

The analysis and resolution of environmental conflicts

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CSEAR 2008, Rimini, University of Bologna Campus,
September 17-19 2008

Introduction





⇒ Title of the Thesis: “Methods and Models for Environmental Conflicts Analysis and Resolutions”, Tutor: **Professor Giorgio Gallo**.



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The Thesis is a “**Work in progress**” — Open Issues.

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Basic framework: collaborative shared decisions and commitments.

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- (1) Decision Theory, Social Choice Theory, Social Decision Theory;
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Analysis of *SD* as a **tool** and a **meta-tool**.

Critical review of participative and consensus based methods



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The use of auctions for the allocations of chores (“bads”)



- (1) **Dutch auction with negative prices:** the auctioneer proposes a chore and an increasing amount ($\leq M$) of money until when one of bidders calls stop and accept the chore.
- (2) **English auction with negative prices:** the auctioneer proposes a chore and a starting amount of money L to the bidders that start bidding lower and lower amounts of money until one of them stops the descent and gets the chore.
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Level of “maturity”: (3) \succ (1) \succ (2).

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No numerary good, no common scale, both goods and bads,
independence or additivity

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Analysis of **Co-operative Game Theory** and **Non CGT** within the following framework:

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initial_set_up;  
while(problem_exists)  
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Conclusions



(1) Open issues:

- (a) \Rightarrow System Dynamics as a meta tool;
- (b) \Rightarrow models generalization and extension;
- (c) \Rightarrow use of Multi Agent systems for the simulation of strategic behaviors.

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- (1) Open issues:
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That's all, folks!!! Thank u...

