

Jean-Pierre Briot

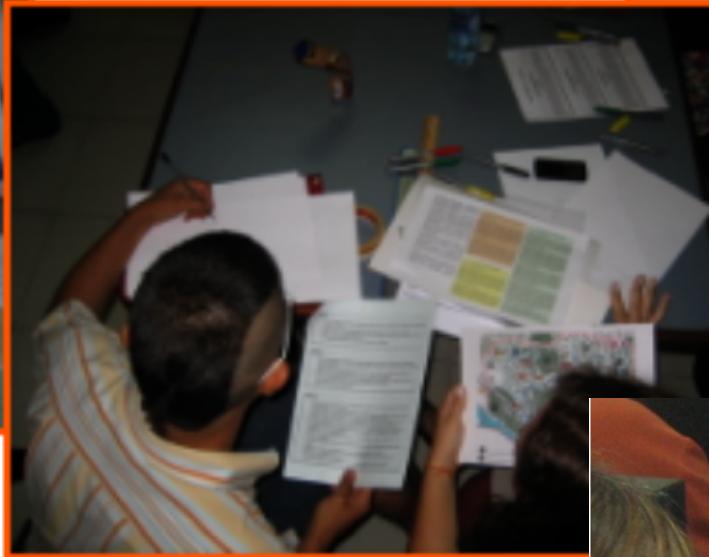
15 ans de jeux pas trop sérieux

13 avril 2023

Isabelle Alvarez



SimParc



Simulation et gestion
participative
assistées par
ordinateur

Simulation et gestion participative assistées par ordinateur

Dialog Area

Informations 10

Area: 1

2) 10:45:57- Player Y: Enters in Chat
 3) 10:46:43- Player X Propose for all: intensive use type for area one!
 4) 10:51:52- Player Y Disagree from Proposal (3) from Player X: There are protected species in these area!
 5) 10:56:01- Player X Comment with Player Y: I didn't know!

1

Structuration des dialogues

2

Visualize Speaks Related to: Speaker all Type of Speak all

3

Player Y disagree from Proposal (3) from Player X

4

Contexte émotionnel

5

Send To: all

6

Surprised

7

Note

8

On-Line Participants: Player X

9

Area: 1

Laguna

Jean-Pierre, Marta

Vinicio Sebba-Patto, Euresco
 Vasconcelos, Gustavo de Melo

...

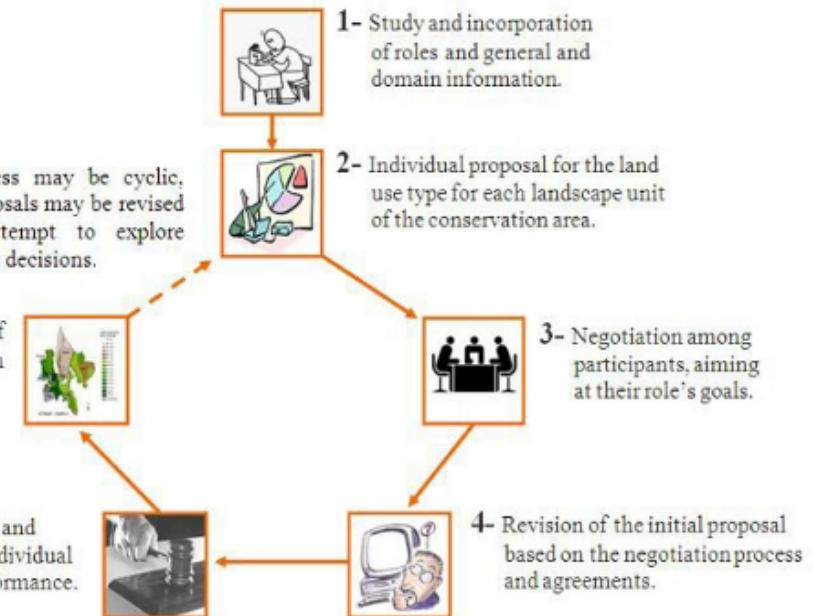
6- Presentation of the effects of the decision making based on players' attitude.

5- Manager decision and presentation of individual indicators of performance.

1- Study and incorporation of roles and general and domain information.

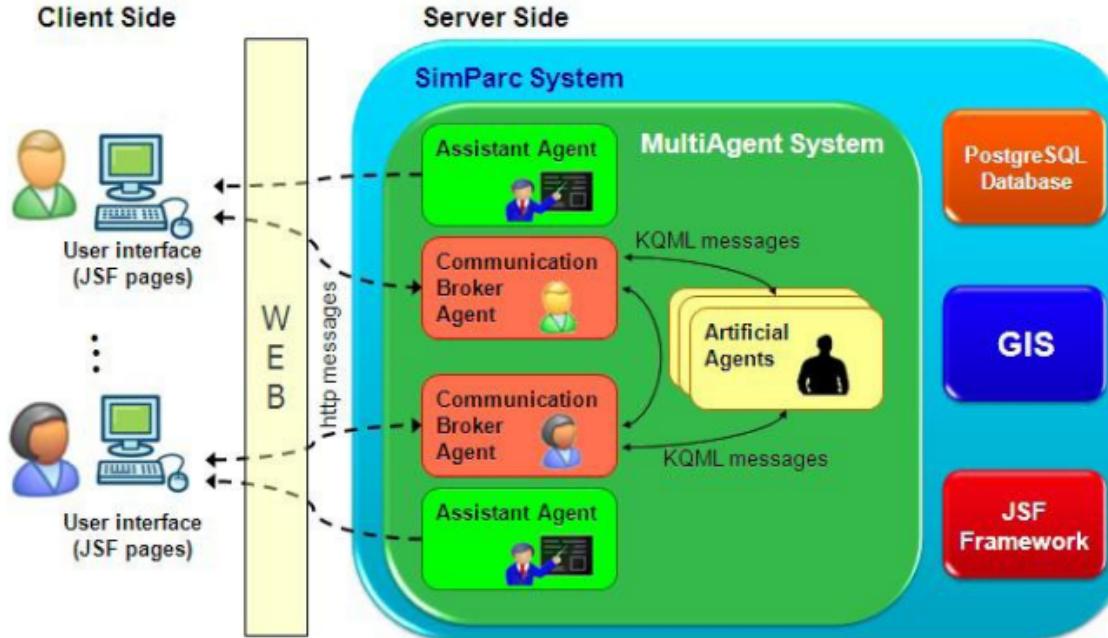
2- Individual proposal for the land use type for each landscape unit of the conservation area.

3- Negotiation among participants, aiming at their role's goals.



Simparc

Simulation et gestion participative assistées par ordinateur



Jean-Pierre, Marta
Vinicius Sebba-Patto, Euresco
Vasconcelos, Gustavo de Melo
Alessandro Sordoni

The process may be cyclic, since proposals may be revised in an attempt to explore alternative decisions.

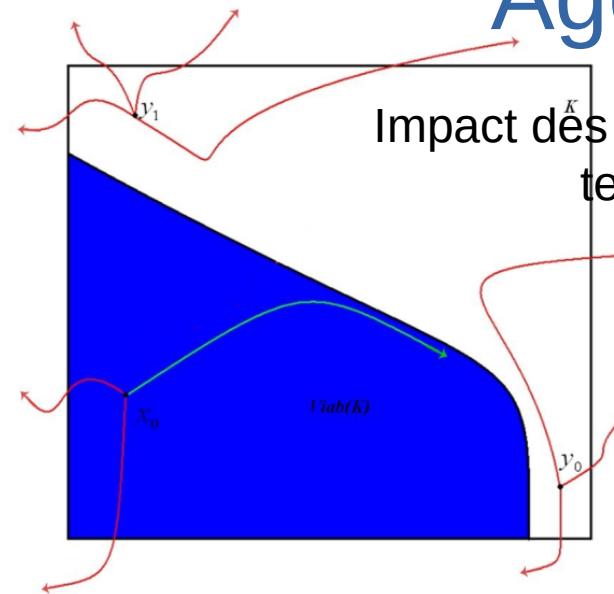
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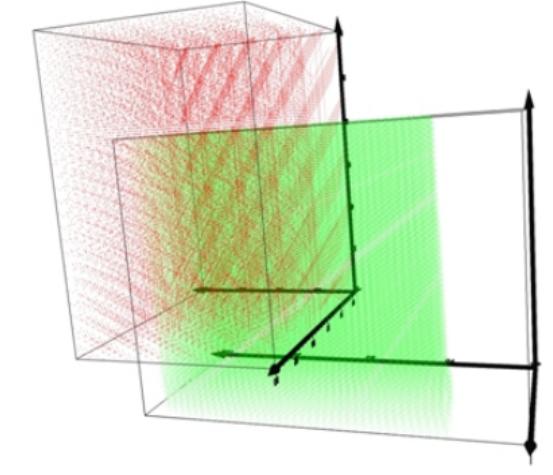
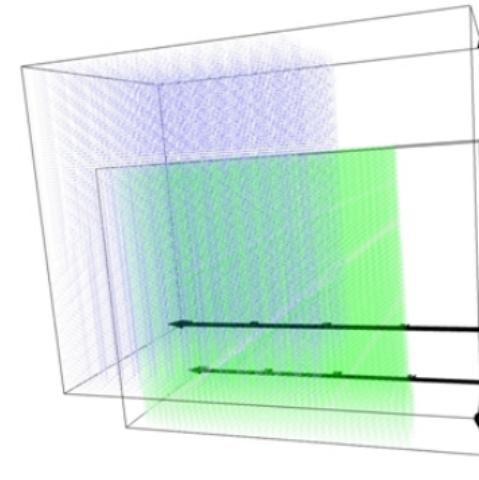
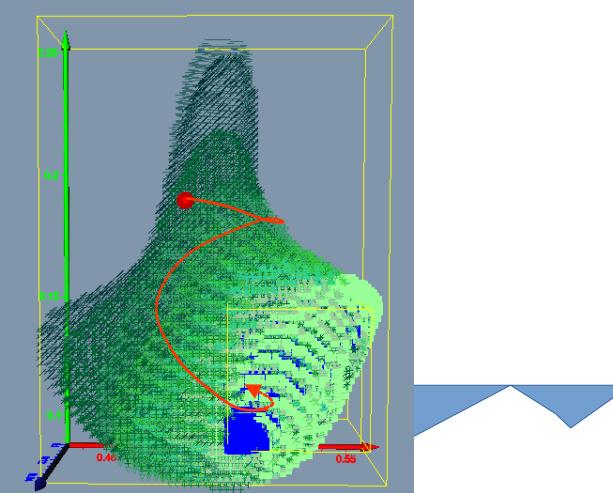
- 1- Study and incorporation of roles and general and domain information.
- 2- Individual proposal for the land use type for each landscape unit of the conservation area.
- 3- Negotiation among participants, aiming at their role's goals.
- 4- Revision of the initial proposal based on the negotiation process and agreements.
- 5- Manager decision and presentation of individual indicators of performance.
- 6- Presentation of the effects of the decision making based on players' attitude.

Agent Viabilité

Impact des choix des participants en terme de viabilité



Wei Wei, Gustavo de Melo, 2011

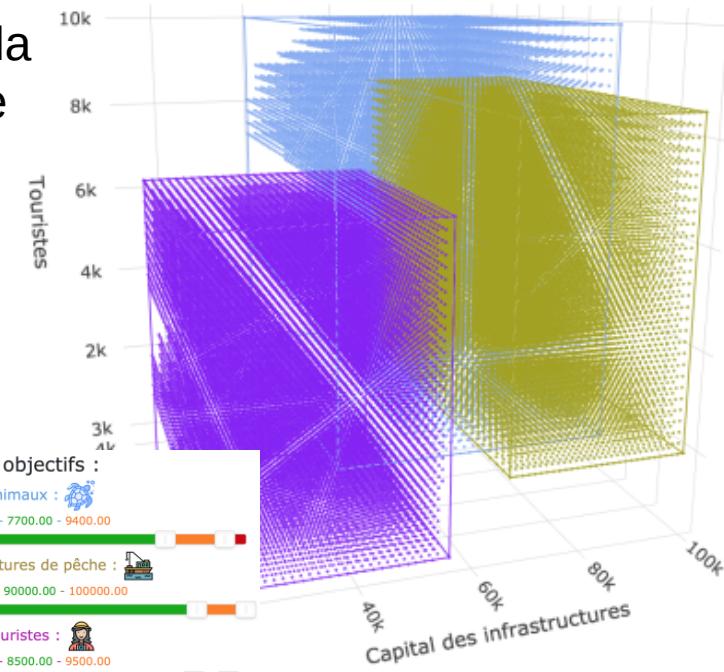
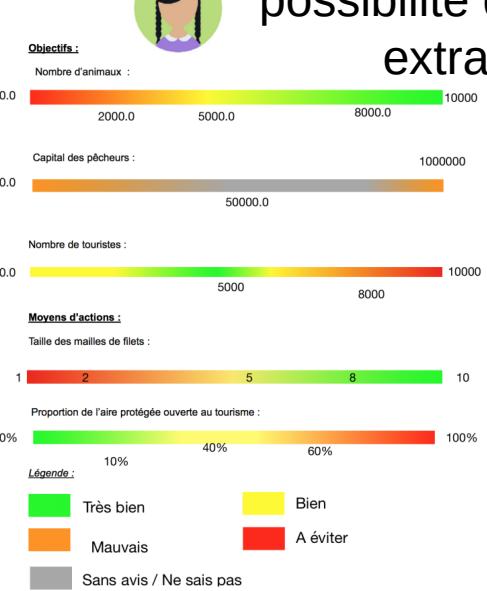


Viaduc

Prototype d'assistant de négociation basé sur la viabilité
Laetitia Zaleski, Jean-Pierre, Marta, 2017-2020



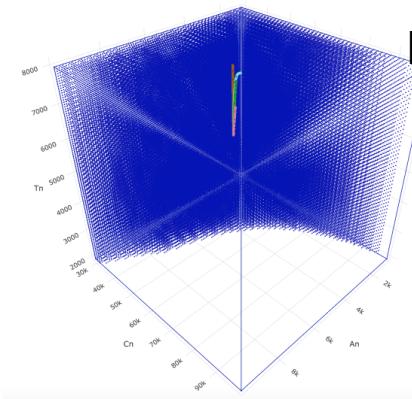
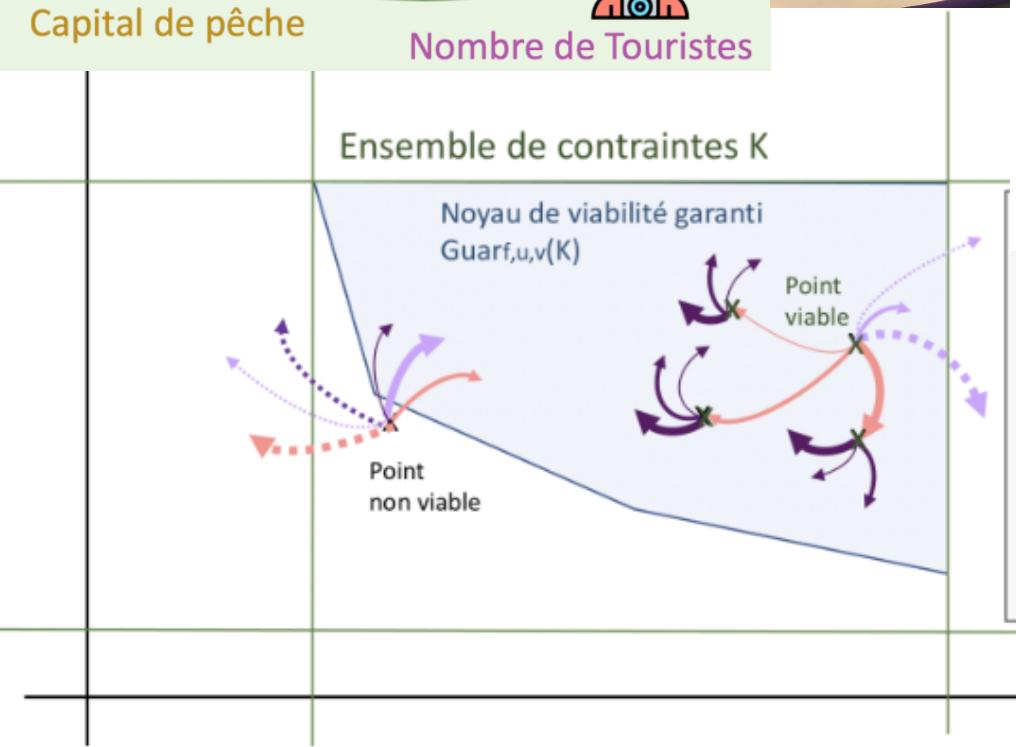
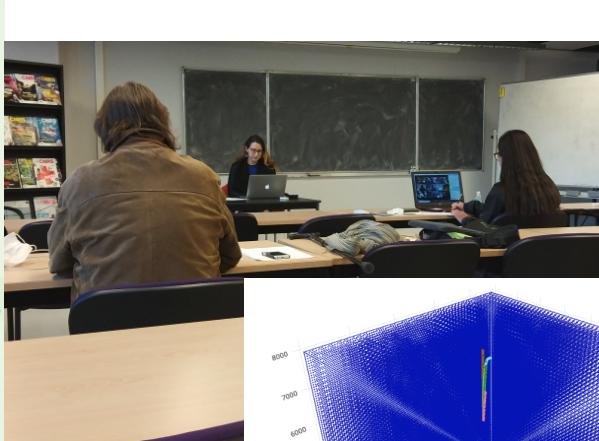
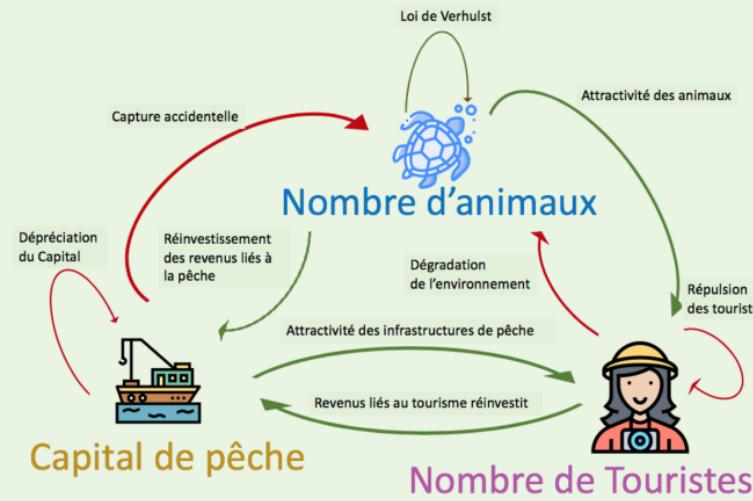
Jeu de rôle
sensibiliser à l'intérêt et la
possibilité de la réserve
extractiviste



Viaduc

Prototype d'assistant de négociation basé sur la viabilité

Laetitia Zaleski, Jean-Pierre, Marta, 2017-2020



Agir sans être d'accord sur tout

un apport de la théorie de la Viabilité pour la gestion durable de l'environnement

Laetitia Zaleski, Jean-Pierre, Marta, 2023

- Vers des assistants de modélisation ?
- Vers des bases de modèles ?
- Vers une mise en oeuvre de la viabilité ?

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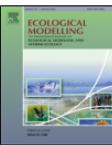


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Collective management of environmental commons with multiple usages: A guaranteed viability approach

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ABSTRACT

In this paper we address the collective management of environmental commons with multiple usages in the framework of mathematical viability theory. We consider that stakeholders can derive from the study of their specific socioeconomic problem (i) the variables describing the different usage of the commons and its evolution (ii) and a representation of the desirable states for the commons. We then consider the guaranteed viability kernel, subset of the set of desirable states where it is possible to maintain the state of the commons even when its evolution is represented by several conflicting models. This approach is illustrated on a problem of lake eutrophication.

1. Introduction

Sustainable use of natural resources, environmental conservation, social inclusion and welfare, economic activity and development entail generally conflicting management objectives. In *The Tragedy of the Commons* (Hardin 1960) highlights the exhaustion of open-access resources

depending on fish biomass and parameters computed each year according to the control scenario. Stakeholders' weighted preferences over the score functions are then optimized each year for different levels of the control variable. When stakeholders express different points of view, the mathematical viability theory (MVT) approach makes it possible to