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**RIGORÓZNÍ PRÁCE**

Rationality of Human Action and Preferences:  
A Criticism of Subjectivist-Teleological Principles of  
Economics and an Outline of a Remedy

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## Prohlášení

Prohlašuji, že jsem rigorózní práci vypracoval samostatně a použil pouze uvedené prameny a literaturu

V Praze dne

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## ABSTRACT

The thesis criticizes the subjectivist-teleological principals of economics. Economics intended to work with the individual preferences without normative, or any other, bias. The neutrality is, however, distorted by deep assumption of the economic thought - the a priori causality between the preferences and action. The teleological perspective as it was introduced by Karel Engliš was sharply delimited with respect to causality. Neoclassical and Austrian school, however, do mix causality and finality in their conceptions of action and preferences. My thesis strives to describe this mistake. It is also possible to formulate the theme of the thesis as criticism of the assumption of certain a priori rationality of human action. I try to clear up the notion of rationality, show the possibilities of its meaning and point out at the radicalism of any assumed causality it may encompass. I use the critical conclusions to outline a preference framework that would not repeat the identified mistakes, which would, however, set out from the subjectivist-teleological perspective as well.

## ABSTRAKT

Práce se zabývá kritikou subjektivisticko-teleologických principů ekonomie. Argumentace však není vedena snahou o paušální odmítnutí těchto základů, ale spíše poukazuje na rozpor mezi těmito základy a jejich začleněním do teoretických konceptů ekonomie. Ekonomie tradičně vychází z jednotlivce a jeho osobních preferencích. Základní zásada je přitom pracovat s preferencemi nestranně, bez jakéhokoli normativní nebo jiné úpravy. Tato práce upozorňuje na zásadní faktor nejen ekonomické teorie, ale i ekonomického myšlení - apriorní kauzalitu mezi preferencemi a jednáním – který zamýšlenou nestrannost narušuje. Teleologické nazírání, tak jak jej představil Karel Engliš bylo přitom ostře vymezeno vůči kauzalitě. Neoklasická i rakouská škola však kauzalitu a finalitu v přístupu k lidskému jednání a preferencím směšují. Moje práce se snaží tento omyl popsat. Alternativně, je téma možno formulovat jako kritiku předpokladu určité apriorní racionality lidského jednání. Práce se snaží rozvinout možné významy tohoto termínu a tím ukázat na radikálnost jakékoli kauzality mezi preferencemi a jednáním. Kritické závěry pak využívám k nastínění rámce pro preference a jednání, který by je nesměšoval, ale stále vycházel ze subjektivisticko-teleologické perspektivy.

## **Poděkování**

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### **Motto**

„Víte proč se našemu druhu říká Homo sapiens sapiens?

Protože dvakrát opakovaná lež se stává pravdou.“

(Zdeněk Neubauer 6.5.2008 na hodině Filosofických základů biologie)

# Contents

|   |     |
|---|-----|
| Chapter 1 – Introduction: Consilience and Methodological Anarchism.....   | 9   |
| Chapter 2 – Some Controversies in the Methodology of Economics (and Social Sciences in General) 17                      |     |
| 2.1 Introduction .....  | 17  |
| 2.2 Individualism and Holism.....   | 18  |
| 2.3 The Case of Assumptions .....   | 23  |
| 2.4 Induction or Deduction – What Method Is Correct for Economics? .....  | 28  |
| 2.5 Teleology and Economics – The Benefits and The Dangers of Their Connection .....                                    | 31  |
| 2.5.1 Teleological Conception of the Human Individual .....   | 34  |
| 2.6 Does Economics Side to Hedonism and Egoism?.....  | 36  |
| Chapter 3 – The Subjectivist Approach in the Austrian School.....   | 39  |
| 3.1 Introduction – The Subjectivist Approach in Economics .....   | 39  |
| 3.2 The Subjectivist Approach in Austrian Economics.....  | 39  |
| 3.3 Conclusion .....  | 45  |
| Chapter 4 – Rationality, Preferences, Human Action and Teleology.....   | 47  |
| 4.1 Introduction .....  | 47  |
| 4.2 Three Meanings of Rationality .....   | 48  |
| 4.3 Ontological and Methodological Claims.....  | 49  |
| 4.4 Rationality as Effectiveness - Three Assumptions of Rationality.....  | 51  |
| 4.5 Rationality and Problem Solving .....   | 54  |
| 4.5.1 Prime and Exclusive Problems and the Problem of Action .....  | 54  |
| 4.5.2 Problems and Science.....   | 56  |
| 4.5.3 The Problem of Action .....   | 57  |
| 4.5.4 The Assumptions of Rationality and the Types of Problems .....  | 59  |
| 4.6 Rationality Tactics.....  | 62  |
| 4.6.1 Introduction .....  | 62  |
| 4.6.2 Mises’s <i>Human Action</i> .....   | 64  |
| 4.7 The Munchhausen Trilemma and the Problem of Rationality.....  | 68  |
| 4.8 Conclusion .....  | 72  |
| Chapter 5 – An Outline of Alternative Teleological Conception of Preferences .....                                      | 74  |
| 5.1 Unclear Preferences (Goals, Ends, Purposes).....  | 74  |
| 5.2 Horizontal and Vertical Rationality.....  | 78  |
| 5.3 The Outline of Three-level Theory of Teleological Purposes.....   | 82  |
| 5.4 The Evolution of Genes as the Highest Level of the Teleological Purposes.....                                       | 84  |
| 5.5 The Evolution of Culture as the Middle Level of the Teleological Purposes.....                                      | 86  |
| 5.6 The Conscious Reason as the Imminent Level of the Teleological Purposes.....  | 89  |
| 5.7 Does the Preference Hierarchy Work Backwards As Well? Is There a Feedback? .....                                    | 90  |
| 5.8 The Relation to the Neoclassical Preference Concepts and Concluding Exposition .....                                | 91  |
| Chapter 6 – Human Action Exposed in Prime Problems – An Outline of an Alternative Concept of Human Action/Behavior..... | 96  |
| 6.1 Introduction – Action and Preferences.....  | 96  |
| 6.2 The Typology of Behavior/Action .....   | 98  |
| 6.3 Instinctive behavior.....   | 102 |
| 6.4 Communally Determined Behavior .....  | 104 |
| 6.5 Fully Conscious Behavior .....  | 105 |
| 6.6 The Complementarity of the Behavioral Types.....  | 107 |
| 6.7 The Behavioral Types and the Method of Economics .....  | 108 |
| 6.8 Suggested progress of the analysis of the behavioral types.....   | 112 |
| 6.9 Two Models of the Change of the Behavioral Regularity .....   | 114 |
| 6.10 An Outline of the Approach towards the Change of Behavioral Regularity in Two Interdependent Sectors .....         | 117 |
| Chapter 7 – Conclusion .....  | 122 |
| References: .....   | 125 |

## List of figures

|   |     |
|---|-----|
| Figure 1 – The Munchhausen trilemma.....  | 69  |
| Figure 2 – Preference relation under varied preference levels.....  | 95  |
| Figure 3 – A possible situation of the action and preferences with respect to the utility maximization<br>(k – actual outcome)..... | 95  |
| Figure 4 – Preference levels and the perception of action.....  | 98  |
| Figure 5 – The behavioral types and the preference levels.....  | 102 |
| Figure 6 – A schema of the behavioral type that is a composite of the three ideal types.....  | 113 |
| Figure 7 – A schema of the distribution of information.....   | 115 |
| Figure 8 – The time paths according to the values of d – R curve.....   | 116 |
| Figure 9 – The time paths according to the values of d – S curve.....   | 117 |
| Figure 10 – A sketch of the changing character of consumption.....  | 121 |



# Chapter 1 – Introduction: Consilience and Methodological Anarchism

In the beginning of the 20<sup>th</sup> century philosophers and scientist intended to give precise criteria for scientific approach. Scientific was to be sharply distinguished from non-scientific, objective from mere subjective. There were two grounds this effort could be based on. The first bases the objectiveness on pure empirical facts and the second on the a priori facts of reason. Unfortunately, the campaign for pure science ended ignominiously in both traits. Pure positivism pursued still greater strictness with respect to the dealings with empirical facts, which made him practically useless. Moreover, the ability of such approach to give clear unambiguous facts had been disputed with increasing vigor. Even though Karl Popper tried to rebuild the approach in different and somewhat looser shapes in the end his effort seemed to have the same problems as the original positivism<sup>1</sup>.

Less perceptible effort to base the science on a priori grounds either disappeared with the incorporation into more diverse methodologies or ended in reclusive obscurity. To deduce the world from pre-existent laws appeared to be impossible even in the most evident phenomena.

The ongoing difficulties with building constructs of objective scientific method provoked radical change in the understanding of the methodology of science. Thomas Kuhn retold the story of science on the grounds of changing paradigm that is based on the agreement among scholars at a given time. And finally, the last nail in the coffin was delivered by Paul Feyerabend that rejected any criteria for science whatsoever. The dream of objective science ended in ashes.

Feyerabend's criticism of the idea of positive science showed that it is impossible to find any objective criteria for science and he also showed that regardless of the proclamations science never followed any such criteria. He analyzed the case of a scientist par excellence Galileo Galilei and showed how his discoveries had to cheat many eventual criteria in order to be accepted. Feyerabend argued that if scientific

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<sup>1</sup> The absoluteness of only one falsifying observation and the requisite to state the theory so that every its claim would be falsifiable combined with the ambiguity of empirical facts.

approach was to satisfy any rules Galileo observations would never be accepted. “Anything goes” is the only criterion for Feyerabend.

It could seem that methodological discussions are futile. If we accept Feyerabend’s assertions we should not be able to find any argument that could prove dubious position of any theory. This is not completely true. There is still the last thing that can be done. Feyerabend pointed at non-existence of any truly objective criteria, but that is not a neutral assertion with respect to the existing theories and sciences because they are based on argumentation that presents them as more scientific than their rivals. Feyerabend’s texts had therefore shaken their dominant position and that is precisely what methodology of science is able to do – point out at uncertain fundamentals of particular methodologies. This work can be done on any science and any theory, but there is certain notorious bias that demands special and systematic attention of the methodology of science. It is already present in Kuhn. The science tends to be practiced in the sphere of interconnected beliefs that is hostile or ignorant to its alternatives that are out of the paradigm. The methodology of science is then required to take down this spirit of infallibility and therefore secure some place in the sun for the alternatives.

American (socio)biologist Edward Osborne Wilson (1998) proposed a seemingly opposite path for science. He argued for unification of natural and social sciences under a common approach. Even though this ambition is surely bold Wilson makes very precise observation about the infirmity of social sciences. He provides an analogy with medicine. It studies various parts of human body from multiple perspectives, but two doctors of different specialization would have no problem to understand each other. Even though they may use exclusive terms there is a common basis for mutual communication. They may discuss and solve the problems together, they may mutually utilize the ideas of their colleagues, and they may gain from the environment of co-understanding and co-laboration.

However, a scientist that studies society, even though she is in an analogical situation, she studies the society as doctor studies the body, would simply don’t find common ground with her colleague of a different social science. If one is economist and the other anthropologist or social psychologist their discussion would be held in different languages and they would probably don’t agree on even the most basic facts.

Wilson put it in the context of the fact that medicine achieved major successes in the past century whereas the social sciences seem not to have left the scratch. In response he advocates for consilience ('jump together') of social sciences that would produce "creative ferment". He is not alone who point at nonsensical overspecialization of scientists. Václav Bělohradský calls on philosophy to guard "dialogic openness of the common world of people against imperialistic monologs of specialist and managers of all kinds" (Bělohradský 2007, p. 18, my translation). Niklas Luhmann points out at missing communication among societal systems. The social sciences are then more parts of these systems than they would contribute to overcoming the barrier.

The proposition for consilience of sciences may sound like the direct opposite of Feyerabend's methodological anarchism, but there is no contradiction. Consilience does not mean dominance and it does not suggest any new quest for objectivity. It is only an alternative that wants to overcome an important flaw of social sciences.

Feyerabend's anti-positivistic approach and Wilson's argument for consilience are the basis of my critical position towards economics. I think that their points are valid for economics, at least for its dominant approaches, more than for any other science. Economics put away the ambition to look for the real phenomena and became just a method that is responsible only to its own world with its own laws. Whereas other social sciences buried their dreams of objective science long time ago economics is still dreaming it. It is stuck in algebraic pyrotechnics (Hamermash) and it is hostile to everything that smells with "unscientific vagueness" or essayistic style that could endanger its plunge into abstraction. While students of sociology are thought to look on the analyzed phenomena from various points of view economics occupies its students with mastering methods that are to be applied universally. Unfortunately, there is no method that would be somehow pre-designed for conceiving the social phenomena. There is no possibility to dodge the contact with the real problems and the necessity of their understanding.

Understanding is never the same as mastering a method. It can be obtained only from scarce and dispersed resources - knowledge that reveals itself in unpredictable places of diverse contributions of humanistic scholars; it cannot be computed or deduced from simple axioms.

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However, I must specify the scope of intended criticism. Economics is a science of multiple schools of thought with various methodologies and it is not my intention to relate this bulk as a whole. I also don't want to conceive methodology of any particular school in its entirety. My intention is, almost exclusively, to dispute subjectivist origins of neoclassical and Austrian thought; to dispute their connection to the individual, his wants and status of his action. These schools differ in many ways, but the basic intention to start from the individual and his genuine wants unites them. It precisely this ambition whose fulfillment I want to challenge. This is the point of departure and also the referential point of this text. I should mention that if I will relate to economics, economic methodology or the economic approach I will generally mean these schools and this particular issue of their methodology.<sup>2</sup>

A particular methodology can be criticized from “outside” by pointing out at the phenomena it does not explain, but also from “inside” by pointing out at inconsistencies in following its own logic. The criticism from outside is disadvantaged because every school of thought steels itself against any objection that would step outside of its methodological tenets. It notes only the phenomena that reside within its world and can be explained by it. Objections from outside are usually classified with dyslogistic label and receive only minor attention from the scientist of the criticized system.

The criticism from inside, on the other hand, carries a danger of silently accepting the environment in which the practical science is conducted. Dealing with a particular theory or school of thought closely pushes the explorer into the use of its language and dealing only with the problems that the theory has prepared for instructing its ability. It is therefore important to keep the distance and constantly cast doubt on the meaning of notions the theory uses.

My intention is to criticize from inside. Not to point out at incapacibilities of economic approach as such, but to point out at its inconsistency in following the logic of its own

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<sup>2</sup> This is important to keep in mind because sometimes it may seem that I don't take into account the existence of alternative schools of economic thought.

subjectivist principals. This is done on logical grounds and also with the analysis of meaning of the basic terms and the rhetorical tactics that defend them. Since the teleological concept of human action is natural ground of rationality, preferences and action<sup>3</sup> I will analyze these notions with a special care.

However, it must be pointed out that it is not the only possible grounds for the criticism of the behavioral foundations of economics. There are some usual issues that are the central points of the methodological discussions. Their exposition can be found in Knight (1921), Blaug (1980), Williamson and Winter (1993) or North (1990). Let's summarize at least the most important points:

- The economic world is viewed as being in equilibrium.
- Individuals face only choices of a similar character in well-defined situations under certainty and they evaluate the outcomes according to stable criteria. Every actor is able to find the best outcome from a set of all available choices.
- Every individual acts according to her own motives and is not constrained by other people. Every individual acts independently and there is no link to the societal factor that would frame (limit) possible choices.
- Since the world is in approximate equilibrium prevailing behavioral regularities are close to maximizing behavior.
- The concepts of representative firm and representative consumer can be used as a sufficient approximation.
- Uncertainty can be conceived with parameters and modeled using expected utility hypothesis.
- Adaptive processes to an optimal choice exist and they are supposed to be costless and instantaneous.

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<sup>3</sup> If the individual is perceived as if he seeks means to his ends, the means are related to the ends with certain effectiveness (*rationality*). However, as we will see, *rationality* is a notion of more than just one meaning. *Preference* is ambiguous as well. It may be related as a specific term for *end* ("I prefer higher utility"), but also as 'what was chosen', i.e. means ("I prefer a pen to a pencil"). *Action* is closely linked to the means. It is, however, not identical term because it assumes activity of the subject whereas means can just occur without any intention of the subject (Engliš 1930, p. 60).

The teleological perception of human being - the point of departure of this text – is connected to some of these issues (namely rationality, individualism, uncertainty)<sup>4</sup> and I will discuss them through its perspective, but I should stress that almost exclusively from its perspective<sup>5</sup>. It is not an ambition of this text to give extensive account of all possible concepts of rationality or preferences or to describe diverse means how to cope with uncertainty.

Nevertheless, the content of this text can be also related to an outside criticism. Václav Bělohradský claims that we live in an irrational society of rational individuals and that “the characteristic of our age is that economic growth is nonsensical, it is impossible to justify it with reason” (Bělohradský 2007, p. 148, my translation). My intention is to show that even purely individualistic subjective approach that sets out from the individual well-being can be in accordance with these claims.

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Since methodology of science has two distinctive meanings I should also claim which of them is the domain of this text. The first meaning subsumes the analysis of actual methods that sciences use whereas the second is oriented towards the philosophical background of science (also called metascience or philosophy of science). The presented scrutiny resides within the latter. It touches methods that scientists use for providing their results only marginally and concentrates on deeper origin of economic thought that sets out from the perception of the individual as if he seeks means to

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<sup>4</sup> However, I will refer neither to the issues of any type of equilibrium (e.g. Hahn 1973) nor to the adaptive processes in the economy (e.g. Nelson and Winter 1982).

<sup>5</sup> For example, the most known account of rationality in economics is Simon’s *bounded rationality*, which is based on the relation between individual cognitive abilities and a given problem. I, on the other hand, will mostly refer to rationality with respect to the individual himself. Simon’s account of rationality was aimed at unrealistic image of the individual that cope with problems with sufficient knowledge and computation abilities and it is therefore apposite for the decision making of a firm. Whereas Simon refers to the actor that is already embedded in the neoclassical framework, I will refer to the original conception of the individual and his connection to the framework. Natural domain of such approach is the consumer choice. It also, unlike bounded rationality, relevant for Austrian economics and its concept of rationality.

We can also note the difference on the label *bounded*. It makes sense with respect to a given problem that demands certain amount of correct operations to be solved; hence individual intelligence can be bounded with respect to this demand. But it is strange to say that you are bounded with respect to your own wants because it is you who define them with respect to your own knowledge. Whereas with respect to a clearly defined problem there is usually correct and incorrect solutions, it is unclear how to define these alternatives with respect to consumer choice (or one’s choice in general).

attain ends. The main hypothesis of this text is that it is possible to show the major faults of economic thought only by analyzing this fundamental principle.

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The thesis itself is divided in two parts. The first is dedicated to the criticism of the subjectivist approach in economics. In the second chapter I discuss several general methodological controversies in which I would like to place the traditional economic approach as well as to show its precarious position in their perspective. In the third chapter the subjectivist approach is identified and criticized in the Austrian school of thought. And finally, in the fourth chapter I try to elucidate the principal notion of the subjectivist economic approach – rationality of human action (as well as related notions of preferences and problem).

In the second part I try to utilize the findings from the preceding chapters to outline an approach that would not repeat the identified mistakes, but which is still based on the concept of teleology. The fifth chapter is dedicated to additional elucidation of the problem of preferences; it also tries to outline a conception of preferences that would be based on teleology as well as on the basic findings of sociobiology and the third culture (Brockman) and other impulses of social science thought. The sixth chapter adds the differentiation of behavioral types that connects preferences and the problems of everyday life. In the end of the chapter I propose two ways of how the analysis could continue.

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Among the intellectual sources that are the subsoil of this text is Englis's exposition of the idea of teleology, Schopenhauer's philosophy of will, works by E.O. Wilson's on methodology of science and the human nature, Weber's works on methodology of the social sciences and economic history, McCloskey's work on the rhetoric of economics and Rorty's turn to the language, and finally the approach of Viktor Vanberg that stands in between Austrian and institutional economics. I should also mention Václav Bělohradský that provided me with apposite exposition of many problems that I only suspected. I think that his work that connects the threads from

various intellectual sources and integrates it to the concise and understandable picture is precisely what is missed in economics.



# Chapter 2 – Some Controversies in the Methodology of Economics (and Social Sciences in General)

## 2.1 Introduction

There are several repetitious questions in the methodology of economics and some of them are closely related to the issues discussed in this text. The purpose of this chapter is to present some thoughts related to these themes and to introduce them in a way similar to the tone of the rest of the text. It should also base the approach used in the subsequent chapters in the familiar ground of methodological controversies that are present in economics (and more-less in social sciences in general) from time out of mind.

It is not a purpose of this chapter to espouse any particular methodology or economic school as well as not to prove certain methodology wrong. It is, however, my intention to shaken certainty of methodology that economists use and often consider as self-evident. If there is anything this text wants to differ with it is an ideological self-consciousness of certain methodological tenet that is hailed as the only right one.

There are probably two repeating (and mutually related) themes in subsequent parts of this chapter. The claim that categorical limitation on only one certain methodological tenet is usually only a rhetorical means how to avoid criticism<sup>6</sup>. And also that it is usually difficult to find precise border between two competing notions.

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<sup>6</sup> Complementary approaches provide McCloskey (1983, 1986, and 1994) and Klamer (1984). They point out that the actual practice of economists is much different from the declared methodology.

## 2.2 Individualism and Holism

Among social sciences economics is the one with the greatest inclination to individualism. It is a question in what extent it is only a methodological position and in what extent it has deeper ideological roots, but this characteristic is surely apparent and significant.

Of course, the fundamental question is how we define *individualism* (atomism, reductionism) and its counterpart *holism* (collectivism, organicism), but if we would continue in the intuitive respect and if we would like to disprove the individualistic character of economics by mentioning an alternative school of thought with genuinely holistic approach there would be only limited possibilities. In fact, the only major undoubtedly holistic print one could have is from the application of Marxist doctrines in the countries of the communist block in the 20<sup>th</sup> century or from the fascist regimes of twenties and thirties. However, if we would go through the schools of economic thought and their theories we would hardly find so clear position on holism-individualism scale (even Marxism is ambiguous in this respect).

This intuitive respect I am relating to is more precisely expressed by the term *societal realism* (ontological holism) which may or may not be considered as identical as holism. Realism considers society as a sovereign existent entity. The alternative claim, *societal nominalism* (ontological individualism), understands society only as a derivative composition of individual existences.

The former claim asks on wants of society, its preferences, needs and the most importantly on action society should take. However, these concepts stay unspecified and vague because there is no clear indication of action (preferences, wants, abilities, etc.) of society. It is impossible to see act society as we see act people. The only possibility is to explain these notions in terms of individual characteristics which is against the very principle of the concept. However, since there could only be individuals acting this prevention of looking for individual sources works often as defense for those that are in control. To speak about the wants of the society it is often wants of the few chosen ones.

Moreover, economy if it should be efficient has to be a dynamic entity that utilizes the skill of individuals, but individual differences are effaced if it is looked from the viewpoint of holistic being. One of the most serious flaws of central planned economy

was that it would not allow for realization of individual skill even if they were offered in good faith.

The implausibility of societal realism with respect to the method of social science is the dominant theme of rhetoric that advocate for individualistic methodologies. However, with its refusal we did not exhaust the issue because it is not the only way how to define holism. In his *Poverty of Historicism* Karl Popper (1976) analyzed two traits of argumentation for holistic approaches. They are distinguished in the way they understand the whole. One possibility is to understand it as an aggregate of all characteristics and interrelations of its parts. The motivation to this approach is in its provision of truly complex perspective. Any only particular analysis always faces the problem of unpredictable influence of factors that are not taken into account.

For example, economics uses ‘ceteris paribus’ assumption. In the line with this argument for holism we should dispute whether this kind of approach still does tell us something about the world around us that is typical by interdependency of its phenomena.

Intuitive remedy to avoid such problems is then to take into account all relevant factors. However, as Popper points out, this idea is illusory, because every scientific analysis cannot escape from its particularity. “It is not possible for us to observe or describe a whole piece of the world, or a whole piece of nature; in fact, not even the smallest whole piece may be so described, since all description is necessarily selective.” (Popper 1976, p. 77)

The second understanding of holism is based on the emphasis of only those properties that are present on the whole, but it is impossible to note them on its separated parts. For example, several tones create a melody, but we are unable to find it in the properties of individual tones, because the melody is created by their mutual ordering.

It is hard to disprove this point. However, Popper identifies it, which put him in the line with subjectivist economics, as trivial and vague. He argues that about any whole we can say that it is more than just an aggregate of its part. For example, even on a plain lump of stones we can observe an increase of pressure on its lower parts that increases with its size. For Popper such trivial properties are not diminishing the privileged position of individualism.

I don't think that the indicated triviality is an argument for disregarding any holistic method. It may be a trivial property of any whole, but that does not mean that it is always irrelevant. We can also realize the extremity of Popper's dismissal of mentioned argument if we note that even significant social science scholars such as Max Weber or Georg Simmel that are proponents of individualistic method par excellence would have to be considered as holistically oriented from Popper's point of view.

Popper's position is weak because he provides no logical argument against this understanding of holism he only disputes its importance. However, he does not supply any arguments why the elements that are revealed only in the whole should not be important.

If Popper would be right, the individualistic method could never get into position when it would not be able to conceive the collective factor because such factors are generally unimportant. If, on the other hand, we would not be persuaded by Popper's arguments we have to consider his position as leading to what Daniel Dennett (1996) called 'greedy reductionism'. It is a type of reductionism that 'explains away' rather than explains the phenomena by neglecting certain aspects of its properties<sup>7</sup>.

Compliance with the second argument for holism discussed by Popper does not lead to any type of ontological holism described above. It does not disregard an analysis from the perspective of individuals it only says that there can be situations where the whole or the societal structure can have important influence on them.

We can also turn the theme around and ask on the further specification of nominalistic (individualistic) method which should lead us to similar result.

If we agree on nominalism in the sense mentioned in the previous paragraph we come across the question by what are individual characteristics, wants or action determined. This question is largely omitted in economics and it is even considered as a virtue, but can we really evade it? It is possible to be really unbiased with respect to the individual characteristics? Isn't the claimed neutrality only an easy way how to disregard many unpleasant problems?

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<sup>7</sup> Instructive example of greedy reductionism is Skinner's radical behaviorism. It neglects existence of mental states, which caused its incompetence of explaining some psychological phenomena.

The custom in economics is to treat the individuals as black boxes into which we should not look. In practical theoretical work, however, the theory supposes much about individuals. The form of confessed assumptions that are used in order to enable the models is not justifiable. It prescribes the character of individuals in a fundamental way (for example: stability of preferences, cognitive abilities, complete information), which makes the former intention doubtful. On one hand we have sharp almost ideological black boxes and on the other individuals that are remade to the advantageous shape that is substantiated only by the theoretical necessity. The discussion of its real impacts are almost always omitted or skimped. The unbiased approach in this respect must therefore be considered as only imaginary.

If we return to the specification of nominalism we can, within its scope, distinguish *individualism* and *holism*. We define the former as absolute independency of any general societal conditions (in preferences, skills, or action) and the latter as absolute dependency in the identical respect. In this case, an individual would have no characteristics genuinely his own, he would have to acquire them from the general conditions of the outside societal environment. The opposite would mean absolute independency on influences coming from these conditions.

However, it is straightforward to realize that individuals are never on one of the extremes. It would be foolish to think that there are no general conditions and that people are independent of them, because we simply are societal beings. It does not matter what form the influence take. Whether it is conscious or unconscious, well deliberated or irresponsibly received, reactive or rational many things may vary, but the fundamental fact stays – the collective character of the determining societal influences. Even if all people would be rational (the analysis of this ambiguous term takes place in 4<sup>th</sup> chapter) and utilize what the society offer them according to their well-being there could be situations where single change on the society level would have an influence on all of the individuals, which is precisely the situation where it is beneficial to look from the holistic level.

If we define individualism and holism as above the borders of both claims are surprisingly unclear. There can hardly be a truly individualistic approach and therefore even economic theory even though it is particular about its individualism is partially holistic. Sometimes its holism is quite strong. Consider the situation where

all producers face a single demand curve. That's holistic approach that can even be as such criticized. Why do we consider only single demand for the whole society? Does it not disregard the individual differences? Again, the economic theory has got into this situation by applying assumptions that are not themselves 'pro-holistic', but their unintended consequences are.

The rest of the schools of economic thought are somewhere in between as well. Sometimes the holistic side is more apparent sometimes it is not. For example, institutions studied by institutional economics represent clearly the holistic factor. They are the property of the whole that is an important factor for the individual action.

But can we consider institutional economics as *ontologically holistic*? I don't think so. Consider Veblen's leisure class (Veblen 1999) that could be taken as an example of very anti-neoclassical approach. Even though he mentions classes and describes their typical behavior it does not mean that class is a being in itself. Even though he may talk about behavior of a group it is always behavior of individuals that face similar environment and their behavior is meaningful as a behavior of individuals.

We are not in the position of categorically disregarding any theory for its place between individualism and holism, but I think that it can be claimed that the more the theory is individualistic it has a difficulty with conceiving or even noting the holistic phenomena<sup>8</sup> and vice versa. However, as we have seen it may not be so clear which theory is how individualistic or holistic.

Very important is not only the actual individualism (holism), but also the way how the theories define themselves in this respect and how strong their emphasis on certain position is. We should be very cautious for theories 'militantly' arguing for clear and the only correct opinion. More than about the theoretical purity it tells about their fear from alternatives and unpleasant question their theory would have to face.

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<sup>8</sup> In his essay *To Philosophize in the Age of Separated Worlds* (my translation) Václav Bělohradský (2007, pp. 17-27) criticizes contemporary society for disregarding the common world that is the link of sense to our own particular worlds. He is reluctant both to fundamentalism of the whole – totalitarianism and fundamentalism of the parts – consumism.

### 2.3 The Case of Assumptions

One of the notorious issues in the methodology of economic science is the assumptions of the theory and their legitimacy. In any other social science this issue is not so pressing, because assumptions of most of the social science theories are of different sort than in economics. Usually, they are not so sharply formulated and they are also not so restrictive. Economics built its rigorous apparatus only in expense of setting assumptions that would simplify the social phenomena in very specific and clearly formulated way, which is a natural ground for criticism. From the perspective of the theme of this text the assumptions are sensitive issue as well because their application might seriously distort the relation of the science to the wants of the individual.

The discussion of assumptions is held in two respects. One discusses their realisticness and the second discusses their influence on predictive properties of theory.

The former respect has been always painful for economics, because the science had a difficulty explaining apparent disconnection with reality of its assumptions. However, it would be silly to insist on assumptions in exact correspondence with reality. Nobody has really demanded that. What is the desirable property of assumptions is generally realisticness (Mäki)<sup>9</sup>. It does not mean absolute correspondence with reality but only its appropriate representation. In physics, for example, we could see assumptions that have nothing in common with reality but nobody would doubt them. Can we see any mass points around us, for example?

Alan Musgrave (1981) created respected typology of assumptions whose application is justified and Uskali Mäki (2000) put it more precisely some time later. Musgrave mentions three types of assumptions. The first, negligibility assumptions, that simplify reality by disregarding factors that are not essential, i.e. that are negligible. The second, domain assumptions, that omits even factors that may be essential in some situations hence they are stated only conditionally. And the third,

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Lubomír Mlčoch (2006) claims that economics misses the conception of the common good, that is indicated by institutional factors such as responsibility and mutual trust.

<sup>9</sup> This is a neologism introduced by Mäki (1989) to distinguish the requisition of reality and requisition of interception of the essential elements of reality – realisticness.

heuristic assumptions that are set in order to probe some possibilities that are out of reach of present theory. Even though these assumptions are themselves unjustified it is a known fact and they are released as soon as it is possible.

So for instance, if it is to be assumed that governmental budget is balanced, the intention of an economist may be to say that any imbalance is negligible and his conclusions are valid universally; or that the conclusions that follows are valid only if the budget is balanced; or finally, he may have put forward such assumption even if he is aware of its falsity in order to find out the results the situation might give. In the last case, however, he must keep in mind the status of his assumption and pursue its loosening. He cannot state an assumption as a dogma.

The classical assumptions of economics can hardly be considered for any of these types. They are not negligible, because the factors it omits can be very determinative. They are not domain because since they are universal background on which science is built they are not stated only conditionally. And finally, they are not heuristic assumptions because there is no trend to loosen them or even realize their shortcomings.

The unfavorable state for justification of the assumptions of economic theory was succored by Milton Friedman in 1953 by his famous essay *The Methodology of Positive Economics*. Friedman turned the problem around and claimed that it is irrelevant how the assumptions capture the reality only if they provide us with good predictive properties. Till today this is probably the most mentioned argument for keeping the assumptions of economic theory.

Friedman's argument is persuasive but it has one major flaw. To be able to judge assumptions according to their predictive properties we have to have reliable means how to measure such properties. I don't think there are such means<sup>10</sup>. Duhem-Quine thesis about ambiguity of empirical fact is exceptionally painful in social sciences. We are hardly ever in a situation when we can decide the competition between two sets of assumption by just comparing their results with an empirical number. Moreover, the economic theory is focused on the long run which means that any contradictory number can be left aside with remark on the long run effect. How can we possibly compare assumptions in such situation?

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<sup>10</sup> For exposition of disputability of falsification in economics see Redman (1991, pp. 116-129).



Notably, every school of thought has its own story about the reality, its past and even future and the very same events mean something completely different for every school. The New Deal is a disaster for Austrian economists and notable achievement for Keynesians, for example. I don't think any of these schools could be persuaded by some proof of assumptions properties.

However, this remark doesn't lead to complete disregard of empirical testing. It is only reluctant to its privileged position. To choose the best assumptions it is needed to utilize both traits – methodological analysis as well as empirical testing.

Let's get back to the question of realisticness of assumptions. Another argument supporting 'lax' assumptions is coming from Weber's concept of ideal types (Weber 1998). It suits the assumptions of economics because they often extrapolate some properties of the phenomena. Besides, even Weber himself considered assumptions of economics to be a suitable application of the ideal type concept (Loužek 2005, p. 475).

However, I don't think that the concept of the ideal type can be an alibi for any assumptions whatsoever. I'd like to point out on differences between some assumptions of economics and those of physics that may look like a similar type.

Consider assumption of mass point in physics. It disregards the spatial dimensions of physical objects and considers only its mass. The proportions are not always negligible. For example, if we drop a feather from a window the air resistance would be a major determinant of its trail and the Newton laws would be very imprecise. So far we have an analogical situation as with the economics' assumptions. However, the distinguishing factor is that in the case of dropping a feather we know very well that the air resistance is important factor and we can very well divide the causes on gravitational and those coming from air resistance. This knowledge is very important; if we would not be able to decide the influence of alternative factors our assumptions would provide us with wrong results. Much more serious would be if we would not be able to reveal the situation even ex post. In that case it would be impossible to find out which are the cases with wrong results and even find out whether our assumptions are correct anytime. Notably, that's very close to the situation in social sciences. Without the knowledge about actual situation of competition, rationality, preference ordering, etc. (i.e. all the things economists forbid themselves to investigate) the assumptions

that suppose its extrapolated state are not much of a use<sup>11</sup>. In this case we see once more the rhetorical defense mechanism of economic theory. It is likely that concede of relevance of other factors would cause much trouble for the theory hence it is claimed that nothing else does not matter in the long run.

What is truly remarkable in this situation is the possibility of such a state. Imagine that somebody would claim that no matter what you drop the gravitational laws would express themselves with sufficient deepness. Naturally, nobody would be persuaded with such an argument, but not because it could be falsified. We cannot falsify such a claim because that would imply testing in all (i.e. unlimited) depths, which is as well as 'the long run' in economics unreachable.

The inefficiency of such an argument does not inhere in testing, but in certain closeness and certainty that we feel with contact with such a theme. We don't need to test all depths to know that it is nonsensical argument. We understand intuitively. However, we often lack such a help in social and humanistic sciences. There are many alternative theories that are hard to conceive together. Nobody is really an expert in them all and every theory is more or less reclusive to its neighbors.

These facts imply the necessity of special carefulness with respect to the assumptions in social sciences. We could see that the space for assumptions that would not excite our attention is much greater than it may seem hence it put more requirements on the analyzing their realisticness. The special characteristic of economics was well put by Frank Knight:

[talking about economics] "...it is an exact science it must accept the limitation as well as share the dignity thereto pertaining, and it thus becomes like physics or mathematics in being necessarily somewhat abstract and unreal. In fact it is different from physics in degree, since, though it cannot well be made so exact, yet for special reasons it secures a moderate degree of exactness only at the cost of much greater unreality." (Knight 1921, p. 3)

The uncertain assumptions also lead to low added value of more and more derivations of the same set of assumptions. If there is a significant reason to believe that the

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<sup>11</sup> Schweitzer (1970) criticized Weber for his sole occupation with the ideal types which may lead to a false conclusion that there are no real types. On contrary, the usability of the ideal types is dependent of our understanding the real types.

assumptions may not be valid it is likely that the error will increase with every next derivation because every derivation is committed under certain assumptions as well. The more we have indication of dubiousness of the assumptions the more we should address ourselves to probing possibilities of alternative assumptions than to deriving implication of implication of implications...of the original assumptions.

The related theme is the relation between assumptions and the beliefs about actual state of things. The assumptions need not to correspond to our beliefs. Often this is an argument in discussions. For example, if it is pointed out at unrealistic cognitive abilities of actors in economic models it is replied that ‘of course people are not omniscient and perfectly rational’ and subsequently it is claimed that it is only an assumption<sup>12</sup>. The unreality of assumptions is shifted towards the fact that they are only assumptions and subsequently the space for complains becomes very limited. No matter how would you point at nonsensicalness of what the theory assumes it would not be an argument.

However, I want argue that assumptions and beliefs have close to each other. One indication is the claim of Charles Peirce, a philosopher of the pragmatic school that persuasively argued that belief as well assumption is a pragmatic proposition:

“Hence, the sole object of inquiry is the settlement of opinion. We may fancy that this is not enough for us, and that we seek, not merely an opinion, but a true opinion. But put this fancy to the test, and it proves it groundless; for as soon as a firm belief is reached we are entirely satisfied, whether the belief be true or false.... The most that can be maintained is, that we seek for a belief that we shall think to be true. But we think each one of our belief to be true, and, indeed, it is mere tautology to say so.” (Peirce, 1877, p. 115)

Another notable indication is that the beliefs of most of economists are very much in the line with their assumptions. I doubt that there are many Austrian economists with Rawlsian preferences. I doubt there would be more sociologists than economists that would be considered as individualistic by the society. I would be surprised if the beliefs about human rationality would not be the most optimistic among economists

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<sup>12</sup> Alternatively, it is referred to different meaning of the term as it is analyzed on the case of rationality in the 4<sup>th</sup> chapter.

compared to any other profession. Again we may compare the situation with physics. Do physics differentiate by their beliefs about gravity<sup>13</sup>?

Since there is uncertainty about legitimacy of assumptions the beliefs and assumptions are naturally connected. Where else would you seek the appropriate assumptions if there is no clear instruction for finding them than in what you believe is correct? The dependence can also be mutual and the beliefs and assumptions can form a vicious circle. If the theory is originated from a (premature) assumption/belief it will probably give us result that will, when taken as undisputed, support the confidence in the original beliefs and the process will go round and round in circles<sup>14</sup>. By this path dependency the scientist may easily get to his own world where everything accords except that she is less and less understandable for normal people. Is it coincidental that is talked about mainstream economics as autistic<sup>15</sup>?

#### **2.4 Induction or Deduction – What Method Is Correct for Economics?**

The Methodenstreit<sup>16</sup>, the greatest methodological argument in the history of economics, clashed two general methodological approaches in economics: inductive, deductive. However, the endeavor to choose once for all between these two choices was opposed by approaches refusing any predetermined concepts. Among these we can find the Babylonian approach (Dow 1998), methodology in the pragmatic tradition (Peirce, Laudan, Rorty), methodological anarchism (Feyerabend), and approaches emphasizing the rhetoric (McCloskey). We may find differences among these concepts but together they agree on refusal of any particular methodology and redirect the attention to the concrete problems.

I want to argue in the line with these approaches that purely deductive or inductive reasoning inevitably face impassable problems. We can also note the repetitious phenomenon in the methodological discussion: no theory is purely on one of the sides because the narrowly set rules are too restrictive for the needs of any social science

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<sup>13</sup> The intended point is not completely right. Of course that about the complicated unresolved questions of the physics scientists would differentiate as well according to the theory they support. The effect is the same in any science. I mentioned physics because it is yet just by intuition on a different level in this respect compared to social sciences.

<sup>14</sup> “We must go round to find the roots of our own beliefs.” (Robinson 1964, p. 1)

<sup>15</sup> *Open letter from economic students*, Le Monde, 2000-07-17

<sup>16</sup> Closer exposition of the dispute can be found in Loužek (2001).

theory. All theories are in one way or another Babylonian; all use rhetoric as an important element of their survival in academic discourses.

The point is valid also for the intention to start from genuine human wants, because such effort is usually linked to the ambition to start from an objective method that would catch these wants without distortion.

Fallacy of inductivism has been revealed many times in history. We should mention famous Hume's (1748) argument claiming that no empirical fact can be a reliable basis for prediction. The fact that something happened in the past is not a reason that it will happen in the future. Karl Popper claimed that no matter how many white swans we find it is never sufficient to claim that there is no black one and thereby refused the possibility of generalization of empirical facts. And finally, Duhem and later Quine (1951) showed that there is nothing as definite empirical fact. Every empirical material is perceived through the eyes of particular theory and its meaning is determined by the means we gather it and by the paradigm with prepared explanatory apparatus.

We may also add concise Rorty's (1989) thesis that clearly says that it is unjustified to expect that we have some kind of reflexive mechanism that would reflect the true state of nature.

Karl Popper in his *Logic of Scientific Progress* doubts even the existence of induction. "The science begins with problems" he says and points out that every problem we necessarily approach with hypotheses to be confirmed.

Econometrics, recent most significant representative of induction in economics, disposes with many highly sophisticated means that make our otherwise only intuitive impression of empirical data more precise. However, the limits of induction are still present.

It does not suggest neglecting econometrics as such. The problem is not in neglecting or accepting, but in the ability to registering its limits. Econometrics as well as mathematical economics in general faces the problem of overestimation of its abilities with respect to the social phenomena.

The special disposition of econometrics to self-overestimation inheres precisely in its contribution – the overcoming of our intuitive management of data. Such a leap out of the former limits is two-fold. It offers more and better means, but with less control

of them. After obtaining the data, the problem is in the embrace of econometric rules that create world of itself with no way back to the original phenomena. The scientist is in position where the only way how to vindicate his result is to relate to the econometric rules; he is unable to conceive the space between the real problem and particular econometric “possession” of the problem.

The deductive method<sup>17</sup>, on the other hand, stands and falls with the (epistemological) status of its axioms. The previous section discussed the case of suitable assumptions. Their sharp detachment from beliefs about the reality was infirmed; yet their generation is to some extent determined by the needs of the apparatus which makes their status weaker. But some theories have an ambition to deduce from axioms that are believed to really catch fixed pieces of truth. Example of this approach is the Austrian economics, especially in the tradition of Ludwig von Mises.

The ambition to deduce social phenomena from such axioms is, however, oversized. The theory can have plausible axioms and produce only tautologies and banalities or its axioms are just impugnable assumptions or it silently draws from more sources than it claims. Usually all three possibilities are present to keep the theory working.

It is notoriously hard to have a universal agreement on a single fact in social sciences. In such an environment it would seem that the theory that builds on self-evident axiom would need to develop exceptional effort towards recognition of its self-evidence among general social science. If a whole theory should stand on few claims they should better be dissected extensively.

However, such a theory does and has to do precisely the opposite because their axiom would hardly survive such open discussion and a theory survives only if it vindicates its relevance among at least some scholars. Hence, the very existential reasons steer the theory into developing very categorical rhetorical apparatus that sharply neglects all that could cause the shake of the axiomatic certainty. Doubting the axioms of these theories is generally a taboo; it automatically puts you in the position of the uninitiated person that doesn't know the very basic facts (that are so

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<sup>17</sup> Very often the deductive method and the teleological setting are presented as natural complements, but we must distinguish the ideal order to which belongs teleology and actual theory that explain existing phenomena (compare with Engliš 1947).

obvious that it is nonsense to talk about them). If the reader has experience of discussion with Austrian economists he or she knows what I am talking about<sup>18</sup>.

I think that the character of any school of thought that is dependent on ‘undeniable’ truths of its axioms is the same as any other group with analogical precious property – it tends to be reclusive. The discussions are held mostly between initiated ones and ‘outsiders’ are looked down on.

Both positivism and apriorism, the methodologies of extreme induction and deduction, are theoretically hardly defensible. The program of purifying of genuine science ends too easily in ideologization and isolation from the live seeds of scientific inquiry that usually don’t fit to the restrictive categories.

With greater restriction the actual theoretical work unstuck with methodological proclamations, which then becomes only a means of rhetorical defense that secures a space in the scientific discourse.

It does not mean that any of these methods is inapplicable only that they are not sacred means with undoubted and the only scientific results.

In general, scientists are not of gullible uncritical kind, but even scientists have to take some things as given and sometimes this necessity transforms in reluctance to doubt facts that they are used to work with.

## **2.5 Teleology and Economics – The Benefits and The Dangers of Their Connection**

For many reasons teleology and economics have had always close to each other. Even though the concept of teleology is old, it was first introduced by Aristotle, it seems as it was shaped with regard to the needs of economics. Robbins’s definition of economics says that:

“Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses” (Robbins 1945, p. 16)

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<sup>18</sup> Those who are interested (among Czech speakers) I am redirecting to the forum of the Czech Liberal Institute ([www.libinst.cz](http://www.libinst.cz))

And it is precisely the comparison of means with respect to purposes (ends) which makes the core of the teleological framework. However, we must point out economics is not its only haven. It is related to (evolutionary) biology (Mayr 1992) or the philosophy of natural sciences (Barrow and Tipler 1986).

Even though the voluntaristic element had been always latently present in economics it was as late as in the twenties when Karel Engliš<sup>19</sup> focused on teleology explicitly. For Engliš, there are three fundamental perspectives we use to look on the world around us<sup>20</sup>. The first is the perspective of natural sciences with causality, it conceives the world as it is (cause – effect); the second, teleological perspective with finality (means – ends) according to which we classify ideal contents that we conceive as wanted; and finally, normative perspective with logical reasoning as a classifying principle (Engliš 1930, p.28)

Let's summarize the basic characteristics of teleological setting as it was introduced by Engliš:

- Teleology is genuine perspective we use to conceive experience. It is only a form and the experience is the content. Teleology itself has no content (Ibid., p. 46).
- It possible to conceive any content with the teleological perspective (Ibid., p. 46).
- Teleology explains wanted A with wanted B<sup>21</sup>.
- Teleological perspective begins with *purpose (end)*, which is a referential framework for all possible *means*. *Purpose* itself is teleologically conceivable only as a *means* of a *purpose* of higher order.
- With teleology we can create a hierarchy of *ends* with one central *end* and multiple means that are (*sub*)*ends* for their own *means* that are (*sub*)*ends* for their own *means*, and so on.

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<sup>19</sup> The basic sources are Engliš (1930) and Engliš (1947). There are, unfortunately, not many works dedicated to Engliš's teleology (but e.g. Vaněk 2000).

<sup>20</sup> These are a priori perspectives in Kant's sense (Engliš 1930, p. 21)

<sup>21</sup> If A is wanted we can then ask why is A wanted and answer because B is wanted which makes A means to the fulfillment of B. Why is B wanted? Because C is wanted and we may continue analogically up to the last ultimate purpose that is itself inexplicable in the teleological framework. If we ask, on the other side, on the fulfillment of A we ask on which means were chosen and how is their relation to the fulfillment of A.



- Teleology is in not, in any way, causality. *End* does not causes *means*. *Means* can be only related to it. The causality is also not reversed (Ibid., p. 27), i.e. *end* is not an *effect* for the *means*.
- Since *end* creates a referential framework for *means* it is possible to judge their effectiveness (rationality) with respect to this *end*.

It is interesting that Engliš is sometimes considered to be an Austrian economist, because, even though there is a common interest in a priori forms, this school is based on the intention to look for causal nexus in human economic conduct. Engliš, on the other hand, referred causality only as the perspective of natural sciences.

However, even Engliš's account of teleology includes some ambiguities concerning the difference between causality and teleology. It explains *wanted* A with *wanted* B, which means that we use the same word for the relation to the *purpose* – B and to the *means* – A, we say they they are both 'wanted'. It signifies that they both „contain“ the want, but the want is based only on the *purpose*; *means* makes sense only as its fulfillment. To denote them with identical 'wanted' is therefore as if the want would be included in the resulting situation of the endeavor after the fulfillment of *purpose*. But, since we differentiated teleology and causality categorically, it is impossible to assume that in the chosen *means* there is a priori anything from the wanted *end*. Whereas the *end* is the single determinant, there can be multiple *means* with varied effectiveness with respect to it.. To relate to *means* as if they are wanted is confusing because the want is founded by the *end* and need not to be included in *means*. The *means* should not be referred as something wanted, but only as an candidate in the process of wanting. Wanting is a process of which chosen *means* need not be a solution whereas to denote something as 'wanted' resembles finished fact that does not accept any other possibility<sup>22</sup>. It is a slight difference, but with very important consequences.

This ambiguity is apparent when Engliš gives teleological definition of action so that it is „...a process that we conceive as wanted by the subject of wanting (as a

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<sup>22</sup> It resembles the difference between imperfective and perfective verbs (*nedokonavá* a *dokonavá slovesa*) in Czech. But whereas they are differentiated by the time span, we need a differentiation for a single moment. However, we may note the desirable difference between “I want” and “I want this”. Whereas the first is linked only to the subject (and the fact that he has wants), the latter establishes a link with the object - I want this, so that it is objectification of my want, hence the *means* and the *end* are mixed together, or we can say that there is a causal link that wipes away the difference between relating to the former and to the latter.

*means* to an *end*) and which we ascribe to the subject as if it would be caused by him.“ (Engliš 1930, p. 60, my translation) If it is said that action is a process that is really wanted and it is something that originates inherently in the subject then it is very difficult to not fall into the illusion that there is some inherent effectiveness (rationality) in action that links *means* and *ends*. This is precisely the problem of Austrian economics as I will try to show in the next chapter.

### **2.5.1 Teleological Conception of the Human Individual**

A billiard ball was directed to the pocket hence there had to be a different ball that hit it and caused its movement. The causal nexus is something intuitive in our perception of the objective world around us. Even though we could look on human affairs in the same way they will always be more than just mechanical movements of inanimate objects. People are intuitively subjects. After all, a causal scrutiny would not lead us very far<sup>23</sup>. If we would base social science only in the terms of causality the causal nexus would be so complex that it would block any reasonable analysis.

There are several other reasons why teleology is apposite to be the primal perspective here. In the discussion of individualism and holism it was claimed that economics cannot afford to disregard the dimension of an individual with its unique wants, skills and exclusive possession of information (Hayek). Teleology is a perspective that can be used on various phenomena, but people are the most intuitive subjects of wanting.

Moreover, teleology provides a helpful barrier against ontological holism (realism). Even though that within its scope both individualism and holism in the abovementioned definition is possible it always keeps the ontological primacy to the individual – it is always he or she who wants.

And finally, one of the significant (but infamous) advantages is that it is easily possible to take its notions too literally and transform the perspective into the description and thereby mix it with causality. This point will be discussed in detail in subsequent chapters, but here we once more concentrate on the difference between causality and finality in the teleological perspective of human being.

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<sup>23</sup> It is, to be sure, not a dilemma between determinism and free will; it is a question of usefulness of looking on certain object as on the one that wants.

We cannot prevent causality to be applied on human beings and it is not even an intention. The only tenet is that causality and finality are categorically different principles, but if we are conceiving a particular content with finality it does not mean that we cannot utilize even causality. We can, for example, relate *means* to an *end* in the teleological way and then reveal the *end* in causal nexus. These two sides of perception of the individual are explained in Schopenhauer (2007).

We may be tempted to believe that causal perception is characteristic with outer causes while finality makes its contents free of any causes. It would mean an absolute independency or causelessness that could be hardly attributed to any living being and is even hardly imaginable. Even finality is in natural accordance with outer causes, because the framework does not set how the *means* are chosen and which purposes are pursued.

This gets us back to the discussions about holism and individualism and supplies us with similar methodological framework – we cannot count with freedom unbound of external influences (societal or other).

The content that is seen from any perspective cannot be ‘made’ independent of the outer world. The perspective that is used for its conceiving cannot unbind it; it just perceives it from a different point of view with a different ambition and specific terms. The *cause* implies the *effect*. From *cause* we can derive *effect*. *Purpose* (goal, end), on the other hand, is only a plan that sets what is *wanted*. We cannot derive the effect from a *purpose*, i.e. to say how will be the *purpose* satisfied. There is no a priori one to one relationship, no warranty of effectiveness.

A possible objection would be: But how would we ever know something like finality if we would not see people getting what they want? If finality is a perspective of how to look on individuals (or contents in general) it should be in accordance with our experience. Are not purposes accessible to us only through their realization? Yes and no. We have our own experience that tells us that not everything intended will come true and we have intuitive ability to put ourselves into the situation of other people or even living beings in general. However, we never know the real motive of other people and we may not know even our own motives. If we watch somebody’s activity there is uncertainty whether the results of such activity were intended or not. We are often in the situation when somebody blames his failure on bad luck, hostility of environment or limited possibilities. We never know for sure whether it is only a

fable or a true description. Moreover, we must insist that there is no “easy-way” source from which we could set the effectiveness of activity. It is certainly not within the framework of teleology.

Schopenhauer applies finality even on inanimate world. It is as even stones would be wanting, but of course it is only a metaphor. Here, finality and causality coincides. We may think that stone wants to hit a car and often we talk about it in this way<sup>24</sup> and the purpose is always identical with what happened. However, even though we often think about people in a similar way this is not the necessity in the case of living beings. Unfortunately, this is what is often drawn from especially in Austrian (and neoclassical) economics. Because of this danger Engliš’s sharp distinguishing of causality and finality is very important.

## **2.6 Does Economics Side to Hedonism and Egoism?**

Is economics an unbiased science that analyzes consequences of our preferences, decisions and actions or it conceives only part of our existence (the one that cares only about consumption and ourselves)? Is economics a materialistic science? Sure, it is something that is noted by ‘outsiders’ and it is denied by economists as misunderstanding of their science.

The key to these questions is in the relation of the science to the individual. If it wouldn’t reflect individual wants the whole analysis would be doubtful. However, economics does not measure individual wants. It measures, well, GDP (and its growth)<sup>25</sup>. If how much economy produces would not be also how much the wants of individuals are satisfied neutrality or economics is lost.

The previous part claimed that economics uses the ambiguity between finality and causality and mixes these concepts. It takes part precisely in the relation of individual

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<sup>24</sup> In (Schopenhauer 2007) we can find a short analysis of linguistic phenomena that reveal deep rooting of voluntaristic perspective in language.

<sup>25</sup> If we should judge just from the rhetoric of economists and their opponents it would decision that has no middle position. Economists speak almost exclusively in terms of growth of GDP, that is bad – small or stagnating (fall is just disaster) or good – high. Naturally, if we admit that this single-scale measurement could not be relevant than self-conscious utterances of economists become suspicious.

wants to the rest of the theory. The consumer choice derives the demand curve from individual preferences. It often uses very trivial examples, but if we look on this part of the theory generally we see that the sole determinant of the result of the choice is individual preference. Of course, someone could say. However, as I tried to show in the previous part (and whose elucidation will take part in the subsequent chapter in greater detail) it cannot be considered as self-evident automatic result.

The problem is that we relate only to a timeless choice between already set goods with which we are used to connect only trivial examples of choosing three pens to two pencils and so on. If more complicated choice would take place it suddenly feels much differently. For example, imagine you are sitting behind the desk on which lie mentioned pens and pencils. It is something very different if you ask: ‘Would you rather choose three pens or two pencils?’ or ‘What is the best thing to do (in general)?’ It may seem that the second question should only be solved by philosophy and economics should concentrate on the first, but while this is true it mustn’t lead to the representation of the human individual as someone who is bothered only by questions of the choices between goods and never question his own action generally. Following from the last sub-chapter and in more detail from the rest of the thesis that is exactly what economics does. It closes human beings in choices of pettiness that correspond to the assumed identity between teleology and causality and disregard everything complicated that does not comply with this tacit tenet. In more complicated choices economics considers, as usual, what the individual chooses – the action – and not the preference that in this case is likely to not coincide. In result, economics in fact conceives human being as something that wants to fail in difficult task.

What is the effect of this mistake? As we could see such method is suited for a certain types of individual choices – easy ones, the ones we don’t need to deliberate, the ones we are sure about. If we project these choices in the real economy it is straightforward that this precisely what is economics blamed for – hedonism and egoism. The easiest choices are those of imminent joy that we find in ourselves. There is no need for long deliberation and doubt, because what we crave for is what we need to choose. The concentration to the self makes things easy as well because our own most apparent

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The critics of economics reply that it is an ideology of growth of the Growth (Belohradsky 2007) or absurd selfmovement (Havel) of the (capitalistic) civilization.

yearnings we know the best. To care about needs of others need not just self-deception but also deliberation about others and empathy, which makes the things naturally more difficult.

The assumed identity between causality and teleology and between action and preferences lead inevitably in hedonistic and egoistic character of economics.

# Chapter 3 – The Subjectivist Approach in the Austrian School

## 3.1 Introduction – The Subjectivist Approach in Economics

In the last chapter I tried to mention some repetitious methodological themes in the history of economics and through their perspective we can characterize the subjectivist economic approach. It is typical by peculiar endeavor to reach pure methodological individualism; it emphasizes deductive method based on few explicitly formulated assumptions (or self-evident axioms); and also strives to start from the teleological conception of human individual that is often insufficiently differentiated from causality.

Now, I want to relate these characteristics to concrete school of thought. The subjectivist orientation is typical for neoclassical and Austrian school. I will, however, concentrate on Austrian economics and mainly on the concepts that are already present in the basic works on marginalism by Carl Menger. It is because the Austrian school is stricter with respect to the subjectivist orientation and does not permit its “infection” from other sources as empirical facts or methods taken over from physics. It is therefore easier to relate to the methodology of Austrian school because we can see the principles in much brighter picture.

## 3.2 The Subjectivist Approach in Austrian Economics

The Austrian economics is descending from Carl Menger<sup>26</sup> who from the very beginning tried differentiate his theory from the empirical (German school) as well as from mathematical (neoclassical), only quantitative, economics. The starting very short methodological demarcation implied much greater emphasis on the accepted principles. While almost all modern economy is somehow related to utilitarianism

Austrian economics' subjective theory of value and elaboration of marginal utility concept lead to very pronounced individualism that became one of the pillars of Austrian economics (Christainsen 1994). Austrian economics also strived to purify individualism from any "societal" admixtures and its exposition was the theme of many methodological texts of Austrian economists (among the particularly important Mises 1960 and Hayek 1984). Menger blamed his neoclassical contemporaries for departing from the individual and his wants by constructing abstract models that are not able to relate the quality that is closely bind to individual subjective wants. "Man himself is the beginning and the end of every economy" (quotation of Menger from Salerno 1998) is statement that characterizes the attitude of Austrian school quite brightly. Austrian school rejected separate theory of costs and tried to build purely monistic theory based on marginal utility concept. The problem of such ambition is that it is difficult to construct a theory that would work with genuine human wants and preferences (i.e. from teleology), because there is no clear and logically justified way to such phenomena. "All things are subject to the law of cause and effect. This great principle knows no exception, and we would search in vain in the realm of experience for an example to the contrary." The very first sentences of Menger's *Principles of Economics* spell the fundamental problem of such approach – the intention to work in the teleological perspective, but in the same time referring to causal nexus. Engliš's warning against mixing causality and teleology was just not taken into account by Austrian economics<sup>27</sup>. The basic problem remains simple: from the fact that human being strives to improve his well-being we cannot postulate any logical necessity of his success.

Pure subjectivism that for Austrians "...is more than just an economic methodology, it is an entire approach to the study of human action" (Horwitz 1994, p. 17) is only an illusion. The individualism of Austrian school was not just a demarcation against societal realism (see 2.2 above), but an attempt to reach pure individualism with genuine neglect of the societal influence on individual. However, such a concept cannot be subjective because it changes the nature of people to isolated islands floating in universe. To start from the individual and its wants is not

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<sup>26</sup> Even though Austrian school is not completely homogenous Menger's *Principles* and later *Investigations* is clear "launching pad" of the methodology of Austrian economic theory. (Alter 1990, p. 79)

<sup>27</sup> Menger, of course, did not know Engliš's work, but Engliš was known by Mises that referred to him in *Human Action*.



satisfactory for the means of theory that would explain real world economic phenomena. Always, we are in the need of concretization of the objects of human wants. We can already see it on Menger's first steps towards his theory. Menger creates a notion of good that he concretize by four characteristics:

1. A human need.
2. Such properties as render the thing capable of being brought into causal connection with the satisfaction of this need.
3. Human knowledge of this causal connection.
4. Command of the thing sufficient to direct it to the satisfaction of the need.

(Menger 1976, p. 52)

The second and the third point resemble the illusionary character of Austrian subjectivism. The neutrality with respect to human choices is seriously damaged if we treat object of choices of individuals – goods as something that is necessarily capable of satisfying their needs. It is an explicit assumption of causal nexus that is not implied by the teleological concept (see 2.5 above). It is true that Menger (Ibid., p. 53) mentions that goods can be “true” or “imaginary” (i.e. of illusory quality), but it is an assertion that is not reflected in the Austrian theory. In the same book he introduces the notion of property so that “property is not . . . an arbitrarily combined quantity of goods, but a direct reflection of his needs, an integrated whole, no essential part of which can be diminished or increased without effecting realization of the end it serves.” (Ibid., p. 76) And he is back in direct causality, because such a statement implies that there is no chance that property would not correspond to human needs, which is definitely not a self-evident statement. The subjectivism of Austrian economics neglects ‘Homo oeconomicus’ but does not stand for the subjectivism of Homo sapiens either. It seems that the individual would not be just herself but that her property would also be an integral part of her, i.e. something that is so directly bound to individual existence as the body functions are. A possible objection to these remarks would be that no methodology is perfect and that the mentioned flaws are not of fundamental character. However, we must realize that the whole Austrian concept is centered to this point, because the very first ambition was to build the theory on

only those elements that are undeniable and perfectly justified. If the teleological scheme of individual and his wants is twisted the whole theory becomes dubious.

The Austrian theory is bound to these causalities and simplifications of human position with respect to his environment. The theory of prices, the key element of Menger's theory, is built on precisely the same mistake. Austrian economics neglected omniscient actors of neoclassical economics and claimed that economic theory should acknowledge that the individual possess only incomplete information and claim "that there is no precision in economic calculation because of the uncertain future that pervades all activities in the market economy" (Taylor 1980, p. 30), however, in Austrian theory, prices and their relation to actor's utility are always something that the actor have perfect information of. The problem is that prices are not just negligible necessary minimum we bestow to the individual, because in prices, in the case everybody is perfectly aware of their significance to his well-being, are compressed genuinely whole (economic) world. If the individual is just prize-rational he is rational in the most extreme way. First, the individual perfectly knows the relation of his property and prizes to his well-being then he exchanges it in order to improve his utility and prizes are formed<sup>28</sup>. Hence the individual lives in the world of prizes that are in fact bills to his happiness. He is probably happy because any exchange he makes will result in him being happier.

We can once more return to the debate about individualism. I criticized the endeavor after some pure individualism with weak or nonexistent link to societal sources. It is likely that if it would be admitted that there could be disproportions between individual's well-being and the outcome of the exchange there would appear a space for questions about the sources and variable conditions of this disproportion, which could hardly be of a priori logical origin and which inheres in such multifaceted things as education and intelligence, i.e. the quality of societal influence and the quality of inborn abilities as well as in the institutional framework and the environmental conditions in general. If we not just neglect the need of the theory

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<sup>28</sup> Menger (1976) refers to the prize interval that is formed by the limit prize beyond which the individual is not willing to make the exchange. This interval is formed on the basis of perfect knowledge of the significance of the goods to the actors' well-being:

"He will agree to an exchange only if it enables him to make better provision for his needs than would be possible without the exchange. He will be willing to exchange his grain for his wine only if he has to give less than 100 units of grain for 40 units of wine. Thus whatever price of 40 units of wine any eventually be in exchange of A's grain for the wine of some other economizing individual, this much is

explaining these factors but also their importance *per se* we thereby neglect the differences of these sources. Then, the exchange of somebody with low capabilities and insufficient information is equaled with the exchange of well-informed people that are fully conscious of what there are buying, because in both cases it is taken as improving of the well-being.

The mistake of Austrian economists is that they think that apriorism, another pillar of their thought (Smith 1994 or Mises 1949), can work as an explicative basis of economy without distorting the nature of human individual. If, as we could see, the individual is adjusted for the needs of the theory we naturally ask why it could not be adjusted in a different way, which is similar point that Austrian economics makes towards the mainstream economics. Apriorism itself is not a universally fallible, but its potential towards explanation of social phenomena is only conceptual and supplementary. It is a fundamental difference if we relate to a priori relation of value to the wants of the individuals (i.e. the foundation of the theory of value) and if we relate to a priori property of action to reveal the value in the outer world<sup>29</sup>.

Menger's closest followers Wieser and Böhm-Bawerk were developing the theory in order to answer its practical problems – Wieser improved the theory of imputation that linked the prices and costs of resources to the expected prices of consumer goods that were to be produced and Böhm-Bawerk in his theory of capital and interest extended the theory of value with the time principle – but they almost did not joined the methodological discussion (Alter 1990, p. 80).

In the later development of the Austrian school we can find two distinguished streams. One is following the line of Ludwig von Mises's apriorism and is later personified by Murray Rothbard and the second follows the issues and perspectives brought in by F.A. Hayek. Mises's libertarian line take pains to purify the Austrian approach in even greater extent by founding the theory on purely a priori praxeological approach that should be based on pure subjectivism. Mises, for example, criticized Menger for inconsistent subjectivism (Mises 1933, p. 172), but the meaning of such purification is not in purification of the flaws mentioned above it is in the even greater animosity towards any other methodology. The criticism presented

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certain, that it cannot, owing to the economic position of A, reach 100 units of grain.” (Menger 1976, p. 194)

<sup>29</sup> Compare with: “Human action is necessarily always rational” (Mises 1949, p. 5).

with respect to Menger's approach is valid in even greater extent with respect to Mises's libertarian stream.

Even though Hayek was consistent follower of Menger and Mises<sup>30</sup> and advocator of the Austrian methodology he contributed with somewhat different observations that did not carry the original sin of Austrian economics. His account on knowledge and its use in society (Hayek 1937, 1945) is valuable and unique contribution to social science. He argued that individuals has exclusive possession of knowledge that is fragmented and dispersed through space so that only them are the ones who can utilize it. Knowledge that is possessed by the individual is directed to his own needs and therefore is not in the same way relevant to the needs of others. The endeavor after total centralization of knowledge is therefore futile, because even if we ignore the technical difficulties of transmission we are not transferring any general message that inheres in information but only a message that is directed to the need of the particular individual. Moreover, even if we pass over the mentioned difficulties there could be no entity that could conceive such knowledge and then transform it to the meaningful orders for the economy. Hayek understood knowledge as constant stream that is showed to individuals only in its particularity and ephemeral presence. For Hayek the means of communication of such knowledge was, as well as for whole Austrian economics, prizes. Unfortunately, he did not see such a means with critical perspective. We could ask, with the connection to the individualism debate, if, apart of the knowledge that is mentioned by Hayek, there is another source of knowledge that is, on the contrary, present generally on larger blocks than just individual's closest neighborhood. What about the knowledge we are thought in school, what about the cultural background we are raised in and most importantly what about the language? Whole philosophy of knowledge is based on idea that language is not means but the sources of our thinking and therefore the very fact that parents taught us particular language influence our thinking and decision making. And also, what about the inborn knowledge that we have in our genes? Even though I accept Hayek's argument on the use of knowledge it cannot be considered as complete characteristic of the knowledge people posses. If individualism means that and only that knowledge is dispersed and only dispersed than it simply does not comprehend the human existence.

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<sup>30</sup> However, later Hayek rejected Mises's apriorism and inclined to the necessity of empirical testing of hypothesis. (see for example Hayek's *Studies* 1967)

The Austrian economist especially requisite to mention is Ludwig Lachmann (and I should mention also G.L.S Shackle, because his influence is very apparent on Lachmann). He, among other occupations as, for instance, his structural theory of capital, tried to question the economics' subjectivism especially from the perspective of the problem of expectations. "Lachmann has argued that, once the creative and imaginative nature of choice and its implied variety of reactions to market changes is recognized, how can Austrians feel assured that market processes tend toward equilibrium?" (Horwitz 1994, p. 20) This statement has important consequence because once we loose the certainty of self-evident rightness of market processes the (Austrian) theory looses its very roots. It is not surprising that in Lachmann some Austrian economist saw a danger for Austrian economics as such (Kindlová 1999, p. 278).

### **3.3 Conclusion**

I criticized the very basic principles of the Austrian school methodology and identified its dubious position with respect to some controversies in the methodology of social science. The main point can be summarized as that Austrian school didn't succeed in its ambition to base the theory in purely subjective grounds without twisting the existence of the individual. However, its failure may not always be so apparent. It is because of many rhetorical twists that assure the reader that the analysis is valid also for the failing individual and incorrect choices, but also because in the basic schemes such individual and his notional goods or basic exchanges that are purified from the real world experience the position to be solved seems easy and self-evident. The natural propensity of people to rationalize their action in order to maintain clear and unified picture of the world (see the theory of cognitive dissonance, e.g. Aronson 1969) makes us prone to believe in the self-evidence of justification of our decisions. Even though that we often doubt our rationality it is not so difficult to persuade us that actually we do the best we could.

The notion of rationality is fundamental to this discussion. The economic theory and social science theory in general have to work with the individual and its ability to satisfy his needs and solve the problems of the society. Even though these abilities can be expressed with the use of many words rationality is the most mentioned in this

respect and it is a term that provides appropriate summarization of human relation to the outer world. Besides, rationality is often considered as the paradigmatic core of economics (Hogarth and Reder 1986, p.2, Sugden 1991, p.751, Foley 1998, p.23). If we would be able to properly understand ourselves what we mean by saying that somebody is rational the misunderstandings in social sciences would diminish extensively. Unfortunately, the ambiguity is very significant here. Even between neoclassic and Austrian school there is much uncertainty whether their understanding of rationality is different only with respect to the application in mathematical models or they set out from completely different notions. The ambition of the next chapter is therefore to contribute to the elucidation of this notion and provide detail criticism of its understandings that subsume certain a priori effectiveness.

# Chapter 4 – Rationality, Preferences, Human Action and Teleology

## 4.1 Introduction

Economics and rationality are very much related terms. Economics, more than any other social science, adopted rational means of mathematics and that was possible only because it assumed actors that are suited for such apparatus, i.e. rational actors. However, it is far from clear how this assumption alter reality, how it matters for the plausibility of the results of the theory, but even what notion of rationality economics uses. When Herbert Simon explained us that we cannot count with unlimited analytic capabilities of human individuals it seemed that the switch was moved to a brand new direction. Nevertheless, the mainstream economics was hit only slightly and the gap between its understanding of the actor and the understanding of the remaining social sciences has stayed wide. The problem is that the notion of rationality is extremely equivocal and even though Simon's argument was sound economists persuaded themselves that it is not in its way. This not true completely, but I'd like to show that to some extent it is, because Simon's criticism does not affect all the rationality assumptions that economists use. In such a situation, it is not so important to ask whether we assume too much or too little of rationality as to discuss the very meaning of the notion. This text follows this insight and tries to distinct the contents of the notion of rationality so that it will encompass the essential understandings of rationality in economics.

The concrete impulse for the unrest about the simonian argument of rationality is its inability to account for the fundamentals of consumer choice in the neoclassical microeconomics and also its irrelevance for the whole Austrian economics. I've always thought that Austrian economics is build up on a very strong rationality assumptions. It is, nevertheless, believed to be untouched by Simon's criticism of the understanding of human rationality in economics. This is also one reason why this text dedicates attention to the works of Ludwig von Mises. The second reason is that

his strict and in a way one-sided approach provide for clear description of the treatment with the notion of rationality I want to point at.

Any notoriously unclear notion suffers from rhetorical exploitation and arbitral shifts in meaning. Notably, these twists and shifts were already analyzed in the case of rationality. Lagueux (2004) pointed out at different meaning of rationality in classical and neoclassical economics. Denis (2004) and Laville (2000) showed how rhetorical tactics are used to dodge the critique of the implausible elements of the theories that are related to strong assumptions about rationality. This text wants to join this discussion and examine the rhetoric of the notion of rationality as well.

Before moving on I have to make one more comment regarding my methodology: An approach used in this text generally refers to *problem* instead of to *choice*<sup>31</sup> that is more usual for economics' discourse. *Problem* is more general notion and it does not provide the possibility of time misconception. *Choice* could easily appear as instant or timeless, but this appearance is deceptive because in reality even a choice requests time to be committed. It is ambiguous to treat "knowing how to do" and "knowing how to choose" as very different things (Nelson & Winter 1982, p. 52).

## 4.2 Three Meanings of Rationality

The very basic problem of the unclearness of a scientific term is its detachment from its everyday use. Hardly ever these two spheres of meaning are distinguished and often this is a natural source of rhetorical utilization. Hence, it seems to me that it is essential to take into account the common meaning of the term and analyze its relation to the rhetoric of science.

In economics, the meaning of 'rationality' and 'rational' is tied with effectiveness. To be able to derive a theory about social phenomena it is essential to know how individuals would be effective in solving problems. However, the meaning of the term in everyday language is broader.

There are three essential meanings of rationality<sup>32</sup>.

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<sup>31</sup> So that human action is something that solves problems rather than something that chooses.

<sup>32</sup> Similar distinction can be found in Rorty (1998).



- To act consciously with the use of reason, not to be driven by emotions, instincts or habits.
- To proceed in the optimal way in the solution of a problem.
- To act reasonably, wisely and with regard to the broader scope.

I am convinced that the presence of these three meanings in one term is a source of great deal of misunderstandings.

One crucial problem is the fact that the first meaning is a description of the means of acting while the latter two relate to performance of its kind. This brings the tendency to interconnect effectiveness and the conduct of reason, which is an arbitral connection that cannot be taken as a fact. There can well be routines, tradition or even affects that in certain situation serve better than deliberation of reason.

The mismatch of the second and the third meaning is another major source of problems. In the case we don't distinguish among these meanings, effectiveness in solving a particular problem is taken as automatically beneficial. The presence of these two meanings under the same shelf of "rationality" supports the illusion that our wisdom is derived from our success no matter what we succeed in.

### **4.3 Ontological and Methodological Claims**

The first meaning of rationality mentioned above contains a characteristic that differs from the other two. When we say that action is guided purely by our reason - that people think to act - we inevitably very specifically describe the actors. It is an ontological claim. Whereas if we just say that people pursue goals<sup>33</sup> it supposes only certain moving power that pushes the living being towards. It does not say what form this moving power takes and therefore does not give a clue about its performance. In comparison with the former it is a claim only methodological.

Methodological claims consider only means how to approach the problem that shouldn't influence the belief of its actual character. They also don't exclude their alternatives, because there can be more than one suitable means how to approach a

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<sup>33</sup> Which is a framework in which I will place the two latter meanings.

certain problem. Ontological claims are, on the other hand, definite conclusions about the objects of enquiry that are rivalrous per se. Both types can be used as an assumption for the theory, but methodological claims are generally weaker, but also much less controversial, because they don't have an ambition to tell a piece of objective truth.

With a little simplification it can be said that the critics of economics consider its assumptions as rather ontological and point out their unrealisticness whereas the defenders think that the assumption of rationality is only a way how to look on the problem that doesn't limit the extent of human action<sup>34</sup>.

One reason why ontological and methodological claims are so mixed in the case of rationality is the ambiguity about its meaning. Whenever rationality is mentioned it generally has a tinge of all three of them. It connects endeavor after a purpose with rational conduct as well as with universal adequacy. It is, for instance, as it wouldn't be possible to act 'through' reason and fail in the same time or, on the other hand, act effectively 'through' habit of affection.

We can draw the problem near by contrasting Weber's ideal types of action and purely teleological perspective developed by Czech economist Karel Engliš (1930). Weber's four types of action: purposeful rational, value rational, affective and traditional are genuinely ontological. They signify four frontier types of how human can act. There is no hierarchy among them and they are incomparable. For instance value rational action is irrational from the purposeful rational perspective and vice versa (Weber 1998). To impose an assumption that action is by itself purposeful rational in this sense is a drastic reduction of human existence. It's neither just a simplification nor idealization of action as such, because the other three types are not worse options of purposeful rational action, they are something generically different.

Rationality in this sense is something intuitively familiar to us. It is our conscious conduct we operate with in daily life and we feel what is easy for it and what is not. Often, this is unfortunate because it silently creates an image of causal nexus in problem solving.

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<sup>34</sup> We can see the Simon's allegation (e.g. Simon 1978) and Friedman's defense of economics (Friedman 1953) in this perspective.

Teleology works with ‘purposes’ as well as with ‘rationality’, but here it means something different. Finality the principle of teleology is only a way of looking at things (Engliš 1930) that does not in any way describe the object it conceives. It is not a claim describing people as consciously seeking goals it is only a perspective through which we look on individuals. It is the perspective of the one that looks not a description of an individual character that is looked at. Because of that it can well be used as means of conceiving any object (even a holistic entity as government). Government of course is not a being of reason or consciousness, but there is no reason why we couldn’t look on it as it pursues goals.

The problem is that when we use rationality with respect to the teleological way of looking on acting individuals it coincides with Weber’s type of purposeful rationality, which is something totally different. Economics is said to be based on teleology, but it’s often much more that is added to it. Notably, the teleological concept can be used in many possible ways, but in economics the mixture with purposeful rational behavior as in Weber’s typology makes it fixed to only very specific conscious purposefulness.

#### **4.4 Rationality as Effectiveness - Three Assumptions of Rationality**

Let’s now forget the previous meanings and start anew from the point of view of the social science’s need that is centered at the question of effectiveness of human action. Let’s first outline the essential rationality assumptions of economics, i.e. the assumptions of rationality understood as effectiveness.

If we are to verbalize the most common objection towards assumption of rationality in economics it would be that economics supposes computing abilities and knowledge that always lead agents to the optimal solution of a submitted problem. This assumption is essentially what criticized Herbert Simon (e.g. 1959, 1978)<sup>35</sup> who argued that people possess only imperfect cognitive abilities that compel them to use various rules of thumb that lead to sub-optimal solutions.

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<sup>35</sup> For summarization of the bounded rationality issue see Conlisk (1996). Another source of relevant findings about the human performance in various types of problems is experimental psychology (among the well known e.g. Kahneman & Tversky 1973, 1983, for summarization of this approach see Shafir & Lebeauf 2002).

However, we should not miss that this assumption is distinct from another significant content of economics' way of looking on acting individuals. It claims that agents behave in the best possible way considering their well-being: "The analysis assumes that individuals maximize welfare *as they conceive it*" (Becker 1992, p. 1). It is an assumptions directed primarily towards the individual, not to the problem he operates in. Among critics of this assumption I would like to point at Vanberg (2004)<sup>36</sup>.

We have to distinguish these two because there is no assurance of their coincidence. Agents can perform in an inferior way in solving a problem and it can still be the best possible response under the given circumstances, but also, reaching the optimal solution may not be the best action considering agent's preferences because he may prefer the product of solving completely different problems.

The former assumptions works with problems as outer systems that have their own logic that is independent of the individual. On the contrary, the second mentioned assumption about rationality cannot be connected to any particular "visible" problem, because it is based on the ability to choose the best problem to solve. In other words it assumes optimal solving of the overall situation of the actor that need not be apparent in any concrete problem that is registered by the scientist. The actor may omit solving the problem the scientist wants to explain or he may dedicate just inferior attention to it. If we'd want to say that this assumption grants success in solving problems it would mean the problems of action as such and not any particular problem that is regarded by the previous assumption.

For example, when dealing with the problem of inflation economists assume that people accurately estimate the purchasing power of their money, i.e. solve a clearly defined problem that exists apart from the individual. If they would just assume that people are solving problems based on their preferences (unknown to economists hence possibly not connected to inflation), it would be insufficient for the needs of the theory.

The first mentioned assumption about rationality assumes the motivation of the actor to take part in the solving of the problem while for the second the motivation is a determining factor.

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<sup>36</sup> Both assumptions are present in both neoclassical and Austrian economics, but neoclassical economics stress the former one while Austrian economics the latter.

Let's sketch these findings by distinguishing three types of rationality. The first two correspond to the two rationality assumptions just discussed and the third is their counterpart that expresses the view of rationality without any of the previous characteristics. Subsequently, I'd like to explore the types of problems that are connected with these rationality types.

**rationality<sup>I</sup>** (perfect a priori) – A general property of human action warranting conformity with all preferences, i.e. the best possible response to a given situation according to actor's well-being.

**rationality<sup>II</sup>** (perfect intersubjective) - Certainty in reaching the solution of an intersubjectively defined problem (or sort of problems). This rationality assumption refers to problems external ('given') to the individual (in contrast to (tacit) problems of personal goals related to rationality<sup>I</sup>).

**rationality<sup>III</sup>** (weak/intuitive) – The understanding of rationality without a link to any causality towards optimum. It, however, opposes randomness or meaninglessness in behavior and understands human being as an active and conative subject. Any judgments about the performance of human action under this assumption of rationality can be, therefore, based only on the intuitive familiarity with context in which the action takes place. This understanding of rationality can be expressed in multiple ways:

(1) Reflection of a simple optimistic feeling that "people are not stupid". This concept of rationality Lagueux (2004) assigns to classical economics to distinguish it from neoclassical optimizing rationality.

(2) Human action viewed through the teleological settings. Action is conceived as an endeavor after a certain goal, but that in no way means that teleology is just a specific form of causality (Engliš 1930). There is no way how to ascertain the effectiveness of human efforts purely from teleology.

We can also point out at the concept of human being in phenomenology (e.g. Heidegger's "Dasein")

(3) Rationality with regards to the ungraspable character of the world people live in. There are general elements such a complexity of environment, time demands and

knowledge limitations that are incompatible with universal certainty regarding reaching the best solution of any kind of problems. (In economics, this perspective can be ascribed to G.L.S. Shackle or Ludwig Lachmann)

#### **4.5 Rationality and Problem Solving**

If we agree that, as Karl Popper says, all life is problem solving it is natural to ask about closer description of what ‘problem’ is. The general definition of ‘problem’ would say that it is a state of difficulty that is to be resolved. However, to clear up the notion with regard to this paper we have to say in what context this state takes place and what is the relation of actors to it.

I already outlined two types of problems connected to the two mentioned rationality assumptions and now I want to specify them and examine the issue closely.

##### **4.5.1 Prime and Exclusive Problems and the Problem of Action**

The basic settings can be well exposed with the basic intuitions of phenomenological sociology:

“Our primitive impulse is to affirm immediately the reality of all that is conceived, as long as it remains uncontradicted. But there are several, probably an infinite number of various orders of realities, each with its own special and separate style of existence. James calls them "sub-universes" and mentions as examples the world of sense or physical things (as the paramount reality); the world of science; the world of ideal relations; the world of "idols of the tribe"; the various supernatural worlds of mythology and religion; the various worlds of individual opinion; the worlds of sheer madness and vagary.” (Schutz 1945, p. 533)

“Among the multiple realities there is one that presents itself as the reality par excellence. This is the reality of everyday life. Its privileged position entitles it to the designation of paramount reality.” (Berger and Luckmann 1971, p. 35)

Summarizing the content of the quotations, in multiple realities connected to our existence there is the reality of everyday life that differs from the others by special importance and characteristics. Schutz (1945, p. 552) states six such characteristics while the one especially requisite to mention is that the every-day reality subsumes special form of sociality; it is “the common intersubjective world of communication and social action”. If we suppose that this reality is somehow problematic, it follows that the problems of this reality are already mutually understandable and communicable. These are the problems as the word is intuitively understood - difficulties around us we relate to in our conversations; problems about which we share consciousness and discuss their proceedings. Unlike the everyday reality, the problems of the remaining realities are always to some extent exclusive and their connection to the problems of everyday life is, if any, only indirect.

To distinguish problems of the everyday reality and those of the remaining realities I will denote the former *prime problems* and the latter *exclusive problems*.

It shouldn't be missed that by providing these insights a reality by itself is set – the conceptual reality of an individual before his access to any particular (prime or exclusive) problems, the reality of human action where the problem refers only the subjective difficulty of how to act (i.e. also in which problem of which reality to actively participate)<sup>37</sup>.

When we talk about problems we generally mean problems in our everyday life and we can also find problems in other more-less exclusive realities, but these has to be distinguished from the problem of the action itself. This kind of problems provides a scheme describing the position of human individual purified from concrete contexts of reality it acts in. He can only aim at goals that are to be reached in particular realities, but his point of departure is more original - without any a priori bound to any problem of any reality. It is not as trivial to mention it as it may seem because it is not easy to free of the settings we live in. It is a bit unnatural to imagine that action can be something more than its exposure in a (prime/exclusive) problem we are concentrated on. By playing football I react on the movements of other players and these movements are meaningful to me as actions only through the settings of

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<sup>37</sup> This does not refer the subjective perception of a *prime* problem but a concept that conceive the overall situation of an actor, i.e. it is a problem of completely different nature.

football game. They are meaningful through their part in the prime problem of a football match, but that doesn't say anything about the problem of the action itself; i.e. about the relation of the prime problem (football game) to the individual problems of action. Participation and performance in the football game doesn't tell us why the game was played and what does it mean for the players.

Even social science tends to ascribe its settings to the actor. Economics did it bluntly creating Homo oeconomicus, an individual that is already embedded in the world of economic science. Even though this may be an advantageous assumption it puts the actor in completely different reality and therefore changes his very nature.

#### **4.5.2 Problems and Science**

The social science is related to all three mentioned types of problems. As any science, except purely abstract mathematics or logic, it was established to solve *prime* problems of a kind – difficulties in the everyday world with general insistence. As any other science, but probably even more, it created a world of its own that contains its own problems detached from the everyday reality. Scientists not just solve (our) problems but also adjust or even create problems according to the needs<sup>38</sup> of the theory and it is always hard to say where the border line is. It is also hard to say in which cases such a plunge into abstraction is beneficial.

The relation between social science and the problem of action follows from the fact that the social science is exposed to the difficulty that it is called on problems depending on the peculiar nature of people that participate in them. In (*prime*) problems social science is called on it is difficult to find any empirical uniformity across time and space. Therefore, social science is forced to look on the problem not just from its own logic but also from the viewpoint of the individuals (i.e. from the viewpoint of the problem of action).

Rationality is of course meant to be a property of human conduct (i.e. rational solving of the *problem of action*), but we can easily read about rational solving of a *prime* or



*exclusive* problem. It may be misleading to mix these uses of the term. It could falsely seem as individual minds were already born in such problems or that success in solving problems of particular reality can be generalized on success in arbitral context.

To find out about possible engagement of human rationality in *prime* and *exclusive* problems we must first be sure about its nature by conceiving the problem of action.

### 4.5.3 The Problem of Action

There are many ways how to conceive the problem of action. Economics, however, is accustomed to use the concept of teleology and look on the individuals as if they seek means for their own goals. I would like to contrapose two conceptions of the problem of action that tend to be mixed in economics' concept of action. The first is purely teleological and the second, even though it may look as variation of the previous, is in fact causal. It is important to distinguish them, because optimality in solving each type results in two very different conclusions. Both will be subsequently used for definitions of already outlined assumptions of rationality.

The first conception considers action as a problem of searching means for desired ends that are set according to the knowledge of the individual. Knowledge about the outer world defines goals that seem worth pursuing. The activity then consists in pursuing these goals.

It has to be emphasized that speaking of 'searching', 'means', and 'ends' is only metaphoric. It is how we conceive the action not how it is committed. It should not signify that it assumes subject with exclusively conscious using information and choosing purposes. Also, mentioned knowledge is not only conscious possession of information but it is any information about the external world we have in the broadest sense of the word<sup>39</sup>.

This understanding of the problem of action defines only what is wanted and does not speak about what is reached. It is therefore purely teleological which also means that it does not include any causal relationship between ends and means.

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<sup>38</sup> Feyerabend in his *Against method* showed very persuasively how this is a substantiality for science.

<sup>39</sup> Basically any inner quality that play a part in our decision making.

There is, however, another significant conception of the problems of action. While the teleological understanding is defined solely by individual goals here the problem considers all determinants influencing the resulting action. It takes into account all the richness of known and unknown circumstances related to action, i.e. not just the goal but also the environmental conditions that influence the result of the actor's endeavor. Both types include certain willingness for success, but while in the previous concept it was the sole element, here it is just one input. This conception conceives the action as the problem of an individual and the complex situation he or she is in. Optimality in solving these problems is tautological necessity and it does not in any way contribute to social science analysis.

We may describe it as that actor performs in the best way according to the circumstances, which may seem like a useful statement to start from, but that is just a temptation of the word 'best'. We may as well say that he performs the worst and the meaning would not change. Any evaluative statement has no meaning since there are no alternatives to compare because the outcome is necessarily unique. The key factor is the circumstances and not the effectiveness of performance.

"Choice is always amongst thoughts, for it is always too late to choose amongst facts" (Shackle 1977 p. 280). This statement in short expresses the difference between these two understandings of the problem of action. The first is based on the "choice among thoughts" while the resulting factual situation is unknown. The second subsumes as well "the facts" and therefore the outcome of this problem is necessarily unique which also means that the problem is causal in nature.

Labeling both types as 'problem of action' would make sense, hence we have to use a further distinction. For this paper I will distinguish them as the *teleological problem of action* (the former) and the *complete problem of action* (the latter).

In Austrian economics there is an apparent effort to compromise between these two possibilities or to suggest that the latter has some explicative basis. Even though there are possibly many other conceptions of the problem of action it is not possible to mix these two on logical grounds. The common exposition of the argument is that human individual is in position of incomplete information that makes him prone to the failure in reaching his goal. In this position he is, nevertheless, able to act

economically with respect to his well-being. Frequently mentioned example is the purchase of a potion of plain water in a good faith of its healing powers. In such a situation an individual is supposed to economize somewhat inside his mistaken belief. This idea has, however, two significant defects:

- 1) It is irrelevant. Supposing the healing is the only function the actor expects from the purchased good, to economize is to not buy the good at all. If we take into account the mistaken belief it is a *complete problem of action* because we are not dealing with just the purpose – to obtain a potion that heals, but also with the environmental condition – wrong information about actually useless potion. There can be no economizing because the failure is same as success. There is just a single outcome.
- 2) Even if we would divide the action on the economizing and not-economizing part such a division have to be arbitral. If we consider that there are two chunks of information - one about the healing quality of the potion and second about the alternative prices the potion can bought for then there can be economizing about the price and fallibility about the quality (i.e. the economizing economists work with) as well as the vice versa possibility - economizing about the quality and fallibility about the price. We cannot justify the consideration of only one of these possibilities less can we declare it as a priori status of human action.

#### **4.5.4 The Assumptions of Rationality and the Types of Problems**

I will now go through the aforementioned assumptions of rationality and try to explain them from the perspective of the aforementioned types of problems they are connected with.

**Rationality**<sup>1</sup> presents an a priori success in solving the *teleological problem of action*. This means that the action is in conformity with all levels of preferences (virtually what Vanberg (2004) calls the ‘rationality hypothesis’). An action under this type of rationality is the best possible while left on its own. Any change of

actor's decision would lead to the worsening of her well-being. If we suppose that the action could be prescribed by somebody else, then nobody, not even a perfect being, could 'outperform' the original actor.

Although this concept of rationality grants success in personal endeavors it does not mean that it will be visible in concrete *prime problems*. Even if we see people falling short in problems that we may intuitively assign to them, it does not change the fact that, considering their well-being, they are doing the best possible thing. Even if we see them being oppressed, hurt or mistaken it is only our perception of their situation within the intersubjective world and not the testimony of their personal failure. If we could possibly hold the reins of their action and enhance performance in the (prime) problem we assigned to the actor, it could only mean worsening of their well-being because they perform in the (prime) problem as well as they wanted to. It is impossible to help even by improving the external material conditions because we never know what part of these conditions were subject of choice and therefore possess the effectiveness of rationality<sup>I</sup> and what part is not "touched" by action.

In the beginning section, **rationality<sup>II</sup>** was outlined as 'perfect intersubjective', which should have indicated that it supposes reaching optimum in some prime problems. For instance economics asks on the output of a firm and assumes that it will be set in the most efficient way among feasible possibilities. It therefore imposes assumption of rationality<sup>II</sup>, reaching optimum in one problem of our everyday reality. However, the nature and behavior of the actors varies under this assumption of rationality as the considered (*prime*) problem changes. If we relate this notion to the problem of murder we arrive at very different result under rationality<sup>II</sup>. The first case results in harmony of economic system while the second in mutual annihilation. The choice of a problem is the key factor because the assumptions of sufficient skill and motivation (rationality<sup>II</sup>) can lead to very different conclusions both about the actors and the order of the society.

Finally, **rationality<sup>III</sup>** can only warrant success in tautological *complete problem of action*. Hence, it can be based on nothing more than on our feeling for concrete conditions of concrete context. It is not connected with universal success in problem solving of any kind of *prime problems* or *teleological problems of action*, even though it could mean intuitive optimism towards some *prime problems*. Lagueux

provides a convenient example: "... if I look through my window at passing cars on the street outside, I can predict with remarkably high degree of accuracy that these cars will continue straight ahead and will not turn right or left before the next corner." (Lagueux 2004, p. 32) They will not because they are not stupid. They are rational<sup>III</sup>. Keeping the traffic example, that does not mean, however, that drivers would behave the same way in difficult crossroads, i.e. the intuitive feeling for a concrete situation does not indicate universal causality.

Since this understanding of rationality does not go beyond the intuitive unsurprising level it is hardly usable for science.

Even though these three concepts may evoke some similarities it must be understood that they reside in completely different worlds and that there is no way how to express one in terms of another.

It is important especially if we realize that we have access only to the latter two of them. We may possibly measure rationality<sup>II</sup> because it manifests itself in the problems of the everyday world. We may find out what kind of problems seems to be difficult for people or we may choose a problem and note people's action with regards to them<sup>40</sup>. Rationality<sup>III</sup> is derived from intuitive familiarity with the environment around us. Its revelation is accessible through our everyday use knowledge.

However, rationality<sup>I</sup> stays only a notional concept without any possibility of direct revelation. We are unable to see the problem of action as we see (*prime*) problems around us. We are unable to see goals people really pursue we can only see goals that we as such designate in the world around us and we simply don't have any clue whether these two are identical.

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<sup>40</sup> This is the major content of the works by Tversky & Kahneman and other psychologists studying behavior with respect to economics.

## 4.6 Rationality Tactics

### 4.6.1 Introduction

In the beginning I mentioned three common meanings of rationality and marked two typical misunderstandings that arise among these meanings. I want to show that the rationality assumptions I presented above are mismatched analogically and moreover, that the rhetoric tactics of rationality assumptions origin exactly from the ambiguity among the common meanings of rationality.

The undistinguishing between rationality understood as endowment of reason and the other two meanings has its counterpart in claims that rationality<sup>III</sup> and rationality<sup>I&II</sup> are identical or that they are two sides of identical phenomenon. Needless to say, rationality<sup>I&II</sup> can be very useful for the social science theory; however, it lacks the intuitive plausibility of rationality<sup>III</sup> and these things together determine the rhetoric: when talking about assumptions and methodology any economist is most likely to refer to self-evidence of certain basic facts about human action that cannot go beyond rationality<sup>III</sup>, whereas when prescribing a theory or making predictions the notion often switches to perfect rationality, usually tacitly. Nelson & Winter (1982, p. 8) remark similar shift between elementary and intermediate courses of economics.

In order to emancipate the close bound between rationality<sup>III</sup> and rationality<sup>I&II</sup> it is necessary to satisfy the intuition for rationality<sup>III</sup> as much as possible so that the difference between mere subjective feeling about concrete situation and revelation of a universal rule will be indistinct. This is managed by introducing the problem in a very simple way that is cleaned from the richness of complications that accompanies everyday decision making. If we describe a concrete situation with a sentence we thereby change it from the problem in life to the problem in words, from being in the world to mere proposition. In such a form we can still ask our intuition if the problem is within the human reach and moreover, it complies with the connection of reason and rationality that stems from one of the meanings of the term. Unfortunately, we very easily forget that such a situation is not the one we experience in the real life. If I say: "There are three shops that sell identical apples and each has a different prize. In what shop you will buy your apples?" it seems like a self-evident problem - everybody will choose the lowest prize. This impression is very tricky. By stating the

problem in such a manner we do not transfer the original difficulty that inheres in the human position with respect to the world. We only stated few claims that are presented to the mind of the reader. But presenting it as a task for our mind and subjecting someone to the actual situation are two different things.

We don't act in the same way we solve logical problems that are presented to us. It is a similar difference as between controlling the individual in a video game and living actual life. In a video game we decide everything consciously with the use of reason. We have the luxury of no fear, anxiety and clearly defined situations. Whether, in a video game, we walk in a park or we are endangered by a gun it is always our cool deliberation that acts. However, there is a fundamental difference between commanding (a virtual person) and living.

Notably, these confusions would not have arisen without the habitude to judge the rationality according to the knowledge of concrete context and also the natural link between the word rationality and the deliberation of reason. With this ambiguity all that is needed is to give our reason the right questions and the illusion of perfect rationality becomes real. If the presentation is skillful the distance from "people are not stupid" to "people can't be fooled" may easily seem short.

The second ambiguity is in undistinguishing rationality<sup>I</sup> and rationality<sup>II</sup>. The first may be a powerful assumption but it is still directed to the a priori characteristics of action itself, while the second is based on the logic of the prime problem and does not directly relate to the quality of action. It only assumes sufficient skill and motivation for reaching the optimum which may vary from (*prime*) problem to problem. These two understandings of rationality are virtually different and neither can be deduced from the other, however, they are often used in pair as they would be different labels for single fact.

Mixing rationality<sup>I</sup> and rationality<sup>II</sup> is closely connected to the indistinguishing between rationality understood as effectiveness in solving concrete problem and rationality as the wisdom of living, i.e. not just (possibly wild) effectiveness in any problem but also the skill of choosing one's participation in problems. Since both these meanings are included in the notion of rationality it makes easy to consider arbitrary chosen prime problem as the judge of human happiness or other way round - human happiness as the necessary cause of the performance in particular prime

problem. None of these relations are justifiable and stem only from the confusion about the notion of rationality.

#### 4.6.2 Mises's *Human Action*

Discussed issues can be very well exposed on the work of Ludwig von Mises. His works are useful mainly because Mises pursued pure a priori method that should deduce from basic facts about human action. Naturally, such a method puts a lot of weight on rationality, which makes it appropriate for the instruction. Furthermore, Mises's concept of rationality is interesting because it is believed not to be threatened by Simon's criticism of instrumental rationality in economics.

I will now focus on several statements from his opus magnum *Human Action* and try to elucidate his conception of rationality and human action.

“Human action is purposeful behavior. Or we may say: Action is will put into operation and transformed into an agency, is aiming at ends and goals, is the ego's meaningful response to stimuli and to the conditions of its environment, is a *person's conscious adjustment to the state of the universe* that determines his life. Such paraphrases may clarify the definition given and prevent possible misinterpretations.” (Mises 1949, p. 11, emphasis mine)

The very first sentences of *Human Action* introduce action within the teleological settings and even though it does not indicate any a priori optimality it contains one controversial element that will do its work later - Mises's assumed identity between teleological framework of purposes and ends and conscious rational conduct.

“Human action is necessarily always rational. The term "rational action" is therefore pleonastic and must be rejected as such.” (Ibid., p. 5)

The meaning of rationality in the past quote is unclear. It is a definition that refers to self-evidence of *complete problems of action* hence we should consider only weak rationality<sup>III</sup>, but most people would probably use the terms ‘meaningful’,



‘purposeful’ or ‘reasonable’ in this sense to be clear. The use of the term rational offers a mismatch with rationality<sup>1</sup>.

However, Mises never explicitly states the definition of rationality in the terms of rationality<sup>1</sup>. Moreover, he often talks about people failing and making mistakes, but not be mistaken whenever he feels the need he uses unmistakable rationality in a hard causal sense:

“He acquires habits, he develops automatic reactions. But he indulges in these habits *only* because he welcomes their effects. As soon as he discovers that the pursuit of the habitual way may hinder the attainment of ends considered as more desirable, he changes his attitude.” (Ibid., p. 47, emphasis mine)

There is no chance that he could be mistaken in following a habit.

“...men have developed a method of ascertaining *as far as possible* the expediency of their actions and of removing uneasiness in *the most* practical and economic way...” (Ibid., p. 216, emphasis mine)

(to be recalled as statement A):

“The consumers patronize those shops in which they can buy what they want at the cheapest price.” (Ibid., p. 270)

These claims suggesting direct causality in human problem solving are by no means implied by the introductory statements about self-evidence of human rationality. They are examples of the routine described above. The problem is described in simple shapes as a logical proposition and presented like that it seems self-evident for our logical intuition. Such an exposition cannot, however, transfer the difficulty that inheres in deciding in actual situation in life.

“What integrates the individual's actions into the whole of the social system of production is the pursuit of his own purposes. In indulging in his "acquisitiveness" each actor contributes his share to the best possible arrangement of production activities.... ...There is no antagonism between the interests of the individual and those of society.” (Ibid., pp. 725-726)

And finally, the system ends in perfect harmony of perfect action.

We could see that Mises's use of rationality is incoherent and that it collides with multiple rationality assumptions presented above. In *Human Action* he starts with claims on the level of rationality<sup>III</sup>, but then in concrete cases his argumentation seems like assuming a priori rationality<sup>I</sup> as the proclaimed purposefulness of human action switches to infallibility. He claims that “[a]prioristic reasoning is purely conceptual and deductive. It cannot produce anything else but tautologies and analytic judgments... ..it cannot add anything to our knowledge” (Ibid., p. 38). Throughout his book, however, there are many cases where facts about human problem solving seem to be obvious for Mises as it would be implied by his introductory methodological statements. He does not claim that people don't fail in certain situations because...; he claims that in certain situations there simply is a causal success of human problem solving *per se*.

Even in the case we suppose rationality<sup>I</sup> holds Mises's approach has to face up fundamental difficulty how to overcome the gap between rationality<sup>I</sup> and rationality<sup>II</sup>. To be able to succeed in the task of building up on the logic of action the analysis mustn't leave the domain of *the problem of action* because otherwise the footing (axiom) for the logic is lost. On the other hand, being a social science theory, it must say something about the processes in the economy that take place around us, i.e. it must relate to prime problems of a kind. But there is a conflict between these two requirements, because the intended analysis is not valid for *prime* problems. We may abstractly classify alternative means with respect to an individual end, but without the knowledge of the individual ends we have nothing to fill in the scheme. The application of empirical or intuitive data, the only we have, take us down from the rigorous logic to vague opinions. The world of the problem of action and the everyday intersubjective world just do not have any canals for transferring one to another.

To show how easy is to leave the declared subjective domain of the problem of action let's focus on the statement A (the previous page). This statement can be read in two ways. We can keep the subjectivity, but then the “what customers want” stays unspecified to us and we can't generalize it (transpose it to the intersubjective world)

on a particular generally accessible good. Since we suppose rationality<sup>I</sup> the problem is solved, but there is nothing we can infer from that. We cannot say for example: corn, the good on the market, is always bought at the cheapest price.

The alternative understanding would allow the previous sentence, it would transpose the meaning on concrete generally known goods, but then the domain of subjectivity (*the problem of action*) would be left. Such an understanding would set a rationality<sup>II</sup> assumption, but it would not be connected to the logic of the individual action.

The difference between these two understandings is essential for the social theory that may build on the logic of individual action. The first understanding of the statement A is true assuming rationality<sup>I</sup>, but it is useless for any theory about the world around us. The only implication of this statement, considering we keep the domain of subjectivity, is an apology of status quo. No matter of what we see around any acting individual is doing his best and nobody can improve his/her decisions<sup>41</sup>.

The second understanding can very well be the starting point of a theory leading to the description of social order around us as we may imagine it with “no antagonism between the interests of the individual and those of society”, but it is not within the domain of subjectivity and the logic of action.

In summary, Mises’s approach is weak in two levels. First, regardless of its own methodological assertions it rests heavily on rationality<sup>I</sup> and second, even this understanding of rationality is arbitrarily transposed towards specific objective rationality<sup>II</sup>. The statements describing the functioning of the economic system are implied neither by the introductive axiom of human action nor by rationality<sup>I</sup>.

Simon’s criticism of economics’ understanding of human rationality was believed not to harm Austrian economic, because while Simon talks about human performance in prime problems Austrian economics is mainly concentrated on the logic of action. However, as we could see it is impossible to build an economic theory purely on the logic of action. In fact Austrian economics regardless of its tenets did the very same

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<sup>41</sup> It may seem that rationality<sup>I</sup> could be sufficient at least to argue for releasing the action from coercive power of the state, which is the most expressive claim coming from Austrian economics, but that just could not be concluded from the logic of action. ‘The state’ takes place in the intersubjective world not in the world of action. We don’t know what *state* for subjective perception of an individual is and we don’t know the relation of the state to him. If, for instance, an individual chooses to be coerced by the state there would be no way how to distinguish it from an enforced coercion. The abolition of the state can possibly be coercion in the same way as it could be liberation.

thing as neoclassical economics – it supposed that certain problems around us people solve without any problem. Its rationality<sup>II</sup> assumptions are concentrated around the functioning of the free market that is in the Austrian view the preserve of effectiveness. Regardless of the plausibility of these assumptions they just do not follow from rationality<sup>I</sup>.

Even though it does not have a justification, the close connection between rationality<sup>I</sup> and rationality<sup>II</sup> is omniscient in the economics' assumptions of rationality. It is so because these assumptions take power from each other. Without the idea of a priori rationality of human action it would be hard to escape the case by case basis of rationality<sup>II</sup> definition<sup>42</sup> and insist on rationality<sup>II</sup> as something a priori present on the market. And without assumptions of rationality<sup>II</sup> in concrete prime problems of market there could be no neoclassical/Austrian economic theory.

#### **4.7 The Munchhausen Trilemma and the Problem of Rationality**

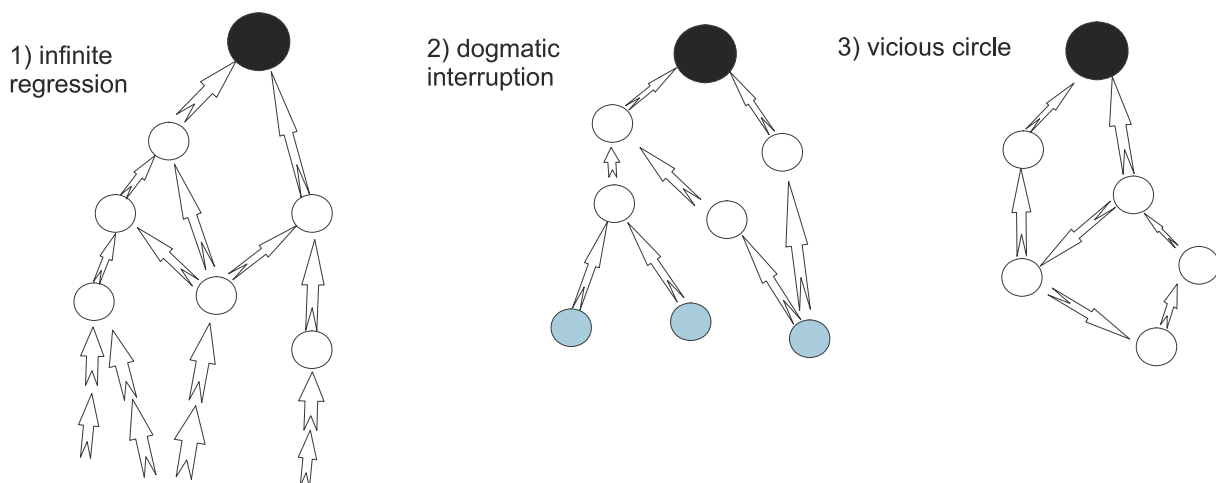
Until now I was defining the meanings and assumptions of rationality and showing their placement and function in the work of Ludwig von Mises. Even though the elucidation of the rationality assumptions should have worked as a clue of their plausibility as well I would like to discuss the issue of plausibility explicitly. From the past discussions we can repeat that rationality<sup>I</sup> was defined in such a way that quite vividly showed its implausibility whereas the plausibility of rationality<sup>II</sup> relies fundamentally on the choice of (prime) problem that is defined on. The crucial point that causes much of deficiency of the economics' dealing with the problem of rationality is then the connection of these two assumptions – rationality<sup>I</sup> as an alibi for arbitral creation of rationality<sup>II</sup> cases. Let's now focus on the issue of plausibility closely. A very handy instrument to show important characteristics is so called Munchhausen trilemma. It is an old epistemological problem considering possibility of justification; it was reintroduced by German philosopher Hans Albert (1985), or more recently for instance in Kordes (2005). It is named after a legend of Baron Munchhausen, who was supposed to pull himself out of a swamp by seizing himself by his own hair. It follows that any knowledge can be justified only in three possible ways and that neither of them leads to certainty:

1) **Infinite regression** - Knowledge is justified by arguments that themselves have to be justified in order to be certain, and those justifying arguments has to be justified as well, and so on ad infinitum.

2) **Dogmatic interruption** - Knowledge is justified by arguments that are justified by knowledge that is justified, and so on up to the point when the justification is ended by argument that has to be taken as granted and is not further justified.

3) **Vicious circle** - Justification ends up in circle. Justification continues to the point when an argument is justified by another argument that is justified by the former argument.<sup>43</sup>

**Figure 1 – The Munchhausen trilemma**



The Munchhausen trilemma shows the impossibility of rationality<sup>42</sup>, because the certainty of successful action requires certainty in knowledge. Even if we would consider something like half-certainty, local certainty or certainty under limited knowledge it would not save rationality<sup>42</sup> because it can never be that an individual would pursue only problems (*teleological subjective*) that he will succeed in solving with respect to his limited knowledge, because such a choice would itself require

<sup>42</sup> Which for example is the approach of experimental psychology.

<sup>43</sup> This labeling is taken from Knudsen (1993).

certainty of knowledge. For rationality<sup>I</sup> there can be either certainty of knowledge that would prove it or anything else that disproves it.

However, if we look on in which cases this trilemma (or the problem of infinite regression) is mentioned in economics, we find it in the discussions about rational expectation hypothesis (e.g. Lipman 2001). It is probably because the theory is stated in a way similar to the trilemma (the variables are to be supported by dependences of other variables). We can also find it as an argument against the fundamental concepts in the neoclassical theory of the firm: "... firms cannot optimize ex ante, since they do not have and cannot get the information that would be required. Specifically, they would need an optimal amount information, but this leads to a new optimization problem and hence into an infinite regress." (Elster 1983, p. 6) (the trilemma or infinite regression also in Elster 1979, Nelson and Winter 1982, Knudsen 1993, Day & Pingle 1991). Together, these arguments are related to the broad group of rationality<sup>II</sup> assumptions, because they don't talk about the general problem of action, but about action with respect to some (prime) problems of economics as the choice of output or the behavior on the asset market.

However, the impact of Munchhausen trilemma on rationality<sup>I</sup> and rationality<sup>II</sup> is different. If we'd conclude that the trilemma means impossibility of rationality<sup>II</sup> it would mean very pessimistic picture of human conduct. It would mean that every (prime) problem is out of human capabilities, which is not true. There are many problems people manage to solve without much difficulty. The Munchhausen trilemma does not mean that we are mistaken in any case, it only shows that we cannot reach certainty. But what does it mean for the methodology of defining rationality<sup>II</sup>? We can only repeat our preliminary conclusion that rationality<sup>II</sup> can be defined on the condition that there are some other reasons that support its use in a concrete situation, but it cannot be defined on pure logical grounds.

Note one difference between rationality<sup>I</sup> and <sup>II</sup>. The latter is defined by a specific prime problem and the definition of a prime problem implicitly includes the abilities of information that are needed to solve the problem. The important fact is that we don't need to prove the justifiability of these information and abilities as the Munchhausen trilemma demands because the problem is just defined with them. There is no need to go beyond the (prime) problem and ask whether the solving of the problem is justified with respect to some other more general more important problem. The concrete prime problem is all that interests us in the case of rationality<sup>II</sup>. That

means that we can judge whether the actor disposes of these abilities and information and subsequently assume rationality<sup>II</sup> or, notably, we can consider the actual abilities and information close enough to the demanded ones and consider rationality<sup>II</sup> as the (Weber's) ideal type. It is crucial to realize that this is impossible to do this with rationality<sup>I</sup>. There is no ideal type possibility for rationality<sup>I</sup>! As well as there is no perfect knowledge in the realm of rationality<sup>I</sup>. Not in the sense of reachability of perfect knowledge but in the sense of its very possibility. This directly follows from the Munchhausen trilemma. Since there is no Archimedean point to hold of and there is no justifiability, which also means no scale to measure the quality of justifiability.

“We are often told that knowledge is to be included among the equilibrium "data" along with tastes and resources, so that changing knowledge entails changing prices and output quantities. But "data" must be measurable and knowledge is not.” (Lachmann 1976, p. 55)

These conclusions means that there can be no support from the realm of the problem of action as defined above to the science of human action nor problems of any kind. There is no logical basis for social science that could overstep the concrete conditions of peoples' problems or that could quantify the problem of human action in a way that could bring us any valuable result.

The most important fact, however, is not that the optimizing or a priori rationality<sup>I</sup> is too optimistic. The question is incorrectly put that way. There is no fundamental benchmark that we can use for scaling the effectiveness of our action, no primal meter we can relate to. This benchmark cannot be found in any normative claim, that would impose welfare on people “from outside” nor “inside” in the knowledge of people. The question then should not be whether we act perfectly or less than perfectly. It should not be ‘How well we act?’ but simply ‘How we act?’<sup>44</sup> If we end measuring the human action on a one-dimensional scale we may see the diversity of resulting action derived from diversity of underlying knowledge. This knowledge will

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<sup>44</sup> Experimental psychology provides many findings that are taken into account even among economists (e.g. Skorepa 2005), but its purely empirical approach miss theoretical anchor. The results are also sometimes accused of heavy dependence on interpretation (see Samuels, Stich and Faucher (1999)). Also, empirical findings are not listened to by some (Austrian) economists that may point out at subjective character of perception of the situation of action.

always be partially common to us all and partially specific as derived from our cultural heritage and personal experience so that it can hardly be explained in detail with simple axiomatic system. Much more than seeking such a system will be helpful to seek the processes the knowledge was acquired (Simon) as well as looking for particular outcomes of this processes.

These claims do not express pessimism about human rationality, but only that this there is no universal source of success to be used for every case, no reason to rely on omniscient human rationality.

#### **4.8 Conclusion**

Let's once more return to Lionel Robbins's famous definition of economics that says:

"Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses." (Robbins 1945, p. 16)

Stemming from this definition, the importance of the notion of rationality of human action follows directly. We have to work with some conception of effectiveness that would assess how the chosen means work to fulfill the ends. Such a quality is usually referred to as rationality. However, before the discussion about the human ability to fulfill the ends we must have a conception of the relation between the ends we consider and the actor himself. To claim the right for speaking for genuine human ends, wants, or purposes is suspicious; often it only masks the problems that would arise with a closer inspection.

In this paper I presented fundamental contexts in which we usually consider rationality (and therefore the ends and the means). Each has certain limits that set the character and the strength of rationality assumption defined within its frames. Since economics demands a strong assumption of rationality (effectiveness) and since the meaning of rationality is equivocal there is an apparent propensity to overstep the limits of rationality assumptions with the help of certain rhetorical tactics.

To improve the orientation in this issue I distinguished three common meanings of rationality and three rationality assumptions where the former is based on general meanings of the term and the latter is based on different concepts of effectiveness. I



also tried to identify certain points where the strong assumptions about effectiveness take advantage from the intuitive connection to the everyday meanings of rationality.

I believe that there is still a lot of space for the enquiry in the assumptions of rationality. Not just in order to reveal the actual assumptions of existing theories but also in creating methodological frameworks for positive theoretical work. I wanted to show that teleology as the basis for economics was usually enriched with implausible elements that, however, did not belong to the original only methodological concept. However, being aware of this danger I think that teleology itself is perspective theme for the study that may support us with usable methodological assumptions.

# Chapter 5 – An Outline of Alternative Teleological Conception of Preferences

## 5.1 Unclear Preferences (Goals, Ends, Purposes)

Preference is a fundamental aspect of the discussions about rationality. If we see rationality from the teleological point of view it is natural to ask on the nature of preferences (goals, purposes)<sup>45</sup> the activity is aimed at as well as the rationality of preferences themselves. Thorough understanding of preferences is also means how to distinguish the latter two meanings of rationality from the introduction of the chapter.

I distinguished (section 4.4.3) the *teleological* and *complete subjective problems* which implied that there are no preferences (goals) to be a priori derivable from action. Action does not necessarily show the preferences because there is always the possibility of an error that will thwart our plans. However, if we consider that preferences are always formed in a hierarchy it enables us to distinguish problems (and preferences that form them) according to the difficulty. Preference that will refer to a broad segment of states of the world will be fulfilled with much greater difficulty than preference that take place only with respect to the imminent problem. If you are in a shop choosing among goods it is an easy job considering you made the right choice choosing the shop. If, on the contrary, you would have to consider all goods in all shops the difficulty of the problem changes fundamentally. We can see that if we consider the hierarchy of preferences then the ending pieces - very time specific, local preferences (goals) will probably be just insignificantly different from the observable action. However, this observation can neither be taken as logical necessity nor could it be generalized on all levels of preferences.

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<sup>45</sup> I will consider these notions as identical, even though, preference, as well as ‘choice’, may evoke connection to the time-less analysis (unlike goal that evokes a time demand).

The everyday use of ‘preference’ or ‘goal’ corresponds to this finding. It includes preferences and goals seen in already realized action<sup>46</sup> but only in the case of imminent preferences. Nobody would hesitate to say that a person eating a sausage really preferred it. While that’s not a problem considering preferences “of the moment”, it is problematic when talking about preferences in general. It would not be so common to say about eating sausage that it was an expression of an endeavor after the lifetime goal. Whether we talk about preferences, purposes, wants or desires, it is unclear whether we mean what we seemed to have chosen or our deep intentions.

Therefore, the notion of preferences seen in action (‘revealed preferences’<sup>47</sup>) should be distinguished from preferences as inner goals of *teleological subjective problems* that are not necessarily apparent.

The second issue is the correspondence of the levels of preferences<sup>48</sup> and it was already touched in the discussion of *teleological subjective problems*. If for every preference there is its why? it is natural to ask whether this preference is only more concrete expression of its higher level ‘masters’ or there is an eventuality of a discrepancy. Can we, for example, from the fact that people want to be healthy, deduce that preferences about the food we eat are in conformity with our health? I don’t know of any indication of certainty in this issue.

The discrepancy among levels of preferences should be acknowledged. Uncertainty in reaching particular goals has been an issue in economics for a long time, but it must be recognized even among levels of preferences.

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<sup>46</sup> Even that is true only a posteriori; if talking about personal preference, we always mean future, not present, imminent action. The divisions of the alternative states of the world we are talking about are points in the future, not the immediate results of our “just now” action. Some capacity of mind has to be stipulated to committing a preference relation, and that happen only if it is worth it. Stanovich (1999) explains the point by distinguishing “system 1” reasoning, which deals with routine and habitual behavior, and “system 2” reasoning, which consists of analytical intelligence. Evans & Over (1996) talk about “type 1 rationality” and “type 2 rationality” in a similar way.

<sup>47</sup> Compare with Samuelson (1948).

<sup>48</sup> Neoclassical microeconomics generally works with consistent preferences. I think that it was possible only due to concentration on preferences of the same level (unlike inter-level preferences) whose consistency is much more intuitive and plausible. Even though we could find experiments showing the opposite (Shafir & LeBoeuf 2002, pp. 495-497), it seems easy to sort several possibilities in a particular situation by preference (e.g. say what you’d prefer of several presented goods). The inter-level consistency, which is the matter of discussion in this paper, is much less plausible concept, because with each level the amount of possible choice grows extensively. In the daily conduct people are in position where most of the preference levels are already set, but if one suspends his plunge into the everyday world for a while and asks himself whether this or that is good for general goals of his life he is likely to be in position of much greater uncertainty in which the choice of particular quantities of a single good is far from the ability of resolution.

Tversky & Kahneman (1986) pointed out that... “a man could be judged irrational either because his preferences are contradictory or *because his desires and aversions do not reflect his pleasures and pains*” (in Lagueux 2004, p.44, emphasis mine). I think that desires and aversions on one side and pleasures and pains on the other signify well the two different levels of preferences.

Third related issue is the question of the purpose behind the hierarchy of preferences. From the most imminent preferences of daily conduct we can step higher and higher to more essential preferences but this succession cannot lead to infinity, there must be something ultimate preferences are directed to. It doesn't really matter if we call it utility, happiness or well-being, but there is always necessity to find something ultimate to what everything is directed. The problem is the same as in the previous paragraph we cannot guarantee that fulfilling any preferences will lead to corresponding effect in this ultimate purpose. What we prefer may not be good for us. This is almost a heretic statement in economics, but we must sharply distinguish it from trials of forcing people while ignoring their preference.

Notably, the purpose behind preferences is not just the last level of preference it is of a different nature than preferences. Preference or goal means certain state of the external world that an individual chooses according to his knowledge. This fact means that it is subject to error because any state of the world has uncertain meaning for our well-being. But the purpose behind preferences is just a notional concept and therefore is not dependent on the external world, which enables it to be a reliable measurement. Hence in the statements: “I prefer this.” and “I prefer higher utility.” the verb to prefer is of different strength. Any concretization of preference means that we connect our hopes with uncertain factor that may thwart the quest for better being.

The importance of these issues varies according to how we combine them. If we consider preference as explicitly present in any action together with equivalence of well-being and preference, we arrive at a pretty strong statement – Anything we choose is good for us.

Unfortunately, this is exactly what economics is accustomed to draw from. As an example of assuming self-evidence in this manner, I will quote a bit long but very important part of von Mises's *Epistemological Problems of Economics*:

“All conscious conduct on the part of men involves preferring an A to a B. It is an act of choice between two alternative possibilities that offer themselves. Only these acts of choice, *these inner decisions that operate upon the external world*, are our data. We comprehend their meaning by constructing the concept of importance. If an individual prefers A to B, we say that, at the moment of the act of choice, A appeared more important to him (more valuable, more desirable) than B.

We are also wont to say that the need for A was more urgent than the need for B, This is a mode of expression that, under certain circumstances, may be quite expedient. But as a hypostatization of what was to be explained, it became a source of serious misunderstandings. It was forgotten that *we are able to infer the need only from the action*. Hence, the idea of an *action not in conformity with needs is absurd.*” (Mises 1933, emphasis mine)

Mises talks about “independent inner decisions that operate upon the external world” which is explicitly an a priori direct correspondence of preferences and action. It suggests that it is possible first to inwardly decide the benefits and costs and then find suitable states of the world that would correspond to the benefit/cost decisions. This would be possible only in the world where alternative choices are marked with the significance to the well-being. In reality, our decisions are never in the position of the master of the world that seeks appropriate states according to his decision. To be independent means to have full range of possibilities, to be aware of what will happen and react upon this knowledge in an unbounded way. In the world of absolute uncertainty there would be no freedom or independence because nobody would be able to pursue his plans. Sad to say, uncertainty of our knowledge necessarily founds our dependence on the external world.

The ability to infer the need just from action is intuitive in the case of imminent preferences. On the condition you prefer an apple to a pear, both lying on the table in front of you, it is likely that your action will result in getting apple. It would hardly be a mistake to infer the need of apple from act of acquiring it in this case.

However, this rule of thumb does not relate to a general property of action. To choose a single action according to a major goal is much more difficult and it is likely that the decision will not be the best possible. If you prefer to be educated what is the single best action to fulfill this preference? If you read a junk book does it mean that

you enjoy reading junk literature or that you were unsuccessful in choosing a good one? Can we from the fact that somebody didn't go to college infer that he didn't prefer to do so? In these cases it is much trickier to designate the need from the action. The need is naturally to perform well while the outcome is likely to be suboptimal.

The explicative power of the logic of action originated from the apparent identity between locally preferred and acquired and then it was carried over to all levels of preference. Thoroughly said, it does not hold universally even in the very imminent levels of preference because the imperfection of knowledge must be taken into account at all times. Uncertainty is not just property of future expectation, but it is present in action generally.

If we take the statements such: “[e]very action is *always in perfect agreement* with the scale of values or wants because these scales are nothing but an instrument for the interpretation of a man's acting.” (Mises 1949, p.95, emphasis mine) thoroughly we could defend with it any economic system because the actions of people will always be in conformity with all values and wants of people acting in this system.

An understanding of preferences is closely related to rationality. The preferred state of the world is the benchmark for rationality. But if we admit that different levels of those goals may not correspond, then a question emerges as to which goal of which level the rationality should refer. Rationality related only to revealed preferences (in fact very particular inner preferences) could be a tricky concept, because even if there would be a good reason to assume perfection in particular problem solving, we cannot be sure that it makes sense for more general levels of individual goals.

## **5.2 Horizontal and Vertical Rationality**

The last sub-chapter concluded that it is impossible to find any a priori effectiveness in human action that could be used as a theoretical axiom. On the condition we conceive human action with means of teleology then within its framework there is no

way how to deduce its fulfillment. It also not possible to deduce any concrete contents - the ends (goals, purposes) and the means - and hereby measure the effectiveness.

Also, no single end (present as a state of the world) can be considered as the ultimately determining. The very fact that it is a desirable situation of the outside (objective) world and not a state of purely subjective well-being means that it is only a conditional measurement of individual satisfaction.

The meaning of a state of the world, the object of our preferences, can be also perceived from multiple perspectives. We may relate them to the most imminent wants that are derived from the “just now” situation of the individual, but we may also relate them to the stable general preferences that are valid in multiple such situations. To not overshadow the differences between these levels of preferences it is needed to consider preferences formed in a hierarchy.

Because of the reasons presented in the last chapter – mixing meanings of rationality, certain “reason-centrism” and insufficient detachment of action and preferences – economics’ conception of preferences works only with respect to the single level perspective.

Single level character of preferences also leads to inability of conceiving both endogenous and exogenous character of preferences. In economics, preferences are generally stable and exogenous, which is considered as methodological necessity. The problem is naturally that preferences are not always of this kind – received information is not only means but sometimes also the sources of our ends. Moreover, as it was argued in the preceding chapters, economics takes into account mainly imminent preferences because such preferences tend to be fulfilled easily. This kind of preferences has, however, an opposite character than preferences that we would considered as stable and exogenous. Imminent local preferences are satisfied so easily naturally because they are made anew every moment (i.e. they are unstable) and because they are not of great importance to the subject. The economics concept of preferences is therefore an incongruous compound of characteristics that worked as suitable element in the theory. Gary Becker (1997) was aware of this contradiction and tried to remedy it. He refused concentration on imminent preferences and claimed that economic actors pursue in fact stable preferences that are hidden in the every day wants. However, this correct foundation was ruined by unjustified assumption of direct correspondence of fulfillment of preferences of different levels.

I should also point out that the single level preference concept has not just been subject of criticism but also that alternative approaches have been proposed. A compact resume of such works was provided by Brennen (1989). He divides the proposals in two branches: those that suggest hierarchical preferences, which includes for example Amartya Sen, but also J.S. Mill; and those that consider egoistic preferences as well as communal preferences (e.g. Etzioni 1986).

If we visualize the purpose levels as a pyramid we can metaphorically say that the single level approach is only *horizontal*. The opposite approach that would consider multiple levels of teleological concept is then to be called *vertical*. Simply because preferences create referential framework for rationality such a differentiation is also analogical to the two latter meanings of rationality presented in the introduction of the previous chapter (page 46). They express similar sides of rationality<sup>49</sup>.

In many situations it is necessary to look on the rationality from the horizontal perspective. After all, it is a natural way how to deal with other people around us. It would be too costly to consider multiple levels of preferences in every situation of daily life so we usually attribute a problem (i.e. a system with a designated goal) to an individual and perceive her as the one who is solving it. Often, we are also interested in people's performance in certain practical problems and easiest way to connect the logic of the problem and individual action is to conceive the problem as the sole purpose of the individual.

While the horizontal approach is practically indispensable it can't be taken as a basis for overall conception of human action because it provides only incomplete perspective. Someone can be perfectly rational in the horizontal sense and yet very irrational in the vertical sense. You can cut a branch perfectly as you planned, but it can be the branch you are sitting on. You can manage to assemble a nuclear missile, but you can be also killed with it.

We can contrapose these two concepts of rationality with the use of two words that are used in everyday language to describe cognitive abilities: intelligent and wise. An intelligent individual is bright and energetic and it is expected that he solve problem

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<sup>49</sup> The significant concepts (assumptions) of rationality that is understood as effectiveness (rationality<sup>I,II,III</sup>) that are presented in the previous chapter are, on the other hand, something different than vertical and horizontal rationality presented here. Rationality<sup>I</sup> is a vertical rationality, but moreover with the warranty of fulfillment of preferences whereas rationality<sup>II</sup>, even though that it is



given to him quickly and effectively, but to be intelligent does not imply the orientation among the countless possibilities that life offers. An intelligent individual is able to solve problems, but he may not be good in choosing problems. To be wise, on the other hand, does not emphasize the practical skill rather it signifies broader perspective in choosing with respect to the long term goals; not just ephemeral actual problems.<sup>50</sup>

To use the concept of teleology in the study of human action properly we have to find a way how to conceive multiple levels of purpose hierarchy to which the use of horizontal rationality will be subordinated. While the preceding chapters were occupied mainly with the criticism of the traditional economic concepts this chapter is a trial of sketching out a vertical approach.

We already concluded in the previous chapter that teleology or any a priori judgment (in the Kant's sense) cannot be an actual source of a theory. On the condition we use the teleological framework there has to be another source that would concretize the purposes the concept is made of. This fact opens a space for variety of influences from such science psychology, anthropology, or sociology. We need to utilize multiple sources in order to get brighter picture of the character and determinants of our preferences.

Together with allowance of another than only logical sources we also get to the weaker level of reliability. We are losing claim on 'mathematical' validity and our results will be always only seeking truth while being aware of its irascibility.

Because of this fact it is suitable to work first on very general level and try to set only plausible frames for action. It is more a question what human action is not capable of than what it is. Notably, such a negativistic approach is, with regards to the character of social science, recommended by Hayek (1967).

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horizontal in a way, is a fundamentally different concept because it is defined on prime problems and not on the problem of action.

<sup>50</sup> Compare with: "European rationality has two antinomies: instrumental and hermeneutical – the first seeks higher and higher productivity, the second deeper understanding. Instrumental rationality invents new and better means for how to reach our ends; hermeneutical rationality offers critical distance from these ends, the key to understanding the whole in which our ends are framed." (Bělohradský 2007, p. 229, my translation)

### 5.3 The Outline of Three-level Theory of Teleological Purposes

The concretization of teleological levels presented here considers three sets of purpose (preference, goals) levels with distinguished characteristics. I will relate these sets simply as levels even though it would be possibly to place even more levels within single set.

The first level is derived from the findings of evolutionary biology and sociobiological account of human nature and utilizes the findings of what Brockman (2008) collectively designate as the third culture<sup>51</sup>. The theories that are subsumed under this label are nowadays quite diverse, but we would use just the basic idea behind: The fact that state of every species is determined by the evolution of genes. From our ephemeral perspective such evolution goes on very slowly and during the time of our lives it is practically stopped.

The process of evolution does not result in perfection of surviving species; it only passes to us genes that were successful in surviving in past environments. With some simplification we can say that these genes reflect the environments they survived in and that they pass to us the purposes that were beneficial to pursue. The human body is one example of such heritage, the instincts that lead us to seek food or to ensure for defense is another, but it's not an objective to name all of such phenomena or even any of them. The only important thing to emphasize is that among all possible purposes the evolution of genes restricts us to only some. This basic restriction is a substratum of all of the remaining purposes human can pursue. It is the most general level of purposes (preference, goal).

It may be unusual to think about preference in such a general category. Can, for instance, a human body<sup>52</sup> be considered as a preference? We are used to think about preferences as goods, but preference is most generally a relation of the states of the world and human body is precisely such relation; its abilities limit our possibilities to only some states of the world and thereby disregard others. It is therefore guidance to some states of the world at the expense of another, i.e. preference relation.

Of course, this side of human existence was reflected in many conceptions of humanistic sciences. For example, Jungian psychology and its archetypes hidden in

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<sup>51</sup> i.e. genuinely new scientific tradition apart from natural and humanistic sciences.

<sup>52</sup> More precisely – all states of the world that can occur on the condition human being dispose of its body.

our unconsciousness, Chomsky's theory of inherited grammar, Wilson's works on the human nature, Simmel's account of original interpersonal relation, or structuralism (Saussure, Levi-Strauss, Althusser).

However, within what our genes left for us there is hardly much uniformity. Or in the language of evolutionary biology, there is not just a single phenotype of human species. Genes themselves 'reflect' information coming from the environment, but this process is only slow. The organisms, however, gradually developed ability to react on the new situations within their lives. At first, such information had to be gathered anew by every individual, but then it started to be possible to transfer knowledge between generations. This was a great leap for the ability to adapt but also a great increase of diversity in the behavior. Suddenly, the organisms were not limited by their short existence in gathering experiences; they could utilize information of its ancestors and adapt much faster than through the slow process of gene evolution. The process of inter-generational informational transmission is an evolution of its own; it is sometimes called cultural, institutional or memetic evolution and it will be considered as the next level of purposes in the teleological scheme. Fundamentally, this evolution does the same thing as the genetic evolution<sup>53</sup>: it limits the alternatives of purposes (within the scope provided by higher ones).

The other very important feature of inter-generational transfers is that it enables reason – a special property of human beings. It is not a coincidence that the species with fully developed culture is the only one that is endowed with reason. To enable reason in the conditions of complex societal relations it is necessary to limit the alternatives and frame the reality, i.e. reduce the complexity that makes conduct of reason possible.

The reason then is able to set purposes for itself. It is where the term 'purpose' ceased to be a metaphor and starts to be used in the way it is used in everyday language. The intention is then truly conscious.

The last level of teleological hierarchy will be that of conscious conduct.

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<sup>53</sup> The analogy with the biological evolution provoked the development of similar unit as a gene – meme, which plays a similar role in the evolution of inter-generational informational transfer. The term was coined by Richard Dawkins in his *Selfish Gene* (1976) and developed by Susan Blackmore (2001).

This concretization of teleological hierarchy does not prescribe behavior; it does not say whether behavior is driven by instincts or by habits and it also does not say whether we owe our success to our education or to inherited intelligence. Its main purpose is to be sure that the subordination of purposes is necessary and it is therefore impossible to use reason independently on its own without a link to specific education or the genetic heritage. It is impossible in the same way to have a culture that is independent of wants of humans that are embedded in their nature. I emphasize neither of the levels but I want to emphasize that neither can be disregarded. In every level we can find traits of ingenious features that make us truly rational and all of them together subsume what can be considered as complete<sup>54</sup> human rationality<sup>55</sup>.

#### **5.4 The Evolution of Genes as the Highest Level of the Teleological Purposes**

I will now go through all three levels in greater detail and try to discuss some points that may cause misunderstanding.

The biological evolution has an ultimate influence on us. We are its product, but that does not mean that from understandings of its mechanisms we can derive everything that is related to human beings. It creates only a foundation on which our nature is built.

Evolution is often understood as a path from imperfection to always better and better qualities and possibly up to some state of absolute perfection. Moreover, major social science theories such as Marxism are built up on this idea. No matter if we are talking about biological or societal evolution this is an illusory idea<sup>56</sup>. Evolution is not following any goal, whether based on perfection or anything else. It is only a process that reacts always on the actual state of an environment that divides following being

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<sup>54</sup> i.e. vertical

<sup>55</sup> Richard Rorty points out that Freud's works are in fact working with very similar concept of rationality: "Freud conceives rationality as the mechanism that adjusts contingencies to other contingencies... ..he dedicates his time to the revelation of the extraordinary subtlety, delicacy and astuteness of our unconscious strategies. He thus allows us to see in science, as well as in poetry, genius as well as in psychosis and - what is the most important in foresight - not the products of different abilities, but possible alternative adaptations." (Rorty 1996, pp. 36-37, my translation)

<sup>56</sup> The critic of such idea with regards to societal evolution can be found in Popper (1976); with regards to the biological evolution I can redirect to any recent textbook about evolutionary biology.

and non-being of genetic information. The environment is a determinant of the evolution as well as the fitness of genes and its character is not subsumed in the evolutionary process. It is an exogenous factor whose characteristic can be of arbitral and of any speed of transmutation. The process of biological evolution is therefore not a movement to greater and greater perfection, but a movement to perfection that always escapes. We may look more sophisticated than our evolutionary predecessors, but it need not to mean anything about the likelihood of our success in the age we live in. We may admire “the wisdom of nature” that endowed a tiger with its camouflage fur and sharp claws, but apart from that felidae are dying out – in recent environment their genetic information is not successful.

The effectiveness of our genetic property with respect to our present environment is not infallible, but that in no way alter the fact that it is an irrevocable determinant of our existence. One of the perpetual themes of philosophy is the question whether human nature is determined inherently or it is created by the culture. It is referred as the *nature-nurture* debate. I think of this dilemma in the similar way as the mentioned dualities related to social science methodology. It is more a sign of the propensity to reducing the complexity by founding the thought of only single principle than a justifiable opinion.

The side that would neglect any influence of inborn ontogenetic properties considers every newborn as *tabula rasa* that can be shaped by its environment in virtually any way. E. O. Wilson criticizes the position of ultra-environmentalist so that “...they start with the premise that man is creation of his own culture: “culture makes man”, the formula might go, “makes culture makes man”. Theirs is only a half of truth. Each person is molded by an interaction of his environment, especially his cultural environment, with the genes that affect social behavior. Although the hundreds of the world’s cultures seem enormously variable to those of us who stand in their midst, all versions of human social behavior together form only a tiny fraction of realized organization of social species on this planet and still smaller fraction of those that can be readily imagined with the aid of sociobiological theory. The question of interest is no longer whether human social behavior is genetically determined; it is to what extent.” (Wilson 1978, pp.18-19)

These preferences are, with respect to our lives fixed. We cannot change them; they are input for our daily conduct, but the daily conduct is not input for them. No matter what we do we cannot change the fact that we approach problems with frame of the very same preferences of this level.

I should also make sure that even though we talk about preference it does not mean any conscious choice. It is mere metaphor that is used only in order to conceive the phenomenon.

## **5.5 The Evolution of Culture as the Middle Level of the Teleological Purposes**

Human preference is not only determined by its genes but also by the environment it lives in. Preferences are always somehow dependent on the environment, but there are different speeds of reaction on the change of the environment. Genes themselves react only very slowly, but their development allowed some species to utilize their past experiences, according to which the preference of species was differentiated. However, this memory had to be filled up anew by every single individual hence the differentiation take only limited proportions. This was true until the emergence of inter-generational transmission of information that could carry knowledge through theoretically unlimited time.

Now, we must make clear what is meant by information or knowledge in this respect. This information is not data that we use only instrumentally to fulfill our purposes. The meaning of information meets here its etymological origin; it is “in formation” (from Latin “in formacio”<sup>57</sup>) i.e. something that forms us; it is not a tool but a light that illuminate tools, a formation of a new perspective.

The genetic evolution may prescribe the behavior, but it may also leave one ‘space’ free to be occupied by information given by parental education, for example, and this is filled up the variety of what parents have to teach. This filling creates a set of purposes and is itself an ontogenetic determinant. Of course, from our parents and society in general we as well receive information in the sense of data that we consciously use as tool, but it is impossible to arrange all data in this way.

I will define this purpose level generally as the dependence of individual preferences on the past generations. We can also say that it is a differentiation of the phenotype according to intra-species influences.

Even though information can be transmitted through centuries it is not its longevity that is so beneficial on it. The evolution of genes transmits the information on much greater time distances but it lacks fast reaction. Information that is being passed on next generations can be changed within a single transmission. Because of this fact we can, for example, teach our children a different language that we were thought but we cannot teach them to have better sight.

In reality, however, such a change is restricted by some factors. The transmitted information is often related to previously transmitted information and they form interdependent clusters. Every such transmission is dependent on the environment in which does it occur and this environment is naturally formed by other in-formations. This is one reason why the cultural patterns show long term prevalence; generations are not built afresh.

It is also likely that it will be beneficial to use up information from variety of individuals (not just parents) which indicate contribution of communal formation that will mutually share information and form uniform informational package (legacy) to be transmitted on following generations.

It is common to say that genes determine what we are, but it should be intuitive in the same way to say that education in the general sense creates us as well. It does not only tell us what to do, but it made us to be, i.e. it creates our perspectives we use to look on things rather than it only offers itself to be acquired.

This side of society has already been a matter of discussion in social science thought. Berger and Luckmann wrote widely acclaimed book with pregnant title - Social Construction of Reality. Michel Foucault in his Discipline and Punish showed how the consciousness about originality of our purposes is often only an illusion even in modern society. Halbwachs explained the mechanisms of the collective memory. A particular example that explains our dependence of our thought on language is whole philosophy of language descending from Wittgenstein. In its framework the language,

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<sup>57</sup> I owe this point to Neubauer (2001).

i.e. something that children receive without conscious intention, is not means for our thought but its determinant.

The evolution of genes is superior to the learning because it must have first set a space that will be dedicated to learning<sup>58</sup>. We can't be formed by any education whatsoever. Sometimes we learn with almost miraculous ability (children learning languages) and sometimes we never learn. For example, we can't learn to control eye-blinking. In terms of actual discussion, it's because this form of eye protection was left to long lasting gene information gathering; it wasn't left for variable socialization learning. Socialization can only 'utilize' the space that was given to it.

The transmission of information between generations is not completely one to one process. The new generation does not just receive what is given to it. There is variable level of distrust that follows from the fact that both subjects do not pursue identical preferences. The parent for example cares for all of his offspring equally while the individual cares for himself always more than for his siblings.

Therefore, sometimes the transmission can be neglected or partially neglected or the information can be judged from outside. Not every data that is passed to the next generation becomes a purpose for the new individuals.

As well as in the previous level we cannot count with any certain warranty of effectiveness that would come from cultural evolution, however, we could be sure that it has significant role in the success of the species that master it. It is certainly not irrelevant.

Regardless of the efficiency it brings us, it is certain that it is something obligatory to us. It is an ontological determinant that we cannot dispose of. We cannot decide not to be influenced by the past generation at all. Not only because nobody asks us when we are children, but because we would not be people without society making us.

This level of preferences can be both endogenous and exogenous. If we consider a problem that is within the culture the preferences are exogenous, but if our problem is a problem of a culture, a problem that is only hardly solvable without the change of



cultural (institutional) background it becomes endogenous. Typical situation of the problem of culture occurs in the cases of revolutionary changes that distort the ability of culture to conceive the environment. One example is the situation in the post-communist countries that became a natural field for institutional economics that were able to conceive the character of the situation much more appropriately than standard microeconomics that consider preferences as given.

However even ordinary problems may be problems of culture. Culture is the wisdom of the past, but future is unknown to it. And future may well bring an environment in which cultural lore cease to work well.

The stability of these preferences is variable as well. Some of its factors are stable through centuries and some are changing in short periods (fashion). Revolutionary changes are also a destabilizing factor that moreover influences especially the preferences that are naturally stable.

## **5.6 The Conscious Reason as the Imminent Level of the Teleological Purposes**

The fundamental function of the previous level is the reduction of complexity that enables reason. The relation among societal structure, culture and reason is of mutual dependency. Culture creates the structures; the structure demands the properties of reason for orientation and the culture simplify the reality so that reason can operate in such a complicated structure. (comp. with Giddens 1984)

Reason without forming power of society is exposed on the cases of so called wolf children that grew up without the presence of human society (mentioned e.g. in Giddens 1999). Even though they did not show symptoms of mental retardation their cognitive abilities were very limited, they never learned language past very basic level and their interests were concentrated to only primitive instinctive wants. They probably missed out the age that is set for reception of information.

Another example is autism. Stricken people may show even exceptional signs of intelligence, but they are unable to utilize this ability with respect to society in even the basic scale. It is symptomatic that such people hate any change of environment

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<sup>58</sup> Compare with: "...morality evolved as instinct." (Wilson 1978, p. 5)

they live in. Anything new is connected with fear and uncertainty for them. They did not learn to orient themselves in the variety of the situations life offers and their reason, even though it itself can be very capable, is unable to work in such situations.

Up to this point the selection of purposes was something only theoretical that we can't fully imagine, but the education reduced the complexity so that we could employ reason to conceive the world around us. To consciously set a purpose means to make a plan that we are in control of. The more we deliberate about all possibilities, eventualities, risks, and danger the more we have the plan in our head as almost a tangible object of imminent closeness. Also, by consciously setting goals we necessarily become far-seers of the future. To set a purpose means to express our beliefs about the future state of the world.

This level of preferences is mostly endogenous. Most of the everyday problems provide data that are relevant to the setting of preference. We can elucidate it on an example of a supermarket visit. If we'd wonder about the formation of preferences we can compose it of the three levels as follows: We visit a supermarket because of getting food and being fed, which is an exogenous fact (of the highest preference level) with respect to a single visit. We prefer a certain set of meals and food products, based on tastes as well as the cultural background we were raised in, that's also an exogenous element (of the middle level). And finally, during a single visit we are likely to buy certain concrete products based on the previously mentioned but also based on their placement, prices, advertisement, previous experience, the choices of other customers, etc., which is a choice to which reason is admitted and it is, at least partially, an endogenous element with respect to this visit.

### **5.7 Does the Preference Hierarchy Work Backwards As Well? Is There a Feedback?**

We may be prone to think that the preference hierarchy may be sometimes reversed, i.e. that conscious setting of preference may overpower preferences on the gene level. Naturally, many times we direct ourselves to the purely conscious ends while disregarding all 'lower' instinctive needs. This fact, however, is not an evidence of

reversed influence because even though we pursue purely conscious end it doesn't disregard its influence on the more fundamental levels. By pursuing a rationally defined end we in fact pursue a non-rational end as well. Therefore, the dominance of the conscious end to instinctive one is in fact a dominance of an instinctive end to another. It is impossible to escape the influence of the fundamental level of preferences.

## **5.8 The Relation to the Neoclassical Preference Concepts and Concluding Exposition**

Even though this account strives to start the scrutiny of preferences anew and is therefore hard to confront it with the traditional economic approach that disassociate itself from any concretization of preferences we can point at its properties that succeed where the traditional account fail.

Through the whole text I am relating mostly to the common grounds of the conception of the individual of neoclassical and Austrian thought. They are both build up on mistaken belief about identity of preferences and action. For Austrian economics it is moreover an explicit fundament of the theory that causes exclusive concentration on action and omission of preferences as such (e.g. Mises 1933). The criticism of Austrian account of preferences is therefore subsumed under their account of action that is present in the past text (3<sup>rd</sup> and 4<sup>th</sup> chapter).

Neoclassical theory of preferences is divided in two streams (Mas-Colell, Whinston, Green 1995). One follows Samuelson's choice behavior approach based on so called "revealed preferences" (e.g. Samuelson 1947 or Arrow 1959) and since the preferences can be revealed only through action the criticism about mixing preferences and action is valid for it directly and in the same logic.

The second<sup>59</sup> approach (developed in Hicks & Allen 1934, Hotelling 1935, Slutsky 1951, and Roy 1941) starts from preferences themselves and is based on two fundamental assumptions of rational preference relation – completeness and transitivity. The label 'rational' is little bit confusing in this respect and it is surely unrelated to the discussion of the rationality meanings and assumptions presented in the 4<sup>th</sup> chapter.

The assumptions of completeness and transitivity seem intuitively justified. It is logical that possible states of the world will be related to the individual with respect to his utility. Naturally, an individual has only information that are limited by his presence at actual place and time, but that does not mean that it is impossible to relate particular states of the world according to his well-being. The fact that I don't know about effects that can occur does not mean that they are unrelated to me.

The transitive assumption is logical in the same way. If, for me, A is better than B and B is better than C then to say that A is worse than C seems like an obscure anomaly if it is conceivable at all.

The problem is not in these assumptions, but in the application and understanding of preference that is again mixed with action. The rational preference relation is a construct that should lead to the creation of individual demand and demand is considered in order to find out what would individual buy, i.e. how would he act. Hence preference is again stuck to action.

If we take this into account and look again on the assumptions of completeness and transitivity we see a very different picture. However, before I would continue with its exposition I want to mention the other assumptions for preference that are connected to the neoclassical analysis – stability and exogeneity.

One of the major faults of the traditional economic approach is that it forbid itself to disrupt the subjectivity of individual wants explicitly while it does not limit itself in doing exactly the same thing tacitly with the use of its methods and assumptions.

The exclusive method of abstraction and construction of universal model situation demanded the system to be based on given irreducible facts that are closed with respect to time and place. Economics therefore limits itself on exogenous and stable preferences while it did not bother to ask when these properties are justified and what does it imply for the analysis. Abstraction is justified only in the case it corresponds to the prime problem it should help to solve. But the question whether and when the preferences are stable and exogenously was rarely even asked.

As we could see stable and exogenous are only the preferences of the highest level. Unfortunately, we directly operate<sup>60</sup> under these preferences only rarely and, as we will see in the next chapter, certainly not with rational conscious conduct. Usually, the

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<sup>59</sup> historically first.

<sup>60</sup> I.e. to operate under them and only under them.

broad scope of these preferences must be restricted to a particular array that is chosen by the lower levels that cease to be exogenous and stable. To get to the situation where we can operate with rational conduct we must be restricted to a very particular and simple situation. We must utilize all the preference levels not to be disturbed by the myriads of choices that would be ungraspable with our reason. Usually, in the daily (prime) problems we solve, whether it is a shopping, working or having fun at the disco, we act with respect to already very restricted possibilities, but also our lower preference levels are becoming endogenous and changing with time and place. Particular shop determines our preference of goods that offers; colleagues, the boss and the working environment determines many of our imminent local preferences at work; and music that is played, consumed alcohol and the presence of other dancers determine our preferences at the disco.

Let's give a broader example of preference hierarchy that should also elucidate the plausibility of the assumptions about preferences: Consider that there are three levels of the highest preference level set. The highest 'to survive' is then restricted with the second highest to 'obtain the nutrition' which furthermore restricted to 'food satiation'. These three are exogenous and stable. We would hardly expect that human being would learn to not prefer food.

Then we would have another two levels with cultural origins. First the preference of an apple that could be a typical fruit of given region and given culture then the preference of apple from the Saturday market which is where people are accustomed to buy fruits.

And finally, we have the preference of a particular stand and a particular straw basket that are chosen according to the evaluation of past experiences. At the end of the preference restriction process we end with only five possibilities - apples.<sup>61</sup>

Now, let's assume that an economist considers a set of food products and applies the assumptions of completeness and transitivity in order to find out about corresponding demands and consumption behavior. Are his assumptions justified? The answer must be no because he is in clash of two contradicting factors.

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<sup>61</sup> Naturally, the character of presented levels may be questioned. For example, we should probably consider a level of the highest set that prescribes the tastes and then its cultural restriction to apples, but that is only a detail that does change the intended point.

He can very well apply these assumptions with respect to one of the high preference levels, i.e. line up the food products according to their content of nutrition or according to their ability of food satiation, but then he is unable to construct demand and deduce consumption behavior because action is not operating on this level.

Or alternatively, he can consider one of the lower levels and even on these levels he can justifiably apply his assumptions, but, unfortunately, it ceases to have any real meaning. If we consider the last level that is restricted only on apples from one particular straw basket then, from such a perspective, all fruits that are not in don't have any importance. The preference relation that is to be analyzed can be conducted but it would have very distorted shapes: among all considered fruits the consumer would be indifferent and only if some of the fruits would be those from the basket they could be measured with respect to each other whereas they would all be preferred to the remaining fruits.

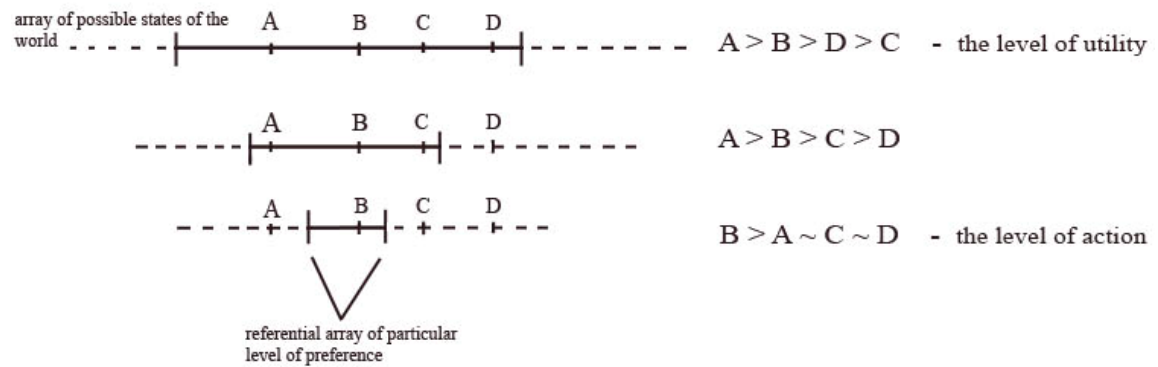
The economist would never consider such a preference relation because it is absurd and it is also not suited for the apparatus. Naturally, he would look on the relation from the perspective of one of the higher levels<sup>62</sup>. From point of view of (higher) preference it is entirely justified because it just doesn't really matter so much whether an individual will consume apple or a banana it will probably both work well, but in the same time it is entirely unjustified if we are asking about action because it is wrong to think that action can rationally operate on high preference levels. Action is always committed in particular place and time and it is designed to this setting. We don't choose from myriads of possibilities but from the straw baskets in our local store.

The next two pictures should illustrate the issue. They consider three preference levels that limit the relevant choice to fewer and fewer possibilities. Whereas the highest level that is closest to actual utility provides reasonable preference relation the level where action is conducted provides the "revealed" preference that is distorted with respect to the higher ones.

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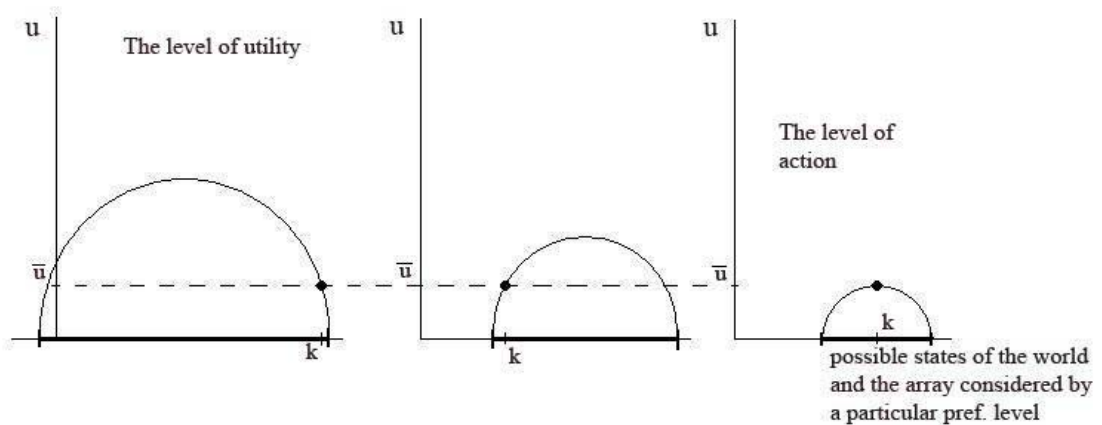
<sup>62</sup> Since neoclassical microeconomics does not consider any preference levels it naturally refers directly to utility, but the logic is the same, because not to keep up with the high levels means to fail even with respect to utility. The higher preference levels works as a proxy of utility here.

**Figure 2 – Preference relation under varied preference levels**



Even though it would not be a big mistake to consider maximization of utility in very limited array given by an imminent problem it does not have any real meaning with respect to broader defined problems:

**Figure 3 – A possible situation of the action and preferences with respect to the utility maximization (k – actual outcome)<sup>63</sup>**



# Chapter 6 – Human Action Exposed in Prime Problems – An Outline of an Alternative Concept of Human Action/Behavior

## 6.1 Introduction – Action and Preferences

It was already pointed out in the previous text that it is wrong to identify preference and action, to think about action only as manifestation of preferences, and it is especially important to emphasize it with respect to the present discussion. Only if we clean out this disturbing connotation we are able to understand the hierarchic character of preferences.

The contrary is apparent on Mill's account of preference hierarchy. He distinguishes the preferences that are incident both to human beings and to animals and those that are uniquely human while the first group is, according to Mill, of lower quality than the second<sup>64</sup>. This relation is, however, primarily based on normative judgment of action. Mill does not supply any logical reason for such a relation he only assumes it according to observation, i.e. perception of action. The normative element or the sense of nobility is connected to and also derived from the common everyday world; it is something inside of prime problems. In fact, such a preference relation is a relation of preference of the same level in terms of presented hierarchy. Action is accessible to us through prime problems and prime problem is a system in which individuals act with respect to its logic, i.e. on uniform level of preference. Since action and preference are looked on in the same perspective preferences are then of a uniform level as well.

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<sup>63</sup> This picture must be taken only as a sketch. The fact that it may indicate cardinality of utility or other non-trivial assumptions is unrelated to the intended point.

<sup>64</sup> "...it is an unquestionable fact that those who are equally acquainted with and equally capable of appreciating and enjoying both do give marked preference to the manner of existence which employs their higher faculties." (Mill 1971, p. 19)



Let's explain it with the help of an example: In the world around us we see people as they are solving problems of certain quite uniform complexity. The problems make sense if people are in the same level of considering possible actions. For instance, if we see a group of carpenters constructing a building we look on them as they would make a decision about which tool to use or how to go on with their work on the project. This perspective supposes that the carpenters are already submerged into the construction work. We don't see them as being occupied by some general problem as increasing the profits of the firm or feeding their children; we do so through a single perspective most likely as simple and imminent as the construction work. If we see workers passing a hammer to each other it is always 'just passing a hammer' – a phenomenon; we don't consider possible general connotations as well as we don't consider that there could be a further differentiation of the phenomenon – multiple ways how to pass a hammer. This perspective works on a single level and if we identify preference with it then forming a hierarchy among such preferences results in hierarchy formed on a single level perspective as in Mill's case. Often it is a relation of 'high' (ethical, esthetic) preference over 'lower' (satisfaction of sensual impulses) because such a relation intuitively known from the everyday discourse. Such a relation is in no way an implication of preference hierarchy presented here, which is of fundamentally different nature.

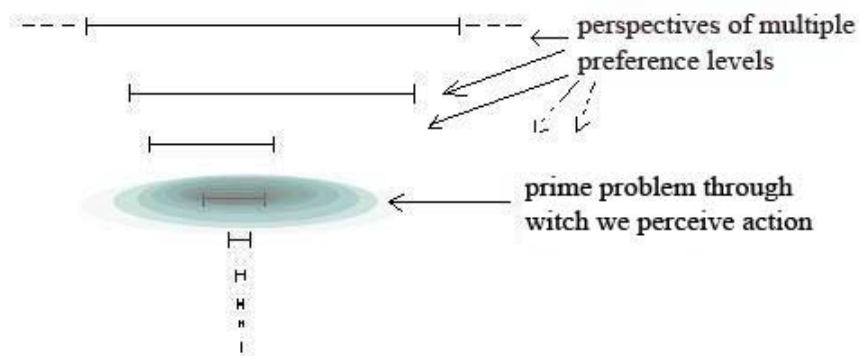
Each level of preferences is not a type of action. It is in fact delimitation of relevant actions and a reduction of such possibilities with respect to a higher level. However, these reductions don't determine the action. Or we can say that the setting of purposes (preferences) doesn't determine its means; it only makes a referential framework.

This exposition also revealed one property of our perception of action. So far we consider action as the resulting state of the world. However, we could see that we don't perceive the state of world as such; we always do so from the perspective of certain scope that is generally determined by the prime problem we ascribe to the acting individual. So that if we see working people it is always a happening with respect to some prime problem (as in the case of construction building) and we don't consider it as a piece of a broader problem as well as we don't consider that our perspective may be differentiated into the smallest details. In the same way as preferences are differentiated with multiple scopes of the perspective action can be

perceived with distinct scopes. A difference is that in the case of action this scope is set for us by the link to the prime problem, whereas we don't have any such link for preferences or even possibility to perceive them as such.

Let's illustrate the issue on a sketch. Prime problem is a system that subsumes people acting with particular perspective<sup>65</sup>. It is therefore as if it would cut the succession of the scopes of perspectives in one point:

**Figure 4 – Preference levels and the perception of action**



## 6.2 The Typology of Behavior/Action

Preference, however, is not what social science is interested in fundamentally. The corner stone is action taking part in prime problems, i.e. not action with respect to individual preferences, but its role in the problems we solve in everyday life. Therefore, we have to draw near what shapes action can take. Such a task is not implied by the concept of preferences, but since preferences are guiding power of action we will see certain influences of the preference levels.

<sup>65</sup> However, the detachment of the prime problem and the problem of action is still valid. The fact that the prime problem may work on a similar scope as preferences of a particular level does not mean that it subsumes the fulfillment of such preferences.

We can see a parallel in Weber's typology of action. It has a function precisely identical; it described how humans act<sup>66</sup>.

Even though we cannot infer action just from the purposes described in the last chapter they will help us to orient among the types of action. The levels of preferences create reference framework for action and the action changes as the framework changes. The basic formative element of the framework is the number of present preference levels. The presentation of the three levels did not lead to conclusion that these levels are present universally. Sometimes the second or the third level may be missing.

Consider the highest level given by the evolution of genes. In some situations it reserves a space for learning and it is then filled in socialization (with particular language for example). However, sometimes it is sufficient or even beneficial to react universally by the way that is imprinted in our instincts. For example we don't have to be thought the need of water we just feel thirsty anytime we lack water.

In summary, we can say that the highest purpose level is divided on the part that is pursued directly and on the part that uses sub-purposes obtained from education. Analogically, the middle level is divided on the part that is provided under the second type of action and on the part under the third part. We may notice that action changes its character based on the highest level it operates under. We may notice that in some situations we behave in the same way as other mammals do; we employ instincts or reflexes. In some situation we only take over the knowledge of the community without employing reason to find a solution and only in some situations we use reason to form unique conclusions. Such a differentiation makes sense because preference levels are differentiated with variability of relevant action and in the environment around us we may see phenomena with differing variability of meanings. For phenomena with great variability of meanings we naturally need subsequent means of interpretation that supplies the lower preference levels.

I will relate to three (ideal) action/behavior types: 1) behavior based on a universal reaction to a stimulus (can be drawn near as instinctive, affective, reflexive, emotional) 2) behavior based on following direct recommendations of societal lore

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<sup>66</sup> Weber's typology is not related to performance in teleological framework hence the adjective 'rational' in the description of two of types refers to a type of behavior and not its effectiveness.

(traditional, institutional, conformist) 3) behavior based on conscious deliberation (rational<sup>67</sup>, cognitive, conscious).

We can see that the typology is not so much different from Weber's (1998). It only disregards value rational action group, which is, by my opinion, a composition of the second and the third type. Such a division assumed that value rational behavior is guided by inner values rather than outer purposes (goals). However, this inner value has to be derived from tradition or culture, which classifies it to the second group. In the case when efforts towards this value are carried out through sub-goals that are pursued rationally it belongs to the third group because endeavor after culturally defined goals is a normal state of rational behavior.

The behavioral types can be very well differentiated by their diversity. We may see it with a look on our history. We see behavior that was present in all the history no matter of place or time. People were and are repeating the same, for us banal, activities: we eat, sleep, we care for children and we are occupied by the same set of feelings: love, hate, pity, etc. We don't have to name them all to know that they are universal and constant. Behavior of this sort is on the edge of consciousness (reflexes, instincts) or it is followed by feelings of happiness that attract our consciousness to it (food, sex).

Then we see the regularities bound to a certain culture. The dynamics of change of behavioral patterns is rather intergenerational which also enables us to see the history as continuum even if we look through the view of centuries. Each culture offers certain recommendations for life and for action in particular situations. Whether we realize it or not, large part of our behavior is just repeating the way things were always done in our culture.

What we don't see clearly by the look to the history is the behavior that has the least amount of regularity: omnipresent expressions of human conduct that solve problems by large specter of unprecedented ways. Its variability is not a sign of independence of the higher preference levels, but it makes it less apparent, because it does not receive direct instructions; it develops unique solutions under the background guidance of preferences.

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<sup>67</sup> Here, the term rational is connected to the employment of reason.

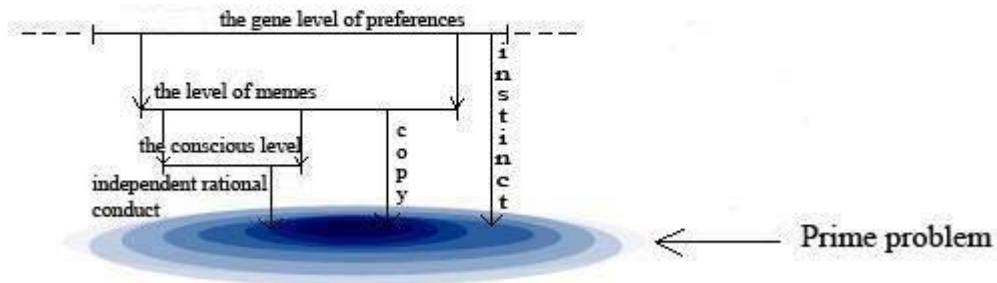
We can well sort out these three possibilities according to behavioral variability. The first group would contain behavior that doesn't change through time or space. The second will be those that may take multiple variants that are fixed with the agreement of a community and change only gradually. And the third will be a free conduct whose outcome can vary extensively.

Sometimes the behavior may look the same, but it may differ in the use of the behavioral type. We may eat on the impulse of hunger, we may eat to comply to societal norms and we may eat based on conscious deliberation that tell us that it is a last chance to eat for the day that must be utilized. However, this fact doesn't change the typical variability of each type. Its possibilities are just not restricted to exclusive cases.

Worth noting is Wilson's (cons) category of epigenetic behavior which is defined by universal presence among cultures. Such a behavior consists of the first behavioral type but also of the behavior of the remaining types that shows uniform variability. It shows the connecting points of the action types that are first detached from the instinctive behavior on the condition that they will supply same actions and the differentiation is only secondary.

Let's again illustrate with a sketch: Behavior can be originated on the highest preference level and take the form of instinctive or affective reactions. It can be copied from others without consciously conceiving the effects. Or it can be committed with the employment of reason.

**Figure 5 – The behavioral types and the preference levels**



### **6.3 Instinctive behavior**

We can say that the first type of behavior is one to one reaction to the state of an environment. One stimulus – one reaction. If there is no interpretation besides the perception of simple stimulus there cannot be multiple reactions. Often, memory can be utilized to change the meaning of the stimuli as in the case of conditioned reflex, but memory is limited by the lifetime of an organism and its environment and therefore can still be considered as rather uniform.

Consider the common example of Pavlov's dogs. They were thought to react by slobbering with starting up the signal that indicated the food delivery. It could be activated without granting any food and the dogs would slobber anyway so that the food motivated activity was committed without the presence of food. However, the trait to the food is short and obvious. The slobbering was clearly motivated by the expected food and it needs not much of a deliberation to realize that. Every conditioned reflex, even though it may redirect the meaning of a stimulus, can be easily traced back to the motivation of an inborn character. The limited variability of the first behavioral type is still apparent.

This type of behavior, in the case it is registered by the consciousness, is closely connected to feelings of happiness. The neutrality (detachedness) with respect to feeling of happiness supplies us with calm environment fitting for undisturbed deliberation. In such situations we feel genuinely active, because our action is consciously willful and intentional. On the contrary, feelings of happiness imply passivity. Happiness moves away critical thinking and focuses the individual to linger with the feelings happiness supplies. However, happiness is not and does not lead to non-action. The passivity is only illusory; it is in fact an activity directed to securing the present state. Conscious deliberation is de facto an endeavor after new interpretation whereas happiness means securing revealed interpretation - a direct way to the highest preference level. The environment subsumes certain situations which instincts reveal as universally beneficial and in such situations our conscious conduct must be overshadowed which is precisely a task of happiness.

In fact, there is always a prepared way to imminent happiness – we just need to do what's the most pleasant at the moment. If somebody would just pursue immediate pleasure he would hear that he behaves like an animal and this assertion would have a portion of truth. By the activity that is pleasant to us we return to the universal needs we share with other animals. We are happy when we eat, drink, have sex, see our children be well etc. and these are the universal activities that belong to this type of action. They are connected to happiness because only happiness has from its essence the power of surrendering our rational consciousness. It is also why we can never rationally decide between feeling of happiness and pursuing of a rational construct. That is always a choice of a character not choice of rational calculation.

The consumer as it is treated in the neoclassical microeconomics is a strange combination of the highest purpose level (stable exogenous preferences) and rational behavior (understood both as effectiveness and behavioral type). It completely disregards the connection between the highest purpose level and affective behavior. However, exactly this type of behavior is very important in the consumer choice and especially in the recent era of massive advertisement and omnipresent attacks on the subconscious side of our mind.

The effectiveness of our behavior is always a function of our abilities but also of the surrounding environment. In the case the environment is heavily rebuilt by the needs of sellers we cannot expect that it won't have an impact on the way people are approaching consumer decisions.

#### 6.4 Communally Determined Behavior

The second type of behavior is basically a take-over of the explicit manners that are offered by society or simply said a way of behavior that does what others do. It brings many advantages. To behave according to tradition means to use up the knowledge of centuries without the need of a conscious check of relevance of this knowledge. Even though the traditions can be also checked rationally it can hardly grasp the full benefits (and costs) it provides. It is because the traditions were created by a long term process that separated the good from the bad just by the test of reality. Even if we would be very optimistic about capabilities of reason the tradition subsumes something that is practically out of its reach.

It also carries certain relation to the society. Consider there are two ways how to solve a problem and that the problem is of complexity that enables its rational solution. A smart individual reveals the better solution, but the rest of the society uses the inferior solution. Even if the individual was right in solving the problem he cannot so easily find out about the effect of deviation from the majority<sup>68</sup>. Even extremely rational individual can get herself in very undesirable situation just by inclination to rational behavior.

This type of behavior is often on the edge of consciousness. It is usually recognized, but it is not fully deliberated; it is not felt by reason. To comply with it go with feelings of positive feelings of certainty<sup>69</sup> and normality.

The same results provide the experiments by Solomon Asch (1955) that in behavior revealed the tendency to adjust in order to comply with the dominant beliefs in society. Asch showed that people sometimes neglect the most blatant facts when they are in clash with the belief of majority. He concluded that there are two reasons for such behavior. First the cognitive reason that reflects that societal lore may carry knowledge that is out of the individual reach so that he may reasonably conform even if it does not correspond to his own knowledge. And second, sometimes it is

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<sup>68</sup> Compare with the theories of labeling (e.g. Becker 1999)

<sup>69</sup> Compare with the need of ontological certainty (Giddens 1984).



beneficial to be a conformist just because it increases the social status of the individual.

### **6.5 Fully Conscious Behavior**

The higher cognitive functions bring the possibility of action that is not derived from explicit recommendations as well as it is not bound by single reaction. It is based on estimation of future that is derived rationally. Only this way of behavior is based on consciously exploiting the chances for benefit the environment provides. Only this type of behavior can really choose from multiple choices. However, it is restricted with special requirements for environmental conditions.

It is designed especially for unprecedented situations and situations with reduced complexity. It is believed that the evolution of reason is connected with elevation of the complexity and fluctuations of societal relationships. It has its logic because the relation of an individual to the inanimate environment and the environment of other animals is quite stable, but the struggle among equal kind consist of many changing situations, tricks and plots and all with high demands on communication. Society is a dynamic environment that needs appropriate behavioral means.

Nevertheless, even rational kind of behavior is still dependent on its purposes to which is aimed. Sometimes the purpose that is pursued rationally is so particular that it doesn't make much sense to analyze it. In such situations it is much more desirable to find out the relation to the higher purposes. It mustn't be forgotten that horizontal effectiveness does not imply the vertical effectiveness.

Behavior is also often rationalized retroactively. It is actually decided through plain conformity or through regression to instincts but in order to keep unity of attitudes and values it is subsequently rationalized<sup>70</sup>.

Conscious rational behavior can be compared to the machines people are building in order to use them in the natural world. The difference between the machines and the world in which they operate is similar to the relation of rational behavior and the world it operates on. The machines are after all products of our rational conduct.

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<sup>70</sup> Compare again with the theory of cognitive dissonance (Aronson 1969).

The machines are typical with certain “shapeness”; they are products of human shaping of the material. They are not incorporated into the world as its natural part, but they carry certain human spoor. Whereas natural world is typical with natural resemblance our products are limited on shapes that can never reach the ‘multifacetedness’ of nature<sup>71</sup>.

Because of this characteristic machines work the best in an environment that is shaped (simplified) in the same way as they are, whereas their ability decreases significantly when they face natural environment<sup>72</sup>. Hence machines are combined with other machines and placed into the factory. On the other hand, all trials to build the artificial human – robot have ended ignominiously.

In the fifties when first computers were assembled people thought that it is only a short way to the construction of robots that would resemble human agency; in the same time nobody could really imagine that the computing power of computers could be anywhere near recent numbers. Even though their forecast about computer abilities missed many digits the state of recent robots is not even close to the former idea. It is because of the original detachment of natural and human-made. Even the best human construct whether it is a model or a machine is unable to be really suited to the environment. The machines are perfect only with respect to other machines, in the same way our rational conduct is effective only with respect to simplified environment.

Because of its time demands this type of behavior must be considered as a scarce resource. For its application in particular moment it is needed to utilize a period of time that therefore cannot be utilized to the deliberation about present situation. To think about one problem implies to solve other problems with less demanding first or second type.

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<sup>71</sup> I am obliged to Zdeněk Neubauer for exposition of this phenomenon.

<sup>72</sup> Simon (1959) describes human problem solving in the similar ways. People are likely to find solution in simple problems quite well, but this ability diminishes significantly with disruption of the simplicity.

## 6.6 The Complementarity of the Behavioral Types

None of the three types can be considered as superior to the others. Human (vertical) rationality is based on utilization of all three types. We can say that the key is in their appropriate distribution.

In some cases it is advantageous to use the first type. When the meaning of the situation is the same as ever was, it is likely that our instincts that evolve in such an environment will guide us well.

If the speed of the reaction is an important factor the first type is often used. It is the fastest because it is oriented only on subjective needs and not on any objective phenomena as outer purposes or societal consensus.

The second type is advantageous in the intra-culturally stable situations, in the situations of considerable societal regulations and also in the situations of great complexity (especially complexity connected of the processes of the society).

The rational behavior is handicapped by greater time demand, because it is oriented on objective relations of prime problems that must be revealed or computed. It is, however, priceless in the situations that are unprecedented, new, or without explicit guide from the side of society. Unfortunately, it is able to operate independently only in transparent and simple problems.

These three behavioral types are ideal types in Weber's sense. In reality, the actual behavior generally takes from more than a single type.

For example, in the situation of an imminent danger, let's say sudden fluttering noise, is reacted affectively – our body gets to the emergency position with lowered centre of gravity and the eyes would blink to protect the eyes. However, after a moment when it is likely that enough time is available our reason starts to investigate possible dangers that supply us with results to follow. In the same time we probably start to fear which works as well as happiness as a limiting factor for conscious conduct. It focuses the consciousness on very particular array of possibilities that reason is made to investigate. In the words of presented framework, the instinctive and rational behavioral type join together in a particular compromise. Also, with the admixture of the instinctive element the highest level of purposes is suddenly much more apparent. We see clear protective behavior that is in its basic characteristics similar to people in general or even to our animal neighbors.

Important model situations are those of great complexity but without the help in the form of relation to society's lore. We struggle with this kind of situations often. Complexity causes our reason to fumble, but there is no other source that would help. The confusing element here is the presentation of the problem as a task for pure thought that forces us to not acknowledge the help from dubious restricting sources and hide natural craving of reason for simplification of its position.

All philosophical questions are clear example of such situations. Philosophy is said to be a discipline of pure reason and many times it was tried to base it on pure reason explicitly. However, its position with genuinely the greatest of complexities causes all these trial to fail (or more precisely to not keep up with the intention). If we look on the history of philosophy it is not a history of surprising results that would turn around all the previous but a process of adding the pieces of knowledge to the works of preceding scholars and developing systems that would correspond to the mood of the age. Even the most rationalistic conceptions were in fact dependent on the contributions of previous philosophers and on overall needs of the epoch, i.e. on sources of the second behavioral type. It is because even the most virtuous reason can do nothing more than let something to reduce the complexity of the problem.

## **6.7 The Behavioral Types and the Method of Economics**

The behavioral type that takes place in a considered problem is a determinant of the apparatus needed for the analysis of the problem. The way we behave has its own logic that must be conceived by the science and implemented in the way the scientists think about the problem. Since all behavioral types are most typically present in behavior it implies the need of conceiving all three of them.

The fallacy of only single (rationalistic) perspective can be shown on following example. In a BBC documentary an experiment was conducted. They prepared a glass terrarium with several not-poisonous snakes in it and placed some banknotes on the bottom. Subsequently, they started to offer to people on the street the option of getting these banknotes. The addressed people were aware of the fact that no threat is involved, however, an overwhelming majority refused to grab the banknotes. The

power of instincts that prevents us from being harmed by lethal snake bite was greater than the rational deliberation<sup>73</sup> that would suggest grabbing the money.

This example shows a situation where the computation of revenue from having or not having the banknotes makes no sense in the study of the human behavior. It is much more beneficial to learn about the instincts.

It also shows the peculiarity of judging behavior as rational in terms of effectiveness. If we take into account that no threat was involved and the value of banknotes the only rational thing to do is to take the money hence we would have to conclude that most of the people in the experiment were irrational. On the other hand, if we take into account also the horror an individual would have to undergo by taking the banknotes it may well be that it is not worth the try; i.e. it is rational.

It seems that in distinguishing the rational behavior from the irrational it is much more important from which perspective we look<sup>74</sup> than actual scrutiny of human action. Milton Friedman claims that the actual way of the behavior does not matter because we can always take it as ‘as if’ rational, but he completely omits the importance of finding the appropriate problem that we assign to the actor. Naturally, the rationality (effectiveness) will vary according to the chosen problem. Even though that there might always be a problem which could be conceived with the economic models of rational actors it is not easy to locate it, because it may change through time and space. There is for sure no easy way we can find it logically or with some universal a priori<sup>75</sup>. Natural remedy to such a difficulty is to ask how individual acts and start from his perspective. Unfortunately, the problem is that economic theory not just refused this method, but also didn’t put any efforts to specify the problems it solves.

Let’s illustrate it on another example. Consider we would like to predict the behavior of an eye in the case a fly flies in its vicinity. If we set out from the logic of the behavior we would first conclude that such a behavior is dominantly instinctive hence the eye reacts unconsciously on the simple stimuli. We would then predict that if the fly is in certain sensual vicinity the eye would blink.

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<sup>73</sup> As this is a simple problem, we could see that rational behavioral type and rational=effective behavior collide here.

<sup>74</sup> I.e. which problem is the actor solving in our perspective.

<sup>75</sup> We got to genuinely identical result as in the 4<sup>th</sup> chapter where we discussed the possible concepts of the problem of action. We could see that it may be conceived only with the means of teleology which does not lead to any causality that could be utilized (hence we need to add a conception of behavior) or it can be conceived as *complete problem of action* with perfect causality, but also with the need of perfectly conceiving the environment which is only another expression for finding appropriate problem to the actor as it described on the present page.

If we, on the contrary, start from the assumption that the behavior is ('as if') rational we face the difficulty of setting the reference framework for such rationality. If an economist would not be aware of this difficulty he probably considers the problem as a simple clearly defined problem that is then presented to reason: What behavior is rational? The behavior that leads to the least exhaustion of resources; i.e. only a blink that prevents a collision with the eye. And the result would be completely wrong description of actual behavior – people blink only if their eyes would otherwise be damaged. This simplest case may look trivial, but this kind of approach is very common in economic reasoning<sup>76</sup>. Besides, even if we would be aware of the necessity of appropriate problem definition we would end up with fundamental problems. How to define the problem so that the behavior will solve it rationally? Should we include incomplete information the actor has about the likelihood of collision? Should we incorporate time demands that prevent precise calculation? We may proceed in many ways, but it inevitably leads us either to the mistakes in problem definition or to the scrutiny of the actor and its behavioral means.

The economic reasoning that is not aware of its precarious situation makes certain typical mistakes. Very often the rational behavior is connected with problems of higher purposes. Sure, we can always define the problem so that the actual behavior solves it perfectly, but the theory usually has the problems predefined. We cannot base the theory on perfect solving of absolutely arbitrary problems.

Economists tend to be mistaken when they reverse the procedure – first they suppose that people behave rationally and then they set the problem people are solving. For example in the discussion of transformation of post communist countries the common argument for market without appropriate laws regulation was that it is in the interest of economic subjects to help to build an environment of trustfulness because in such a case they can conduct their activities with the least costs. This argument supposes that people think in such a 'high' long term perspective, but such a perspective is in fact extremely difficult to ascertain rationally and people dedicate their reasons to short term local problems. Such an argument completely misses the point by setting the purposes of economical subjects arbitrary. If we consider

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<sup>76</sup> Unfortunately, such an approach is seriously applied on various phenomena and sometimes it overshadows even the most blatant empirical evidence or simple empathy. "I don't know of any parents that don't care about the education of their children." (Václav Klaus, 17.2.2008, in *Partie*, TV Prima, my translation)

economic subjects are in imminent prisoner's dilemma naturally we end up with very different result.

Analogical situation is in the economic motivation of restaurants and shops in general. I often hear that it is in their greatest interest to treat customers well because satisfied customer will come back. It is the same mistake; even if we suppose effectiveness of entrepreneur's decision we don't know what purposes he is seeking.

Economics is the only social science that satisfies the criteria of science formulated by Kant – it uses the means of mathematics. However, Mathematization is possible only in the case of generalizing abstraction that wipes away the feeling for the actual character of the problem we solve. In other words, it is a transformation of quality into quantity. Economic phenomena look as if they would have special prerequisites for quantitative analysis because they subsume several quantifiable factors as prizes, money, costs, revenues, or good quantity. However, quantitative scrutiny, in order to be justified, does not demand only partial quantitative character of the phenomena, but exclusively quantitative character. Even if it is possible to join countable elements into a closed system of mutual dependence this system is not a model of the prime problem of any economic phenomena. To build a model means to choose the essential parts of reality and isolate them, however, an economist building a model is not in the position of choosing anything else than only those parts that are easily quantifiable and give them meaning only in terms of other quantifiable elements. When in the real world the economic quantities are primarily qualities, whose quantifiability is only a means for easier dealings, in economic model the quality is indicated only in quantity of another factor.

The resulting model supplies us with distorted picture of the problem people solve because problems where only quantities are represented is precisely those that if it would be present in the everyday reality would be solved in terms of purely rational means. The economics models are therefore building picture of the world where everything is easily computed and easily caught by rational conduct. However, most of the problems that people face in everyday life are hardly of that sort. Even though prizes and money in general are of great help in reducing the complexity in the case the problem doesn't not include only quantifiable elements the meaning of money and prizes loses its simplicity. We then have two spheres of meaning for all of the terms present in economic phenomena. First, the real meaning and second, the meaning

present in economic models that is translated into quantities. Unfortunately, it is very difficult to keep track of the meanings. It is almost impossible to be sure when we relate this or that meaning. Even economist themselves are not conscious of this difference. Often, they just fall into a illusion that the world of their method is the actual world.

The problem is then in such a situation economic models cease to be only means but become also forming factor of the general perspective of economists. Judging by the voice of economists in the public discourse it seems that the logic of economic thought is only of ceaseless boosting of GDP whereas the quality of such process is disregarded. It is mistakenly supposed that such a quality is something metaeconomic. But the content of the science is set by the prime problems it is assigned to solve, not by the method it itself chosen for such task. Economics is obliged to look for the qualities in the economic problems.

## **6.8 Suggested progress of the analysis of the behavioral types**

On the condition we recognize the need of an analysis that probes actual behavior we face the question how to go on with the analysis. There is, certainly, more than one possible approach and various economic theories, whether explicitly or not, already conceived the character of human behavior and incorporated it in their framework. It is probably more typical to base such an approach on empirical scrutiny (e.g. behavioral economics); however, the approach considered here tries to touch the field conceptually and set a framework that could assist for general orientation.

In the scrutiny of economic phenomena the initial question is which behavioral type is used in particular situation. We have to start in a scheme that would subsume all three types and possible shifts among them.

The problem is that any particular situation of the social life (prime problem) is solved by the individual actors only conditionally. They may not be active in a particular problem, they may dedicate only an inferior attention to it and their participation may change over time. It would be hard to incorporate all these factors because of excessive complexity and because we are unlikely to ascertain the actor's

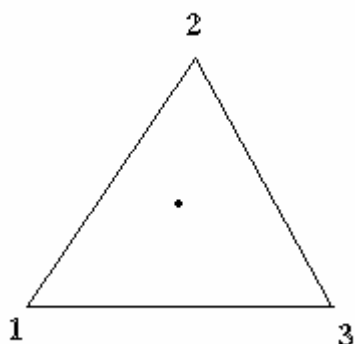


position towards the problem which would lead to the determination of his participation.

With respect to these complications it is better to relate action to a broader section of life (such as working behavior or consumption behavior) that must be faced inevitably. These sections subsume many prime problems that could be changed for different ones. For example, if we'd take into account only a supermarket visit we could not be sure that it is a problem everybody takes part in or if there are not conditions that lead to substitution for another type of store, but when we relate to consumption behavior as a whole we can be sure about universal relevance.

For each such section we can form a triangle with each vertex signifying one action type. The space of the triangle is a sum of all combinations of the three types so that a point inside the triangle signifies a particular combination valid for certain situation.

**Figure 6 – A schema of the behavioral type that is a composite of the three ideal types**



I will suppose that in each section there is certain behavioral ‘gravitation’ point that would signify the center of individual behavioral type combinations in the society. This does not mean that individual behavior cannot be different from this point, but for some reasons it is likely that there would be some degree of social coherence in this respect. First, it is likely that a society would provide a uniform environment that would cause similar behavioral response to be beneficial. And second, we may regard the choice of the behavior as a sort of institution of higher order, because it is likely that there would be a propensity to preserve conformity even in the behavioral type. If

the choice of the action type would tend to be copied from other people this would be a reason for uniformity.

The distinctive theme of institutional economics, sociology or cultural anthropology is the evolution of institution, but it may be a good idea to use the apparatus of institutional change on a more fundamental level, i.e. not the change of particular institutions, but the change of used behavioral type.

Such a scrutiny has certain tradition in social sciences. We may point out Weber's or Sombart's works on the origin of capitalism that was typical by the process of rationalization; i.e. switch from the traditional to the rational type.

I will consider the process of change in one standalone sector and apply two models of institutional change and then consider the case of interdependency of two sectors.

## **6.9 Two Models of the Change of the Behavioral Regularity**

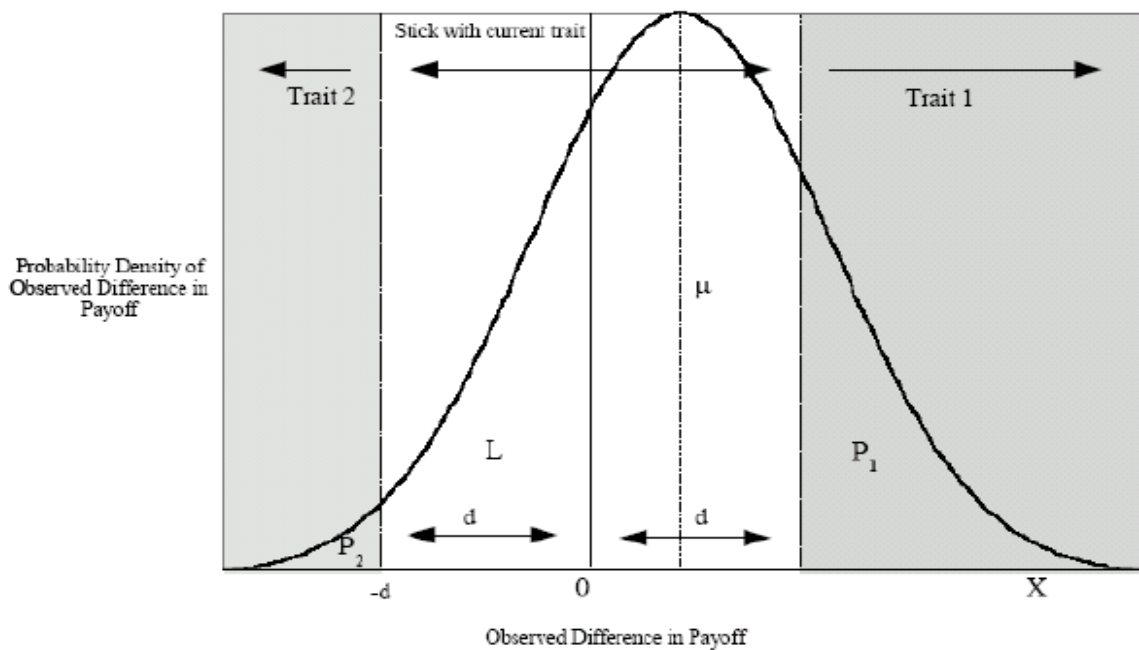
I will present two models of institutional change from Henrich (2001). However, the difference is in their application. Whereas the original approach refers to two competing institutions or behavioral regularities the presented approach considers institutions of "higher order" or regularity of behavioral type. The differing factor is also that two competing institutions are of incommensurable quality. Since this framework considers a behavioral regularity that is compound from all three types the old and the new regularity differs in relative representation of each type that can be conceived as notional quantity. We will suppose that the new trait is oriented to one of the vertexes so that we have two options of more and less of one of the behavioral type and the degree of the difference can be changed.

I will consider two options how to conceive the behavioral choice. The first is derived from the evaluation of the environmental condition based on accessible information. And the second is based on the conception of different replicatory propensities of the alternatives.

The first option supposes that the environment is the source of information that lead to the choice of the appropriate behavioral type. The information is distributed

normally and during each period each individual receives a random draw from this distribution. One of the tails of the gauss curve will signify the information leading to choosing the original trait (compound of behavioral types) and the other to the alternative (which is different in closeness to one of the vertex). The middle area would then signify the information that would be insufficient for the decision hence it will lead to keeping the previously chosen trait. The mean value of the distribution will determine the relative representation of mentioned three possibilities. If  $\mu > 0$  the first trait is more beneficial than the second and we should anticipate a process that would lead to the gradual adoption of the first trait.

**Figure 7 – A schema of the distribution of information**



Source: Baxa (2006)

The individual adopts the second trait if  $X < -d$ , stays at his previous choice if  $-d < X < d$  and adopts trait 1 if  $X > d$ ; where  $X$  signifies the obtained information in one period and  $d$  the placement of the traits. If we suppose that  $q$  is the frequency of the individuals with trait 1,  $1-q$  the frequency of the individuals with trait 2,  $q'$  is the value of  $q$  in the new period,  $P_1$  (or  $P_2$ ) is the probability of learning the new trait and that at the beginning of the process everybody is at trait 2 ( $q = 0$ ) the dynamics of the change will proceed as follows:

$$q' = q + (1 - q)P_1 - qP_2$$

If  $L = 1 - P_1 - P_2$  the previous equation simplifies to:

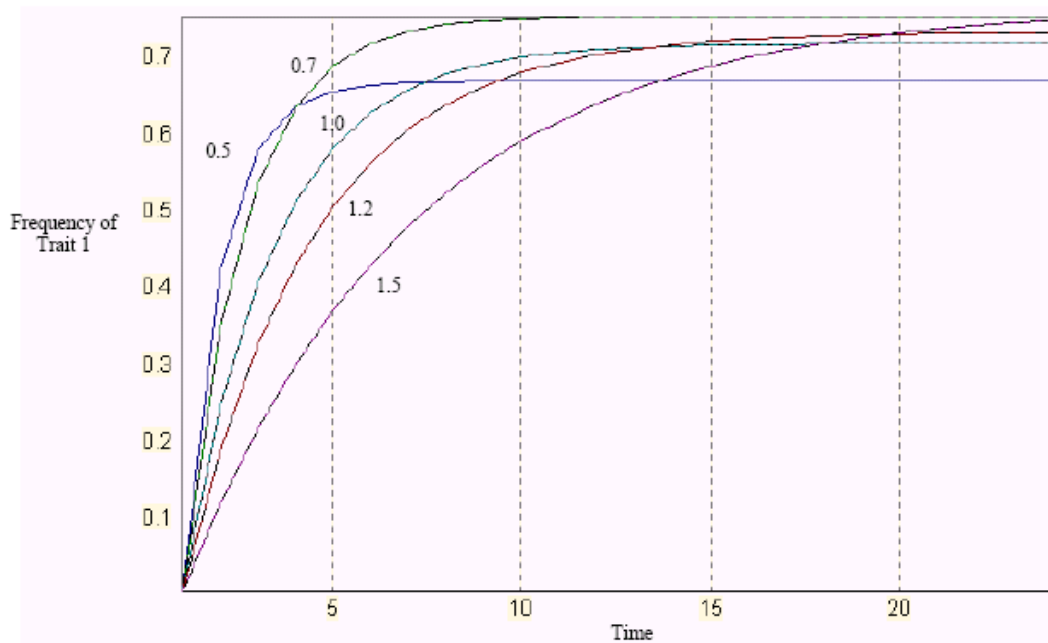
$$q' = P_1 - Lq$$

and by rewriting we obtain:

$$\Delta q = q' - q = P_1 - q(1 - L)$$

This process will generate a fast speed of adoption in the beginning and a slower speed in later phase (so-called R curve) as we can see on the picture for various values of  $d$ :

**Figure 8 – The time paths according to the values of  $d$  – R curve**



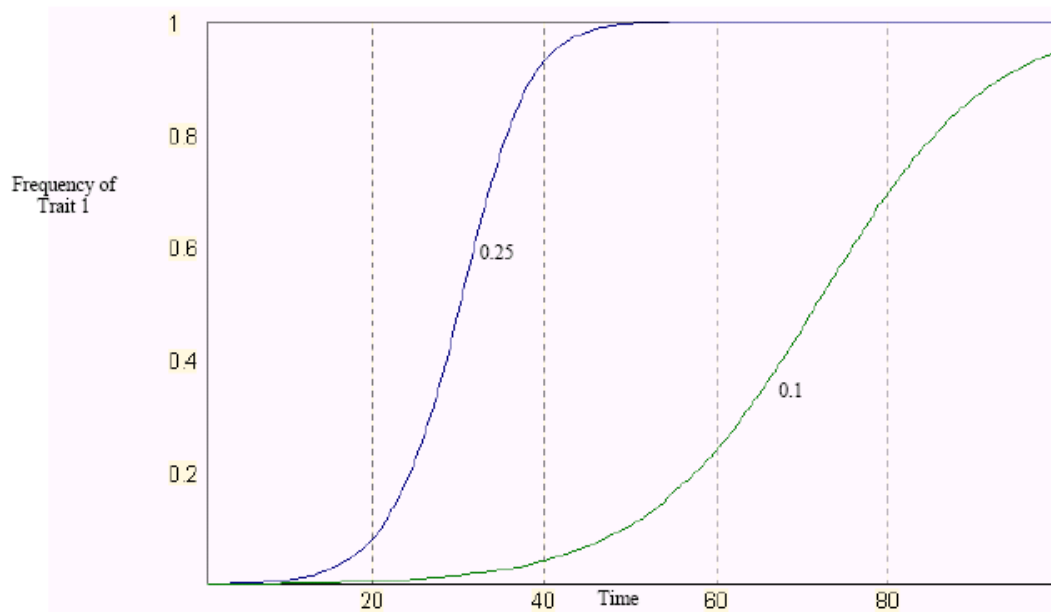
Source (Baxa 2006)

The alternative approach conceives the different replicatory propensities ( $r_1$  and  $r_2$ ) directly. If  $B = (r_1 - r_2)$  ranges from -1 to 1 the process is described by the following equation:

$$\Delta q = q' - q = (1 - q)q(r_1 - r_2) = (1 - q)qB$$

and it forms a S-shaped curve in time:

**Figure 9 – The time paths according to the values of  $d$  – S curve**



Source Baxa (2006)

### **6.10 An Outline of the Approach towards the Change of Behavioral Regularity in Two Interdependent Sectors**

In the case of change of behavioral regularity in only a single sector we are unable to ascertain the quality of the change, but if it would be possible to track the changes from the internal influences among sectors we would be able to judge the effect according to its external impacts. If the change in one sector would be a trade off for a

change in another we can compare the variants according to the accompanying factors and therefore judge rationality of such a change.

I would like to present an idea about how such phenomenon could occur. Consider two sectors: the consumption sector and the productive sector. In economics, the consumption curve is usually considered as proportional to income whereas in the long run it coincides income. However, such a curve provides only a rough picture. With a closer look we cannot expect such straightforward relation. Notably, the character and the determinants of consumption change in time. The emergence of capitalism is one of such milestones in consumption behavior. For contemporary people the behavior of workers in pre-capitalist era, as it is described by Max Weber (1961, 1998) might seem a bit peculiar. According to Weber, it was typical to work only in order to obtain certain fixed amount of money. When the employer wanted to induce higher working efforts by an increase in wages the workers reacted by a decrease of the supplied labor in order to obtain the same amount of money as before. It is then not a surprise that wages was kept very low even though it meant only a moderate working performance. It is clear that both consumption and production were under major influence of the second behavioral type. The local lore determined quite explicitly the goods that were needed for appropriate life so that the workers had no motivation for higher gains. For this case, the consumption curve in such a case would have to look differently. It would have to be restricted up to some limit point of income behind which the workers would not be willing to provide work, because they would not be interested in further consumption.

The onset of capitalism is typical with the shift to rationally organized production. This shift had multiple causes. It was mainly complex technical implements that broaden the possibilities of an entrepreneur, organizational improvement such as modern accounting that enabled rational calculation, the introduction of liberal law framework, but also, the last but not the least, the change in the peoples mind. Max Weber in his famous *Spirit of Capitalism* showed that all changes connected with the rise capitalism could be found in different places or different times as well. Only certain peculiar behavioral pattern that produced will to work for the work itself (work was not means but itself an end – the calling) combined with the ideal of asceticism was unique and, according to Weber, it was a decisive factor in the emergence of capitalism.

The behavioral pattern then changed towards rational type in the case of production, but remained traditional in consumption. We could even suppose further movement towards the traditional type because of the strong emphasis on asceticism. The consumption curve would therefore, from a certain point, be flat. The income could rise, but it would not be followed by increases of consumption.

The development since was characteristic by continual escalation of productivity due to new and new technological inventions and massive innovations. The effect on the increases of productivity is the increases of income while supplying the same amount of labor. The model individual of the rise of capitalism that was endowed with the protestant spirit had to face situation that eroded his commitment to ascetic life. The second behavioral type that underlines deep commitment in the societal and religious background is designed to stable environments that would keep clear interpretation of everyday life. The original interpretation leap inhered in commitment to save or invest the money rather than spend. It was, however, a division of concrete amount of income. But, after the investment got back in the form of additional resources and then again and again it was more and more difficult to interpret the situation of the individual in the same way – i.e. spend only the necessary minimum and save/invest the rest. The temptation of immediate consumption was becoming too great and the behavioral pattern started to incline towards the other two behavioral types (the consumption based on imminent joy (1<sup>st</sup> behavioral type) is more important in this respect because the necessity of conscious conception limits the amount of possible spending). The erosion of ascetic ideals was accompanied by analogical process in the case of working discipline. The commitment to working became less attractive in the case of abundant resources<sup>77</sup>.

We can see two opposing forces. One that diminished working load and hence made the production more costly and the second that increased consumption that increased sales and therefore income. These two forces should equalize in some point – the prizes get so high that the workers end to decrease the labor supply.

However, the erosion of ascetic ideal that moved the behavioral regularity from the second type as well as certain technological inventions (especially massmedia) prepared the situation for phenomenon I wanted to point at. The production sector got into the position where it could grow only by technological progress, but also by

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<sup>77</sup> The change of the character of capitalism is well described in Bell (1999). About the process of change from asceticism to endeavor after immediate joy is also described in Bauman (1998).

directly influencing the consumption behavior. The inclination towards instinctive consumption behavior prepared the field for massive involvement of advertisement that would aim at the instincts. Whereas the second type has the consumption “predefined” by the society and the third type is limited by the need of reasonable justifiability, the first type is one to one (causal) reaction on firmly set stimulus. For the productive sector is therefore possibly to provoke it purposefully.

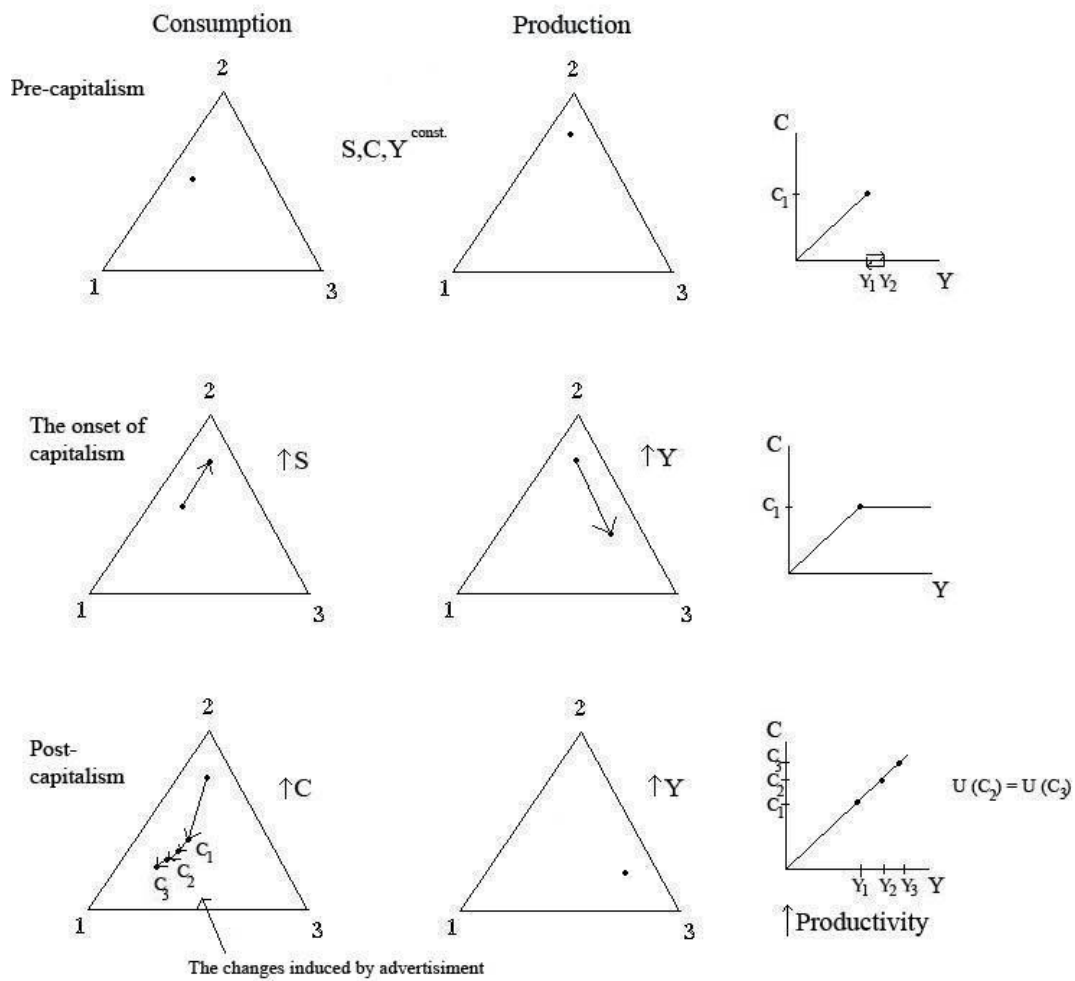
Advertisement is an effect different from all of the previously mentioned. Whereas they were exogenous, advertisement is genuinely an inside influence. It is a means how the productive sector induce higher yields by increasing the consumption. However, the very same people consume and produce so that it is certain unprompted contract of higher consumption and higher income. But because the income switch is induced only by consumption increase caused by advertisement it has a corresponding value as the former income. If the advertisement would not “create” the wants (Galbraith 1958) the additional money would not be needed. The situation before and after the inducement are identical in influence on the actors<sup>78</sup>. If we would want to decide between them we would have to decide according to other effects that accompany these two states. Then there is a natural bridge to many recent pressing issues such as pandemic of obesity, dissipating of resources or the danger of global warming that would indicate the excessive costs of the kindled demand.

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<sup>78</sup> On the condition of disregarding the multiplicative effect the increases of consumption might set off.



**Figure 10 – A sketch of the changing character of consumption**



Even though I am aware of the dubious position of mere sketch it shows the potential of the framework. It combines two characteristics whose fusion I missed in the economic discourse: the concentration to the individual and his wants that is present in the neoclassic and Austrian thought, but in Keynesian economics it is overshadowed by emphasis on production and uncertainty with respect to the ability to fulfill the individual wants that is present in Keynesianism, but not taken into account by neoclassics and Austrians.

## Chapter 7 – Conclusion

Let's once more state the most definition of economics by Lionel Robbins:

“Economics is the science which studies human behavior as a relationship between ends and scarce means which have alternative uses.” (Robbins 1945, p. 16)

He thereby put away any definition that may rest only on material production and centered the attention to human and his ends in general. The relationship to the satisfaction of the individual (in the broadest sense of the word) is therefore not just one issue in economic theories, but a defining principle with which the science stands and falls.

Often, the approach based on such definition is disputed along with the intention to define the fundamental criteria of social science objectively, usually on the basis of values declared by the society that are to be compulsory for every individual. This was not an intention of this text. On the contrary, I wanted to cast doubt upon the economics' compliance with its own subjectivist definition.

I argued that it is impossible to satisfy the subjectivist intention and conceptually equate action and preferences in the same time. The fact that (neoclassical and Austrian) economics supposes that action and preferences are bound with certain a priori valid connection is a major and far-reaching flaw that distinctively distorts the connection with human wants.

I touched this issue from multiple perspectives: On the basis of methodological frameworks used for the perception of human action – causality and teleology; on the basis of the use of the notion of ‘rationality’ and ‘preference’, with respect to the primary origins of Austrian economics, and with respect to the meaning of individualism.

I tried to create a conceptual scheme of preference hierarchy that would conceive human preferences and rationality without neglecting any of its content. I proposed distinction of *vertical* and *horizontal* rationality that should reflect the fact that every action is aimed at fulfilling of multiple preferences that differ with the breadth of the

scope. Since action and preferences are equated in neoclassical and Austrian economics conceive only those preferences that satisfy this criterion. Their conception of rationality is therefore only *horizontal* because it refers only to the last pieces of preference hierarchy that are usually consistent with action.

On the contrary, *vertical rationality* is related to all of the levels of preferences. To be vertically rational means not just to be successful in the local tasks an individual is working on, but also the task itself must be beneficial with respect to its role in fulfilling a task of a greater importance and so on. Concisely said, our daily conduct and our daily economic activity have to have some sense. Not with respect to any objective principal, but with respect to our own purely subjective well-being. This sense is simply not guaranteed by the fact that we act. Action is only an endeavor after well-being and not directly its reaching

Robbins proposed his definition to replace a delimitation that would consider only material “bottleneck” factors, but economics’ indistinguishing between action and preferences resulted in precisely the same effect, because it disregarded the quality of action. Reaching any end is treated the same without the question about its sense for the individual.

The last chapters were dedicated to the outline of the concept that should fill the *vertical* preference framework with content and describe possible means of behavior with respect to the affiliate preference levels. In the analysis I categorically distinguish methodological framework that is build on logical ground, but have no explaining power and its fulfillment that is able to explain but loses the claim on logical validity.

The statement of Václav Bělohradský to which I referred in the introduction that says that “characteristic of our age is that economic growth is nonsensical, it is impossible to justify it with reason.” is a claim that does not make sense in the traditional economic thought. In this text I did not wanted argue for its truth, but for its integration into phenomena economists can recognize.

It was not an intention of this text to prove that any economic methodology is fallacious, but to reform its impact of the routines of economic thought that is formed

by a path-dependency process, which reiterates certain typical beliefs and mental patterns. Rorty (1996) claimed that everybody has a set of beliefs whose contingency he more or less ignores and called such a set *final vocabulary*. The final vocabulary of a scientist naturally determines how scientists describe the world. It was pretentious intention of this text to infirm the final vocabulary of economists.

## References:

- ALBERT, Hans. *Treatise on Critical Reason*. Princeton: Princeton University Press. 1985.
- ALTER, Max. *Carl Menger and the Origins of Austrian Economics*. Boulder: Westview Press. 1990.
- ARONSON, E. The theory of cognitive dissonance: A current perspective. In *Advances in Experimental Social Psychology*. L. Berkowitz (ed.). Volume 4:1-34. New York: Academic Press. 1969.
- ARROW, K. J. Rational Choice Functions and Orderings. *Economica* 26, 1959: 121-127.
- ASCH, S. E. Opinions and social pressure. *Scientific American* 193, 1955: 31-35.
- BARROW, J. D., TIPLER, F.D. *The Anthropic Cosmological Principle*, Oxford University Press. 1986.
- BAUMANN, Z. *Work, consumerism and the new poor*. Philadelphia: Open University Press. 1998.
- BAXA, J. *Chování v institucionální změně*. Diplomová práce. IES FSV UK. 2006.
- BECKER, Howard. *Outsiders : studies in the sociology of deviance*. New York: Free Press. 1991.
- BECKER, Gary S. *The Economic Way of Looking at Life*. Nobel prize lecture. 1992.
- BECKER, Gary S. *Teorie preferencí*. Praha: Grada Publishing. 1997.
- BELL, Daniel. *Kulturní rozpory kapitalismu*. Praha: SLON. 1999.
- BĚLOHRADSKÝ, Václav. *Společnost nevolnosti*. Praha: SLON. 2007.
- BERGER, Peter, LUCKMANN, Thomas. *Sociální konstrukce reality*. Brno: CDK. 1999.
- BLACKMORE, Susan. *Teorie memů: kultura a její evoluce*. Praha: Portál. 2001
- BLAUGH, M. *The Methodology of Economics*. Cambridge: Cambridge University Press. 1980.
- BRENNAN, T. J. A Methodological Assesment of Multiple Utility Frameworks. *Economics and Philosophy* 5, October 1989: 189-208.
- BROCKMAN, J. *Třetí kultura : za hranice vědecké revoluce*. Praha: Academia. 2008.

- CHRISTAINSEN, Gregory, B. Methodological individualism. In *The Elgar Companion to Austrian economics*. Boettke, P. ed. Bodmin: Edward Elgar. 1994.
- CONLISK, John. Why bounded rationality? *Journal of Economic Literature* 34: 669–700. 1996.
- DAY, R.H., PINGLE, M.A. Economizing Economizing. In *Handbook of Behavioral Economics*. Frantz, R. Singh, H., Gerber, J. (eds.). Greenwich, Conn./ London: JAI Press, Inc.: 509-522. 1991.
- DAWKINS, Richard. *The Selfish Gene*. Oxford: Oxford University Press. 1976.
- DENIS, Andy. Two rhetorical strategies of laissez-faire. *Journal of Economic Methodology* 11:3, 2004: 341–357.
- DENNETT, D. *Darwin's Dangerous Idea: Evolution and the Meanings of Life*. New York: New Touchstone. 1996.
- DOW, S.C. *The Methodology of Macroeconomic Thought: A Conceptual Analysis of Schools of Thought in Economics*. Cheltenham: Edward Elgar. 1996.
- ELSTER, Jon. *Ulysses and the Sirens*. Cambridge: Cambridge University Press. 1979.
- ELSTER, Jon. The crisis in economic theory. *London Review of Books* [4 (9):5-7]. 1983.
- ENGLIŠ, Karel. *Teleologie jako forma vědeckého poznání*. Praha: F. Topic. 1930.
- ENGLIŠ, Karel. *Malá logika*. Praha: Melantrich, 1947.
- EVANS, J. St. B. T., OVER, D. E. *Rationality and Reasoning*. Hove, UK: Psychology Press. 1996.
- ETZIONI, A. The Case of a Multiple-Utility Conception. *Economics and Philosophy* 2, October 1986: 159-83.
- FEYERABEND, Paul. *Against Method: Outline of an Anarchistic Theory of Knowledge*. 3<sup>rd</sup> edition. London, New York: Verso. 2002.
- FOLEY, Duncan K. Introduction, In *Barriers and Bounds to Rationality*. Albin, Peter S., Foley, Duncan K. (ed.). Princeton, NJ: Princeton University Press. 1998: 3–72.
- FRIEDMAN, Milton. The methodology of positive economics. in *Essays in Positive Economics*. Chicago: University of Chicago Press.: 3–43. 1953
- GALBRAITH, J. K. *The Affluent Society*. Boston, MA [US]: Houghton Mifflin. 1958.

- GIDDENS, A. *The Constitution of Society: Outline of the Theory of Structuration*. Berkeley: Univ. of California. 1984.
- GIDDENS, A. *Sociologie*. Praha: Argo. 1999.
- HAHN, F.H. *On the Notion of Equilibrium in Economics: An Inaugural lecture*. Cambridge: Cambridge University Press. 1973.
- HAYEK, F. A. Economics and Knowledge. *Economica* 4, 1937: 33-54.
- HAYEK, F. A. The Use of Knowledge in Society. *The American Economic Review* 35, September 1945: 519-530.
- HAYEK, F. A. Individualism True or False. In: *The Essence of Hayek*. Nishiyama-Leube, pp.131-159, Stanford: Hoover Institute Press. 1984.
- HAYEK, F. A. *Studies in Philosophy, Politics and Sociology*. London, GB: Routledge and Kegan Paul. 1967.
- HEIDEGGER, Martin. *Bytí a čas*. Praha: Oikomenh. 2002.
- HENRICH, Joseph. Cultural Transmission and the Diffusion of Innovations: Adoption dynamics indicate that biased cultural transmission is the predominate force in behavioral change. *American Anthropologist*, vol. 103, 4, 2001: 992-1013.
- HICKS, J. R., ALLEN, R. G. D. A Reconsideration of the Theory of Value. *Economica*, N.S. 1, 1934: 52-76, 196-219.
- HOGARTH, Robin M., REDER Melvin W., Introduction: perspectives from economics and psychology. In *Rational Choice – The Contrast Between Economics and Psychology*. Hogarth, R.M., Reder, M. W. (eds). Chicago and London: University of Chicago Press. 1986: 1–23.
- HORWITZ, Steven. Subjectivism. In *The Elgar Companion to Austrian economics*. Boettke, P. ed. Bodmin: Edward Elgar. 1994.
- HOTELLING, H. Demand Functions and Limited Budgets. *Econometrica* 3, 1935: 66-78.
- HUME, D. *Zkoumání lidského rozumu*. Praha : Svoboda. 1972.
- KAHNEMAN, D., TVERSKY, A., Availability: A heuristic for judging frequency and probability. *Cognitive Psychology* 5, 1973: 207-232.
- KAHNEMAN, D., TVERSKY, A. Extensional vs. intuitive reasoning: The conjunction fallacy in probability judgment. *Psychological Review* 90, 1983: 293-315.
- KINDLOVÁ, E. 11. kapitola: Rakouská škola. In *Dějiny ekonomického myšlení*. Holman, R., et al. Praha: C. H. Beck : SEVT. 1999.

KLAMER, Arjo. Levels of Discourse in New Classical Economics. In *History of Political Economy*, Summer 1984: 263-90.

KNIGHT, Frank H. *Risk, Uncertainty and Profit*. Boston: Hart, Schaffner and Marx. 1921.

KNUDSEN, Christian. Equilibrium, Perfect Rationality and the Problem of Self-reference in Economics' In *Rationality, Institutions and Economic Methodology*. Gustaffson, B., Knudsen, C., Mäki, U. (ed.). London: Routledge. 1993.

KORDES, Urban. A peaceful coexistence of epistemologies - philosophy from the constructivist's point of view. *Kybernetes* 34, 2005: 295-305.

LACHMANN, Ludwig. From Mises to Shackle: An Essay on Austrian Economics and the Kaleidic Society. *Journal of Economic Literature*, Vol. 14, No. 1., March 1976: 54-6

LAGUEUX, Maurice. The forgotten role of the rationality principle in economics. *Journal of Economic Methodology*  
<http://www.informaworld.com/smpp/title%7Econtent=t713704064%7Edb=all%7Etab=issueslist%7Eb ranches=11 - v1111>, 2004: 31 – 51.

LAVILLE, Frédéric. Should we abandon optimization theory? The need for bounded rationality. *Journal of Economic Methodology* 7, 2004: 395–426.

LIPMAN, Barton L (1991) How to Decide, How to Decide, How to. . . : Modeling Limited Rationality. *Econometrica, Econometric Society*, vol. 59(4), pp. 1105-25,

LOUŽEK, Marek. *Max Weber*. Praha : Karolinum. 2005.

LOUŽEK, Marek. *Spor o metodu mezi rakouskou školou a německou historickou školou: nejvýznamnější metodologický spor v dějinách ekonomie*. Praha: Karolinum. 2001.

MÄKI, U. On the problem of realism in economics, *Ricerche Economiche*, Vol. 43, 1989: 176-198.

MÄKI, U. Kinds of assumptions and their truth: Shaking an untwisted F-twist. *Kyklos* 53, (2000): 303–22.

MAS-COLELL, A., WHINSTON, M., GREEN, J. *Microeconomic Theory*. Oxford: Oxford University Press. 1995.

MAYR, Ernst. The idea of teleology. *Journal of the History of Ideas* 53, 1992: 117-135.

MCCLOSKEY, D. The Rhetoric of Economics. *Journal of Economic Literature* 31, June 1983: 482-517.



- MCCLOSKEY, D. The Rhetoric of Economics. *Social Science* 71, 2/3, Fall 1986: 97-102.
- MCCLOSKEY, D. How Economists Persuade. *Journal of Economic Methodology* 1, June 1994: 15-32.
- MENGER, Carl. *Principles of Economics*. New York: New York University Press. 1976.
- MILL, John S. *Utilitarianism*. Indianapolis: The Bobbs-Merril Company. 1971.
- MISES, Ludwig von. *Epistemological Problems of Economics*. Princeton, NJ: D. van Nostrand. 1960.
- MISES, Ludwig von. *Human Action – A Treatise in Economics*. New Haven: Yale University Press. 1949
- MLČOCH, L. *Ekonomie důvěry a společného dobra: Česká republika v Evropské unii: pokus o nástin perspektivy*. Praha : Národohospodářský ústav Josefa Hlávky. 2005.
- MUSGRAVE, Alan. Unreal assumptions in economic theory. The F-twist untwisted. *Kyklos* 34, 1981: 377-387.
- NELSON, R., WINTER, S. *An Evolutionary Theory of Economic Change*. Cambridge, MA [US] : Belknap Press of Harvard University Press. 1982.
- NEUBAUER, Z. *Smysl a svět: hermeneutický pohled na svět*. Praha [sic]: Moraviapress. 2001.
- NORTH, Douglass C. *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press. 1990.
- PEIRCE, C.S. How to make our ideas clear. *Popular Science Monthly* 12, 1877: 286-302 Reference from the reprint in Houser and Kloesel 1992.
- POPPER, Karl R. *Poverty of Historicism*. London: Routledge & Keenan. 1976.
- POPPER, Karl R. *The Logic of Scientific Discovery*. London : Unwin Hyman. 1990.
- QUINE, W. V., Two Dogmas of Empiricism, *The Philosophical Review*, Vol. 60, No. 1, January 1951: 20-43.
- REDMAN, D.A. *Economics and the Philosophy of Science*. Oxford University Press. 1991.
- ROBBINS, L. *An Essay on the Nature and Significance of Economic Science*. 2<sup>nd</sup> edition. London: Macmillan and Co. 1945.
- ROBINSON, Joan. *Economic philosophy*. Harmondsworth, GB : Penguin. 1964.

RORTY, Richard. *Truth and Progress*. Cambridge: Cambridge University Press. 1998.

RORTY, Richard. *Philosophy and the Mirror of Nature*. Oxford: Blackwell. 1990.

RORTY, Richard. *Nahodilost, ironie, solidarita*. Praha: Pedagogická fakulta Univerzity Karlovy. 1996.

ROY, R. De l'utilité. *Actualités Scientifiques et Industrielles*. no. 930. Paris: Herman et Cie. 1942.

SALERNO, J.T. *Carl Menger: The Founder of the Austrian School*. <http://www.mises.org/about/3239>

SAMUELS, R., STICH, S., FAUCHER, L. *Reason and Rationality*. Rutgers University. <http://ruccs.rutgers.edu/ArchiveFolder/Research%20Group/Publications/Reason/ReasonRationality.htm>. 1999.

SAMUELSON, P. Consumption theory in terms of revealed preference. *Economica* 15(60), 1948: 243–253.

SCHOPENHAUER, Arthur. *O vůli v přírodě a jiné práce*. Praha: Academia. 2007.

SCHUTZ, Alfred. On multiple realities. *Philosophy and Phenomenological Research*, Vol. 5, No. 4., 1945: 533-576.

SCHWEITZER, Arthur. Typological method in economics: Max Weber's contribution. *History of Political Economy* 2, 1970: 66-96.

SHACKLE, G. L. S. *Epistemics and economics*. Cambridge: Cambridge University Press. 1977.

SHAFIR, E., LEOEUF, R.A. Rationality. *Annual Review of Psychology*, Vol. 53, 2002: 491-517.

SIMON, H. Theories of Decision-Making in Economics and Behavioral Science. *The American Economic Review*, Vol. 49, No. 3, Jun. 1959: 253-283.

SIMON, H. A. Rationality as process and as product of thought, *American Economic Review* 68, 1978: 1–16.

SKOŘEPA, M. *Rozhodování jednotlivce : teorie a skutečnost : obecná část*. Praha: Karolinum. 2005.

SLUTZKY, E. Sulla teoria del bilancio dei consumatore. *Giornale degli Economisti* 51, 1951: 1-26.

SMITH, Barry. Aristotelianism, apriorism, essentialism. In *The Elgar Companion to Austrian economics*. Boettke, P. ed. Bodmin: Edward Elgar. 1994.

STANOVICH, K. E., WEST, R. F. Discrepancies between normative and descriptive models of decision making and the understanding/acceptance principle. *Cogn. Psychol.* 38, 1999: 349–85.

SUGDEN, Robert . Rational choice: a survey of contributions from economics and philosophy, *The Economic Journal* 101, 1991: 751–85.

TAYLOR, Thomas C. *An Introduction to Austrian Economics*. Auburn: The Ludwig von Mises Institute: 1980.

VANĚK, J. Teleologie Karla Engliše jako filozofický základ ekonomického myšlení. *Politická ekonomie* 4/2000: 469-480.

VANBERG, V.J. The rationality postulate in economics: its ambiguity, its deficiency and its evolutionary alternative. *Journal of Economic Methodology* 11, 2004: 1-29.

VEBLEN, Thorstein. *Teorie zahálčivé třídy*. Praha: Sociologické nakladatelství. 1999.

WEBER, M. *General Economic History*. New York, NY [US]: Collier Books. 1961.

WEBER, M. *Metodologie, sociologie a politika*. Praha: OIKOYMENH. 1998.

WILLIAMSON Oliver E., WINTER S.G. *The Nature of the Firm Origins, evolution, and Development*. New York, Oxford: Oxford University Press. 1993.

WILSON, E.O. *On Human Nature*. Cambridge: Harvard Univ. Pr. 1978.

WILSON, E.O. *Consilience: The Unity of Knowledge*. Thorndike: Thorndike Press. 1998.

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*Open letter from economic students*. Le Monde, 2000-07-17.

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