# Betesa meeting (2-3/07/2013)

## Recap and Timeline

Marco, Vicky, Andrea, Bernardo, Xavi, Alexis, Alexandre, Enrico, Mathieu, Juanjo, Francesc, Carla

### AP Agents (Carla, Mathieu, Xavi, Marco)

#### Actions:

- Move home (dune, shared, near water, plots available)
- Create new field (added, replaced, 2/1 cultivation cycle)

#### Resources:

- Plants and animals (tot calories, production loss)
- "field size" (cultivated and grazed, working hours/size, biomass % for animals)
- Yields (based on rain)

#### Plotting cycle:

- Cultivated (MJJASO)
- Wild (NDJFMA)

#### Timetable

- Mid July> collect data
- End of August> implementation
- October> simulation

### Alexandre, Alexis, Mathieu, Vicky

- Performance (end of July)
  - Update cells only when necessary (only when needed)
  - Changing the resolution (end of July AA-AT-BR-XR)
- Information sharing (possibly September)
  - Random sharing and system exchange (2 agents meet do they share or not? How much they share?)
  - Test different models and strategies
  - Information about unknown cells
    - scouting? Fixed ratio depending on parameters Strongly parameter dependent
    - Go for the negative approach no scouting needed (scouting is kind of part of the daily moving for hunting)
- Path (resource guessing)

### Xavi, Enrico, Bernardo

- Relation between efficiency and strategy
- Generation based reproduction (impact of time in the learning process – vertical transmission)
- Negative frequency between tendency to perform a strategy and efficiency – move to a positive feedback
- Explore the model and integrate it into the Gujarat model
- Model finished by end of August so that it will be explored in London starting from September (Xavi in London 15/09-15/12)
- Final outcomes in November
- Integrate this into the Gujarat model once both agents are fully implemented.

# Meetings

- Last week of July. Meeting on CS5.
- <u>Beginning of September</u>: meeting with Xavi to discuss the implementation of the AP model before he leaves to London (Xavi will also be in Barcelona in October). JJ/FC will present a short recap of the archaeological situation in Gujarat.
- <u>Beginning of October</u>. Resilience cluster. How are we moving on? Plus workshops organisation.

# Outcomes (priorities in red)

- JAMT waiting for reviews (paper and special issue to be closed)
- Two more papers:
  - Ecological models: rule-based/model-based (AB with AT)
  - Computer science: architecture, performances etc
    - ICKAI
    - Turin (Feb 2014 deadline July. Two papers: Pandora and "performances")
    - Journal of Artificial Societies?? Journal of Simulation??
- Next Special Issues:
  - Thematic workshops (3) think of journals (wider than archaeology- Ecological Modeling/Ecology and Society [open access 800€ per paper], Human Ecology/Current Anthropology), define abstracts and list of papers. Open access journal that have conventions with CSIC (if the CSIC buys the proposal they pay for everything)
- Timing within project. Not all publication need to be out before the end of the SimulPast but the main pillars do:
  - JAMT special issue
  - at least another special issues
  - a book coming out of the 2014 SimulPast workshop within social simulation conference)
- Final book related to the end of the project workshop that will be more a guideline for social simulation.
- Working papers for each sub-groups. Let other people know about planning and keep track of what you want to do.
- Wiki updating: everybody look at it and let Carla know what to do.

#### Mathieu:

- Two papers on Rabari ethnography and one on traditional ecologic knowledge changes.
- Bernardo and Pep are working on a paper on Complexity in Archaeology coming out of Pep's final BA work (Clios dynamics, Journal of Archaeological Research, JAMT)
- Xavi and Cristina just published a chapter on social science simulation in a book on simulation.
- Possible exploration on
  - the "environmental cue" on the model we are using
  - Exchange of information distance (spatial dependency of information sharing – porcupine dilemma)
- Xavi is working on a paper applying quantum probabilistic models to foraging strategies. Residential vs logistic mobility for a second paper applying the same quantum probability model.
- Possibly include simulation on storage in our AP model for Andrea's special issue on storage.
- Prosopis small project for a student > Create a list of possible projects and send to Alejandro

### **Events**

- <u>September 2013</u>, IPHES (Tarragona): workshop on complex systems and prehistoric society paper presented and accepted on CS1 and poster on CS5 (TdF presented but not known what happened).
- March 2014, Paris CAA 2014: July 14<sup>th</sup> deadline to present workshop/seminars/ session. What do we do?
- May 2014, Montpellier: conference on resilience in Montpellier. AB and MS are proposing a short session on computer simulation for resilience in semi-arid areas.
  3 papers proposed (climate and HG, climate and cultural transmission as resilience strategy, applied case study on cell-phones with present-day pastoral society in Gujarat). Deadline mid-August.
- <u>September 2014</u>, Barcelona: Social Simulation Conference with a workshop dedicated to SimulPast
- December 2014, ICREA workshop, proposal submitted (outcome Before summer holiday)
- Cluster workshop schedule and organisation (invite external people)
  - Resilience
  - Cooperation
  - Transmission
- Ideas:
  - something for SAA in a couple of years (San Francisco, April 2015) either on the Case Study or on the Resilience Cluster
  - Human Behavior end Ecology (annual conference normally held in April)