European University Institute  
Department of Economics  
Winter and Spring 2008

**Advanced Macroeconomics Course:**  
*Social learning and Intelligent Design*  
**Ramon Marimon**

This is a course for second and more advanced researchers or post-docs in economics. The course will take the form of a Reading Group meeting regularly —usually, on a weekly basis—through the second and third terms and all participants will have to present a paper at least once. It is also designed as a Course in that participants’ presentations will be combined with lectures and will fulfill the requirements of a full credit advanced course (e.g., the 20 hours requirement and a paper as additional course requirement for those taking it for credit). More specifically, it is planned to run from the start of the Block III at the beginning of January and end with the Advanced Block I in mid April.

Its title (and not only the title) borrows from Thomas Sargent’s 2008 *American Economic Association presidential address* “Evolution and Intelligent Design”. It also borrows from Jose Luis Borges the idea that to write a good short story you need to have a good start and an end. The start is a discussion of 2008 AEA presidential address, with its references to the main contributions of an ongoing research agenda. This will set the stage for the rest of the course; in particular, depending on participants’ interests, more attention will be made to different parts or extensions of the paper. My emphasis on (social) learning and my interests beyond monetary theory will also count at this point. The course will end —more precisely, it will have an aftermath—with Sargent’s Max Weber Lecture on April 16, 2008 (a recast of his presidential address) and a special session with the surviving members of the course. Although, as it often happened to Borges, our exploration may push us beyond the frame of this foreseen end…
Provisional outline and readings

1. Reassessing rational expectations: from adaptive learning to self-confirming equilibrium


2. Social and reinforcement learning


3. Learning and modeling: anticipated utility, the economics of ideas, and model validation


4. On limited commitment and recursive contracts


Marcet, Albert and Ramon Marimon 2005 “Recursive Contracts”

Marimon, Ramon and Vincenzo Quadrini 2006. “Competition, Innovation and Growth with Limited Commitment”


5. New dynamic public finance
Evolution and Intelligent Design

Thomas J. Sargent†

September 4, 2007

Abstract

This paper discusses two sources of ideas that influence monetary policy makers today and the relationships between them. The first is a set of results that hinge on imposing the rational expectations equilibrium concept and that culminate in applying ‘intelligent design’ to macroeconomics by solving Ramsey and mechanism design problems. The second is a trial and error evolutionary process by which 800 years of monetary thought and experiments formed ideas that helped us to put in place a well functioning gold standard, then let us liberate ourselves from it by adopting a government managed fiat currency system. Models of out-of-equilibrium learning tell how we should expect potential limit points of such an historical evolutionary process to relate to rational expectations equilibria. These models converge to self-confirming equilibria in which a government can have have models that are wrong about the consequences of following policies not taken. That leaves more room for more mistakes and useful experiments than exist inside a rational expectations equilibrium.