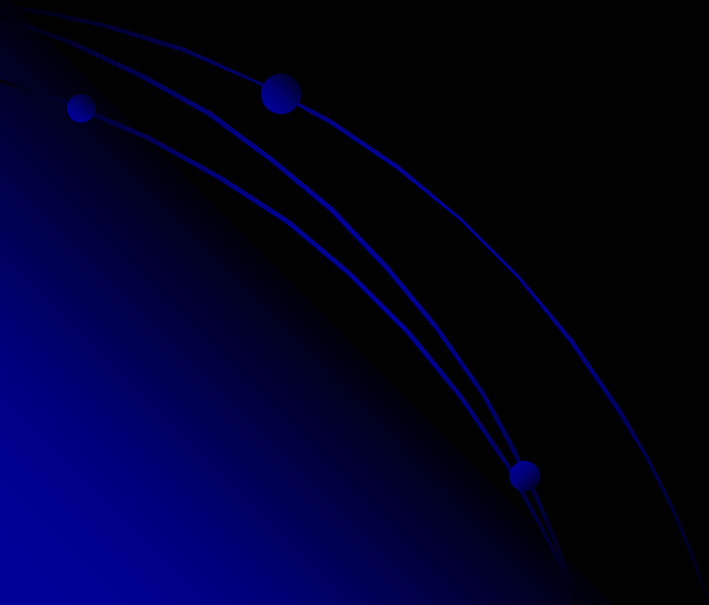
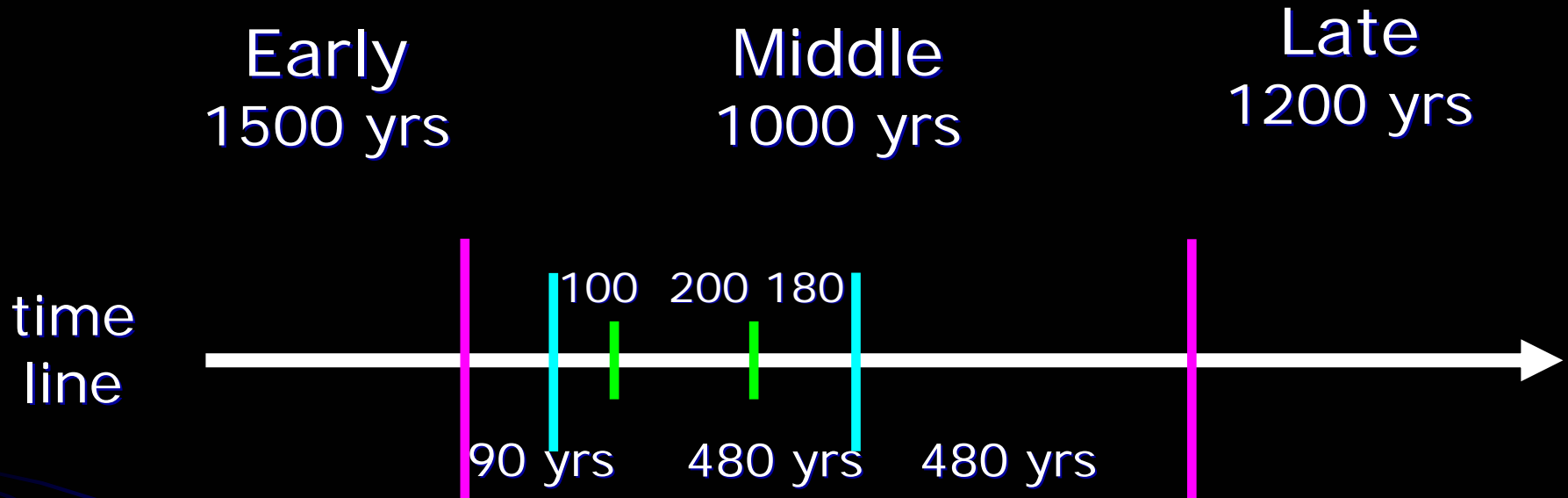


# Time, scale, space

## Workshop 2

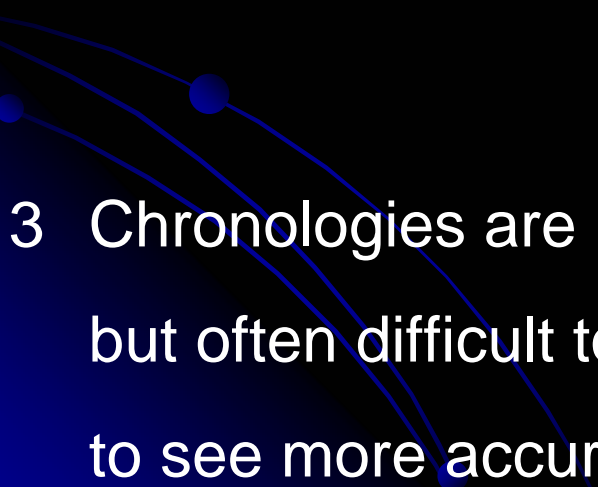


# TIME SCALE 1



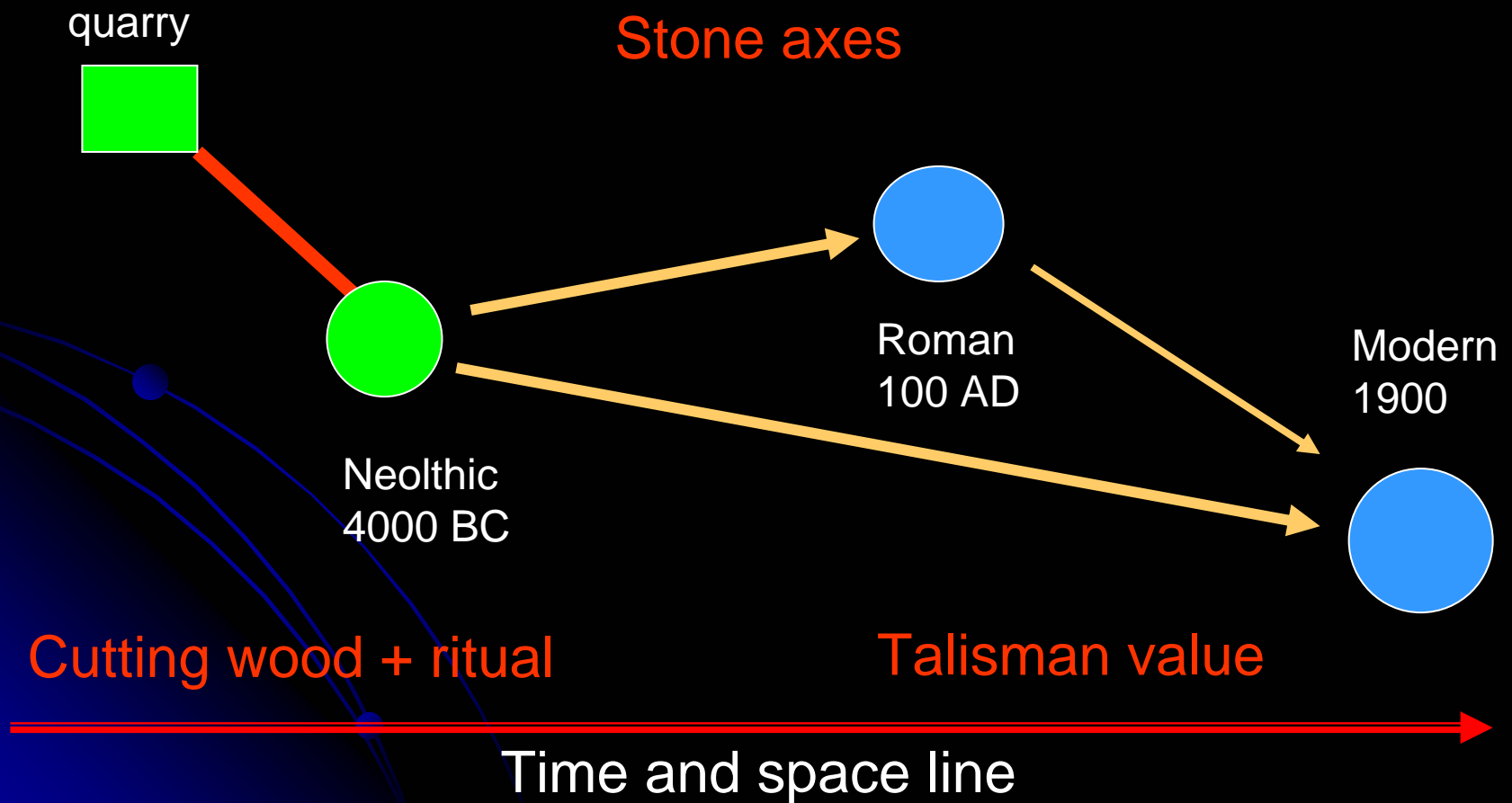
Periods are archaeological tools  
they didn't exist in past in such a way,  
we use them to explain the past

# TIME SCALE 2

- 1 Archaeological periods differ in scale (uneven time spans)
  - 2 Cultural defined periods differ in regional sense  
And : Coexistence of different cultural entities
  - 3 Chronologies are never accurate enough,  
but often difficult to segregate in smaller periods  
to see more accurate spatial dynamics
- 

# TIME OF THE OBJECT 1

Live span of object : primary use, second life



# TIME OF THE OBJECT 2

Datespan of dating object longer than lifespan of dated site

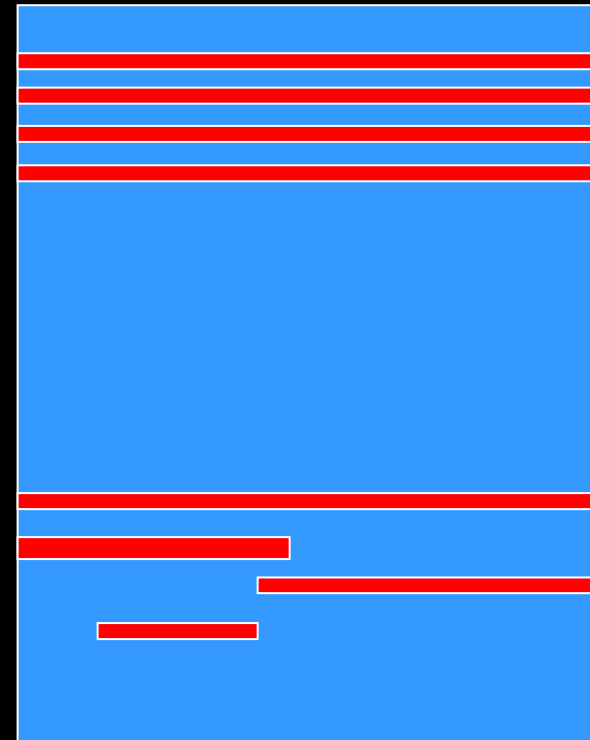


Perceived lifespan of site in model covers datespan of object



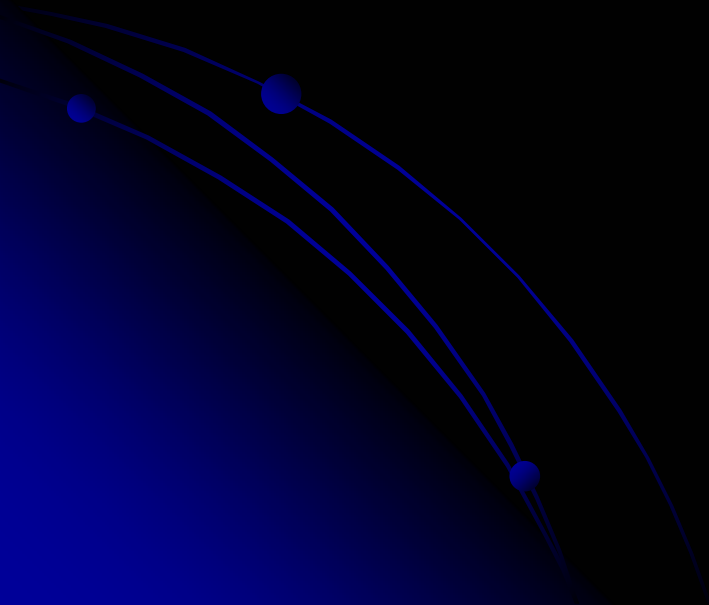
Obligation to introduce random lifespan to sites within datespans of dating objects

Date frame by object



# CHANGE IN TIME

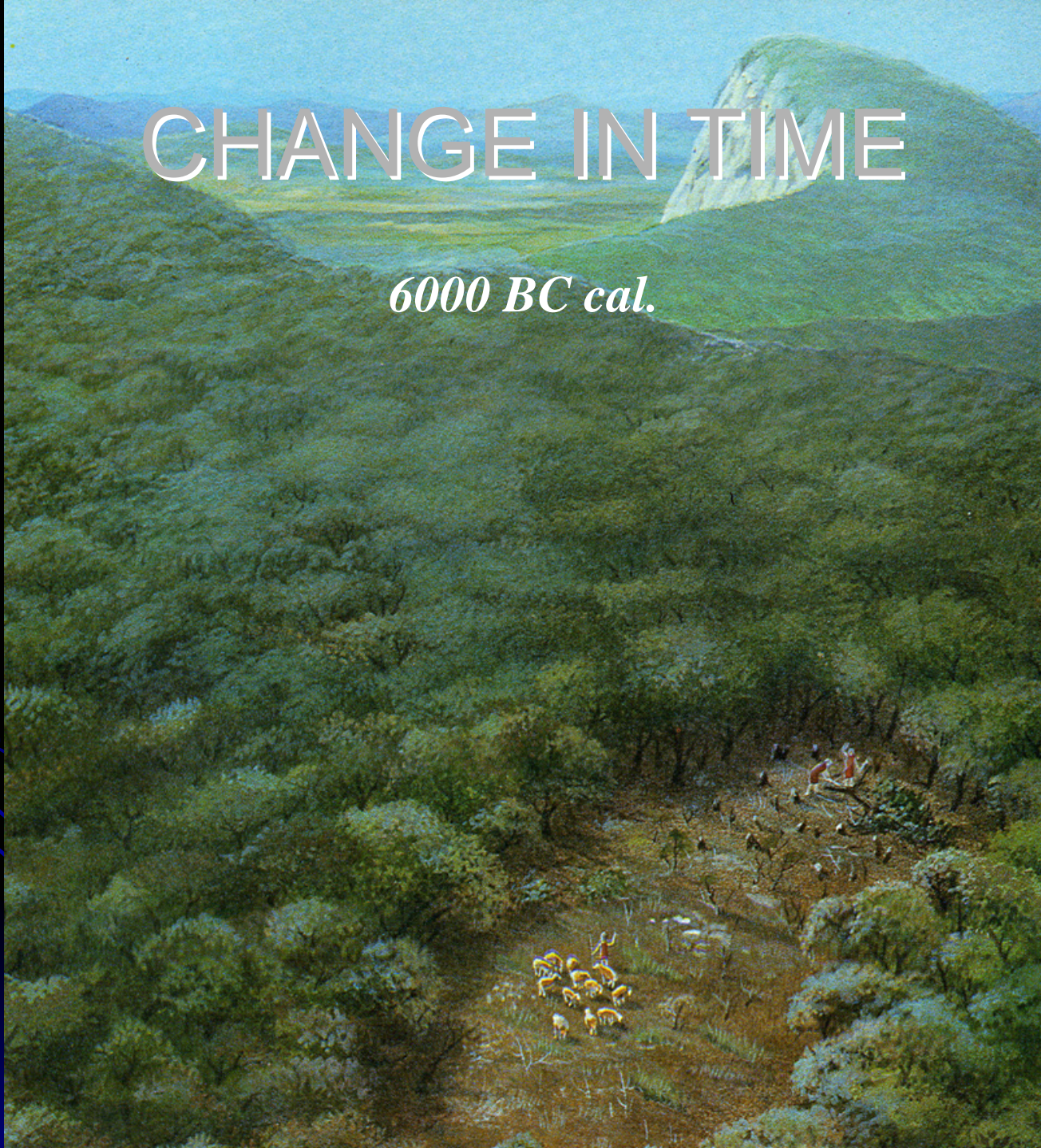
How do you introduce the movement through time in static cartographic models? We represent the dynamics only by snapshots





# CHANGE IN TIME

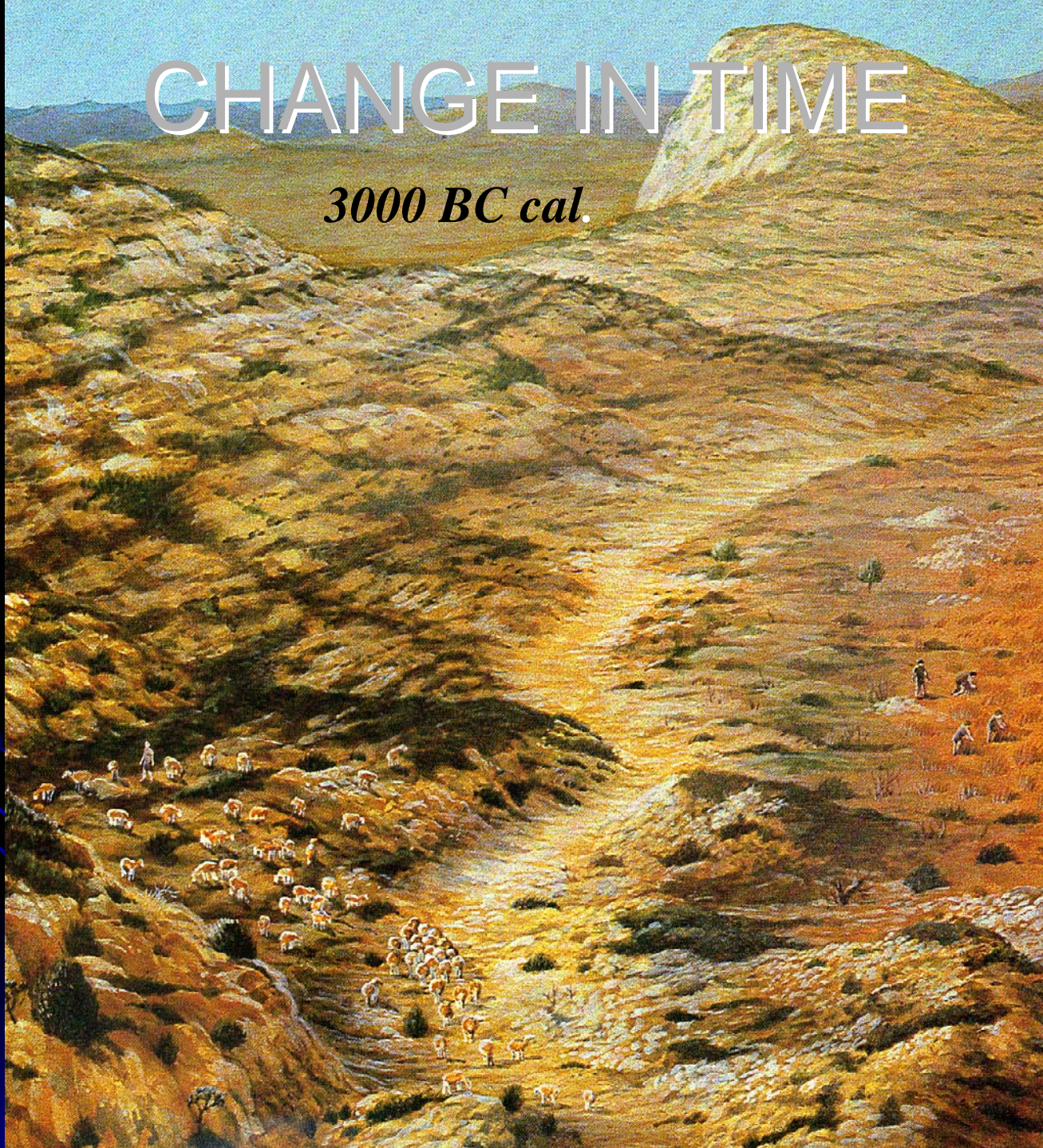
*6000 BC cal.*





# CHANGE IN TIME

*3000 BC cal.*





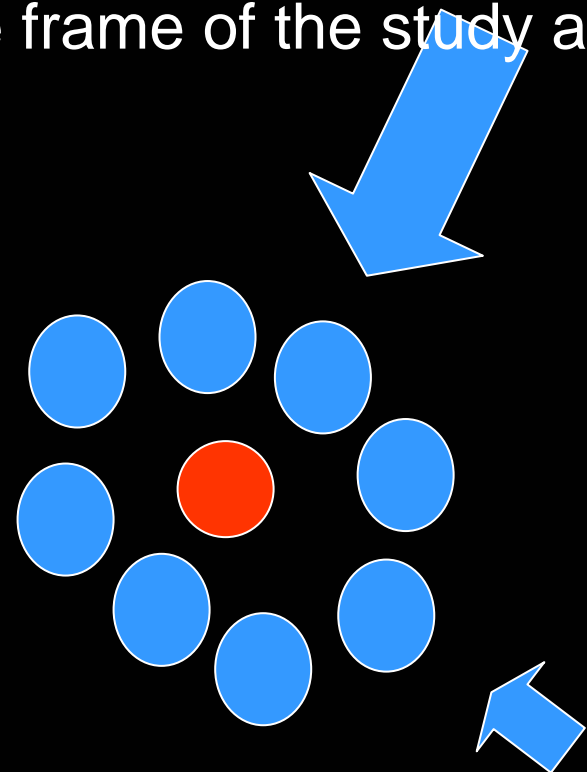
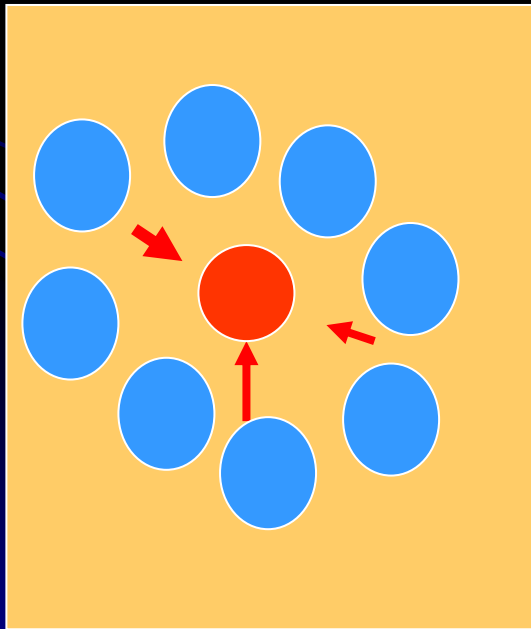
# SPACE SCALE 1

Different scales:

stratigraphy; intra-site; site; local; regional; world

Implies looking at different dynamics :

beware of influences from outside the frame of the study area

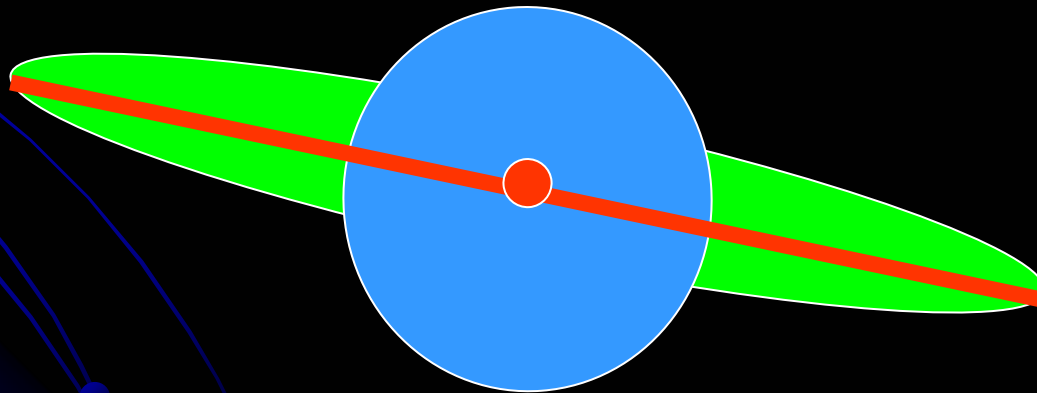


# SPACE SCALE 2

## TIME and SPACE

Perception of time

The perception of distance (time)  
changes the spatial scale



# SPACE SCALE 3

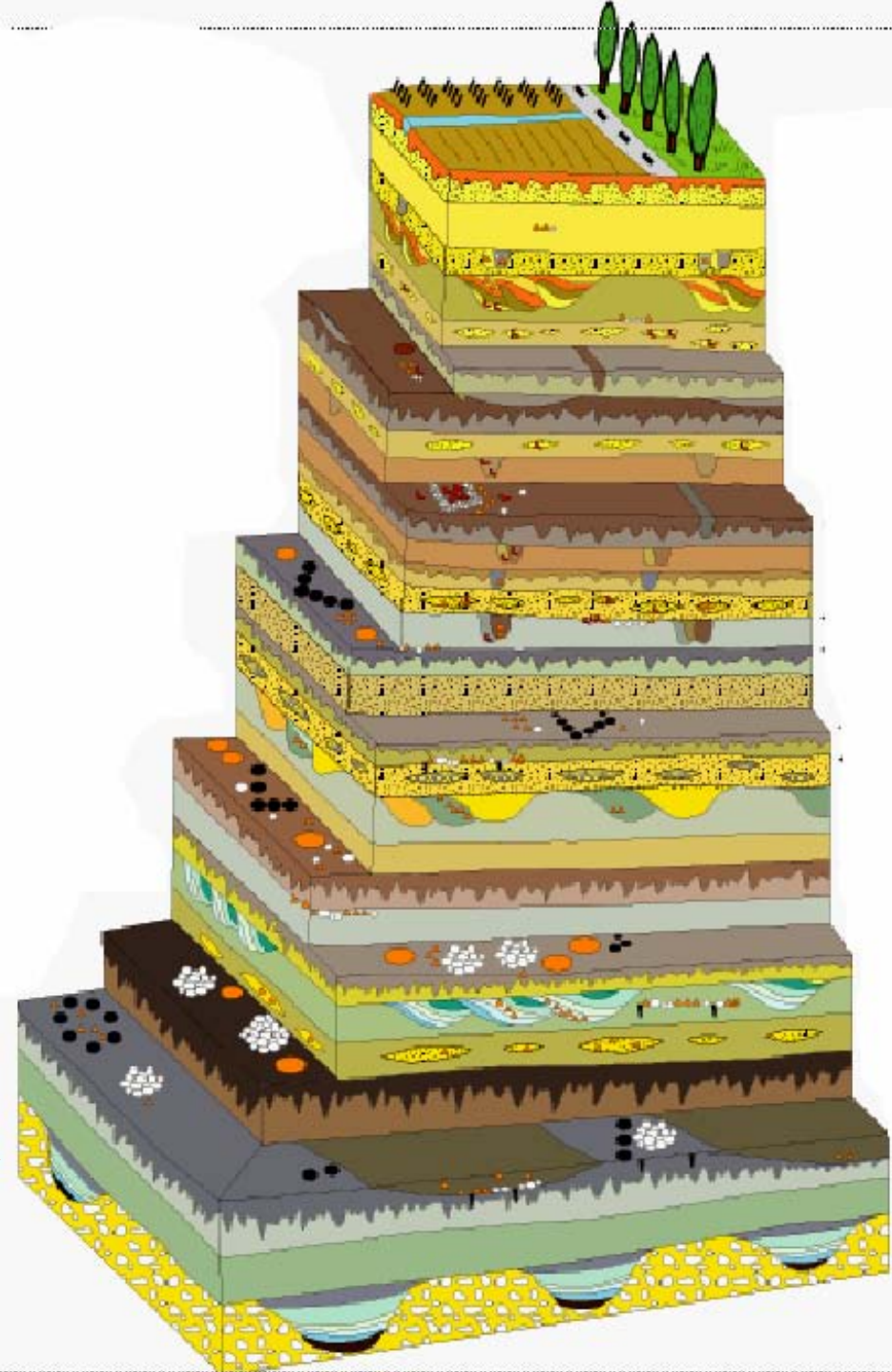
## TIME and SPACE

Space changes  
through time

An illustration of landscape evolution since  
the Mesolithic Period

8000-7500 BC →

Source : J.F. Berger 2001  
DAO : P. Sarrazin





# What is the object of analysis ?

- Determining a given state of events
- Or defining the process which led to this state

With the same data and the same question, two persons can work on wholly different aspects. Developing concepts in an early stage is therefore of prime importance.

# Different questions – different scales (spatial and temporal) 1

Modeling of duration of a system or a culture  
and/or of crises / thresholds :

The problem of acceleration in systems  
and of switchovers from one system to another



# Different questions – different scales (spatial and temporal) 2

Searching the changes, processes beneath

Perceived dynamics on different time and space scales

Representations of space in time slices

Scales defined for research necessities

Dynamics of change differ in space

Time perception in different cultures (and of the researcher)

Perception of space depends on perception of time