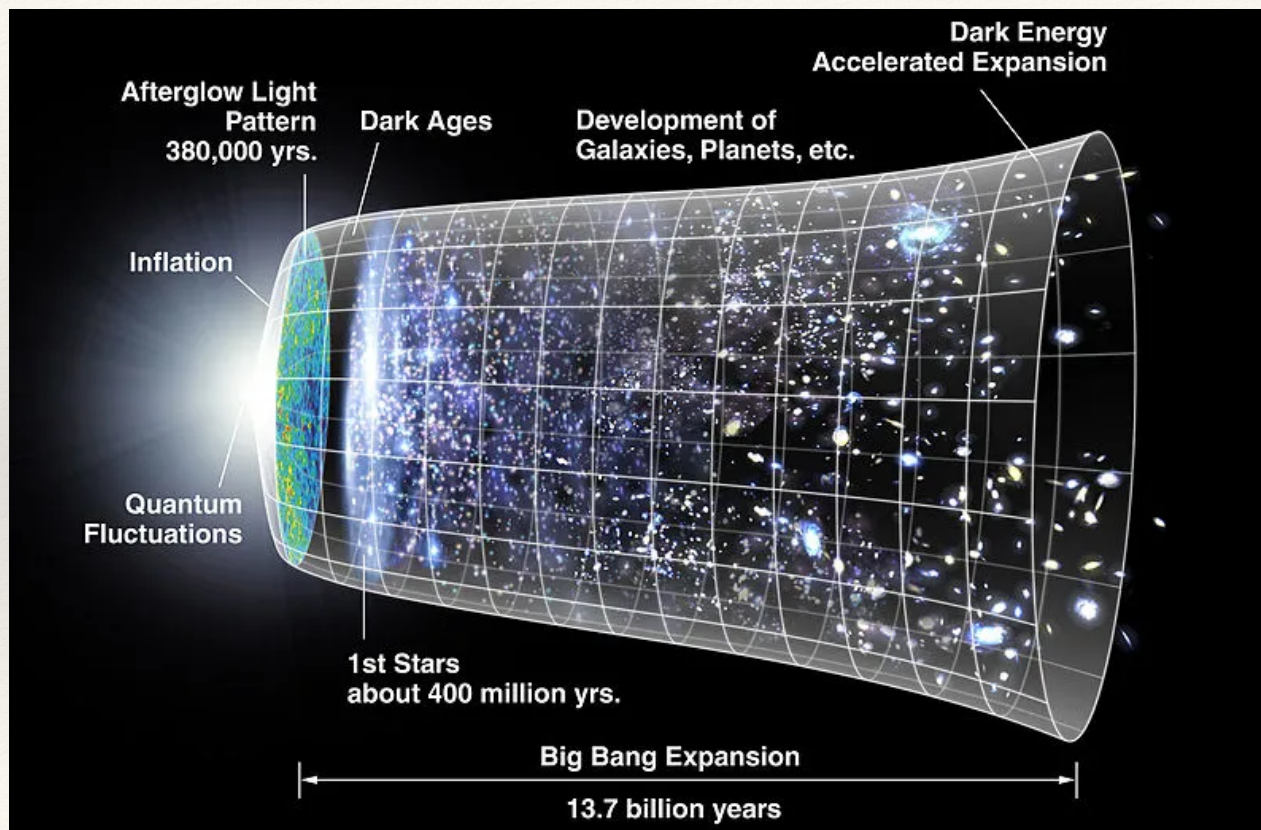
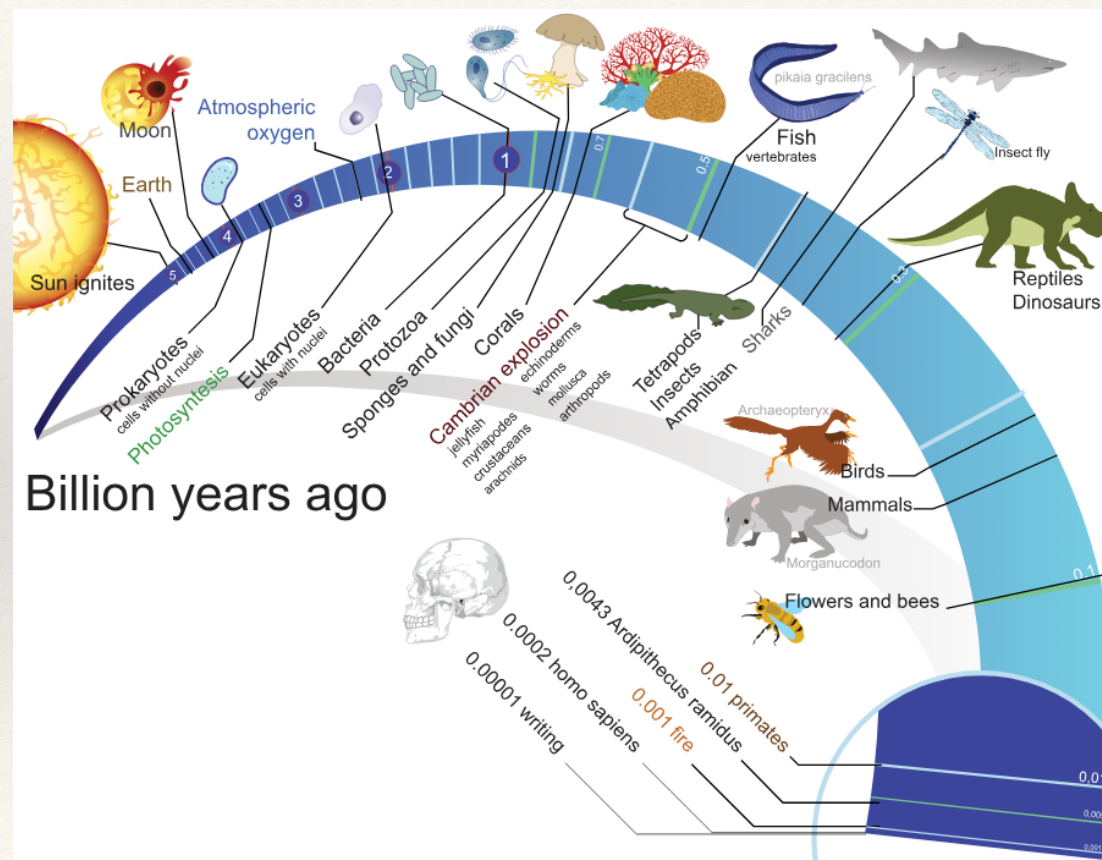

A brief history of humankind

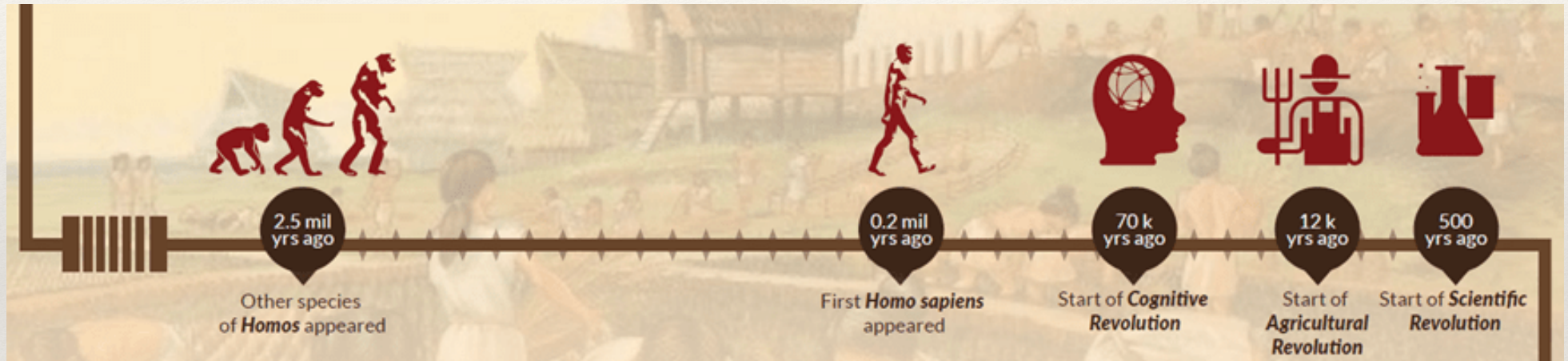
The universe



Life on earth



Humanity



(Based on Sapiens, Yuval Noah Harari)

THE 3 KEY HUMAN REVOLUTIONS



The Cognitive Revolution

Sapiens flooded the planet as hunter-gatherers, changing our environment and social structures faster than any other species.



The Agricultural Revolution

We multiplied rapidly, but ended up with tougher lives and poorer nutrition. New imagined orders like peasants vs nobility, empires and gods emerged.

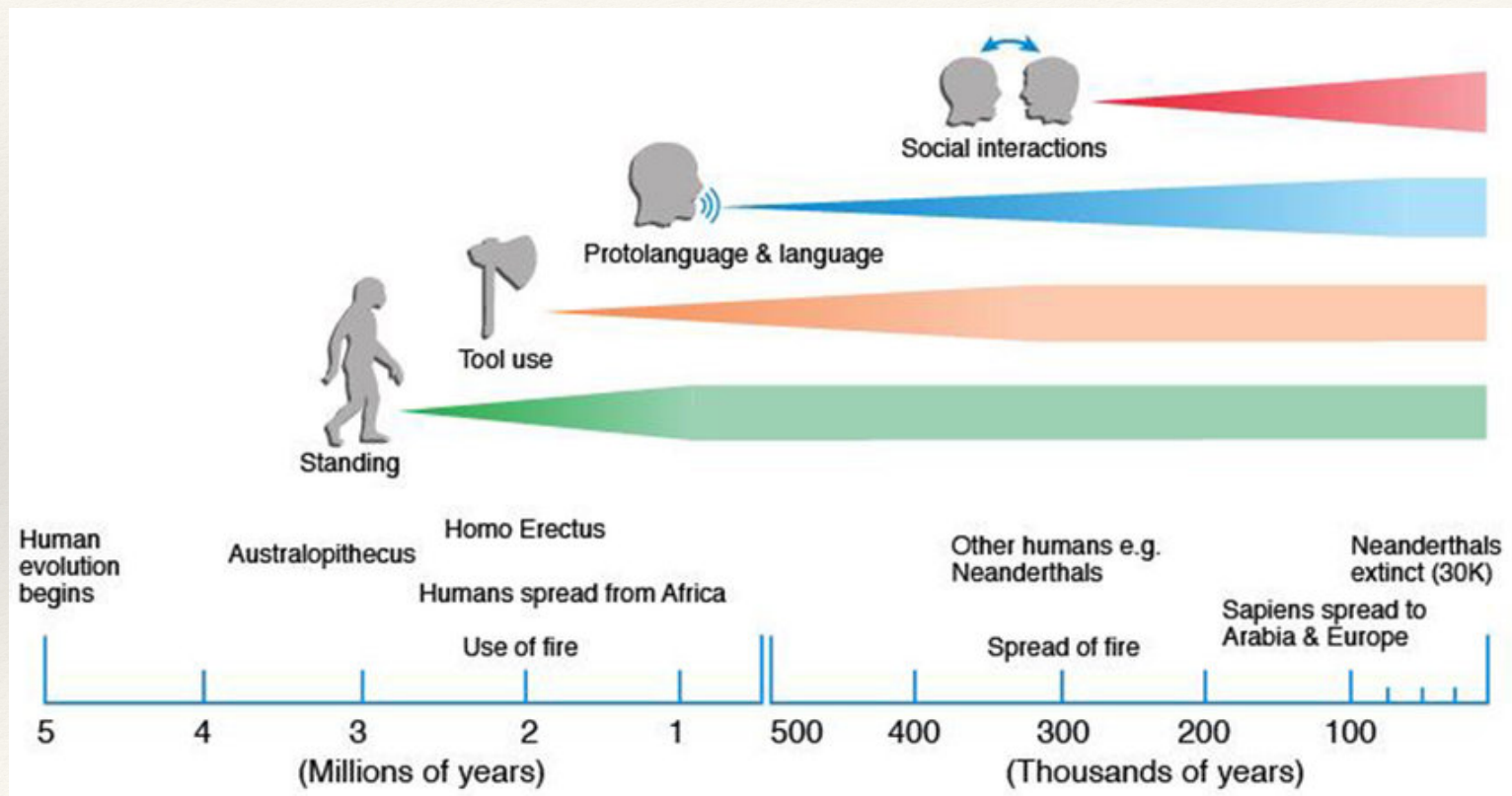


The Scientific Revolution

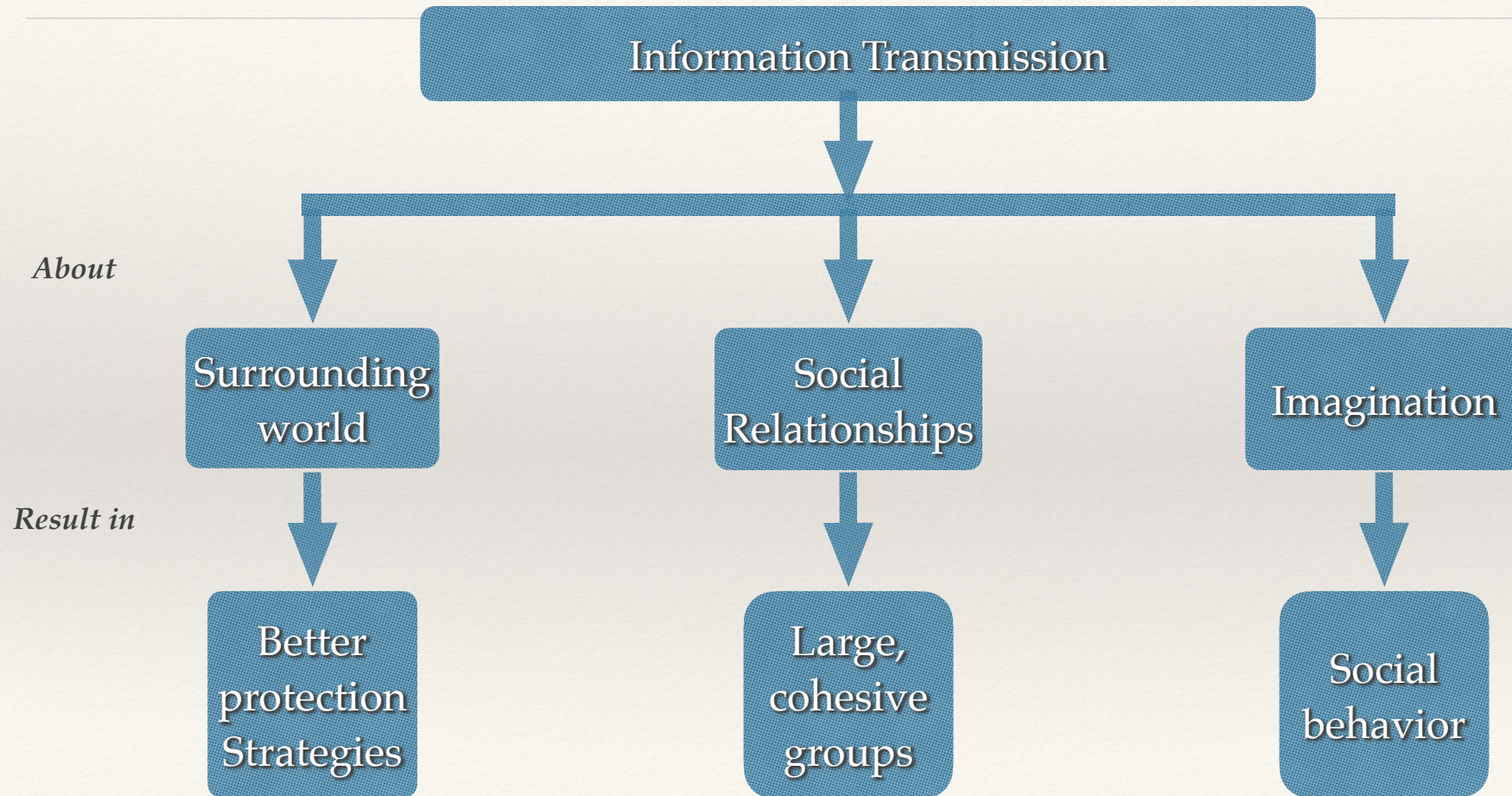
Science, imperialism and capitalism jointly brought more changes in the last 500 yrs than ever before. This revolution may well be the one that drives mankind to extinction.

(Based on Sapiens, Yuval Noah Harari)

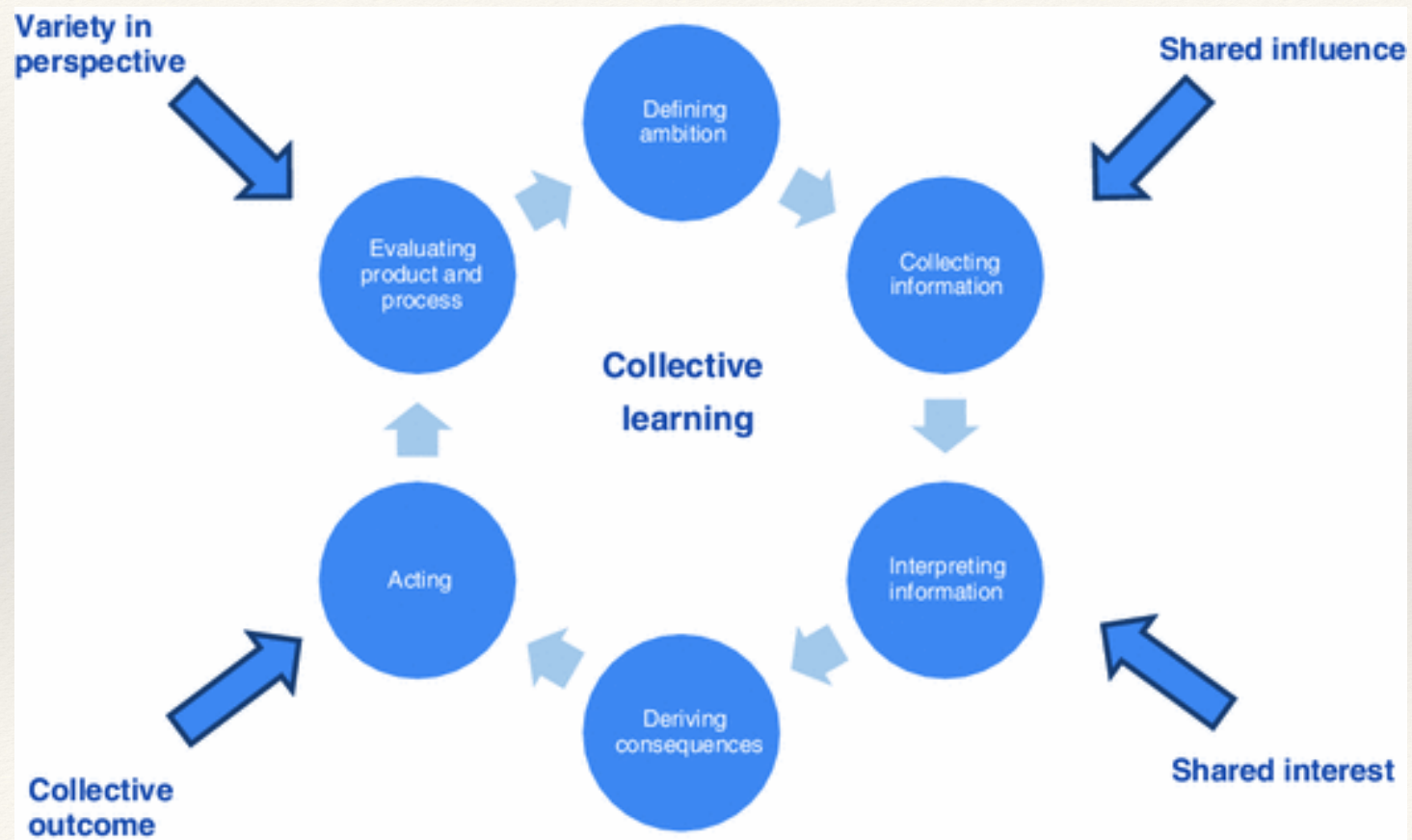
Early human developments



Cognitive Revolution

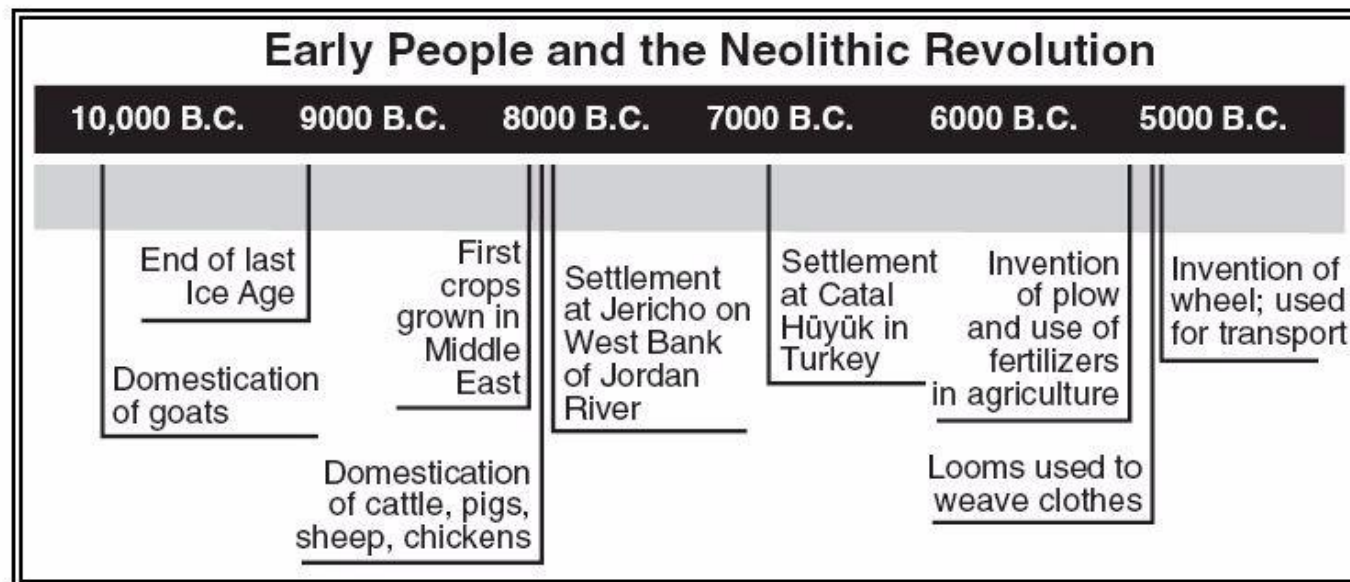


Collective learning



Agricultural revolution

Neolithic Timeline



Source: Vivienne Hodges, *New York State Global History Regents Coach*, Educational Design, Inc. (adapted)

Top inventions



Ian Barbour's views of technology

❖ **Technology as Liberator**

- ❖ Higher living standards (*medicines, sanitation, drugs, nutrition, reduced manual labor*)
- ❖ Opportunity for choice (*mobility, birth control,...*)
- ❖ More leisure (*education, arts, entertainment, sport,...*)
- ❖ Better communications (*radio, TV, phone, email,...*)

❖ **Technology as Threat**

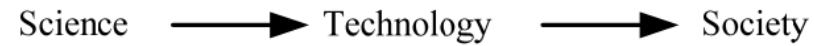
- ❖ Uniformity (*standardized products, lack of individuality*)
- ❖ Narrow criteria of efficiency (*efficiency is defined in terms of quantity where human values are overlooked*)
- ❖ Impersonality (*people feel like cogs in a well-oiled machine*)
- ❖ Uncontrollability (*technology takes on a life on its own; we lose control*)
- ❖ Alienation (*from the process of work, the product of work*)

❖ **Technology as Instrument of Power**

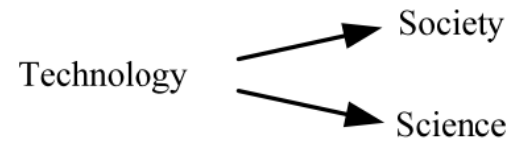
- ❖ Technology and power (*technology is neither good nor evil*)
- ❖ Redirection of technology (*political structures can redirect technology to do more good*)
- ❖ Social construction of technology (*science, society, and technology are mutually reciprocal in influence*)

Ian Barbour's views of technology

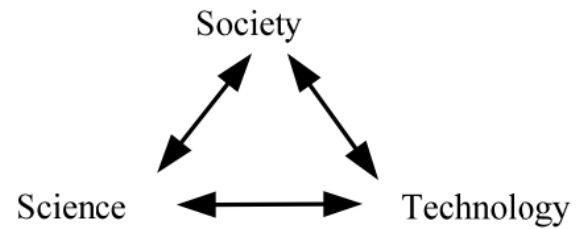
Linear Development:



Technological Determinism:



Contextual Interaction:



Kranzberg's laws of technology

- ❖ Technology is neither good nor bad; nor is it neutral.
- ❖ Invention is the mother of necessity
- ❖ Technology comes in packages, big and small
- ❖ Although technology might be a prime element in many public issues, nontechnical factors take precedence in technology-policy decisions.
- ❖ All history is relevant, but the history of technology is the most relevant.
- ❖ Technology is a very human activity – and so is the history of technology.[[]