

Jean-Pierre Briot

15 ans de jeux pas trop sérieux

13 avril 2023

Isabelle Alvarez



SimParc



Simulation et gestion
participative
assistées par
ordinateur



Simparc

Simulation et gestion participative
assistées par ordinateur

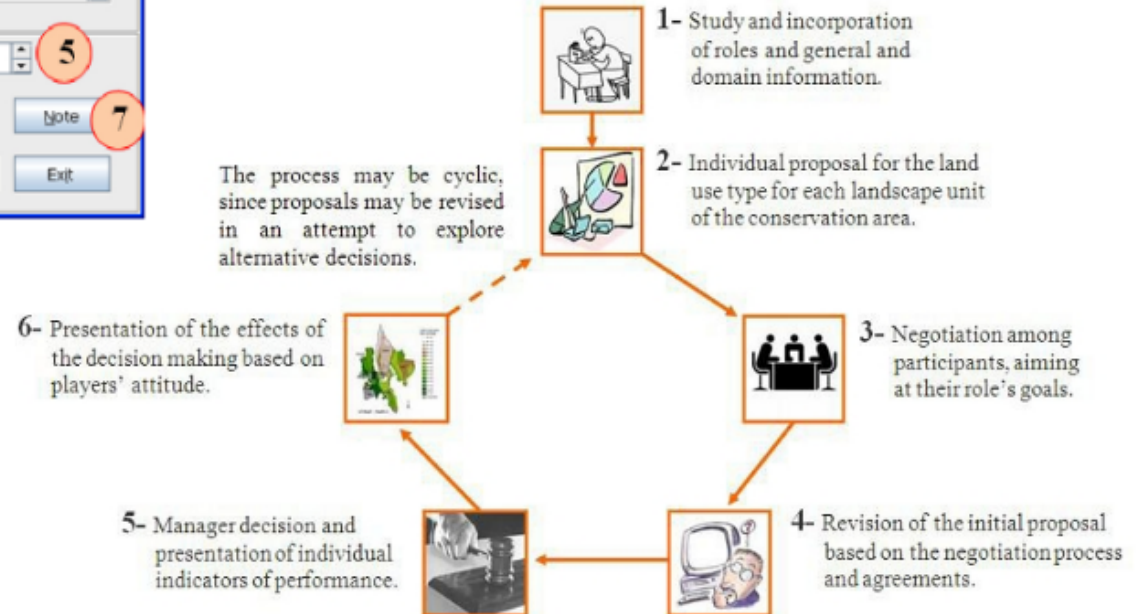


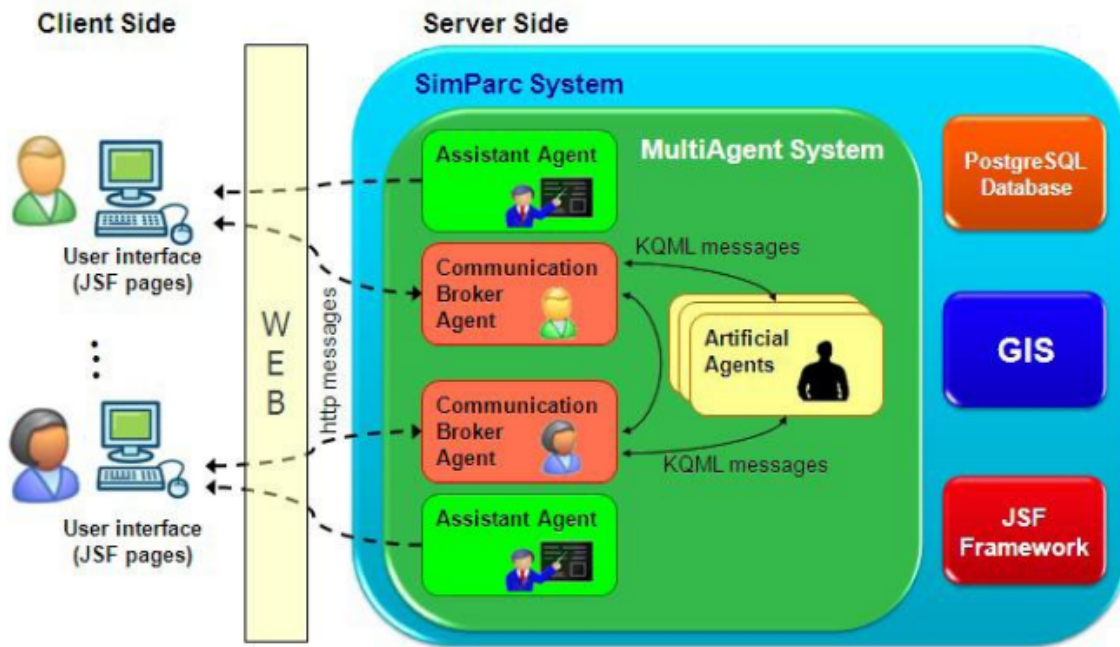
1 Structuration
des dialogues

4 Contexte
émotionnel

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

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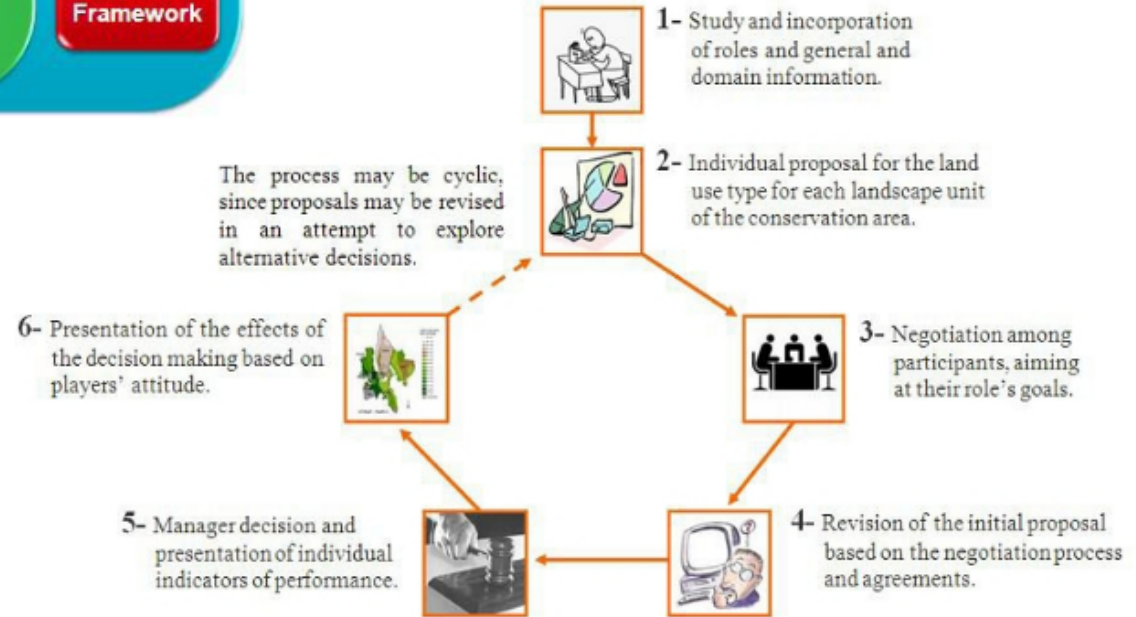




Simparc

Simulation et gestion participative assistées par ordinateur

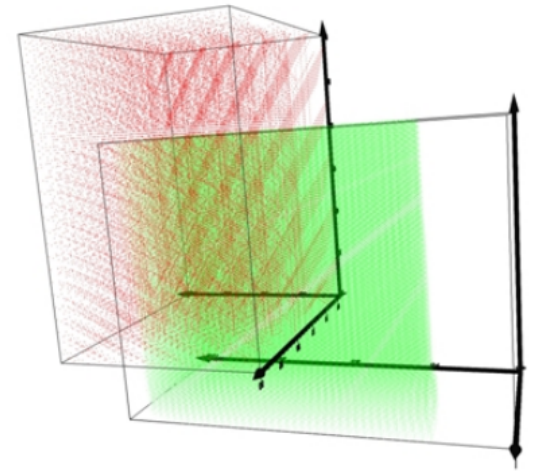
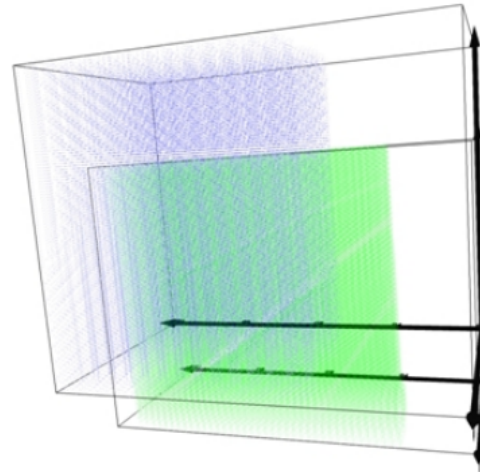
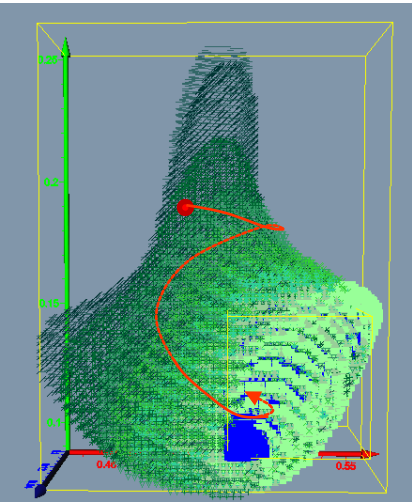
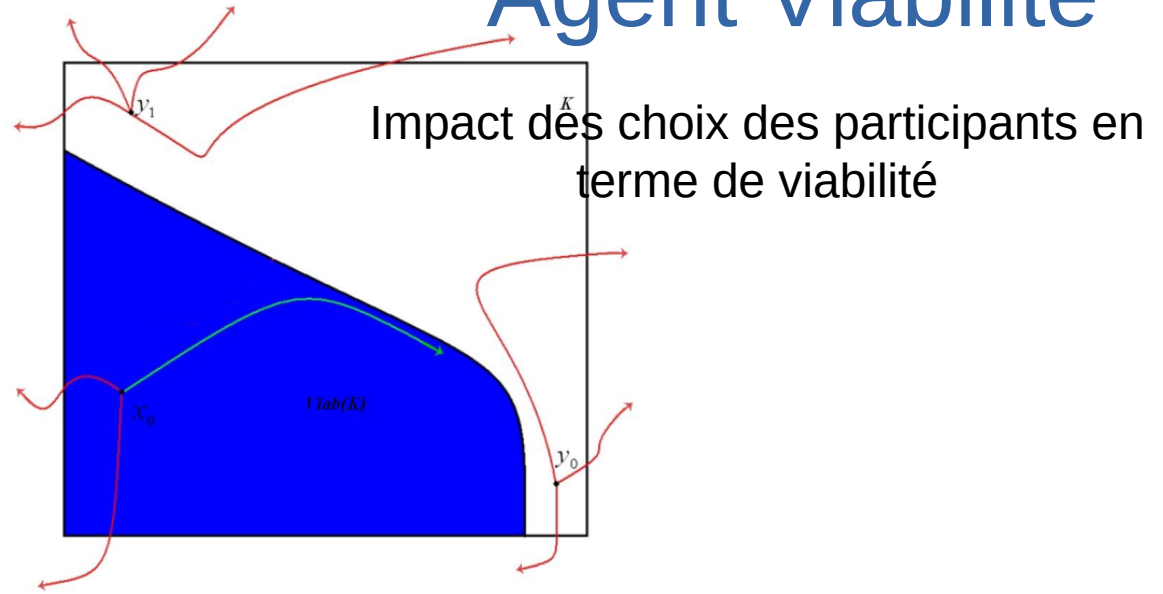
Jean-Pierre, Marta
 Vinicius Sebba-Patto, Euresco
 Vasconcelos, Gustavo de Melo
 Alessandro Sordoni





Wei Wei, Gustavo de Melo, 2011

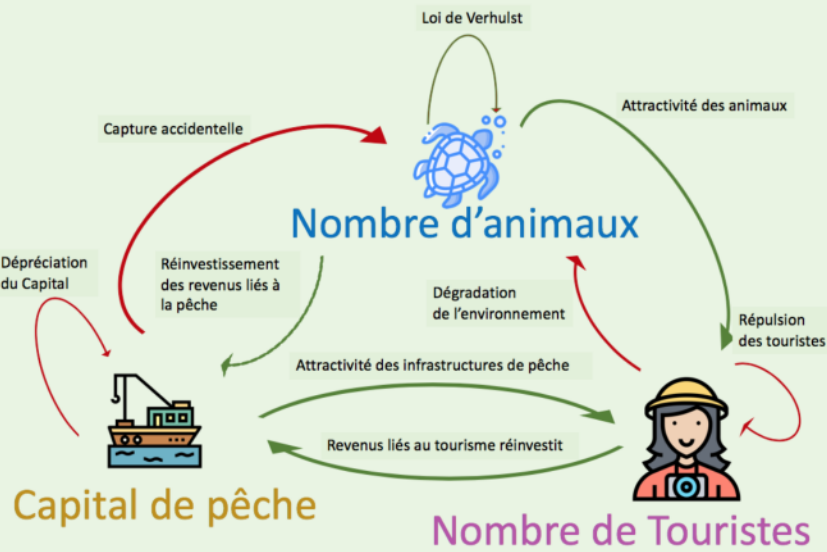
Agent Viabilité



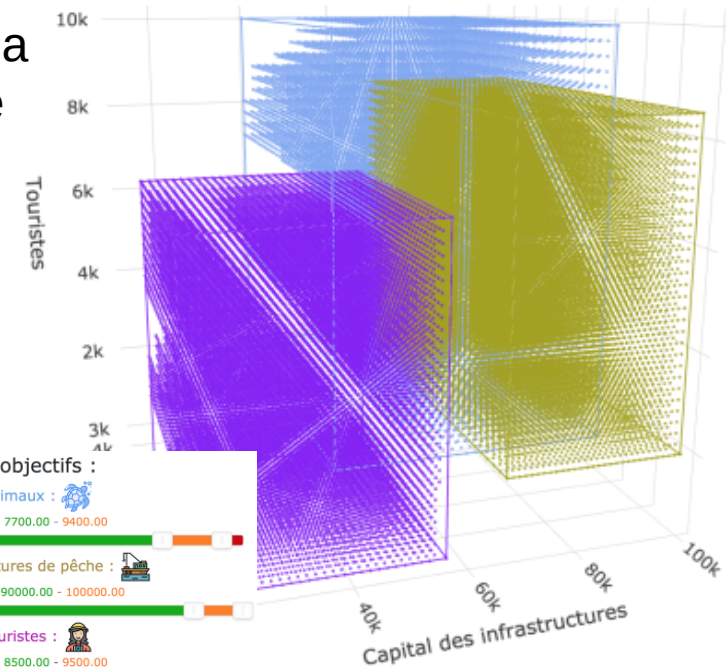
Viaduc

Prototype d'assistant de négociation basé sur la viabilité

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



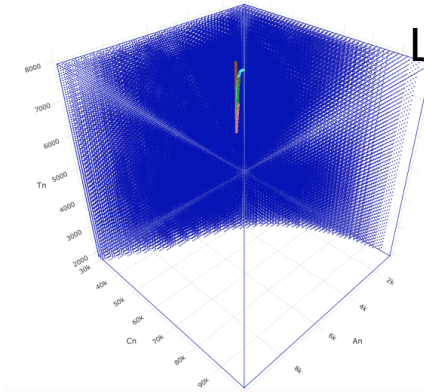
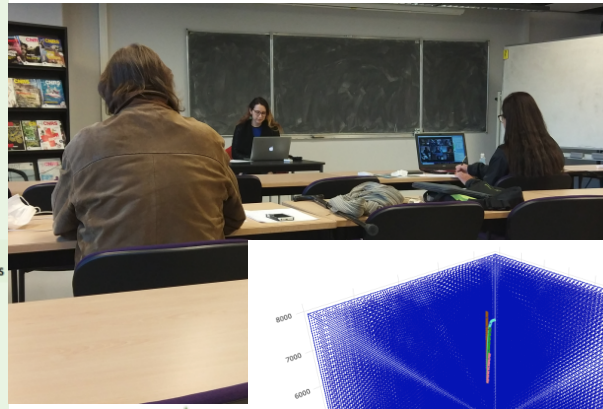
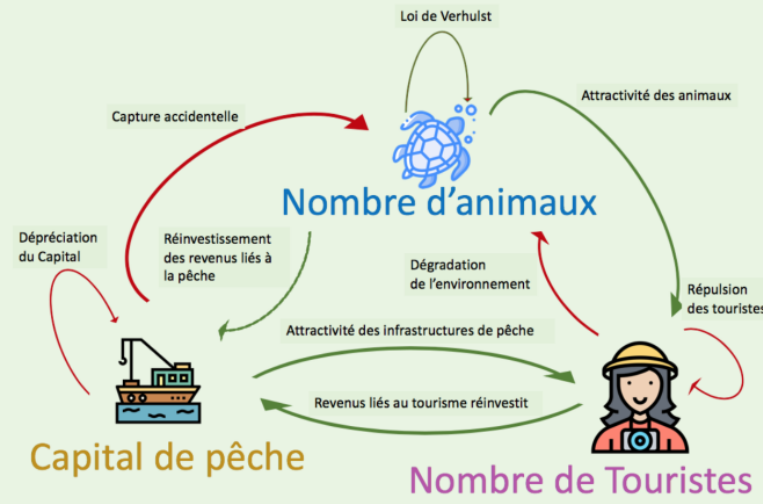
Jeu de rôle sensibiliser à l'intérêt et la possibilité de la réserve extractiviste



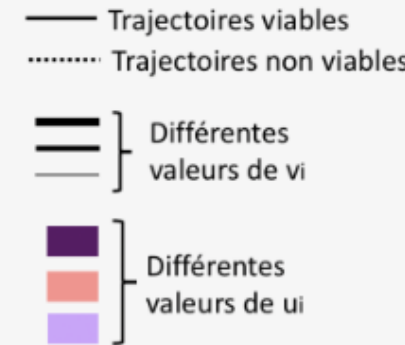
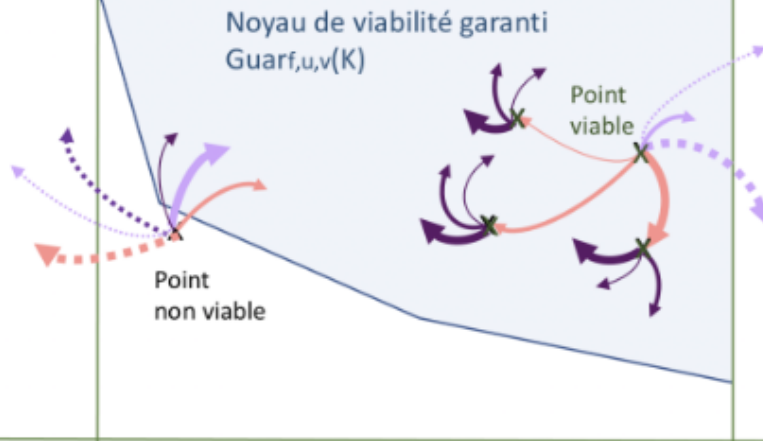
Viaduc

Prototype d'assistant de négociation basé sur la viabilité

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



Ensemble de contraintes K



X1

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 ?

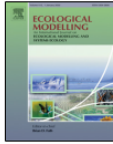
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Collective management of environmental commons with multiple usages: A guaranteed viability approach

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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 (1968) 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