Introduction

The development of science offers numerous examples of "scientific revolutions" (Kuhn, 1970), which lead to deep changes in the existing "paradigms". During these revolutions, the prior knowledge, far from being abandoned since it is obsolete, is often reinterpreted in the new paradigm as a limit case of a broader representation. The theory of restricted relativity, proposed by A. Einstein, is an exemplary illustration of such a situation. It elaborates a new conception of energy, mass and time breaking up radically with all was already accepted. Nevertheless, the formula of classical mechanics continues to be valid when considering speeds that are much lower than the light speed. Is microeconomics involved in such a revolution and changing its paradigm? One has to be careful when answering such a question since economics is far from being able to claim the same scientific standards than the hard sciences. Moreover, it is hazardous to speak of a revolution while it is already on the way.

Even if the conception defended in this book is clearly grounded on a refoundation of microeconomics, its point of view is more modest. It rests on four observations: (a) it exists a "standard paradigm" constructed around three key concepts, optimizing rationality, equilibrium and market efficiency, which frames the main classical works in microeconomics; (b) the empirical limits of such a paradigm are obvious since it is unable to explain some major observed economic phenomena; (c) several original models are already available in order to explain at least some of these phenomena; (d) these models express a coherent project, looking as an original paradigm, which integrates standard microeconomics as a limit case. The book aims at designing this new paradigm, which progressively emerges at the crossroads of various modeling streams: evolutionary, cognitivist and institutionalist.

Characterized by its departure from classical economics, the present project has still to be distinguished from another one which inspires today an important part of microeconomics, the "extended standard theory" (Favereau, 1989). The last aims at developing the study of organizations and institutions while staying in the standard paradigm, and is well illustrated by the modern theory of contracts and incentives. The first is interested in institutions too, but is running away from the standard view in

more profound aspects. However, in order to prevent ambiguity, it is necessary to state that it still shares with the classical or extended approach number of principles and problems, for instance the adoption of methodological individualism or a specific interest in price formation.

This introduction is devoted to making precise the four statesments which justify the project. The first section is related to assertions (a) and (b) and the second to assertions (c) and (d). A third section presents the structure of the book and its pedagogical aims.

The standard paradigm

The existence of a "standard paradigm" is not unanimously recognized by economists. As spelt out by R. Nelson and S. Winter (1982, p.6), some economists "would strenuously deny there is an orthodox position providing a narrow set of criteria that are conventionally used as a cheap and simple test for whether an expressed point of view on certain economic questions is worthy of respect; or, if there is such an orthodoxy, that it is in any way enforced". It is right that this notion is mainly put forward by economists willing to differenciate their work from "normal science". For that reason, it may be endowed with a high critical charge which makes it suspicious to "orthodox" economists. In many cases, it sustains a view which goes beyond a simple objective description of the economists' achievements in order to induce a new way of dealing with their discipline. This motivation is shared by the authors of this book.

One should nevertheless not under-estimate the difficulties associated with such a goal. Microeconomics is a rapidly developing science which makes use of various concepts and principles in order to cover an always broader field. It is not possible to reduce it to a few notions without making a caricature of it. However, it seems possible to bring out what may be called an "orthodox way" to deal with the usual microeconomic problems. On one hand, it proceeds to a systematic appeal to optimizing rationality and equilibrium as two general categories allowing to think all economic phenomena. On the other hand, it develops a theory of trade order dominated by the assumption of market efficiency. This triptyque will be exploited in order to analyze the standard paradigm.

Optimizing rationality

Adopted by the orthodox approach, optimizing rationality assumes that all agents are endowed with an objective function that they maximize with re-