# When in Rome... Norms as socio-mental processes not objects

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### Beliefs, goals and actions

- Beliefs are stored within agents
- Representations of believed states of affairs in the world
- Goals are desired states of affairs
- Actions are behaviours that an agent can perform in the world

#### Norms

- Norms are expressed as a socio-cognitive process encompassing beliefs, goals and actions
- The original sources of beliefs are also important in delineating a normative process
- Norms are not individually generated from base individual needs but are socially received.
- Norms are very often related to behaviour within social situations

# Norms as process

- Beliefs which are socially received
- Concerning "proper" or "acceptable" goals in a given context (normative beliefs)
- Generate goals in those contexts
- Generate actions in those contexts
- Depending on existing beliefs, goals and strategies those actions may or may not be pursued

# Norms as process

A normative belief (b1) may produce goals in a given context. To achieve goals a set of actions Normative belief need to be performed. b1 b2 b3 **Beliefs** g2 Goals **g**1 a1 a2 a3 a5 a4 Actions

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#### Current simulations...

- The spread of normative reputation between and within agent groups
- Extending work done within an existing model
- Conte & Castelfranchi 1995 Artificial Societies UCL Press.
- Castelfranchi, Conte & Paolucci 1998 –
   JASSS vol. 1, no. 3.

#### Quick simulation overview

- 10x10 two dimensional grid world
- 50 agents, 25 food items
- Agents move around the grid looking for and consuming food items
- Agents use heterogeneous strategies
- Some respect a "possession" norm allowing agents initially near to food items to consume them
- Some do not respect the norm attacking owners of food items to steal the food

# Initial results with groups

- Certain forms of "group reputation" (ie stereotyping of a group of agents as either norm followers or norm breakers) are sufficient to give normative agents an overall advantage in food finding activities
- Additionally, groups of norm followers have a more egalitarian distribution of consumption.

#### The technical bit...

- Agents are implemented as simple java objects
- Beliefs, actions and goals are all implicit –
   the behaviour is hard-coded.
- No BDI-type platform is used
- However, it would seem that all behavior is consistent with the outlined view of norms
- Does implementation matter? (opinions)

#### Questions from the armchair

- Is this view of norms (as a socio-cognitive process involving beliefs, goals and actions) inconsistent with other frameworks?
- Is it too "thin" (adds nothing of value?)
- Is it too "wide" (covers too many phenomena)
- Is it a "so what" or "just so" theory?