

Role-Playing Games in a variety of cultures: experiences from the ComMod group

Olivier Barreteau
Cemagref UMR G-EAU
Olivier.barreteau@cemagref.fr

William's Daré
Cirad UPR GREEN
Williams.dare@cirad.fr

Key Words: companion modelling, renewable resources management, collective decision, legitimisation

1. Introduction

The group ComMod has designed and implemented role playing games in various situations around the world, while performing “companion modelling” approaches¹. All these experiences deal with renewable resources management and have either an objective of reaching a better understanding of the complex systems in which this management of renewable resources takes place, or an objective of facilitating collective decision processes for this management of renewable resources. Key concepts of this approach are (i) making explicit various assumptions and viewpoints involved at various stages and (ii) taking in charge the dynamics of these systems. For that we used mostly Agent based modelling and role playing games. The current symposium of Simulation & Gaming on Natural Resources Management provides several examples of use of role playing games in that trend². This group is mainly made of French scientists, but not only, who work a lot abroad, in developing countries. Several experiences have thus been conducted in Africa, South-east Asia, South America, Pacific islands, France and Australia. Our purpose is first the study of the facilitation of collective decision processes for renewable resources management issues through the use of games and social simulations; however we increasingly take the opportunity to analyse the process itself to strengthen the approach and assess its effects. This extended abstract is rooted mainly in experiences dealing with water management in Senegal and France, even though it is obviously taking a lot of inspiration from the whole group experience. Oral contribution might embrace more examples.

2. Place of games in local habits

While implementing a game in a given place, first issue is to get people involved. This means selecting people, inviting them in a session and introducing the game. This means naming the kind of event they will go through. However, in most places, a “game” has a specific

¹ This approach is described in a charter, to be found in : <http://www.commod.org>. Composition of group is also detailed in this website.

² This symposium is published in issues 2 and 3 (in press) of volume 38 of Simulation & Gaming.

connotation which has to be dealt with, in order to get through this first stage and have people accepting to participate.

One of the first experience of the group has been made in the Senegal River Valley, with a game, Njoobari Inoowo, featuring farmers in a typical shared irrigated system of the Senegal River Valley (Barreateau, Bousquet, & Attonaty, 2001). It has been initially developed to validate an agent based model of coordination among farmers within these irrigation systems. The idea was to make farmers play their situation as represented in the computer model, so that they might react upon it. First sessions showed that not only farmers were considering the representation as suitable, but also that they were keen on discussing on their real situations on the basis of their common experience in the game.

The game had then to be played with farmers from the Senegal River valley. All of them are Muslims, a religion which does not accept games with randomness, and do not know about role playing games. However rural theatre is well established in the area. Therefore we chose to name it as theatre to introduce the workshop. However the atmosphere in game sessions did show quickly that participants understood it as a game, in the meaning of Caillois (Caillois, 1967).

In France, games are better known but are claimed no to be serious. A game on a serious issue is thus not acceptable, as we could see in an experience for water sharing rule adaptation experience in the Drôme river valley (Barreateau, Abrami, Chennit, & Garin, 2006). An alternate naming could be simply a workshop, but this leads to lose the distance between the game session and the real world which paves the way for the creativity of participants. This led us to a dead end, with few really concerned participants and doubts towards the usefulness of such settings beside the work of extensionnists, who made it illegitimate.

Cultural legitimisation of games is even more important since the games we produce are featuring items close to real life of participants, with a high personal involvement (Daré, 2005; Daré & Barreateau, 2003). Works in other places undertaken by the group also go in that direction, such as in Northern Thailand (Patamadit & Bousquet, 2006).

Seriousness of issue at stake makes the terminology less important. In Senegal, the game was taking its place in a research process: coming after in depth and repeated interviews of farmers, who became thus curious on the follow up appearing through the game session. Players were also directly concerned by the issue at stake in the game: They were faced to irrigation management every day, and thus came into the simulation without trying to hijack it either for fun or for strategic reasons. When players are not directly concerned by the issue, which might be assessed by the fact that one of the roles could be them, games are not taken as seriously. In such context, their reflexivity on the gaming nature of the setting is increased.

3. An influence still present in the way of playing

When the game is accepted, be it presented as such or not, culture of players influence also their way of playing.

Several games experimented in the group make players put the shoes on of someone else. This requires a specific ability, and might be difficult when this “someone else” is present. We found actually this difficulty in various contexts. It seems to be a more socially related cultural trait. In the Senegalese game, one of characteristic of the roles given to players is a social status, due to the fact that the society is highly hierarchised with categories well established and ruling a lot of the interactions among people, including money and work exchanges. We could observe that it was much more difficult for a participant of low social status to put the shoes on of a high social status than the opposite, mainly when another

participant of high social status is present. To make a step by on individual practices (such as irrigation practices) seems to be easier than on relational practices.

We found this difficulty in France as well. In another experience, Concert'eau which is extensively presented in another session of this conference (Richard-Ferroudji & Barreteau, 2007), some participants could not leave their own ways of thinking, their own "justification principles" as it is implemented in this game, for the duration of the session. The most extreme case is a retired military, now elected in the local council, for whom their might be only one good. Asking him to play in a game working on the issue of pluralism of goods was too difficult. In this situation new to him, with other citizens of his place, he was always heading back to his own views. The relation to others in the real world is again more difficult to leave aside.

Debriefing, which is well known as a key stage in a game session (Lederman, 1992; Peters & Vissers, 2004), is important to make the participants more at ease in a gaming situation. This is used in most experiences of companion modelling. In the Concert'eau experiment, this was heavily used by participants to come back to their "normal" position in the real networks: a fisherman representative having to play a position of defending the economic benefits of water, be it at the price of its ecological quality, was keen on revealing his role to other participants as a role and not real ideas.

Another mean to deal with this issue of cultural concerns with social relations would be to have absolute anonymous games, such as in experimental economics, but this would prevent from leading the discussions on the interactions and from generating social learning with the group of participants.

Cultural influence on game practice in renewable resources management issues should not be considered only as a difficult point. Once game analysis is tailored to the cultural context of participants, a game session might also learn on the effect of some cultural traits on resource management, even when they are denied. With the Senegalese game we could learn through the game on the influence of social position, which is said to be defined by ancestors' position and claimed not to be in use anymore, except in some specific social events such as tea party or weddings. The way of playing, related to the social position of players, did show that it is important also in irrigated management issues.

4. Conclusion: gaming as a contingent craft

From various experience, we can see without any surprise that the reception of game for renewable resources management is highly dependent on the culture of the target group. However this should not be considered as a major flaw of this technique. This leads to learn on cultural traits. This is also the counterpart on the capacity of gaming, as a craft, to meet the triple requirement for contingency to think and discuss about possible changes (Miettinen & Virkkunen, 2005). While the influence is increased when interactions are at stake, we argue that it reinforces the need for more reflexivity on the gaming process.

5. References

- Barreteau, O., Abrami, G., Chennit, S., & Garin, P. (2006). Support to Stakeholder Involvement in Water Management. Circumventing some Participation Pitfalls. In S. Perret, S. Farolfi & R. Hassan (Eds.), *Water Governance for Sustainable Development* (pp. 275-289). Montpellier, Londres: Earthscan.

- Barreteau, O., Bousquet, F., & Attonaty, J.-M. (2001). Role-playing games for opening the black box of multi-agent systems: method and teachings of its application to Senegal River Valley irrigated systems. *Journal of artificial societies and social simulations*, 4(2), <http://jasss.soc.surrey.ac.uk/4/2/5.html>.
- Caillois, R. (1967). *Les jeux et les hommes*: Gallimard.
- Daré, W. (2005). *Comportements des acteurs dans le jeu et dans la réalité : indépendance ou correspondance ? Analyse sociologique de l'utilisation de jeux de rôles en aide à la concertation pour la gestion de l'eau*. Unpublished PhD, ENGREF, Paris.
- Daré, W., & Barreteau, O. (2003). A role-playing game in irrigated system negotiation: between play and reality. *Journal of Artificial Societies and Social Simulations*, 6(3).
- Lederman, L. C. (1992). Debriefing: Toward a Systematic Assessment of Theory and Practice. *Simulation & Gaming*, 23(2), 145-160.
- Miettinen, R., & Virkkunen, J. (2005). Epistemic objects, Artefacts and Organizational Change. *Organization*, 12(3), 437-456.
- Patamadit, I., & Bousquet, F. (2006). The Thai traditional learning process in folk culture: implications for the companion modelling approach. In F. Bousquet, G. Trebuil & B. Hardy (Eds.), *Companion Modeling and Multi-Agent Systems for Integrated Natural Resource Management in Asia*. Los Baños: IRRI.
- Peters, V., & Vissers, G. A. N. (2004). A simple classification model for debriefing simulation games. *Simulation & Gaming*, 35(1), 70-84.