# Time, Space, Scale

June 29, 2007 Group 1

### But first a few words on Uncertainty....

- .... In archaeology it's a given!
- So we have to find ways to get around it or to incorporate it

 How then to represent it? GIS: fuzzy logic Database: degree of certainty

#### About scale...

- Definition of scale / resolution: its different for everyone
  - From decade to century to millenia
  - From point-level to regional space unit
- (so you have to be explicit about it in your text)
- It depends on the quality of your data
- You can switch to different scales in your research, according to the problem

### About time...

- Time is never fixed in archaeology
- Everything has its own rythm in time

   Land use can change easily and quickly;
   Land ownership changes far more slowly
- Change causes time ruptures that vary according to the nature and/or quantity of the event:

Fire (short but intense, on small scale)
War (long, on big scale)

- It is difficult to realise a continuous scenario of phenomena;
- You need to find the instances of change over time...
- ...and you also have to focus on the « unchanging » periods of time between those events of change!

## More questions concerning time

- How do you represent time?
  - -Is it possible in the first place
  - -Does every problem require it
  - -What is the best way?
    - Visualisation
    - Real life reconstruction
    - Other...

#### About space...

 Problem of impact of changes on space: change can have a different effect on different types of space / space with different functions

## Problems concerning 3D

- Is 3D modeling a good option, other than to visualise the (dis)appearance of volume
- How should we represent uncertainty in 3D
- Does modeling in 3D provide us with more (archaeological) information than in 2D

#### Final words...

As archaeologists, we can Mayber separate space and side of the base to distinguiste beteveen the two, but we can never leave one of the two out of the picture