JSSE
Volume 11, Number 2, © JSSE 2012 ISSN 1618-5293

Silja Graupe

The Power of Ideas. The Teaching of Economics and its Image of Man[1]

"I don't care who writes a nation's laws
– or crafts its advanced treaties –
if I can write its economics textbooks."
(Paul Samuelson)

Economics as a science not only investigates what is (as a positive science) and what should be (as a normative science), but influences, through its fundamental ideas, what facts and norms are recognized as such in society. This holds especially true for economic education. My article explains this thesis and elaborates, in particular, how this form of education stipulates a particular vision of human beings worldwide. First, I show how economics actively seeks to influence the inscription of the commonplace image of the human through economics education. Second, I discuss economics as a textbook science in Thomas Kuhn's sense: as a science incapable of giving the students any plural or critical understanding of their self and the world. In the third step, I identify the essential features of the human image lying at the base of the economic curriculum; an image (so I argue), which splits society into mere cogs in the machine of the economy on the one side and omnipotent social engineers on the other side.

Keywords
Critique of Economics, economic education, textbook science, historical amnesia, image of man, mechanistic worldview

1 Introduction

Why study economics? Paul Samuelson, the most famous economics textbook writer of all time, answered this question with the following words of John Maynard Keynes (1955, 12):

> "The ideas of economists and political philosophers, both when they are right and when they are wrong, are more powerful than is commonly understood. Indeed the world is ruled by little else. Practical men, who believe themselves to be quite exempt from any intellectual influence, are usually the slaves of some defunct economist. Madmen in authority, who hear voices in the air, are distilling their frenzy from some academic scribbler of a few years back. I am sure the power of vested interests is vastly exaggerated

1 Translated from the German by Roger Gathman.

compared with the gradual encroachment of ideas."

This allows us to discover an important thesis about the function of economics as a science: it not only investigates what is (as a positive science) and what should be (as a normative science), but influences, through its fundamental ideas, what facts and norms are recognized as such in society. It forms something like the base of thought, from which we think about the economy and society, without ever reflecting on it in turn. It determines, tacitly, the assumptions of our scientific reason, without, conversely, being interrogated by that reason. Thus, economics immobilizes what can appear to us as the most interesting problems or relevant questions in science. It forms what Ludwik Fleck (1980, 130) would call a *thought style*: "It is readiness for both selective feeling and for correspondingly directed action. ... It constrains the individual and determines what cannot be thought in any other way."

In the following I want to explain this thesis and thus elaborate, in particular, how economics is inscribed with a particular vision of human beings. Doing this, I will start with the following idea: We cannot normally foreground our image of man in order to observe it. Rather, it is inscribed in how we see ourselves and others and the kind of explanations we seek for our humanity. Fundamentally, our images of man are not images at all, but 'lenses' or 'filters' through which we selectively observe our action in the world: "Our image of the human is already, in our pre-scientific reflection, an indissoluble component of our everyday activity" (Meinberg 1988, 10).

My essay is divided into three steps. In the first, I show how economics actively seeks to influence the inscription of the commonplace image of the human through economics education. Second, I attempt to present an insight into the basic features of this form of education. Here, economics will become visible as a textbook science in Thomas Kuhn's sense: as a science incapable of giving the students any plural or critical understanding of self and the world. In the third step, I will identify the essential features of the twofold human image that, I would argue, lies at the base of the economic curriculum. On the basis of this image, students get trained to understand themselves on the one hand as "pleasure machines," "robots," or "laboratory guinea pigs." On the other hand, they learn to identify themselves as social engineers who observe *other* people as pleasure machines, robots, or guinea pigs and to strive to manipulate the latter according to their own ideas and interests.

2 The Influence of Economic Education

Globally, economics is booming as a discipline. In US colleges and universities alone, 1.5 million students annually enroll in the introductory economics course (Nasar 1995). "This introductory course is both the first and the last brush that most educated Americans have with supply and demand, marginal cost, comparative advantage and other first principles of

the dismal science" (ibid). One could make a similar observation about the approximately 360,000 students of economics departments in German universities who make up nearly seventeen percent of all students in Germany (Statistisches Bundesamt 2010). They, too, in their beginning micro- and macroeconomics classes are obliged to confront economics thought. Even if in the past, most ambitious economists focused "on the kind of esoteric research that might win them a Nobel Prize," they are now jumping at this chance "to mold the minds of the next generation of political leaders, executives, image makers and other members of the … elite" (Nasar 1995). Here, we are not speaking simply about the power to shape individual lectures or seminars; rather, the great names in the guild strive to write textbooks powerful enough to *dictate the canons of their discipline to almost all universities around the world.*

To begin with, it is a question of dominance within a giant market. In the United States alone, the market for introductory economics textbooks measures about fifty million dollars per year. Of the thirty to forty books that compete for this revenue, a handful secures the lion's share. Of these blockbusters, as the New York Times, not without admiration, names them, each sells annually about 50,000 books at a price of about fifty five dollars each (Nasar 1995). The first fifteen editions of Paul Samuelson's *Economics* (from 1948-1995) sold approximately about four million copies, not counting the more than forty translations (Skousen 1997). The careers of other textbook authors are similarly steep. Take for example Gregory N. Mankiw, who was chairman of the Council of Economic Advisers under President George W. Bush. He was not only paid by Harcourt Publisher a record advance of 1.4 million dollars for his textbook, *Principles of Economics*, but also received a bonus of twenty two percent for each copy sold – with sales reaching well beyond the million. Here, too, we are not counting the revenue garnered from over ten translations (Nasar 1995).

Yet the *superstars* of the intro economics textbooks business do not simply seek money and wealth. By their own account, they are much more invested in the struggle for the best minds in our society. "The top three or four textbooks, even the top 10, are profitable, wildly profitable" admits, for example, Mankiw. And he adds: "Besides, economists are proselytizers" (quoted in Nasar 1995). Paul Samuelson formulates the point as follows: "*My interest was not so much in dollars as in influencing minds*" (quoted Gottesman, Ramrattan, Szenberg 2005, 98, my emphasis). Here, as in the fact that authors like Samuelson are, especially in the United States, often treated as "high priests" and their books as "bibles" or "gospels,"[2] we find that economists do not only desire to sell heaps of their standard intro economics textbooks; they also want them to be *read* a million fold. They wish their content to be actually learned and understood, pushed, if necessary, by the constant pressure of grading and exams.[3] It all comes

2 Compare for instance the obituary notices in the Wall Street Journal (December 13, 2009) published on the occasion of Paul Samuelson's death, where Robert Hall, Professor at Stanford, for instance, writes: "His book, Foundations of Economic Analysis, was a bible to my generation of economists, trained entirely in the then-new Samuelson mode." Samuelson writes about himself: I was besieged by groupies reminiscent of Talmudic students crowding around famous rabbis. The policeman at the door of the White House whispers, 'I am using your book at Georgetown night school.' The chap who sells me a newspaper at Harvard Square confides that at Northeastern he studied my book. . . . Wherever I go in Europe, Asia, or Latin America, strangers greet me as an old friend or old tormenter. I have never been to India, Russia, or China, but in my MIT office, I am asked to autograph copies of translations" (quoted in Gottesman, Ramrattan, Szenberg 2005, 98).

3 Samuelson also invokes another form of pressure. He tells his students to consider the study of economics a factor absolutely decisive to success or failure in the daily struggle for existence: "As we have come to realize, there is one overriding reason for learning the basic lessons of economics: All your life – from the cradle to grave and beyond – *you will run up against the brutal truths of economics*. (…) Of course, studying economics cannot make you a genius. *But without economics, the dice of life are loaded against*

down to consciously influencing the ideas, attitudes, and imaginations of each new generation:

> "It is hard to gauge the influence of Samuelson's textbook, or in general the impact of introductory courses in economics, on U.S. policymakers or corporate executives. Samuelson has been willing to claim, with tongue only slightly in cheek, a considerable impact. He has made a well-known comment: 'I don't care who writes a nation's laws – or crafts its advanced treaties – if I can write its economics textbooks.'
>
> He has also expressed hope that his textbook would be a reference guide for former students. 'When the election of 1984 rolls around,' he wrote in 1967, 'all the hours that the artists and editors and I have spent in making the pages as informative and authentic as possible will seem to me well spent if somewhere a voter turns to the old book from which he learned economics for a rereasoning of the economic principle involved" (Skousen 1997, 149-50).

Mankiw writes in his preface to the instructor (2001, vii): "Economists have a unique way of viewing the world, much of which can be taught in one or two semesters. My goal in this book is to transmit this way of thinking to the widest possible audience and to convince readers that it illuminates much of the world around them." Critical economists like Steve Keen see in this nothing less than a campaign of ideological persuasion: "What I had initially thought was an education in economics was in fact little better than an indoctrination" (Keen 2001, xiii).

3 Economics as a Textbook Science

In order to be able to relate to Keen's reproach, we first need to understand how the self-conception of economics as a science has substantially changed over the last seventy years or so. Originally, economics had defined itself by means of its subject matter: it sought to explain the world of commerce (see, for example, Becker 1990). In this way, what economists did was rather well-defined. They were supposed to analyze what was commonly seen as 'commercial' or 'economic' matters.[4] This limitation in relation to the object of research stood in contrast to a great freedom with regard to the *manner* of research. Each economist could freely control his methodological approach, and thus *how* he was to conduct his research. In consequence the self-understanding of the economic sciences was plural: it unified a number of perspectives on 'economic' phenomena. Modern economics, however, negates this pluralistic self-understanding and inverses the freedom of the researcher into its exact opposite. Gary Becker, a leading figure of the *Chicago School of Economics* and the Nobel Prize winner in economics for

you" (Samuelson, Nordhaus 2005, 3, my emphasis). In an earlier edition (1955, 3), Samuelson even writes: "Thus, *even from the purely egotistic standpoint of self interest* [it is important to] find answers to ... the questions of modern economic life" (my emphasis).

4 This is to say that economics was believed to simply analyze the production, distribution, and consumption of goods and services or, more specifically, the allocation of limited resources to the satisfaction of mutually exclusive ends. Common to these definitions is that they refer to the objects of economic investigation, but do not prescribe the methods, with which one should investigate these objects.

1992, codified this turn-about as follows: "That which distinguishes economics as a discipline from other disciplines in the social sciences is not its subject matter but its *approach*" (1990, 5, my emphasis). Scientific freedom means, for Becker, that fundamentally all social subjects may be analyzed by the economist: from "fertility, education and the uses of time, crime, marriage, social interactions, and other 'sociological,' 'legal,' and 'political' problems" (ibid, 8). Nothing less than all human behavior gets reduced to an object of economic research:

> "Indeed, I have come to the position that the economic approach is a comprehensive one that is applicable to all human behavior, be it behavior involving money prices or imputed shadow prices, repeated or infrequent decisions, large or minor decisions, emotional or mechanical ends, rich or poor persons, men or women, adults or children, brilliant or stupid persons patients or therapists, businessmen or politicians, teachers or students" (ibid).

Under the flag of this economic imperialism,[5] modern economics claims absolute freedom in the choice of its subject matter. Yet this is bought at the price of a substantial limitation of the choice over one's research methods. The economist must (and should!) probe absolutely everything in the world. But he has to approach it from a single angle of vision: that of modern microeconomics or neoclassical theory. Only the "combined assumptions of maximizing behavior, market equilibrium, and stable preferences, used relentlessly and unflinchingly, form the heart of the economic approach" (ibid, 5). While the economist may have become free to analyze everything in the world, he has no choice regarding the rules of thought by which he undertakes this analysis. In order to preserve the unity of economics as a science, he must renounce the multiplicity of conceptual possibilities in order to align himself with a single *technique* of thinking. In this way, a *monoculture of thought* is established, that extends far over the borders of what we usually understand to be 'economic' or 'commercial.'

Often I hear colleagues reply that one can easily exaggerate the power of this monoculture, if one ignores, on the one hand, the many directions that are alternative to the economic mainstream, and on the other hand, refuses to recognize the extent to which the mainstream itself continually works so as to perfect and refine its approach. These objections might be justified, at most, with respect to research. But in regard to the curriculum, they certainly mistake the actual heart of things. Because in the lecture halls of the world, the neoclassical refinements do not count; nor does their critique. Both are not taught, or only taught in later semesters. It is much more likely that the following prevails:

> "Normal science can keep the student and practitioner on the straight and narrow if there develops an interpretive tradition that makes it unnecessary to consult the canonical texts with all their ambiguity, passion, and contingency. The development of textbooks is a

5 We are not using, here, some insult forged by critics, but the explicit self-understanding, in particular, of a science that has been colored by the Chicago School of Economics. "I am an economic imperialist. I believe good techniques have a wide application" says, for example, Gary Becker about himself (1993).

> hallmark of that interpretive tradition. Teachers of economics sometimes complain that, pedagogical style apart, current economics textbooks are almost all alike. (…) The existence of canonical textbooks is a considerable part of what distinguishes economics from other social sciences" (Pearce, Hoover 1995, 184).

A remark attributed to Paul Samuelson goes: "Economists are said to disagree too much but in ways that are too much alike: If eight sleep in the same bed, you can be sure that, like Eskimos, when they turn over, they'll all turn over together" (quoted in Weinstein 2009). This aptly hits on the superstars of the intro economics textbooks, especially in regard to their microeconomic insights. In this case, it even seems wholly appropriate to say – to remain with Samuelson's image – that all have slept in the same bed for decades, but up to now none of them, either individually or together, has turned over. Let us look at this more closely. Today's economic doctrine is commonly divided into the domains of micro and macro economics. To put it a little simply, microeconomics is ascribed the task of explaining, mainly, the individual behavior of economic actors. Here economists divide the social world into two classes: the consumer and the producer. Then they observe the behavior of a single individual of each class, in order to draw conclusions about all consumers or producers. Thus, microeconomics gives us a methodological individualism,[6] in which the behavior of groups can only be explained from the aggregation of individual actions. On this basis there arises the image of an ideal market. It is imagined that individual consumers with already given preferences always meet individual suppliers with likewise fixed ideas of profit on markets as though for the first time. Social interaction is considered an end result in this view, but is not seen through as the driving force behind individual utility and gain calculi. Modern macroeconomics appropriates the principles of methodological individualism unhesitatingly, in order to dedicate itself to the representation and shaping of the mutual effects of different markets, for example those of commodities, labor and capital. It is understood, in other words, to be *micro founded*. Already from this rudimentary description we can see the fact that microeconomics fundamentally shapes the human image which then grounds all further economic descriptions of social interactions. And precisely in regard to this subject area the following holds true: even if the macroeconomic content of all standard textbooks already shows "a surprising degree of consensus" (Walstad, Watts, Bosshard 1998, 198-99), microeconomics represents precisely that subject area where "the victory of Samuelson's early pedagogy has been most complete and where the beliefs of economists have changed least" (Skousen 1997, 138). Whether in Greek, German, Chinese, Japanese, Hebrew, Serbo-Croatian or Spanish, and under whatsoever title: in regard to the basic understanding of humanity and human action, all the important economics textbooks of our time establish a single, unified lingo.

In order to trace this phenomenon more precisely, I suggest grasping microeconomics as a *textbook or normal science*, as described by Thomas S. Kuhn (1996, 17):

6 The concept of "methodological individualism" goes back to Joseph Schumpeter (1908).

> "In the early stages of the development of any science different men confronting the same range of phenomena, but not usually all the same particular phenomena, describe and interpret them in different ways. What is surprising, and perhaps also unique in its degree to the field we call science, is that such initial divergences should ever largely disappear. For the do disappear to a very considerable extent and then apparently once and for all."

Actually, current economics textbooks, almost without exception, are based on a single economic theory of human behavior that was already established in the middle of the 19th century: the neo-classical. In this way, they prevent the student in this science from meeting with the usual multiplicity of perspectives, visions and ideas:

> "More than a decade before I became an undergraduate, a major theoretical battle had broken out over the validity of economic theory. Yet none of this turned up in the standard undergraduate or honours curriculum – unless it was raised by some dissident instructor. There were also entire schools of thought which were antithetical to conventional economics, which again were ignored unless there was a dissident on staff" (Keen 2001, xiii).

The textbook science grounds a pedagogic concept that in essence rests on forgetting history, or more precisely, on an almost complete forgetting of economics 'own intellectual history and history of ideas:

> "Textbooks, however, [are] pedagogic vehicles for the perpetuation of normal science (…) Textbooks thus begin by truncating the scientist's sense of his discipline's history and then proceed to supply a substitute for what they have eliminated. Characteristically, textbooks of science contain just a bit of history, either in an introductory chapter or, more often, in scattered references to the great heroes of an earlier age. From such references both students and professionals come to feel like participants in a long-standing historical tradition. Yet the textbook-derived tradition in which scientists come to sense their participation is one that, in fact, never existed" (Kuhn 1996, 138).

Certainly, Kuhn himself was making this statement simply in regard to the natural sciences. Yet economics has attempted, since its origin in the 18th century, to be a science, "which resembles the physico-mathematical sciences in every respect" (Walras 1969, 71). And this ambition is mirrored in a forgetting of history that takes shape in the way economics textbooks veil the ancestry and dynamic history of their science and abbreviate it beyond recognition, a process very similar to what Kuhn describes in the case of the natural sciences. For instance, in the first edition of Samuelson's *Economics* we find just a single page dedicated to the history of economics (1955, 12-13). This is presented by Samuelson as an "ancestral portrait gallery," in which he only mentions five economists: John Maynard Keynes and Adam

Smith, whom he praises, Karl Marx, whom he refers to as the "black sheep" of the economic profession, as well as David Ricardo and John Stuart Mill.[7] In the newer editions of his textbook, even these rudimentary descriptions drop out; instead of which we find a few disparate references to "important figures in economics" (Samuelson, Nordhaus 2005, xx). If the student thus will already find it almost impossible to clearly locate scholarly positions and approaches within the original multiplicity of economics opinions and perspectives, other textbooks drop out even these sporadic remarks concerning the intellectual history of economics. Mankiw for instance doesn't spare a word for it (2001), and Varian does as little (2007).

"The depreciation of historical fact is deeply, and probably functionally, ingrained in the ideology of the scientific profession" (Kuhn 1996, 138). Yet with the loss of one's proper intellectual history, an awareness of the plurality of perspectives and methodological approaches that once was the glory of the science vanishes as well. Commerce and society appear differently depending on the perspective from which we envision them. Our 'methodological lenses' decide what aspects of the economy we will focus on and how we do so. They also determine what problems remain essentially hidden. Many of the central problems of present day commerce remain completely in the dark as long as we only observe them from the angle of the economic mainstream. Thus, for instance, Norbert Häring in his study, *Markt und Macht* ("Power and Markets," 2010), represents how textbook economics systematically hinders taking into account the phenomenon of market power. This can similarly be shown for creativity (Brodbeck 1996) or the inherent dynamic of markets (Schumpeter 1942; Sraffa 1926; Keen 2010). In this way, a systematic blindness is spurred on, which already led Joan Robinson (quoted in Hill, Myatt 2010, 1) to the following question:

> "It is true that we cannot, in the time available, teach everything that we would like. But why do we pick out for treatment just that selection of topics that is least likely to raise any questions of fundamental importance?"

"The point is: The way we think changes things... The freedom of thought depends on the fact that one can choose between different ways of thinking" (Hedtke 2008, 5-6). As correct and important this insight is, as completely is it ignored by a textbook economics for which 'multiple perspectives' is a foreign term that is never even mentioned, once, as a *possibility*. "For every critical economic issue there are competing concepts and theories that lead to different conclusions. The problem is that when they are not missing from textbooks altogether, these theories are almost always summarily dismissed" (Adler 2010, vx). "But if one is barred from all alternatives, one does not even know that one could chose if one knew the different thought concepts" (Hedtke 2008, 6).

The newer textbooks in particular drive such a method-monism to extremes,

7 About Adam Smith, Samuelson writes (1955, 12-13): "First comes *Adam Smith*, a Scotch bachelor with *powdered wig* like *George Washington*, who gathered together the earlier wisdom of business pamphleteers and philosophic system builders in his Wealth of Nations (1776). He recognized the virtues of free markets, and the times were ripe for his doctrines to become the bible of the rising middle class. About Marx, Samuelson says: 'And then our picture gallery comes upon the black sheep, who was beyond the pen of the true classical tradition. Karl Marx, an exile from Germany, worked away in the British Museum vowing that the Bourgeoisie would pay for the suffering his boils cost him as he sat working out his theories of the inevitable collapse of capitalism'" (re-translated from the German edition).

in as much as they do not even make their own perspective clear as a means of knowing. There exists a systematic difference between the observer and the observed, or between the knower and the known, and it is the task of an introductory chapter about the scope and methods of science to make the reader aware, at least, of this difference. What commerce looks like to economists, how it appears to them, is not simply equivalent to commercial reality as such. Yet Varian, for instance, simply sweeps aside such reflections as superfluous. He writes, explicitly, that "it is rather inappropriate *to begin* the study of the economy with it" (2007, 1). Mankiw (2001, 3-17) takes this kind of pedagogy even further. At the beginning of his textbook, he explains his "10 principles of economics" so that they appear simply as facts, and not a higher level, selective description *of* facts. Take, for example, Mankiw's forth principle "people respond to incentives" (2001, 7). This principle essentially tells us to analyze individual behavior in the framework of a stimulus-response model: we are to preconceive people as if they automatically and unconsciously altered their behavior in response to changes in market prices. As such, Mankiw essentially leads us to highlight certain characteristics of human beings, i.e. the easily predictable, while erasing others, i.e. the thoughtful, creative and essentially non-determinable aspects of human activity. But Mankiw does not reveal this as a methodological pre-adjustment. He rather pretends to speak about reality as such. He simply tells us that all people *factually* respond to incentives. Thus he misleads his students into taking a specific view of social reality uncritically as the equivalent of or the substitute for this reality.

At least with Paul Samuelson one can perceive that such leveling is in no way unintended, but is instead a conscious pedagogical program. Thus, he confronts millions of students at the beginning of his textbook with the following message (1955, 5-6):

> We must "firstly develop the faculty in ourselves to see things without partisanship or previous assumptions, that is, to see them as *they really are*, and without reference to whether that is pleasant or unpleasant to us. (…)We know that a *doctor passionately interested* in stamping out disease must first train himself t*o observe things as they are*. (…) Similarly, there are elements of valid reality in a given economic situation, however hard it may be to recognize and isolate them. There is not one theory of economics for Republicans and one theory for Democrats, one for workers and one for employers... On many basic principles concerning prices and employment, most – if not all! – economists are in fairly close agreement" (translated from the German edition, emphasis in the German original).

These few references may satisfy us in order to show how textbook economics narrows the student's understanding systematically down to a single perspective. Instead of making this limitation known, economics leads the student to apply this perspective to ever more commercial as well as social phenomena, and to describe the latter on this basis in continually more refined detail. Students are thus hindered to develop their own thought, if they are not completely blocked in regard to the following: They are neither given the tools to critically reflect on the grounds of the

assumptions underlying their own thought, nor to transform them in any respect. Again a similar point has been made by Kuhn with regard to the natural sciences. The praxis of science "will seldom evoke overt disagreement over fundamentals" (1996, 11). "Given a textbook, ...the creative scientist can being his research where it leaves off and thus concentrate exclusively on the subtlest and most esoteric aspects of the natural phenomenon that concern his group" (ibid, 20). At the same time, the student is isolated from all social problems that cannot be described with the help of the conceptual instruments of economic textbook science. He is, in other words, compelled to banish all of those problems that cannot be adequately focused within the economic perspective to the realm of the irrational and unscientific – even if they occur to him, as a human being, to be obvious and pressing.

4 The Image of Man in Economic Textbook Science

Certainly, economic assumptions about humanity are an object of scientific research. Here, advocates of mainstream economics openly acknowledge that *homo oeconomicus* is simply a model, created for a particular, highly specific purpose (see for instance Kirchgässner 1991). Likewise they repeat Joan Robinson's sentence: a model that didn't dispense with the whole variety of reality would be as useless as a map on the scale of one to one (quoted in Felderer, Homburg 1999, 10). Every theory, the argument goes, must emphasize certain aspects of reality as being 'significant' (positive abstraction) while dismissing others as 'meaningless' or as 'confusing collateral circumstances' (negative abstraction), so that it may serve its specific end: the same thing should hold true with regard to the image of man. But even though this statement from Robinson is frequently quoted in economic textbooks, it is, with regard to the economics curriculum, misleading in at least two senses. Firstly, they suggest that students are continually made aware of abstractions as part of their own intellectual activity, as their own instruments of thought. But with our contemporary economics textbooks this is certainly not the case. And this concords with our second sense, which is that textbook economics never makes its view of economic man explicit as what it truly is: an *image* of man. Rather, *homo oeconomicus* functions as a mere fundamental assumption, which is casually introduced inside the framework of the greater theoretical structure. It is hardly reflected upon but only *applied* to problem-solution. Thus, it is not explained to students, why they are to observe just the properties of *homo oeconomicus* as being 'essential' for humanity in commerce, nor do they learn to reflect upon the conflicting human properties they are forced to erase as mere disturbing matters. In other words, students are neither given any explicit rules as to how they are supposed to think of humans nor why they should do so. Yet this doesn't mean that such rules do not exist. Rather, what we see here is the binding force of "*tacit knowledge*" (Polanyi 1966). This is the kind of knowledge students assimilate in the course of their learning process, without ever growing capable of articulating it explicitly. In a sense, one can speak here of the development of a paradigm:

> "Scientists work from models acquired through education and through subsequent exposure to the literature often without quite knowing or needing to know what characteristics have given these models the status of community paradigms. (…) Paradigms may be prior to, more binding, and more complete than any set of rules for research that could be unequivocally abstracted from them (...) While paradigms remain secure … they can function without agreement over rationalization or without any attempt of rationalization at all" (Kuhn 1996, 46-49).

But what composes the economics paradigm in regard to the understanding of human beings? Let's begin our search by tracing the "law of diminishing marginal utility". This law is taken as a central assumption about consumer behavior by all standard microeconomics textbooks. "This law states, that the amount of extra or marginal utility declines as a person consumes more and more of a good" (Samuelson 2005, 85). What does this mean? "Marginal utility denotes the additional utility you get from consumption of an additional unit of a commodity (ibid). Thus, this additional utility is supposed to decline, the more units of the good are consumed altogether.[8] It is never thought, however, to become equal to or less than zero.

Samuelson mentions, correctly, that this law of economics was formulated over a hundred years ago. Yet he suggests (2005, 85), that we can found this law by means of observing our own proper world of experience:

> "What is the reason for this law? Utility tends to increase as you consume more of a good. However, *according to* the law of diminishing marginal utility, as you consume more and more, your total utility will grow at a slower and slower rate. Growth in total utility slows because *your* marginal utility … diminishes as more of the good is consumed. The diminishing marginal utility *results from the fact* that your enjoyment of the good drops off as more and more of it its consumed" (my emphasis).

Samuelson calls upon the experience of the students in order to explain a major economic 'law.' At the same time, however, he instructs them to look at this experience through lenses already colored by this very law itself. Very clearly, this is an instance of circular logic, which in a careless manner mixes together method and empiricism, experience and theory. A similar case can be observed in regard to an even more important economic 'law' which postulates in principle the limitlessness of human needs, a non-satiation, as it is called by economists. In modern textbook economics this principle is hidden in the abstract concept of indifference curves, which Samuelson, for instance, introduces like this: "Start by assuming that you are a consumer who buys different combinations of two commodities, say, food and clothing, at a given set of prices. For each combination of these two goods, assume that you prefer one to the other or are indifferent between the pair"

8 Note that the concept of utility itself remains fairly obscure within some economic textbooks. Samuelson, for example, refers to it either as "satisfaction," "subjective pleasure," or "usefulness that a person derives from consuming a good or service" (2005, 84) And yet he warns: "But you should definitely resist the idea that utility is a psychological function or feeling that can be observed or measured", advising the reader to think of it just as a "scientific concept" (ibid). Mankiw, however, is less bothered by such sophistry. He simply denotes utility as "a measure of happiness or satisfaction" (2001, 447).

(Samuelson, Nordhaus 2005, 101). Again, the perception of the reader is narrowed down from the outset with regard to his own possibilities of action. And once again, this is not made explicit. A sort of perception filter is installed, through which the world appears simply as an assembly of bundles of goods, between which people predictably choose according to their own utility: "If you offer the consumer two different bundles, he chooses the bundle that best suits his tastes. If the two bundles suit his tastes equally well, we say that the consumer is indifferent between the two bundles. (…) An indifference curves show the bundles of consumption that make the consumer equally happy" (Mankiw 2001, 466). Other bundles of goods are taken to grant lower or higher levels of satisfaction. Thus, they are arranged on higher or lower indifference curves respectively. In addition, the following is taken for given: "Because the consumer prefers more of a good, points on a higher indifference curve … are preferred to points on a lower indifference curve" (ibid, 467). In this or a similar fashion all current economics textbooks construct in a few paragraphs a simple "indifference map" in which the total decision space of people is depicted as something like a "utility mountain" (see figure 1; quoted from Stocker 2002, 143):

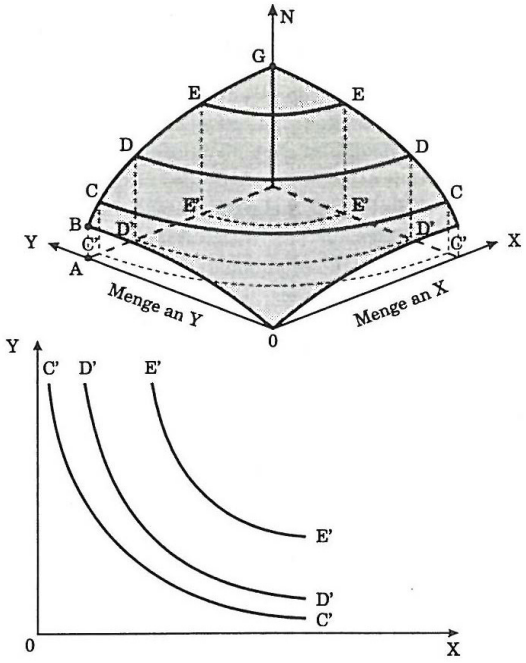
> "This diagram is analogous to a geographic contour map. A person who walks along the path indicated by a particular height contour on such a map is neither climbing nor descending; similarly, the consumer who moves from one position to another along a single indifference curve enjoys neither increasing nor decreasing satisfaction from the change in consumption. (…) Note that as we increase both goods and thus move in a northeasterly direction across this map, we are crossing successive indifference curves; hence, we are reaching higher and higher levels of satisfaction (assuming that the consumer gets greater satisfaction from receiving increased quantities of both goods)" (Samuelson, Nordhaus 2005, 102-103).

Notice again that a highly crucial assumption about humans is introduced here in a by the way fashion: microeconomic textbooks unanimously assume that having more of a bundle of goods is always preferred to having less of it (e.g. Varian 2007, 85). "Consumers usually prefer more of something to less of it" (Mankiw 2001, 468). It appears as though people were, by internal necessity, always driven to climb up the "utility mountain" to ever dizzier heights, as if they were forced to continually chase after ever greater levels consumption. There seems to exist something deep within them that causes them to restlessly strive for ever greater bundles of goods. In other words, their peculiar journey across the mountain of utility recognizes no climax. It does not reference or account for any limitation of satisfaction.

This is the basic idea behind "indifference curves" and the "utility mountain" (see again figure 1): utility (i.e. happiness or satisfaction) increases as more of both goods are consumed. Indifference curves C', D' and E' are conceived analogous to height contours on a geographic contour map. Utility neither increases nor decreases along these curves. But the level of utility is higher along E' than on D', and higher on D than on C'. Note that textbooks economics, in contrast to this graph, usually does not assume a "summit" of the utility mountain to exist (point G). Rather, utility is thought to limitlessly

increase as consumption of both goods increases.

Figure 1



Samuelson explains this fundamental presupposition about human behavior and why he takes it for granted as little as do his colleagues. Such lack of explanation does not simply encumber the necessarily foreshortened forms of presentation normal to a textbook. Instead, it is deeply anchored in the tradition of economics research as such. A reference to one of the actual originators of the 'laws' of diminishing marginal utility and of non-satiation, the Prussian political economist Hermann Heinrich Gossen (1810-1858), can illustrate this: "Man arranges his actions so that the sum of his life enjoyments will be of the greatest amount," so Gossen already postulated in 1854 (4-5). We already know this from our economic textbooks. Yet the manner in which Gossen justifies this postulate is very illuminative:

> "Not only is this maximization viewed by all men without exception as life's ultimate purpose, but it is undoubtedly the real purpose of man's life, willed by his Creator. We can explain the ineradicable and unceasing human desire to reach this objective only by the same procedure by which we seek to explain all other phenomena in nature, namely by assuming that the creator created in men a power whose effect intervenes as this wish in his existence, as we also all other phenomena in nature through the assumption of effective forces corresponding to certain specific laws. ... Its purpose, and thus the purpose of the creator by his creation, can thus not be anything other than willing this effect, that he wanted man to follow its promptings. Hence it would frustrate totally or in part the purpose of the Creator were we to attempt to neutralize this force in total or in part, as is the

> intention of some moral codes promulgated by so many men. But how can a creation be more presumptuous than to want to frustrate the purpose of his creator in whole or in part!" (ibid, 2-3).

Here we see: Gossen does not truly ground the law of decreasing marginal utility. Rather, it intervenes at a point where reflection stops, beyond which we are told that any further explanation is superfluous, and even appears to be vicious: "For its genuineness or truth, this revelation needs no human testimony; it confirms itself in such an indubitable manner that any other proof seems superfluous" (ibid, 4). This kind of dead end is not an anomaly in the history of economics. It is the norm. It is already found for instance in Adam Smith, the originator of economics as a science. For he claimed the workings of his famous "invisible hand" to be located beyond the purlieus of all scientific explanation (see Ulrich 1991). These workings, according to the Scottish moral philosopher, were like the creative power of a watchmaker, owing themselves "in reality to the wisdom of God" and thus not being rationally explainable by human mortals. Like the cogs of the clockwork, the latter must believe in this working, but not seek to ground it in a strictly scientific sense (1759, II.II.19). But the standard economics textbooks don't say a word to draw the student's attention to the problematic of such fragmentary foundations. They only require that the existence of social regularities be taken as given, as if they ever had been correctly founded. They mislead, in other words, students to unconsciously put themselves on the shoulders of long dead economists without ensuring the credibility of these foundations, not to speak of seeking alternative standpoints.

Let's go a step further. Textbook economics does not only confront the students with the alleged laws of decreasing marginal utility and of non-satiation. It also introduces them to the supposedly hard reality of scarcity: "Let us … give the consumer a fixed income. He has, say, $6 per day to spend, and he is confronted with fixed prices for each food and clothing unit – $1.50 for food, $1.00 for clothing" (Samuelson, Nordhaus 2005, 103). People, so it is suggested, always prefer to select bigger bundles of goods; yet this can only happen in the framework of their command over a given income, and thus over money. The actual wandering in the mountains of utility can only unfold along an income gradient, as if every human decision were like a ball slotted into a specific track (see figure 2; quoted from Stocker 2002, 159): left of this gradient, bundles of goods are not preferred because they grant too low levels of satisfaction; on the right, they cannot be reached, because of the lack of income to back them. Thus, there remains only one choice: "The consumer chooses the point of his budget constraint that lies on the highest indifference curve" (Mankiw 2001, 471). This is what economists call the principle of *utility maximization*. Here is where we see: first, textbook economics offers the students only a single 'map' for orientation in the economy.[9] Closer inspection reveals, second, that this map in truth is not even analogous to a terrain map as long as we think of the latter as an aid to real orientation. Its purpose is, rather, to describe a seemingly inexorable program of action, which inevitably limits

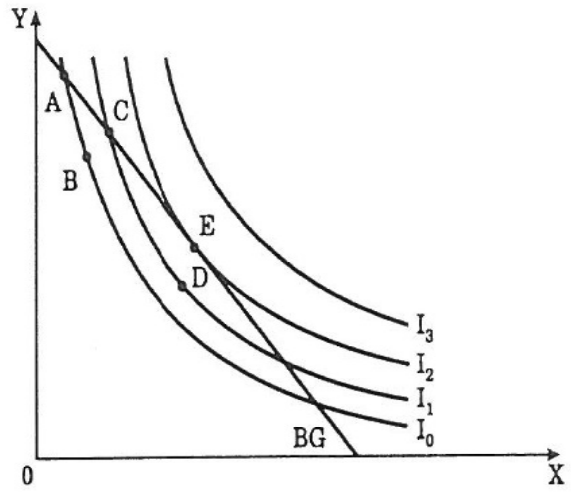
9 One might hold the idea that at least the action of the entrepreneur or firm is represented by textbook economics in a different manner. But this is systematically not the case, in as much as its theory of supply feeds back to the same way of representing human action as its demand theory. It only replaces "indifference curves" with "isoquants" and the "budget constraints" with "isocost lines" as a foundation for its theory of profit maximization. For the particularly abstruse assumptions that result from these presuppositions, see Mirowski 1989.

human freedom of choice to a single point in a pregiven commodity space. Economic textbooks certainly qualify students to calculate this program in all of its details. They also instruct them to make it the foundation for all further questions concerning economic theory and politics. But at the same time they systematically disempower students, or even force them to retreat from, becoming conscious of the image of man lying at the foundation of this program.

It escapes them, for instance, that textbook economics implicitly supposes that man can only chose between given goods whose price is dictated by the market. Man cannot create for himself his choices, neither can he create his own area of action, but must always chose between given things within a pre-fixed commodity space. This is the equivalent of saying: the actor does not have the choice when it comes down to the question of the rules that govern his choice" (Baurmann 1996, 325). Moreover, money is always preconceived as the entry ticket into the realm of satisfaction. One must possess it, if one wants to act at all, and one must always possess more of it, if one wants to experience an increase in one's happiness or satisfaction. Also, the reverse has to hold true: as soon as one controls more money, one's own utility *must* unhesitatingly mount: Every increase in income invariably shifts the budget line, i.e. the path through the utility mountain, outward, i.e. in such a way, that not only higher regions of utility mountains can be climbed, but also *must* be climbed.

This is the economic idea about "optimal choice:" Given the basic textbooks assumptions about individual behavior, individual choice must, by necessity, seek the highest possible indifference curve attainable within the pregiven boundaries of a fixed income. Invariably, it comes to rest at point E (see again figure 2).

Figure 2



We have yet to name a further assumption. Man must not only calculate all the action possibilities open to him individually. He also has to be able to compare them one to the other. Let us denominate three bundles of goods

A, B, and C, as economic textbooks usually do. When A is preferred to B, and B to C, so the economic mainstream teaches, one must inevitably prefer A to C, too. Otherwise one's behavior is considered "kinky," "irrational" or "inconsistent," and thus unworthy of further analysis. "What is usually assumed is that consumers are reasonably consistent in their tastes and actions – that they do not flail around in unpredictable ways and do not make themselves miserable by persistent error" (Samuelson, Nordhaus 2005, 89). What is praised here as "reasonable" shows itself, upon closer inspection, as clearly incompatible with fundamental human capacities. Microeconomics does not simply claim to map and calculate actions in the present moment, but pretends that it can prognosticate them. In order to do so, it must, at least implicitly, preclude "erratic changes" in choosing behavior over an, in principle, endless span of time. Whoever prefers A to B today, and B to C, must also prefer A to C *in the future*. In other words, the indifference curves and thus the whole of the utility mountain are presumed to be stable in time and space. Man is not supposed to ever alter his preferences from one moment to another (see for instance Becker 1990). Yet, an essential human property is thus negated and damned to meaninglessness: the capacity to reflect on one's own needs and tastes and from this background to rethink old decisions and to develop new predilections. Any idea of the human potential to change oneself is missing here, because this potential would shake the utility mountain as if an earthquake occurred from within. It would shove aside and bend the indifference curves, thus simply making any microeconomic calculations and prognoses of human action null and void – precisely those calculations and prognoses which are presumed in the textbooks without question (see Graupe 2007, 59-68). Also, the inventions of new goods and thus the development of new tastes and desires are completely cast into the dark.

But what actually allows textbook economics to ground its statements about human beings? And what consequences result on this basis for the image of man? Let us look again into the history of economics, about which the textbooks of economics are so abstinently silent. Beyond the religious grounding of the 'laws' of economics, as we have found with Smith and Gossen, we find this: "The full truth is that the teaching of political economics in the manner in which it is professionally practiced today, is in the strict sense a mechanistic science, like none other than classical physics" (Georgescu-Roegen 1971, 1). "One *must* study the laws of social cooperation in exactly the same way as the physicist studies the laws of mechanics" (Mises 1940, 2). Since the second half of the 19th century, mainstream economics has literally taken up this demand. Back then, economists like Irving Fisher, Léon Walras and W. Stanley Jevons began to transpose the formulas of mechanics, especially in regard to its notion of energy and the differential calculus, to the social world (see Mirowski 1989). In the course of this process, they more or less consciously pasted the previously named rigid assumptions about human beings in order to justify their own claims and standards of scientificity. They began to think in terms of utility mountains only to be able to describe human actions with the same formulas with which physicists calculate the motion of particles. In order to correspond to their own ideal of science, they simply translated the central concepts of mechanics into economic concepts. "Utility", as for instance Irving Fisher made clear, was equated with "energy," "marginal utility" with

"force," the "commodity space" with (physical) "space," and "negative utility" with (physical) "labor" (1925, 85). Neo-classical theory and thus the current crop of economics textbooks blindly absorbed this mechanistic frame of concepts, without ever thinking about its presuppositions.[10] This also holds true for the concepts of utility and profit maximization, with which economists invariably describe all human activity, as though it were self evident (see for instance Becker 1990). These concepts have also nothing to do with a faithful observation of the social world, but instead with the imperative to manufacture a social physics:

> "'Mecanique Sociale' may one day take her place along with 'Mecanique Celeste,' throned upon the double-sided height of one maximum principle, the supreme pinnacle of moral as of physical science. As the movements of each particle, constrained or loose, in a material cosmos are continually subordinated to one maximum sum-total of accumulated energy, so the movements of each soul whether selfishly isolated or linked sympathetically, may continually realising the maximum energy of pleasure. (...) The invisible energy of electricity is grasped by the marvelous methods of Lagrange, the invisible energy of pleasure may admit of a similar handling" (Edgeworth 1881, 9-13).

For the image of man, it follows that men are to be pictured as machines, because otherwise the economist would be incapable of carrying out his calculations:

> "The conception of Man *as a pleasure machine* may justify and facilitate the employment of mechanical terms and Mathematical reasoning in social science" (ibid, 15, emphasis in the original).

We can see, here, that the economists' image of man is simply not the result of a long search for truth or description of human action as realistic as possible, but just the by-product of a specific, if also mostly unconscious ideal of science. It exists only because it suits the economist and his scientific pretenses. According to Milton Friedman (1953, 14-15), who was a Nobel Prize winner for economics, such an instrumental understanding is basic to economic theory:

> "Really important and significant hypotheses will be found to have 'assumptions' that are wildly inaccurate descriptive representations of reality, and in general, the more significant the theory, the more unrealistic the assumption (in this sense). (...) To be important, therefore, a hypothesis must be descriptively false in its assumptions (...) To put this point less paradoxically, the relevant question to ask about the 'assumptions' of a theory is not whether they are descriptively 'realistic,' for they never are, but whether *they are sufficiently good approximations for the purpose in hand*" (my

10 Clearly this accords with the fact that the early neo-classicals rarely were completely clear about the consequences of their theory for the image of man (see Mirowski 1989).

emphasis).

Walter Bagehot's perspective on the image of human beings is even more revealing (1885, 5):

> "Of course we know that this is not so, that men are not like this; but we assume it for simplicity's, sake, as a hypothesis. And this deceives many excellent people, for from deficient education they have very indistinct ideas what an abstract science is. More competent persons, indeed, have understood that English Political Economists are not speaking of real men, *but of imaginary ones*: not of men *as we see them*, but of men as it is *convenient to us* to suppose they are" (my emphasis).

Certainly, every scientific process of abstraction pursues a certain goal and, in this sense, can be seen as interested. The textbooks all agree here, either implicitly or explicitly: "the level of abstraction from reality depends on the purpose for which the model is built" (Koutsoyiannis 1975, 1). Yet the actual problem lies elsewhere. For the economic textbooks neither reflect the implications of this simple scientific-theoretical insight, nor do they reveal the purpose of their own highly specific abstractions. "Economic theory is a method to understand human behavior," said, for example, Robert Lucas, the 1995 Nobel Prize winner in Economics, "in which we investigate *artificial, fictional people – imitations of robots, one might say* – that are constructed in order to analyze the functionality of artificial economic orders that are constituted from these actors" (quoted in Brodbeck 2009, 97, my emphasis). Yet students do not learn to actively go through this imaginative procedure, but are instead pushed to merely accept the results of these procedures as seemingly irresistible 'facts.' They are not given the possibility of explaining the extent to which they are misled to imagine human beings as utility machines or robots; they simply learn to apply these images tacitly in their first or second semesters. Their further study then offers hardly any occasion to touch on this paradigmatic understanding ever again. Rather, this understanding's field of application is continuously extended. What students learn to consider as 'normal' behavior for instance in the regard to the choice between clothing and food, is, in higher courses, uncritically transferred to all the situations of life: "we can", it is taught, "never *have enough of everything*, and so must accept tradeoffs among the different things we value – including *life,* love, *and the most trivial pleasures*" (Friedman 1996, 33, my emphasis). In brief, textbook economics introduces students first to a highly selective picture of human beings, and then persuades them to blindly apply this picture to all human behavior. Said differently, it trains them into the already mentioned tradition of economic imperialism, of which Gary Becker says (1993): "The horizons of economics need to be expanded. Economists can talk not only about the demand for cars, but also about matters such as the family, discrimination, and religion, and about prejudice, guilt, and love."

It is in this way that economic textbooks lead to gradually imagining every individual social domain as a market in the sense of an aggregation of

individual utility machines. Whether we are dealing with marriage, church attendance, or the working environment: the theory of the "perfect market" always awakens the impression as if the multiplicity of these machines could be organized in a giant clockwork with hardly any friction. The consumers' individual utility maximizing behaviors lead to aggregate economic demand, and the profit maximizing behaviors of individual firms to aggregate economic supply. But what moves both in common is not the will of any individual, but only and uniquely the "unconscious, automatic price *mechanism*" (Samuelson 1955, 39). "Who does the rationing? A planning board? Congress? The president? No. The marketplace" (Samuelson, Nordhaus 2005, 59). Students learn to imagine the whole world as if nothing else mattered but "the rationing of the purse."

> "The power of the purse dictates the distribution of income and consumption. Those with higher incomes end up with larger houses, more clothing, and longer vacations. *When backed up by cash*, the most urgently needs get fulfilled through the demand curve" (ibid, 60, my emphasis).

Thus, economic textbook science makes students to blindly accept an unjust distribution of income as the starting point of all scientific reflection As such, it encourages them to systematically as well as uncritically deal with social inequality as an unquestionable fact. Yet this is not enough still. It also cements, below the radar of awareness, a further form of fundamental inequality. This form can be sussed out by asking one simple question: does the economist actually understand *himself* as a utility machine? Does he consider himself a *homo oeconomicus* or does he only utilize this concept in order to speak about other human beings? Actually, students learn to perceive free market competition – the "rationing of the purse" – not from an internal but from a kind of *external perspective* only. As though it were self-explanatory, from the very first semester they learn to look upon the economy with the help of graphs and formulas, as though they could, through some curious process, place themselves outside of it. It seems as if they were able to gain a 'God's eye' perspective on people and markets. Certainly, Adam Smith already (1759, IV.I.11) prizes this kind of observation:

> "The perfection of police, the extension of trade and manufactures, are noble and magnificent objects. The contemplation of them pleases us, and we are interested in whatever can tend to advance them. They make part of the great system of government, and the wheels of the political machine seem to move with more harmony and ease by means of them."

At least, Smith still remarks that this distant observation is fundamentally nothing other than an illusion. Explicitly he names it a "deception of nature" impeding the true knowledge of commercial reality. For him, ultimate knowledge is gained out of immediate experience, out of a sympathetic position within human society, not from an outside observer's standpoint. (cp. ibid, IV.I). Yet ultimately Smith dubs this deception good, in as much as

it promises to satisfy a goal: "And it is well that nature imposes upon us in this manner. It is this deception which rouses and keeps in continual motion the industry of mankind" (ibid). Only in the position of distant observation can the human spirit be formed into an instrument of unlimited striving for growth, and because of this Smith tells us to approve this speculative position. Economics textbooks blindly follow this command, without making this underlying instrumental understanding explicit or even critically thinking it through. Thus, the students are apprenticed, silently and without being presented any alternative, in a pitiless positioning outside of economic affairs. At the same time, they are trained to negate any kind of source of knowledge that may spring from conscious participation in these affairs. It is a matter of what Alfred Schütz (quoted in Brodbeck 2009, 102) observes without intending any critical undertone:

> The social scientist "is not involved in the observed situation, which interests him not practically, but only cognitively. It is not the theater of his activities, but only the object of his contemplation. He does not operate in it and has no vital interest in the outcome of his actions; no hope and fear are bound together with the consequences of his acts. He looks at the social world with the same cool equilibrium with which the natural scientist follows the events in his laboratory."

This is the background that allows us to explain why, for instance, Samuelson (1966, 64) conceives people simply as the "guinea-pigs" of his analysis. Yet in one essential point, Schütz's remark still falls short. For his proper position outside of society does not simply serve the economist as a place of contemplation. Rather, his science offers him the opportunity to actively intervene in the sphere of economic affairs as if coming from the outside. Already, Adam Smith praises this in the direct continuation of the above cited passage (1759, IV.I.11):

> "We take pleasure in beholding the perfection of so beautiful and grand a system, and we are uneasy *till we remove any obstruction* that can in the least disturb or encumber the regularity of its motions" (my emphasis).

"The purpose of theoretical science is … to control the real world" (Menger 1883, 33). Even Mankiw (2006, 29) understands the economist, in truth, not as a disinterested researcher, but as a *social engineer*, who should guide the destiny of the economic machine:

> "Economists like to strike the pose of a scientist. I know this, because I often do it myself. When I teach undergraduates, I very consciously describe the field of economics as a science, so no student would start the course thinking he was embarking on some squishy academic endeavor. (…) Having recently spent two years in Washington as an economic adviser [of Georg W. Bush – S.G] at a time when the U.S. economy was struggling to pull out of a recession, I am reminded that the subfield of macroeconomics *was born not as a*

> *science but more as a type of engineering*. God put macroeconomists on earth not to propose and test elegant theories *but to solve practical problems*" (my emphasis).

"Cool heads at the service of warm hearts" (Samuelson, Nordhaus 2005, 7): Students are not only guided to the "dispassionate development and testing of theories" (Mankiw 2001, 20-21) but also attuned to the role of *experimenters*, who can manipulate other human beings, markets or even whole nations according to their own will. "The economy is a system without a steering wheel," Samuelson claims (1948, 255). And the textbooks leave no doubt as to the fact that the economically educated elite not only have to put the steering wheel in place, but have to firmly grip it:

> "However, with understanding usually *comes the ability to predict and to control*, and this has been the case in microeconomics. The concepts and relationships economists have developed … *provide the basis for the design of policies by governments wishing to influence the outcome of this process*, or alternatively for the critique of the actions governments may take" (Gravelle, Rees 1981, 1, my emphasis).

To put this in terms of another economics metaphor: if we think of commerce as a game or play, whose rules are inalterably given to the actors (see for instance Friedman 1971), then it is merely a step to get to this conclusion: "The economists determine the rules of the play" (Kyrer 2005, 7).

This shows the problematic of a twofold, and one could even say split image of man that the standard economics textbooks propagate, but do not reflect upon: on the one side most humans are considered utility machines, robots or guinea pigs. On the other side, a few other human beings exist, who, as part of the elite, can steer and control those utility machines, robots, and guinea pigs. The question of whether such elite can, at least, be entrusted with the common good may appear in any case as a subsequent question only. But basically, this question is posed as rarely in the framework of standard economics research as the question of whether the systematic difference between game strategies and game rules, players and referees makes any sense in the first place (see Graupe 2011). In contrast to pure textbook economics, a researcher like Patrick Gunning nevertheless puts into explicit words the basic logic of the science's two-fold image of man (1988, 168):

> "*Homo economicus* must always maximize his financial wealth in situations specified by the economist. The a priori being can create his own situations. He can even become an economist. To put this still differently, *Homo economicus* is a puppet or robot that is programmed by the economist. The a priori being is his own controller. It is the a priori being who encompasses the humanness in the human being. Economic models must be peopled by individuals who are programmed by the modelbuilder. They cannot be peopled

> by a priori beings. The usefulness of models lies in the fact that they enable the modelbuilder to contrast (1) what he can, through reflection, come to know about the nature of the a priori being with (2) the puppet or robot that he employs in his model. In this way, he can isolate the inventive, creative, programming, controlling, alert aspects of human nature."

5 A Prospective View

The economics curriculum, under the surface of awareness, shapes an image of man, which splits society into mere cogs in the 'machine' of the economy on the one side and omnipotent social engineers on the other side. The latter are portrayed as if they could steer this machine from the outside according to their own precepts. Thus, the curriculum gives the impression as if *homo oeconomicus*' inexorable striving for utility and gain maximization could always be held within bounds by sensible managerial precepts. In generating this combination, it completely obscures one essential question: what kind of game is being played when the elite learns to recognize itself in the idea of striving for gain and personal utility, on the one side, while at the same time learning tacitly to locate themselves outside of the competitive order so as to perform as its judge and leader in the name of their own goals? An idea of such omnipotence contrasts with the danger that young people will only silently identify with *homo oeconomicus* and thus learn to count themselves among the impotent part of society only, who find delight merely in consumption, but have no ability to actively shape the world around them as well as their selves. It is possible, that the image of man of the economics curriculum misleads students into constantly wavering between these positions of omnipotence and impotence; unable to find a middle way between these extremes. It has been my concern to show and outline this fundamental problem, how it arose and against what background it stands. As for viable alternatives, I must leave this question open at this point. Yet let us go at least this far: a first step, in my own experience of teaching, consists in encouraging students to become conscious of the many ways in which the economic "missionaries" and their "bibles" can be disputed. A critical course through the history of economic ideas empowers them to be able to find their own actual point of view and the reasons for it. "The difficulty lies, not in the *new ideas*, but in escaping from the old ones, which ramify, for those brought up as most of us have been, into every corner of our minds" (Keynes cited in Keen 2010, xii). Yet this escape is only possible for those ideas that one really is aware of. At least we should (re)introduce the discipline's intellectual history, as much as the explicit reflection on the economics image of man, into economics teaching. This could serve as a first step in order that young generations are no longer brought up as the slaves of dead economists and – lets add to the often cited image from Keynes – dead or living textbook authors.

References

Adler, Moshe. 2010. Economics for the Rest of Us. Debunking the Science that Makes Life Dismal. New York.

Bagehot, Walter. 1885. Postulates of English Political Economy. New York, London.

Baurman, Martin. 1996. Der Markt der Tugend. Tübingen.

Becker, Gary S. 1990. The Economic Approach to Human Behavior. Chicago.

Becker, Gary S. 1993. Economic Imperialism. In: Religion & Liberty, Vol. 3, No. 2. (http://www.acton.org/de/pub/religion-liberty/volume-3-number-2/economic-imperialism) accessed May 28, 2012.

Brodbeck, Karl-Heinz. 1996. Erfolgsfaktor Kreativität. Die Zukunft unserer Marktwirtschaft. Darmstadt.

Brodbeck, Karl-Heinz. 2009. Die Herrschaft des Geldes. Geschichte und Systematik. Darmstadt.

Edgeworth, Francis Y. 1881. Mathematical Psychics. An Essay on the Application of Mathematics to the Moral Sciences. London.

Felderer, Bernhard; Homburg, Stefan. 1999. Makroökonomik und neue Makroökonomik. Berlin.

Fisher, Irving. 1925. Mathematical Investigations into the Theory of Value and Prices. New Haven.

Fleck, Ludwig. 1980. Die Entstehung einer wissenschaftlichen Tatsache. Frankfurt/Main.

Friedman, David. 1999. Der ökonomische Code. Wie wirtschaftliches Denken unser Handeln bestimmt. Frankfurt/Main.

Friedman, Milton. 1953. Essays in Positive Economics. Chicago.

Friedman, Milton. 1971. Kapitalismus und Freiheit. Stuttgart.

Georgescu-Roegen, Nicholas. 1971. The Entropy Law and the Economic Process. Cambridge, London.

Gossen, Herrmann Heinrich. 1854. Die Entwicklung der Gesetze des menschlichen Verkehrs und der daraus fließenden Regeln für menschliches Handeln. Braunschweig.

Gottesman, Aron; Ramrattan, Lall; Szenberg, Michael. 2005. Samuelson's Economics: The Continuing Legacy. In: The Quarterly Journal of Austrian Economics, Vol. 8, No. 2, 95-105.

Graupe, Silja. 2007. The Basho of Economics. An Intercultural Analysis of the Process of Economics. Heusenstamm.

Graupe, Silja. 2011. Standing on Mount Lu. How Economics Has Come to Dominate Our View of Culture and Sustainability – and Why It Shouldn't. In: Banse, Gerhard; Nelson, Gordon;GrauGra Parodi, Oliver, eds. Sustainable Development. The Cultural Perspective. Berlin, 251-77.

Gravelle, Hugh; Ress, Ray. 1981. Microeconomics. London, New York.

Gunning, Patrick J. 1988. Professor Caldwell on Ludwig von Mises' Methodology. In: The Review of Austrian Economics, Vol. 3, 163-176.

Häring, Norbert. 2010. Markt und Macht. Was Sie schon immer über die Wirtschaft wissen wollten, aber bisher nicht erfahren sollten. Stuttgart.

Hedtke, Reinhold. 2008. Ökonomische Denkweisen. Eine Einführung. Schwalbach/Ts.

Hill, Rod; Myatt, Tony. 2010. The Economics Anti-Textbook. London, New York.

Kirchgässner, Gebhard. 1991. Homo Oeconomicus. Das ökonomische Modell individuellen Verhaltens und seine Anwendungen in den Wirtschafts- und Sozialwissenschaften. Tübingen.

Keen, Steve. 2010. Debunking Economics. The Naked Emperor of the Social Sciences. London, New York.

Koutsoyiannis, Anna. 1975. Modern Microeconomics. London, Basingstoke.

Kuhn, Thomas S. 1996. The Structure of Scientific Revolutions. Chicago, London.

Kyrer, Alfred. 2005. Neue politische Ökonomie. München.

Mankiw, N. Gregory. 2005. Principles of Economics. Orlando.

Mankiw, N. Gregory. 2006. The Macroeconomist as Scientist and Engineer. In: Journal of Economic Perspectives, Vol. 20, No. 4, 29-46.

Meinberg, Eckhard. 1980. Das Menschenbild der modernen Erziehungswissenschaft. Darmstadt.

Menger, Carl. 1883. Untersuchungen über die Methode der Socialwissenschaften und der Politischen Oekonomie insbesondere. Leipzig.

Mirowski, Philip. 1989. More Heat than Light. Economics as Social Physics, Physics as Nature's Economics. Cambridge.

Mises, Ludwig von. 1940. Nationalökonomie. Theorie des Handelns und des Wirtschaftens. Genf.

Nasar, Sylvia. 14. März 1995. A Hard Act to Follow? In: The New York Times. (http://www.nytimes.com/1995/03/14/business/a-hard-act-to-follow-here-goes.html?src=pm) accessed July 4, 2011.

Pearce, Kerry A.; Hoover, Kevin D. 1995. After the Revolution. Paul Samuelson and the Textbook Keynesian Model. In: History of Political Economy, Vol. 27, Supplement, 183-216.

Polanyi, Michael. 1966. The Tacit Dimension. New York.

Samuelson, Paul. 1966. Consumption Theory in Terms of Revealed Preference. In: Stiglitz, Joseph E., ed. The Collected Scientific Papers of Paul A. Samuelson, Vol. I. Cambridge (Mass.), 64-74.

Samuelson, Paul. 1948. Economics. 1. Edition. Boston et al.

Samuelson, Paul. 1955. Volkswirtschaftslehre. Eine Einführung. Second Edition. Köln.

Samuelson, Paul; Nordhaus, William D. 2005. Economics. Eighteenth

Edition. Boston et al.

Schumpeter, Joseph. 1908. Das Wesen und der Hauptinhalt der theoretischen Nationalökonomie. Leipzig.

Schumpeter, Joseph. 1942. Capitalism, Socialism and Democracy. New York.

Scousen, Mark. 1997. The Perseverance of Paul Samuelson's Economics. In: Journal of Economic Perspectives, Vol. 11, No. 2, 137-152.

Smith, Adam. 1759. Theory of Moral Sentiments. London.

Sraffa, Piero. 1926. The Law of Returns under Competitive Conditions. In: Economic Journal, Vol. 40, 538-550.

Statistisches Bundesamt. 2010. Technical Report "Studierende an Hochschulen – FS 11 R. 4.1." Wiesbaden.

Stocker, Florian. 2002. Spaß mit Mikro. Einführung in die Mikroökonomik. Stuttgart.

Ulrich, Peter. 1991. Der kritische Adam Smith – im Spannungsfeld zwischen sittlichem Gefühl und ethischer Vernunft. In: Meyer-Faje, Arnold; Ulrich; Peter, eds. Der andere Adam Smith. Beiträge zur Neubestimmung von Ökonomie als politischer Ökonomie. Bern-Stuttgart, 145-190.

Varian, Hal R. 2007. Grundzüge der Mikroökonomie. München, Wien.

Wall Street Journal. 13. Dezember 2009. Remembering Paul Samuelson. (http://blogs.wsj.com/economics/2009/12/13/remembering-paul-samuelson/) accessed July 28, 2011.

Walras, Léon. 1969. Elements of Pure Economics. New York.

Walstad, William B.; Watts, Michael; Bosshardt, William. 1998. The Principles of Economics Textbook. History, Content, and Use. In: Walstad, William B.; Saunders, Phillip, eds. Teaching Undergraduate Economics. A Handbook for Instructors. Boston.

Weinstein, Michael. December 13, 2009. Paul A. Samuelson, Economist, Dies at 94. In: The New York Times. (http://www.nytimes.com/2009/12/14/business/economy/14samuelson.html?pagewanted=1) accessed July 28, 2011.