

МАТЕМАТИЧНІ ТА ІНФОРМАЦІЙНІ МОДЕЛІ В ЕКОНОМІЦІ

UDK 330.101

V. YEFIMOV

ON PRAGMATIST INSTITUTIONAL ECONOMICS

***Abstract.** There are two logics of the functioning of science as an institution: the logic of production and dissemination of knowledge oriented to solve existing socio-economic problems and the logic of survival of members of the profession. These two logics could contradict each other. The first logic corresponds to the fulfilment by the science of its social task. The second corresponds to aspirations of members of any social organism to survive as members of this organism. To our mind Pragmatist Institutional Economics can fulfil successfully its social task but could have enormous problems to become a normal science in the sense of Thomas Khun. Economic realities are very complex, determined to a large degree by cultural heritage but at the same time very dynamic. Knowledge concerning these realities for different countries, and even for different regions and different economic sectors inside the same countries, in different periods of time can hardly be presented on the basis of the same categories. It means that communication between members of the modern community of academic economists, which is to a great extent international, is difficult. In this situation advantages for career oriented academic economists for the creation of their professional communities on the basis of Cartesianism rather than Pragmatism are obvious. This paper is an appeal to economists to adopt the pragmatist method which, in its modern form related to social sciences, is Qualitative Research.*

***Keywords:** Cartesianism, positivism, pragmatism, subject-matter of pragmatist institutional economics, method of pragmatist institutional economics, theorising in pragmatist institutional economics, experimenting in pragmatist institutional economics.*

Introduction

The movement of New Institutional Economics – NIE – [28, 50], born in the seventies, followed the Institutional Economics of John R. Commons (1934a) by putting the notion of «transaction» in the centre of its study. The seventies were a period of appearance of an absolute authority of neoclassical economics with its hypothetico-deductive (Cartesian and positivist) methodology and the NIE followed this methodology. Most of the participants of this movement believed that

their field could just be an extension of the mainstream economics and that they could use similar quantitative techniques. The NIE was assimilated by many of the members of its community to «transaction costs economics». In this way they have distorted totally the initial design of Commons' institutional economics who saw the transaction as a unit of activity common to law, economics and ethics [9]. Instead of Cartesian analytic philosophy, which is the philosophical foundation of neoclassical economic theory, he based his institutional economics on pragmatist philosophy of Charles S. Peirce and John Dewey. As Philip Mirowski has noted «these two traditions have a profound conflict over their respective images of a «science», and therefore profoundly incompatible images of «economic man» and «rationality» [53]. Commons used the pragmatism as a model of human behaviour and as a method of research. If the former becomes more and more popular, the latter is ignored or rejected by the majority of modern institutionalists, either advocates of new or old institutional economics. It happens because at present the hypothetico-deductive thinking dominates almost the totality of the community of academic economists.

Social science thought flows based on Pragmatism, Institutionalism in economics and Chicago school in sociology [88], were very influential in the United States between two wars. Later their influence fell and empirical research in economics based on pragmatism almost disappeared. Beginning from the second half of the 20th century the American Institutionalism only attracted the attention of historians of economic thought and specialists in economic methodology. Some of them made an outstanding contribution to the understanding of its pragmatist nature [71, 53, 7, 13, 3], but many others did not share pragmatist views of Commons. They concentrated on developing theoretical notions using as main references writings of founders (Veblen, Commons, Mitchell). Geoffrey Hodgson, one of the leaders of this stream, has taken a militant anti-empiricist position by declaring that empirical evidence has only residual importance in economic research [37]. Most of modern advocates of old institutional economics are out of touch of real economic problems and empirically oriented Commons is criticised as a poor theorist [39]. Most members of this community are not doing any empirical studies themselves and even their theoretical considerations usually appeal exclusively to theoretical considerations of others and not to any results of empirical studies.

Many modern institutional economists criticise Old Institutional Economics for its descriptive character and lack of rigorous and systematic theory. Pragmatically oriented sociologists developed a method called Grounded Theory [29, 86, 47], which reconciles description and theorising. Empirical research in the framework of this method is used not to test theories or hypotheses created before its start but to create concepts, theories and hypotheses deeply rooted in the collected data. Grounded Theory is the most sophisticated method entering the set of pragmatically oriented social research methods called Qualitative Research [18, 70]. One of them is case study method, another one is a method of field experiments called Action Research [32, 87, 72] which has large applications in the study of organisations. Pragmatist economic laboratory experiments based on gaming-simulation [31, 100] could oppose neoclassical experimental economics. Grounded Theory, Action Research as Qualitative Research in general and laboratory gaming-simulation experiments can be used for economic research. The aim of this paper is to attract the attention of economists to the tremendous unused

potential of the application of pragmatist methodology. The paper discusses the pragmatist methodology and techniques from an institutional economist point of view. The paper is based on a personal experience of the author in application of these methodology and techniques for economic institutional investigations [101-104].

1. Pragmatism versus Cartesianism and positivism

Descartes was very suspicious to results of observations. He was sure that the senses deceive us and all the things that we see are false. He appealed to doubt in everything. At the same time he was convinced that where the senses fail, the mind triumphs. It influenced very negatively a vision of science: «Cartesianism destroyed the balance which underlies true science: the balance between thinking and observing, deduction and induction, imagination and common sense, reflection and action, reason and passion, abstract thinking and realism, the world within and the world without the mind. Under the impact of Cartesianism the second element of the equation was sacrificed to the first [...] Descartes' epistemological reflections opened an era of axiomatic, unhistorical, deductive thinking broadly called the Enlightenment» [52]. The Cartesian dualism with its separation of knowing from doing, object from subject, fact from value, theory from practice serves an epistemological foundation for neoclassical economics [7].

The founder of Pragmatism, Charles S. Peirce, understood the historical context of appearance of Cartesianism. Descartes revolted against authority as the ultimate source of truth and allowed theoretically scepticism. Afterwards «that done, he sought a more natural fountain of true principles, and professed to find it in the human mind» [63]. In this way, he underestimated the role of observation by overestimating the role of human thinking. According to Peirce, we cannot doubt in everything: «A person may, it is true, in the course of his studies, find reason to doubt what he began by believing; but in that case he doubts because he has a positive reason for it, and not on account of the Cartesian maxim» [62, pp. 28, 29]. Peirce estimated that «machinery of the mind can only transform knowledge, but never originate it, unless it be fed with facts of observation. Nothing new can ever be learned by analysing definitions» [63, p. 126]. He has noticed that scholars are «less intent on finding out what the facts are, than on inquiring what belief is most in harmony with their system. It is hard to convince a follower of the a priori method by adducing facts» [63, p. 138].

One of the central notions of Peircian philosophy is that of belief : «Our beliefs guide our desires and shape our actions (...) Doubt is an uneasy and dissatisfied state from which we struggle to free ourselves and pass into the state of belief; while the latter is a calm and satisfactory state which we do not wish to avoid, or to change to a belief in anything else (...) Both doubt and belief have positive effects upon us, though very different ones. Belief does not make us act at once, but puts us into such a condition that we shall behave in a certain way, when the occasion arises. Doubt has not the least effect of this sort, but stimulates us to action until it is destroyed (...) The irritation of doubt causes a struggle to attain a state of belief. I shall term this struggle inquiry (...) That the settlement of opinion is the sole end of inquiry is a very important proposition. It sweeps away, at once, various vague and erroneous conceptions of proof» [62a, pp. 114, 115].

Another notion of this philosophy closely linked with the notion of belief is that of habit. The belief «involves the establishment in our nature of a rule of action, or, say for short a habit (...) The whole function of thought is to produce habits of action. (...) To develop its meaning, we have, therefore, simply to determine what habits it involves» [63, pp. 129, 131]. For Peirce «belief is not a momentary mode of consciousness; it is a habit of mind essentially enduring for some time (...) Instead of saying that you want to know the «Truth», you were simply to say that you want to attain a state of belief unassailable by doubt» [66, p. 336]. Based on the Peirce's Pragmatism, we can say that social reality is a reality of beliefs and habits. It means that this reality is socially constructed by the processes of institutionalisation, legitimation and socialisation [4]. The social reality is historical: «Institutions cannot be created instantaneously. Institutions always have a history, of which they are the products. It is impossible to understand an institution adequately without an understanding of the historical process in which it was produced» [4, p. 72].

Peirce saw the research as a collective action of investigators who, by observing and by analysing something separately, gradually converge on the results of investigation. «The opinion which is fated to be ultimately agreed to by all who investigate, is what we mean by the truth, and the object represented in this opinion is the real. That is way I would explain reality» [63, p. 139]. In this way, the «Cartesianism's guiding notion of the solitary doubting ego is supplanted by the idea of a co-operative search for truth for the purpose of coping with real problems encountered in the course of action» [41, p. 19]. The consequences of this transformation of the guiding idea of philosophical reflection are extremely far-reaching: «Indeed, the entire relationship between cognition and reality is changed. The concept of truth no longer expresses a correct representation of reality in cognition, which can be conceived of using the metaphor of a copy, rather, it expresses an increase of the power to act in relation to an environment. All stages of cognition, from sensory perception through to the logical drawing of conclusions and on self-reflection, must be conceived anew» [41, pp. 19, 20].

The selective character of the perception shown by William James [40], a follower of Peirce, became evidence. Since then, psychologists made a significant progress in understanding of human cognition. The perceptual process includes the selection of a stimulus for attention, its organisation into a meaningful pattern and an interpretation of the significance of the stimulus. Language plays an important role in perception shaping [48, pp. 79 - 87]. Several types of perceptual errors are possible and among them is the so-called perceptual defence, which «provides a measure of protection against information, ideas that are threatening to an existing perception or viewpoint. It is a process that encourages the perception of stimuli in terms of the known and familiar» [48, p. 93]. It is perceptions that determine to a large extent the behaviour of actors. In this sense, the social reality, a reality of actions based on beliefs and habits, is subjective.

Mechanism of perception and knowledge acquisition is conceived in modern cognition science as a process of categorisation: «The categories we construct and employ to structure the world can be construed as entities deeply imbued with our own experiences as human agents; sometimes they may be heavily constrained by the properties of the real world, at other times the correspondence may be highly metaphorical. As we have not been afforded a privileged or God-like insight into the properties of the real world, we have no independent means of knowing exactly

which is which» [94, p. 77]. There exist actually two approaches to categories: similarity-based and explanation-based: «The similarity-based view holds that instances of a category are represented mentally by the degree to which they are similar to other known instances of the category. The explanation-based view, on the other hand, argues that instances of a category are related by an explanatory structure» [84, p. 77]. Arthur Denzau and Douglas North describe the cognition process in the following way: «Categories-classifications gradually evolve from earlier childhood on in order to organize our perceptions and keep track of our memory of analytic results and experiences. Building on these categories we form mental models to explain and interpret the environment, typically in ways relevant to some goal(s). Both the categories and mental models will evolve to reflect the feedback derived from new experiences – feedback that may strengthen and confirm our initial categories and models or that may lead to modifications» [17, p. 224]. These modifications can be of two types: changes in details concerning existing categories and changes of categories. Denzau and Douglas use the term «representational redescription» to characterise the latter type which is a reorganization of the categories and concepts with sudden shifts in viewpoints [17, p. 225]. To our mind the notion of representational redescription is very close to the notion of abduction of Peirce. Contrary to Cartesianism the Pragmatism attributed a modest role in human reasoning to deduction. The modern cognition science supports this position of Pragmatism. Cross-cultural studies provided support for an approach which suggests that people do not engage in deductive reasoning in the real world. Instead, their judgements are based on categorisation and instances of a category are represented mentally by the degree by which they are similar to (have overlapping attributes with) an abstract representation of the category [84, pp. 115, 374].

At present, many social scientists, especially economists, are convinced Cartesians. They think that cognition process in economic science is primarily deductive process and empirical work in this domain is not very much appreciated. The dominance of Cartesianism in economics can be explained in terms of Peirce's investigating communities. Economic realities are very complex, determined to a large degree by cultural heritage but at the same time very dynamic. Knowledge concerning these realities for different countries, and even for different regions and different economic sectors inside the same countries, in different periods of time can hardly be presented on the basis of the same categories. It means that communication between members of the modern community of academic economists, which is to a great extent international, is difficult. In this situation advantages of the creation of communities of academic economists on the basis of Cartesianism rather than Pragmatism are obvious. Cartesian approach creates unlimited possibilities for communicating inside the world community of academic economists on the basis of universal categories without much care about historical and geographical differences. In addition empirical work is very hard and apparently less pleasant than purely armchair «theoretical» work. Douglas North underlines: «There is a lack of empirical work on the subject <...> When Lee Alston, Thrain Eggertsson and I were working on a book of reading on empirical studies in new institutional economics, we had difficulty finding a sufficient number of case studies to use. The reason is that few have been done» [60, pp. 8, 9]. The most important cause of the crisis in mainstream economics is its remoteness of the actual economic activities.

Mainstream economics is also rooted in positivism. The founder of positivism, August Comte, professed to consider all phenomena as subject to «natural laws». He saw the role of «positive science» in discovering these laws and the reduction to a minimum of their number [12]. Neoclassical economics is in this sense a «positive science». All generalisations of this economics were based on natural laws theory. In spite of the fact that a lot of rhetoric concerning the natural laws has disappeared from the discourse of the contemporary neoclassical thought, this economics is still founded on the epistemology based on the concept of these laws [7, p. 65]. The positivism of 19th century, that of August Comte, has been altered in the middle of the 20th century in the logical empiricism, which is characterised by the hypothetico-deductive approach: «The first step in testing a scientific theory was to deduce certain empirical predictions from the theory and its initial conditions. The second step was to check these predictions against the observational evidence; if the empirical predictions turned out to be true, the theory was confirmed, and if these predictions turned out to be false, the theory was disconfirmed. In either case, it was not induction, but rather the deductive consequences of a scientific theory, that were relevant to its empirical support (...) Hypothetico-deductive method allowed scientific theories to be «based on» empirical observations (deductively) without actually being «built up from» those observations (inductively)» [15, p. 376]. We can see here very clearly a manifestation of Cartesianism: «Cut off from observation as a source of truth, the Cartesian mind puts great on «testing» to reaffirm its realism. But testing is not a guarantee of correct ideas because, having lost its mooring in reality, the economic mind has created so many conundrums, puzzles and purely mental constructs that testing proves everything and nothing» [52, p. 41]. Since Milton Friedman [26] the neoclassical economics affiliates openly to positivism by adopting the hypothetico-deductive approach. The table below shows the difference between positivist and pragmatist paradigms.

Table 1 – Basic characteristics of positivist and pragmatist paradigms

	Positivist paradigm	Pragmatist paradigm
Basic assumptions	The world is external and objective The observer is independent Science is value free	The world is socially constructed and subjective The observer is an integral part of what is observed Science is moved by human interests
Basic characteristics of research	Data presents objective facts Context is given a priori Sublimation of complexity Logic of verification	Data presents subjective meanings Context is apprehended a posteriori Taking into account of complexity Logic of discovery
The researcher must:	Elaborate concepts in such a way that they could be measured Find causality links and fundamental laws Reduce the phenomena to their simplest elements Formulate hypotheses and test them	Elaborate concepts rooted in qualitative and quantitative data Try to understand the phenomenon under study Observe every situation in its totality Develop ideas by analysing data

Source : (Usunier, Easterby-Smith and Thore, 2000, p. 37) and (Mucchielli, 1996, p. 197) adapted by the author.

Let me comment just one line in this table which is dealing with complexity. The founder of positivism, Auguste Comte, professed to simplify observed phenomena before explaining them. Social sciences and in particular economics followed this positivist tradition. The scholars reduced phenomena under study to a certain number of quantitative variables or made a synthetic description before starting an analysis. In this way the positivist approach in general and the quantitative approach in particular sublime or deny the complexity of phenomena under study. On the contrary the pragmatist approach in social sciences, associated with the qualitative research, does not reject the complexity but tries to manage it in the research process. This approach foresees rich and thick descriptions in order not to lose some crucial information. These descriptions often take the form of quotations from interviews. The descriptions incorporated in an article or a book do not represent raw data but are chosen as significant. They are ranged according to the constructed categories and accompanied by comments. In this way they represent an important part of the reasoning and allow the readers to make their own judgements concerning results of the research.

The pragmatist philosophy of Charles S. Peirce according to his own words corresponds to the experimentalist's mind [66, pp. 331, 332]. An experimentalist «has had his mind molded in the laboratory (...) With intellects of widely different training from his own, whose education has largely been a thing learned out of books, he will never become inwardly intimate, be he on ever so familiar terms with them; for he and they are as oil and water, and though they be shaken up together, it is remarkable how quickly they will go their several mental ways, without having gained more than a faint flavor from the association» [66, p. 331]. I am afraid that such an experimentalist's type of person is quasi inexistent in the community of academic economists. The university education and training do not foster an interest to do field studies and even more this kind of studies are considered as something inappropriate for «highly qualified economists». I can imagine that Table 1 above is absolutely indigestible for economists to whom «data» are exclusively writings of other economists or statistical data at most. This table will leave them totally insensitive.

In June 2000 a group of French students of economics published an open letter to professors and other responsible for teaching of this discipline [27, pp. 13 - 14]. The first part of this letter was as follows: «Most of us have chosen to study economics so as to acquire a deep understanding of the economic phenomena with which the citizens of today are confronted. But the teaching that is offered, that is to say for the most part neoclassical theory or approaches derived from it, does not generally answer this expectation. Indeed, even when the theory legitimately detaches itself from contingencies in the first instance, it rarely carries out the necessary return to the facts. The empirical side (historical facts, functioning of institutions, study of the behaviours and strategies of the agents . . .) is almost nonexistent. Furthermore, this gap in the teaching, this disregard for concrete realities, poses an enormous problem for those who would like to render themselves useful to economic and social actors» [27, p. 13]. I believe that this is a very pragmatist declaration. The students requested practical knowledge for practical actions. The movement which was born after the French students revolt of teaching economics has received the name «the post-autistic economics movement»: «The main reason why the teaching of microeconomics (or of «microfoundations» of macroeconomics) has been called «autistic» is because it is

increasingly impossible to discuss real-world economic questions with microeconomists – and with almost all neoclassical theorists. They are trapped in their system, and don't in fact care about the outside world any more» [33, p. 2]. The autistic character of standard economics has deep philosophical roots in Cartesianism and positivism.

The dominance of positivist paradigm in economics makes it absolutely useless in the investigation of burning economic problems of the present. Many economists are not aware of and/or are indifferent to this situation. Of course there is a sizable and growing minority who do not subscribe to the neoclassical model or who reject the anti-scientific fundamentalism that surrounds it, but no means existed for mobilising them as a community [27, p. 2]. In order to respond to the most important requirement of the open letter of French students, «We wish to escape from imaginary worlds!», this community should be not only anti-neoclassical but, what is more important, it should be pragmatist. It means that the subject-matter of alternative economics should correspond to socio-economic reality which is the reality of beliefs and habits. It means also that the method of this economics should follow the logic of discovery and the elaboration of its concepts should be rooted in qualitative and quantitative data. The method should help to observe the situation in its totality with taking into account its complexity. The method should be oriented not to creating sophisticated intellectual constructions but to understanding the phenomenon under study in order to help to solve real life problems. A set of methods of this type is called Qualitative Research.

2. Subject-matter of pragmatist institutional economics

The Pragmatism gives us the key for understanding social realities by indicating that they are beliefs and habits (rules). By defining the subject-matter of pragmatist institutional economics we have to be more precise. We must say what we mean by institutions, their relation to beliefs, and propose a scheme for analysis of economic activity in order to indicate the place of institutions and beliefs in this activity. On the basis of the definition of institution and the scheme of analysis of economic activity the subject-matter of pragmatist institutional economics can be defined.

The institution can be defined as typification of habitualised actions [4, p. 72]. The literature on institutional economics contains a large number of definitions of institutions. May be the most condensed of them are the following: «The major role of institutions in a society is to reduce uncertainty by establishing a stable (but not necessary efficient) structure to human interaction» [58, p. 6]; «Institutions are durable systems of establishes and embedded social rules and conventions that structure social interactions» [39, p. 163]. It is important to distinguish formal and informal rules and to know how they are enforced [58; 61]. Usually formal rules take the written form and the informal do not. Most of the institutions in modern societies are made up of both formal and informal rules. In stable institutions informal rules complement formal ones. In emergent institutions earlier embedded informal rules can contradict to newly introduced formal rules and distort or even block their application. As we saw in the previous section of this paper, according to Pragmatism habits (rules) are closely linked with, based on, beliefs. Similar to rules, the beliefs can be «formal» and «informal». «Formal» beliefs are often depicted in documents of political parties and their more or less coherent sets represent ideologies. «Informal» beliefs do not take a written form. Among beliefs

it is important to distinguish «values» which provide categorization in evaluative terms of «good» and «bad». Enforcement of rules is exercised by some human actions. These actions in their turn follow some formal and informal rules. In considering only economic institutions the researcher is forced to include in his analysis «enforcement characteristics» of these institutions [58, 61]. Nevertheless the enforcement dimension of the institutional analysis can be made by inclusion in this analysis of non-economic institutions, for example, religious and political. As rules and beliefs, enforcement of rules can also be «formal» and «informal». The former represents the prosecution through the law system with a threat of penalties or imprisonment and the latter, for instance, takes the form of «public opinion» with a threat of exclusion from a community.

Karl Polanyi distinguished two meanings of economic: substantive and formal. Classical economics was defined as dealing with production, distribution and consumption of goods and services. This definition corresponds to the substantive meaning of economic. Neoclassical economics switched to its formal meaning of economic. Polanyi gave a substantive definition of economic in institutional terms: «It can be briefly (if not engagingly) defined as an instituted process of interaction between man and his environment, which results in a continuous supply of want satisfying material means» [69, p. 34]. Economic activity, as the flow of economic actions, in its substantive meaning, can be analysed at four levels.

Table 2 – Scheme for analysis of economic activity¹

No	Level of analysis	Analysed units	Links between analysed units
1	Cognitive	Beliefs	Complementarity/contradiction
2	Institutional	Rules	Complementarity/contradiction
3	Organisational	Decision-making centres	Power relations
4	Technological	Resource processing units	Material/informational flows

There are top-down links between these four levels. Beliefs determine the rules in the framework of which power relations took place between decision-making centres. Decision making centres determine the functioning of resource processing units and control material and informational flows between them. There are also down-up feedbacks between levels. Technological level provides signals to organisational level to make possible correct decision-making. Different natural and juridical persons (decision making centres) using their power try to change rules in their favour. Finally, problems emerging in the functioning of decision-making centres in the framework of existing rules push them to change their beliefs. The choice of level for analysis of economic activity depends of the objective of the study. If the researcher is concerned with the result of economic activity at particular moments, then major attention is likely to be devoted to the technological level. On the contrary, if the researcher is concerned not with the end result of economic activity but with its mechanism operating in a certain period of time then his attention should be devoted to organisational and institutional levels. Furthermore if he is concerned with changes in the mechanism of economic

¹ Previous versions of this scheme were published in Yefimov (1981, 1988, 1997, 2001). This scheme has some similarities with that of Williamson (2000).

activity then undoubtedly the main attention should be focused on institutional and cognitive levels [100, pp. 30 - 31].

Neoclassical economics ignores levels 1 and 2, and level 3 is present in neoclassical analysis in a very simplified form with poor collection of decision-making centres and neglect of power relations. The stress in this analysis is made on level 4. On the contrary, pragmatist institutional economics should put level 2 in the centre of its studies supported by analysis of levels 1 and 3. If the research is oriented to the analysis of institutional functioning, level 2 plays an important role. If the objective of the research is institutional change, then the analysis at level 1 becomes crucial. In the framework of pragmatist institutional economics, quantitative analysis of material flows (level 4) can serve only for asking questions and answers to these questions should be found at higher levels [103, pp. 30 - 31].

By summing up what was said above, we can define the subject-matter of pragmatist institutional economics in the following way: pragmatist institutional economics studies economic activity by analysing functioning and change of institutions that structure economic activity. Analysis of functioning of institutions requires the taking in account of power relations between actors. The study of institutional change demands an analysis of beliefs/ideologies shared by different types of actors. Briefly, we can say that subject-matter of pragmatist institutional economics is sets of institutions, in which the human economy, as Karl Polanyi said, is embedded and enmeshed. In other words, the pragmatist institutional economics investigates typification of habitualised economic actions and beliefs linked with these actions. These typifications could take the form of formal rules (laws and written regulations) and informal rules (customs and traditions). In modern societies beliefs often take the form of ideologies. Pragmatist institutional economics is sharply different from neoclassical mainstream economics by subject-matter which for the former derives from the substantive meaning of economic and for the latter – from the formal one. I believe that this understanding of the subject-matter of pragmatist institutional economics corresponds to that of John Commons: «Peirce's pragmatism, applied to institutional economics, is the scientific investigation of economic relations of citizens to citizens. Its subject-matter is the whole concern of which the individuals are members, and the activities investigated are their transactions governed not by a law of nature but a working rule, for time being, of collective action» [10, p. 157].

3. Method of pragmatist institutional economics

Pragmatist institutional economics differs from neoclassical mainstream economics not only by the subject-matter but also by its method. Generally speaking the method of pragmatist institutional economics is Pragmatism of Charles Peirce. Pragmatism as a method of research corresponds to the reality of human cognition studied by the cognition science and Cartesianism/positivism with its hypothetico-deductive method does not. Descartes distinguished sharply processes of cognition of layman and processes of cognition of scientist. The Pragmatism of Charles Peirce eliminates this sharpness. Why they would be different? Laymen and scientists belong to the same specie of human beings and their brains are constructed in the same way. The modern cognition science gives a model of human behaviour (*homo cogitans*) and at the same time a method of scientific research, a method corresponding to the human nature. This model/method consists

in the categorisation and creation on their basis of mental models in the every day life and in the research practice. In both cases the categories/concepts and mental models are shared inside certain communities: «The world is too complex for a single individual to learn directly how it all works. The entire structure of the mental models is derived from the experiences of each individual – experiences that are specific to the local physical environment and the socio-cultural linguistic environment (...) In fact, no two individuals have exactly the same experiences and accordingly each individual has to some degree unique perceptions of the world. Their mental models would tend to diverge for this reason if there were not ongoing communication with other individuals with a similar cultural background» [17, pp. 225 - 226].

However some differences between cognition activities of laymen and scientists do exist and «the crucial difference [is] created by the attempt in science to maintain the precision in terms as opposed to their plasticity in a popularly held and communicated mental models, Kuhn argues, the relatively precise nature of concepts helps keep a paradigm or conceptual framework almost fixed for long periods» (Ibid., pp. 235-236). The process of accommodation and change in shared mental models does not always progress smoothly or easily. Ideological purists try to resist any change (Ibid., p. 226). In this way, professionalization of scientists can play a negative role in knowledge acquisition process, especially after the strong institutionalisation of science. This happens in situations of a weak social (democratic) control or too strong social (authoritarian) control from outside of scientific communities on the activities of scientists from the point of view of the quality of knowledge they acquire and hold. Science in general and economics in particular is a set of institutions which could be analysed on the basis of four level scheme exposed in Table 2. Rules of recruitment, promotion, publication etc. are an evolutionary result of ideological, political and financial influences from outside and inside of scientific communities and of their shared mental models too.

John Commons accepted the term Pragmatism proposed by Peirce as the name of the method of investigation he applied to economics: «We compelled to distinguish and use two meanings of pragmatism: Peirce's meaning of purely a method of scientific investigation, derived by him from the physical sciences but applicable also to our economic transactions and concerns; and the meaning of the various social-philosophies assumed by the parties themselves who participate in these transactions. We therefore, under the latter meaning, follow most closely the social pragmatism of Dewey; while in our method of investigation we follow the pragmatism of Peirce. One is scientific pragmatism – a method of investigation – the other is the pragmatism of human beings – the subject-matter of the science of economics» [10, pp. 150, 151]. This method supposes an experimental approach to investigation, that is the direct contact with investigated subject-matter, i.e. institutions and beliefs which accompany them. This direct contact can be achieved by the investigator through studies of different documents, including texts of formal rules (laws and regulations), use of action research, participant observation, interviews and case studies. All these techniques should withdraw the cognitive gap between scholars and actors and in some way enlarge «learning communities» by partial inclusion in them of actors. In order to catch meanings of observed events and understand informal rules, participant observations should include active interviews, which could take the form of «brainstorming» sessions. The pragmatist methodology rejects an objectivity based on value free neutrality of the

researcher and proposes a solution to the problem of subject-object relation in social inquiry.

Pragmatist methodology of social research was developed by the Chicago sociological school in the framework of Symbolic Interactionism. The author of this term wrote: «No theorizing, however ingenious, and no observance of scientific protocol, however meticulous, are substitutes for developing a familiarity with what is actually going on in the sphere of life under study» [6, p. 39]; «We must say in all honesty that the research scholar in the social sciences who undertakes to study a given sphere of social life that he does not know at first hand will fashion a picture of that sphere in terms of pre-established images (...) [In the framework of usual research practices] in place of being tested and modified by firsthand acquaintance with the sphere of life they [pre-established images] become a substitute for such acquaintance (...) [In this case] there is no demand on the research scholar to do a lot of free exploration in the area, getting close to the people involved in it, seeing it in a variety of situations they meet, noting their problems and observing how they handle them, being party of their conversations, and watching their life as it flows along. In place of such exploration and flexible pursuit of intimate contact with what is going on, reliance is put on starting with a theory or model, posing a problem in terms of the model, setting a hypothesis with regard to the problem, outlining a mode of inquiry to test that hypotheses, using standardized instruments to get precise data, and so forth» [6, pp. 36 – 37]. The last sentence of this quotation describes exactly in what way most of the economists do empirical research. This positivist methodology for economics was formulated by Milton Friedman: «A theory is the way we perceive «facts», and we cannot perceive «facts» without a theory» [26, p. 34].

Unfortunately not only neoclassical economists share these Friedman's views. Geoffrey Hodgson who is one of the very active authors with «institutionalist label» confessed: «Contrary to many institutionalist writers, the epistemological position here is strongly anti-empiricist» [37, p. 24]. He criticised Friedman not for his Cartesian positivism but on the basis of this «strongly anti-empiricist» position [37, pp. 28 - 35]. I think that Hodgson is even more Cartesian than Friedman. Let us discuss his «anti-empiricists» arguments, which are indeed pro-Cartesian arguments: «The key criticism of empiricist epistemology (...) is that no observation can be independent of the conceptual framework, language and theoretical system of the observer. Consequently, no «objective» facts can be known untainted by the preconceptions of the investigator» [37, p. 35]. The pragmatist approach does not exclude that the researcher coming to the field has some preconceptions or pre-established images, but what the pragmatist approach excludes is determining by them the gathering of data. For example, in 1998 I had an occasion to attend a meeting, held in a district Administration in Russia, of heads of collective farms of this district. During this meeting I had the feeling that we were still somewhere in 1978. In 1999 I started an inquiry in the Russian countryside, having the preconception of the agrarian institutional continuity in post-Soviet Russia, but the questionnaires for this inquiry were elaborated not in the framework of this preconception. These questionnaires [104, pp. 375 - 377] served as guides for talks with different actors with the objective not to test this idea but to understand what was going on in different kinds of farms, companies and administrations.

The statement «All facts are expressed in some form of language, and an aconceptual or atheoretical language is impossible» [37, p. 35] is a sophism because of the use of undefined here notions of «theory» and «language». «Theories» and «languages» can be of different levels. The statement is true if the notions of «language» and «theory» are used in the sense of categories and mental models shared in a certain socio-cultural linguistic environment which can be very large. For example, if the area under study was the Russian countryside, then knowledge of Russian language including technical agricultural terms would be sufficient to begin «observation», i.e. «getting close to the people involved in it, seeing it in a variety of situations they meet, noting their problems and observing how they handle them, being party of their conversations, and watching their life as it flows along». At the same time the statement of Hodgson is false if the notions of «language» and «theory» are used in the sense of categories and models/theories/hypotheses shared by a certain community of scholars. For example, gathering data concerning preconceived variables, quantitative or qualitative, of a theory and escaping any other information, which could be collected in the field if it does not enter in this set of preconceived variables, will make investigator 'blind' to many possible insights. In the case of using low level categories and mental models shared by actors of the area under study the scholar has a possibility to make a discovery and to reconsider his pre-established image of the area under study by developing his own new categories and mental models. In the case of using high level categories and models/theories/hypotheses shared by members of a certain scientific community the scholar is condemned to be prisoner of his preconceived variables. He is unable to discover in the field something outside of his a priori model/theory/hypothesis and what he can do only to «test» this a priori model/theory/hypothesis.

Geoffrey Hodgson is right by saying that «we cannot ever gain a more accurate or adequate understanding of economic reality exclusively by observation and the gathering of data». And it is true not because «contrary to empiricist view, science cannot progress without a theoretical framework, and no observation of reality is free of theories or concepts» but because understanding of economic reality can progress only through «representational redescription», i.e. the correction or even total change of categories/concepts and models/theories constructed on the basis or emerged from observation and gathering of data. I agree with professor Hodgson when, following the sociology of science, he said that «science is a social activity and its development involves the social generation, scrutinization and acceptance or rejection of theories, procedures and norms. Consequently, science can never be «neutral» in the sense that it is entirely free of the biases and preoccupations of society and the scientific community» [37, p. 36]. But this true statement does not transform his sophism in a true statement.

A close and reasonably full familiarity with the area of life under study is essential to any social researcher [6, p. 37]. A set of methods based on pragmatist methodology which allow to get this familiarity with area of life under study has received the appellation of Qualitative Research. The methods included in this set can be classified as follows: basic or generic qualitative research, ethnographic study, case study, life story method, phenomenological study, grounded theory and action research. The two latter methods will be discussed in sections 4 and 5 of this paper. Below in this section we will characterise briefly general features of qualitative research methods in general. All qualitative research methods use as

sources of information existing texts, semi-directive interviews and participant observation. Institutional economists should pay special attention to juridical (laws and regulations) and political (programmes of parties and associations and declarations of political leaders) texts. The former reflect formal rules and the latter existing beliefs. In order to collect information on the informal rules and shared beliefs, including values, the researcher should use semi-directive interviews and participant observation. Data on habits and beliefs can hardly be numerical. That is why methods used in the framework of the pragmatist paradigm are primarily qualitative. This paradigm integrates the observer and the observed in the procedures of observation. It is attentive to find meanings of actions of the concerned actors. In the framework of this paradigm the researcher takes into consideration the complexity of the situation under study and intentions, motivations, expectations, reasoning, beliefs and values of actors [56, p. 34].

Qualitative research can analyse data at several levels: «At the most basic level, data are organized chronologically or sometimes topically and presented in a narrative that is largely, if not wholly, descriptive. Moving from concrete description of observable data to a somewhat more abstract level involves using concepts to describe phenomena (...) This is the process of systematically classifying data into some sort of schema consisting of categories, themes or types. The categories describe the data, but to some extent they also interpret the data. A third level of analysis involves making inferences, developing models, or generating theory» [51, p. 187]. Some categories can be of similarity-based type when the others are of explanation-based type. The process of qualitative research can be characterised as a progressive move from actors' meaning to researcher's meaning (sense).

The most important characteristics of qualitative research are the following [51, pp. 6 – 8, 61]:

1. Qualitative researchers are interested in understanding the meanings people have constructed, that is, how they make sense of their world and the experiences they have in the world. It is assumed that meaning is embedded in people's experiences and that the meaning is mediated through the investigator's own perceptions. The key concern is understanding the phenomenon of interest from the participants' perspectives, not the researcher's.

2. Qualitative researcher uses his data not to answer questions like how much or how often but to discover what occurs, the implications of what occurs, and the relationships linking occurrences. In this case his sample, i.e. people contacted, has not to be large and random but has to correspond to this purpose. Purposeful sampling serves to the investigator to discover, understand, and gain insight and therefore he must select a sample from which the most can be learned. The size of the sample can be determined gradually: sampling continues until a point of saturation is reached, i.e. no new information is forthcoming from new sampled units.

3. The researcher is the primary instrument for data collection and analysis. It determines by a creative character of communication with actors and abductive nature of data analysis (insights).

4. Qualitative research usually involves fieldwork. An occasional qualitative study could be undertaken using documents alone, but these are exceptions.

5. The product of a qualitative research is richly descriptive.

Table 3 displays a comparison of characteristics of qualitative research with the more familiar positivist-quantitative approach. The dichotomy indicated in this table does not exclude the use of quantitative methods in the framework of a qualitative research.

Table 3 – Characteristics of quantitative and qualitative research

Points of comparison	Quantitative Research	Qualitative Research
Philosophical roots	Cartesianism, positivism	Pragmatism, phenomenology
Goal of investigation	Prediction, confirmation, hypothesis testing	Understanding, description, discovery, meaning, hypothesis generation
Design	Predetermined, structured	Flexible, evolving, emergent
Sample	Large, random, representative	Small, non-random, purposeful
Data collection	Inanimate instruments (statistical data, surveys, questionnaires)	Researcher as primary instrument, semi-directive interviews, observations, documents
Mode of analyses	Deductive and inductive (by statistical method)	Abductive (by researcher)
Findings	Precise, numerical	Comprehensive, holistic, expansive, richly descriptive

Source: [51] adapted by the author.

4. Theorising in pragmatist institutional economics

The pragmatist institutional economics was founded by John R. Commons. The school of thought launched by him is often accused to create no theories as neo-classical economists do¹. Mainstream economists try in vain to find in texts of institutionalists deductive theories based on a priori axioms: «The institutionalists seem to have suffered from a methodological confusion regarding the nature of theory. They thought a description was a theory» [92, p. 187]; «Theory was never Commons’s metier. When he calls his «theories» are exclusively poorly wrought and somewhat lackadaisical classifications and sub-classifications of phenomena as they appear to him from the dimly held and mainly intuitive conception impossible to define» [77, p. 124]. Geoffrey Hodgson who has the Cartesian vision of institutional economics has been trapped in the same way: «Commons did not have the stature of a major theorist such as Alfred Marshall or Karl Marx. Furthermore, he did not have the aptitude for careful definitions or logical chains of reasoning» [39, p. 548]. John Commons spoke about theorizing in the Max Weber’s sense: «[The Weber’s contribution] converts the whole process of theorizing from a «theory», in the older sense of the logical consistency of reality, to the mere methodology of constructing intellectual tools to be used in investigation. There is no longer a question of antagonism between theory and practice, for a theory is a tool for investigating practice» [10, p. 722]. Commons underlines that the «search for the meaning of human activities can never be expected to yield an «exact» science, or even an approximation to the quantitative requirements of other

¹ See for example the section on American institutionalism of the book of Mark Blaug (1985).

sciences. Yet that is not wanted, anyhow. What the economist wants is understanding, and he wants measurement only as an aid to understanding» [10, p. 723].

The discussion in section 3 of this paper of militant Cartesian position of Geoffrey Hodgson makes here unnecessary a critical assessment of his following statement: «In the interwar period institutionalism was actually the dominant school of economic thought in the US. It lost ground to neoclassical formalism partly because it neglected its own task of underlying theoretical development. It is not difficult to see how institutionalism became bogged down. After establishing the importance of institutions, routines and habits, it underlined the value of largely descriptive work on the nature and function of politico-economic institutions. Whilst this was of value it became the predominant and almost exclusive practice of institutionalist writers. The institutionalists became data-gatherers par excellence. The error here was largely methodological and epistemological, and committed by many institutionalists with the exception of Veblen himself and few others. It was a crucial mistake simply to clamour for descriptive «realism», by gathering more and more data, or by painting a more and more detailed picture of particular economic institutions» [37, pp. 21 - 22].

It is true that pragmatist roots of original (old) institutional economics prevented the creation of context-free, a-historical, theoretical purely deductive constructions. This is not a handicap of pragmatist institutional economic theories not to be deductive but abductive, but this is their important cognitive advantage. I believe that Polanyi meant this kind of theory to deal with substantive concept of economic which derives from fact unlike the formal concept of economic which derives from logic [69, p. 31]. Theorising in pragmatist institutional economics can be nothing else than a creation of sets of concepts with their interrelations coming from «a close and reasonably full familiarity with the area of life under study». These concepts must be deeply rooted (grounded) in the data gathered about rules and shared meanings. Most of this data can be collected exclusively through direct contacts with actors. As we underlined in the first section of this paper, economic realities are very complex, determined to a large degree by cultural heritage but at the same time very dynamic. Knowledge concerning these realities for different countries, and even for different regions and different economic sectors inside the same countries, in different periods of time can hardly be presented on the basis of the same categories/concepts. Complexity, cultural diversity and dynamics of economic realities have as a consequence the impossibility of creation of theories useful for political and economic actors covering all these realities. That is why pragmatist institutional economics is determined as a discipline only by its subject-matter, method and very general key concepts like belief, habit, ideology, institution and some others. For most of the investigations other created concepts are inevitably contextual.

Special guidelines for producing this kind of theories were called Grounded Theory methodology [20, 29, 47, 85, 86]. Grounded theory was defined by its elaborators as a discovery of theory from data [29, p. 1]. Grounded theory methodology is a continuation of methodology of symbolic interactionism and is the most sophisticated version of qualitative research. According to this methodology, a theory must be generated not in an armchair but in the field. The process of data collection and the generation of a theory are not totally separated. The investigator collects documents and contacts actors to get data for analysis.

He/she tries to set aside theoretical ideas during data collection and initial stages of their analysis. He/she does it «in order to assure that the emergence of categories will not be contaminated by concepts more suited to different areas» [20, p. 4]. Categories have to emerge from (created on the basis of) texts of documents and transcripts of interviews. The categories discovered by the investigator are not just names of some pieces of data but reflect meanings of these pieces of data. The categories formulated by the researcher are the result of an abductive process of detailed creative analysis of texts of documents and transcripts of interviews. This process is oriented to capturing insights. The interviews led by the investigator are active: interviews are based on approximate questionnaires and the interviewer lets speak the actor; interviewed actors are not considered by the analyst as passive «subjects» and the interviews can even take the form of brainstorming sessions.

The decisions concerning data collection are taken gradually following the process of emergence (creation) of categories: «Beyond the decisions concerning initial collection of data, further collection cannot be planned in advance of the emerging theory» [29, p. 47]. The founders of the grounded theory called this type of data collection Theoretical Sampling: «Theoretical sampling is the process of data collection for generating theory whereby the analyst jointly collects, codes, and analyses his data and decides what data to collect next and where to find them, in order to develop his theory as it emerges. This process of data collection is controlled by emerging theory...» [29, p. 45]. Under theoretical sampling, data collection stops when new data does not influence the established categories, their properties and the links between categories: «As a study proceeded, however, ideas would become more focused, and the methods could correspondingly become more structured, interviews, for example, might resemble long conversations at the start of the study, but become highly selective and focused on particular topics (and therefore much shorter) by its close» [20, p. 6].

It is important to choose one or several core categories among the generated categories: «Through the process of integrating categories, a central theoretical framework could crystallize around a «core» category (...) A framework would «solidify» out the analysis and delimit the research by differentiating between core and peripheral categories and identify the scope and boundaries of the theory. This framework could in turn direct further data collection and analysis – but with a more circumscribed and focused agenda» [Ibid., p. 9]. During the analytic process the number of categories may be reduced and the theory can be formulated with smaller set of higher level concepts [29, p. 110]. The generated categories are hypotheses which help to understand the phenomena under study. According to Commons «it is a synthesis, which helps to formulate a hypothesis, for it sets up the following problem: What is the meaning of the activities in their relations to each others? And thus suggests the kind of hypothesis needed to select the facts and weigh their relative importance. It is a synthesis of all the factors out of which we formulate a hypothesis. It differs from the theory of Menger as synthesis differs from analysis» [10, p. 723].

When the abductive process of generation of categories is finished, the analyst determines deductively the consequences of hypotheses-categories and their links. Once a grounded theory is generated, the theory as a whole and its parts could be tested from the deduced consequences on the basis of statistical methods, which involve application of logical operation of induction. The result of this operation could be a rejection of the generated theory as a whole or its parts. It could mean

that the detailed data used for theory generation was not really representative. Though the pragmatist methodology of social research does not reject quantitative methods but rejects substitution of theory generation on the basis of data by testing of an a priori theory elaborated exclusively in an armchair. In this way the grounded theory methodology solves in a convincing way the problems of data sample size and data representativity.

Direct application of the grounded theory methodology to economic realities produces context embedded theories. It is clear that for this type of theories the continuity of pragmatist institutional research can be more methodological than substantive. But it does not mean that every grounded theory research is an isolated investigation from the scratch. Some important theoretical substantive continuity is possible in the framework of the same or close contexts. In the latter case the comparative analysis of several grounded theories could produce categories/concepts of a higher level which would form new more abstract theory embracing several contexts at the same time. For example a study of market institutions in developed capitalist countries at the turn of the 21st century made in [24] can be considered as a grounded theory of the second order (level), i.e. a generalisation of grounded theories based on «a close and reasonably full familiarity» with particular industries in particular countries and in a particular period of time.

Grounded Theory methodology is nothing else but an explicit application of human cognition scheme to social scientific research. Any real research would follow it implicitly. This is a very important advantage of this methodology in comparison with normal, in the sense of normal science, procedures. Its other advantage is its orientation to discovery which diminishes the probability not to notice important information concerning the area under study. This probability diminishes also by the requirement to set aside theoretical ideas during data collection and initial stages of their analysis. At later stages of analysis the influence on it of previous theoretical ideas shared by the researcher became inevitable but these ideas are confronted with data not filtered by these ideas, as in the normal standard practice, that allows to the researcher to evaluate their appropriateness. The fact that the most important sources of information for social research are texts depicting rules (habits) and ideologies (beliefs) determines the Grounded Theory methodology as the methodology of generation of categories on the basis of texts.

5. Experimenting in pragmatist institutional economics

Common understanding of science supposes that it has to have theoretical and experimental parts. If all generations of economists did not deny the necessity of the presence in their discipline of the theoretical part, their attitude toward the experimental one was not so obvious. Many economists of the 19th century denied the possibility of economic experiments. For example John Stuart Mill characterised political economy as essentially an abstract science, and its method as the method a priori [35, p. 13]. In his System of Logic (1843) «Mill offers a radical empirist view of science and then argues for a special dispensation to social sciences such as economics: a dispensation that is based in part on the absence of experimental-laboratory control in the social sciences (...) Because experimental (a posteriori) method is not available in the social domain, the deductive (a priori)

method is the only method available to economic science. Economics is a deductive science and only deductive science» [35, pp. 16, 21]. This kind of attitude is still vital among many economists. At the same time, field (naturalistic) and laboratory economic experiments began to develop actively in the second part of the 20th century in the United States. Both types of experiments followed positivist tradition.

The idea of economic field studies is simple: «If a fundamental policy change is under consideration, and if there is no clear basis for estimating a priori the effect of this policy on economic behaviour, then the only way to obtain this information is to put the policy into practice on a limited scale and to see what happens» [23, p. 9]. Undertaking this type of experiments is time and resource consuming: «In terms of time involved, there are one to two years of advance preparation, anyway from two to ten more years for the conduct of the experiment in the field, and from one to three years after that for the analysis of the huge amount of data that have been collected. Even preliminary results may require four to five years of work from the time the experiment is authorized» [23, p. 23]. In the seventies hundreds of million of dollars were spent for this kind of experiments for analysis of consequences of national programmes that had involved hundreds of billions of dollars (Ibid., p. 2). The experiments were carried out according to natural sciences' (positivist) standards: the populations involved were considered as passive subjects which have to react to established controlled variables and samples of these populations were determined in advance according to requirements of statistical criteria. The outcome of these experiments were almost exclusively numerical data processed with statistical methods. Very soon after the start of field economic experiments it became clear the difference of social experiments with experiments in physical and biological sciences: «[the former type of experiments] introduces a major new dimension of the methodology of experimentation because humans, unlike other animate or inanimate objects, are very likely to react to the conditions of the experiment and thereby confound the results». (Ibid.) This kind of effect has been already noticed earlier (1928) in the famous Hawthorne experiments.

Field economic experiments can be used not only for analysis of economic policy consequences but also for understanding of the systems under study: «The best way to understand something is to try to change it». Transformations in former communist countries can be considered as large-scale naturalistic economic experiments. Scholars involved as consultants in these transformations could take advantage of their participation for deep studies of these processes. They had opportunities to determine some parameters of these transformations and to contemplate on the resulting outcome. Close contacts of the consultant with actors during a long period of time in conditions of manipulations of important real life parameters (rules and ideologies) provide ideal conditions for pragmatist institutional research [102, 104]. As all pragmatist based research practices, they had to follow the logic of discovery and not the logic of verification. They have to consider actors involved in experiments not as passive «subjects» but as active participants of the study process. In this case the problem of experimental control becomes inessential. Multiple naturalistic socio-economic experiments take place constantly in countries with more stable institutional environment, but usually economists do not take advantage of these tremendous research opportunities: scholars and actors in majority of cases remain separated.

Pragmatist field economic experimenting could use the rich technical base of Action Research [32, 72, 87]. The main pioneer of action research – Kurt Lewin – associated the idea of action research with the idea of doing experiments in the field [72, p. 17]. Now the action research is usually understood as «the whole family of approaches to inquiry which are participative, grounded in experience and action-oriented» (Ibid., p. xxiv). Advocates of action research declare explicitly their affiliation to Pragmatism [32, 46]. In action research, new knowledge is created through active experimentation. The results are always tested in real life because action research aims to find solutions to real problems. The results are justified through their workability [46, p. 107]: «Action research focuses on solving context-bound real-life problems. Knowledge production cannot be done without taking into account the wholeness of a situation. Inquiry is based on questions emerging from real-life situations as opposed to the conventional academic way of working where questions arise from within the academic community which is subdivided into professional fiefdoms. Reading other researchers' work as a way of identifying new research questions, the standard practice is partly supplanted in action research by a more direct process of researching what social stakeholders understand to be pressing problems (...) Action researchers do not believe in the idea of scientific, cosmopolitan knowledge that is valid everywhere, and we reject the notion that valid knowledge can be produced only by «objective» outsiders using formal methods that supposedly eliminate bias and error» [46, pp. 105, 110]. Nevertheless action research carried out for different contexts allows making generalisations and creating higher level grounded theories. At the same time knowledge of different contexts by action researchers could be very useful in a particular situation: «By setting the local situation in the context of these broader comparisons, the professional action researcher can assist the local group in opening up its sense of the situation and some options for the future» [32, p. 99].

In action research, actors (insiders) and investigators (outsiders) collaborate closely. Action research can be called cogenerative research: «Local participants [insiders] are enabled to take charge of the meaning construction process. At the same time, trained researchers cannot make sense of local social life without secure communication links to these participants. The dynamic tension between insider and outsider knowledge is the basis for this cogenerative process (...) The interaction between local knowledge and expert knowledge through a cogenerative process is a core feature of action research. One consequence of this is that most accounts of action research, trying to be true to the process that constructed them, are rendered in narrative form» [Ibid., p. 113, 123].

Laboratory economic experimentation as field experimentation can also follow positivist and pragmatist approaches. The author of this paper devoted more than ten years to pragmatist laboratory experimental economics [99; 100; 101]. I was a pure neoclassical economist during my graduate and PhD studies [98]. After the disappointment in trying to investigate functioning of the Soviet economy on the basis of this approach, I moved for a short period of time to the behavioural approach [14, 80] but it was again a disappointment: even computer simulation models required too strong assumptions on human behaviour. The solution for me was very natural and simple: if we cannot simulate with formal models the behaviour of humans, let's invite these humans to simulate their own behaviour in laboratory conditions when their environment (responses to their decisions) is

simulated by computer simulation models. Once engaged in this way, the logic of the research has brought me to accept the pragmatist approach for gaming-simulation [99] as a basis for modelling and laboratory experimenting in the framework of institutional economics [100]. On the basis of this approach a large scale gaming simulation model was developed as a basis for laboratory experiments with the objective of comparative analysis of different economic systems [101]. The economic systems of two particular countries (Soviet Union and Hungary) were presented in this model by rules which depicted national economic legislations [101, pp. 43 - 69].

The method of gaming-simulation gives possibility to organise laboratory economic experiments as a research process which follows the pragmatist logic of theory/hypothesis discovery. Abductive discovery procedures are organised in this kind of laboratory experiments on the basis of a dialogue between scholars (experimenters) and players-participants (experienced actors and experts in the area of real life under study), as a special form of «brainstorming session» accompanied by a computer simulation model managed by the players-participants: «The group of players and experts can completely coincide with the research group but it can be extended at the expense of involvement (for the period of research) of professional managers and scientists, specialists in this particular and neighbouring field. The composition of participants is considerably dependent on the research goals and the type of simulation games applied. As the game becomes more abstract, a higher percent of scientists among the players will be involved. The more concrete the problem or the game is, the higher is the proportion of management practitioners. The main emphasis in gaming experiment is given to joint creative activity of all participants, players included. Their task should not be confined to that of passive examined subjects. It is just the players who, collaborating with the experimenters, must make the main contribution to the solution of the investigated problem. Their gaming activity (the activity while performing the gaming roles) must be a cause, framework and an empirical basis for the research (activity apropos of the game). The participants of a gaming simulation experiment contribute to the solution of the problem in the process of discussions, filling in questionnaires and making reports as well as other types of activity apropos of the game» [100, p. 198].

At present the so-called Experimental Economics is developing in the framework of mainstream economics' concepts and methodology [16, 25, 36, 43, 82]. In this discipline laboratory experiments are understood as follows: «When I speak of «laboratory» experiments, I am speaking of experiments in which the economic environment is very fully under the control of the experimenter, who also has relatively unimpeded access to the experimental subjects. This distinguishes laboratory experiments from «field» experiments, in which relatively few aspects of the environment can be controlled, and in which only limited access to most of the economic agents may be available» [73, p. 949]. In this more or less correct vision of economic laboratory experiments we already see the sign of positivist orientation in calling the participants-players experimental subjects. Most of Experimental Economics laboratory experiments are carried out with students (undergraduate and MBA) on the basis of economic equilibrium, game theory, and utility theory schemes. These laboratory experiments follow the logic of theory/hypothesis verification in the framework of positivist paradigm. They are oriented to «creating an experimental environment in which theories being tested

give unambiguous predictions, and of controlling or measuring the preferences of experimental subjects», «experimental tests of axiomatic models», «to test hypothesis, which is that agents in a market environment will behave like utility maximizers» [Ibid., p. 950, 952, 993]. Another sign of positivism: «Structure of the experimental design should be planned with consideration for the subsequent statistical analysis of the hypotheses of interest» [16, pp. 30, 31].

Advocates of neoclassical experimental economics see two main advantages offered by laboratory methods: replicability and control [Ibid., p. 14]. An unautistic reader may find unconvincing the following arguments in favour of this kind of experimental economics: «The economic profession imposes little professional credibility on the data-collection process, so economic data are typically collected not by economists for scientific purposes, but by government employees and businessmen for other purposes (...) But relatively inexpensive, independently conducted laboratory investigations allow replication»; «Surprising is the lack of control over data from natural markets sufficient to test even basic predictions of neoclassical price theory. Consider, for example, the simple proposition that a market will generate efficient, competitive prices and quantities. Evaluation of this proposition requires price, quantity, and market efficiency data, given a particular set of a market demand and supply curves. But neither supply nor demand may be directly observed with natural data»; «Distinguishing natural data may sometimes exist in principle, but the data are either not collected or collected too imprecisely to distinguish among alternative theories. In other instances, relevant data cannot be collected, because it is simply impossible to find economic situations that match the assumptions of the theory (sic!). An absence of control in natural contexts presents critical data problems in many areas of economic research.» [Ibid., p.15]. The disdain of economists for data collection cannot be a rationale for laboratory economic experiments. Data are understood here as «objective» numerical data. For an institutional economist most of the data he/she needs is not numerical but qualitative data representing the meanings of actors and the latter can share this data with investigators. If some theoretical parameters cannot be in some way empirically approached they have to be abandoned. If it is «impossible to find situations that match the assumptions of the theory» why collect these data? An absence of control in natural contexts does not present critical data problems if the objective of the research is not to predict or to verify but to understand with help of people acting in these contexts. The only important argument evoked here, which can be accepted, is the relatively high cost of field data collection but the most important rationale for economic laboratory experiment has to be found somewhere else. This rationale is a possibility to plunge a mixed team (scholars and actors) of participants in an environment that does not exist for the moment (for example an introduction of a new economic legislation) and investigate problems arising in this environment. Preference for laboratory to field experiments could come either from cost considerations or from potential undesirable (dangerous) consequences of the field experiments. Most of the data in these experiments are produced by the participants. In addition a computer simulation model, which provides feedback of decisions made by players, can also supply data for this investigation.

Cartesian/positivist nature of neoclassical experimental economics can be seen in a priori microeconomic systems [81] at the basis of its experimental situation design and in the role of players-participants. In addition to the usual a priori conceived elements of microeconomic, game or utility theories, microeconomic

system contain a priori rules, which neoclassical authors misleadingly called institutions. The latter represents abstractions of similar type to an abstraction of the auctioneer in the microeconomic general equilibrium model. As it was already mentioned, participants in neoclassical laboratory economic experiments are considered as «subjects» and are recruited among undergraduate and MBA students. In this kind of experiments «participants receive salient rewards that correspond to the incentives assumed in the relevant theory (...) Also, as a general matter, rewards are monetary» [16, pp. 24, 25]. In order to guarantee an «unbiaseness» of participants' behaviour, the experimenters make a lot of efforts to prevent participants from discovering objectives of the experiment.

The methodology of pragmatist gaming simulation experiments is the opposite. Most of the data generated by these experiments are not quantitative but qualitative. The experimental situation as the whole experimental design is based in this kind of experiments not exclusively on abstractions, but primarily on results of preliminary field studies. The central concept of pragmatist gaming simulation experimentation is the concept of players' dual behaviour: «A game assumes simultaneous realisation (but not sequential alternation in time!) of practical and conventional behaviour. A player must keep in mind that he is taking part in a conventional (unreal) situation and at the same time ignore the fact (...) The duality of the player's behaviour in gaming simulation experiment is manifested in two types of activity: in the gaming activity [execution of role] and the activity apropos of the game [research]. Player's system of motivation should be such as to provide those necessary proportions of dual behaviour which would not run counter the purposes of the experiment (...) In an experiment so designed, the players are directly interested in studying the functioning of the analysed institutions (...) The emphasis on the aim to win may disturb the necessary level of dual behaviour and thus devaluate the experiment» [99, pp. 404 - 409].

Conclusion

The Pragmatist Institutional Economics can be outlined in the following way:

1. Economic activity is analysed at institutional level taking largely into consideration organisational and cognitive levels and to a much lesser degree technological level (see Table 2 in section 2 of this paper). It means that in the centre of analysis are human interactions.

2. Rules and beliefs behind them that structure human interactions are the most important analysed units. These rules and beliefs can be formal and informal.

3. Formal rules are written adopted laws and regulations. 'Formal' beliefs are ideologies fixed in a written form in manuals, programmes of political parties and other documents.

4. Informal rules and beliefs are shared by actors, members of a certain community. Very often these rules and beliefs are linked with a cultural heritage of members of this community. Sometimes informal rules and beliefs are complementary to formal ones, sometimes it is not the case. The only possible source of information about informal rules and beliefs, and their complementarity or contradiction to formal rules and beliefs, are members of this community, bearers of these informal rules and beliefs.

5. The task of the researcher is to contact actors by interviewing them, participating in their activities (participant observation) or even making the

research together with them (action research) in order to understand rules and beliefs that guide their activities.

6. Last but not least, because rules and beliefs of the present almost always have roots in the past, researchers should study their historical evolution in order to understand current rules and beliefs.

This outline should orient pragmatist institutional economists in data gathering concerning certain area under study but no other theory or idea should influence this process. Some categories made out from the analysis of the data, including transcripts of interviews, could mark some discovered phenomena when others could contribute to the understanding of discovered or already met phenomena. The pragmatist institutional research should follow the logic of discovery of unknown and understanding of this unknown based on the collected data and should not follow the logic of verification of some preconceived theories or hypothesis.

This paper is an appeal to economists to adopt the pragmatist method. This method, in its modern form related to social sciences, is Qualitative Research. It is called «qualitative research» because it deals with primarily qualitative data but its most important characteristic is its affiliation to the pragmatist paradigm (see Table 1 in section 1). The modern cognition science confirms as realist this pragmatist paradigm of research. Table 3 in section 3 of the paper shows the difference between the qualitative research and more traditional quantitative research which follows the positivist paradigm. The qualitative research includes basic or generic qualitative research, ethnographic study, case study, life story study, phenomenological study, grounded theory and action research. For data gathering it uses existing texts, semi-directive interviews and participant observation. Among different types of qualitative research Grounded Theory for theorising and Action Research for field experiments are most advanced. Grounded Theory can be considered as an explicit application of the model of cognition for social research. The core of this model elaborated by cognition science is the process of categorisation. Grounded Theory is a method of theorising based on collecting and gradual processing of qualitative data with the objective of creation of categories/concepts emerging from this data. Action Research method supposes the highest degree of contacts between researchers and actors in the framework of experiments and in this way it reduces the cognition gap between them and creates some kind of a larger investigating community interested in the success of the research. At last, pragmatist experimental institutional economics carry out economic experiments in the form of gaming simulation which may be considered as institutional modelling [100]. Participants in these experiments are not considered as passive subjects, they are not undergraduate students but real actors, and take part in the research process which could be characterised as some kind of brainstorming sessions in a mixed team of actors and researchers on the basis of a computer based simulation.

REFERENCES

1. Atkinson R. (1998), *The Life Story Interview*, Thousand Oaks: Sage Publications.
2. Alston L.J., T. Eggertsson and D.C. North, eds. (1996), *Empirical Studies in Institutional Change*, Cambridge: Cambridge University Press.

3. Bazzoli L. (1999), *L'économie politique de John R. Commons. Essai sur l'institutionnalisme en sciences sociales*, Paris: L'Harmattan.
4. Berger P. and T. Luckman (1991), *The Social Construction of Reality*, London: Penguin Books.
5. Blaug M. (1985), *Economic Theory in Retrospect*, Cambridge: Cambridge University Press.
6. Blumer H.(1969), *Symbolic Interactionism. Perspective and Method*. Englewood cliffs, New Jersey: Prentice-Hall.
7. Bush P.D. (1993), «The Methodology of Institutional Economics: A Pragmatic Instrumentalist Perspective», in (Tool, 1993), pp. 59–118.
8. Commons J.R. (1924), *Legal Foundations of Capitalism*, reprinted New Brunswick: Transaction Publishers, 1995.
9. Commons J.R. (1932) «The problem of correlating law, economics and ethics», in Rutherford M. and W.J. Samuels (eds) *John R. Commons. Selected Essays, Volume Two*. New York : Routledge, 1996, pp. 453–473.
10. Commons J.R. (1934a), *Institutional Economics. Its Place in Political Economy*, reprinted New Brunswick: Transaction Publishers, 1990.
11. Commons J.R. (1934b), *Myself. The Autobiography of John R. Commons*, reprinted Madison: The University of Wisconsin Press, 1964.
12. Comte August (1975), *Cours de philosophie positive*, Paris : Hermann.
13. Corei T. (1995), *L'Economie Institutionnaliste*, Paris: Economica.
14. Cyert R.M. and J.G. March (1963), *A Behavioral Theory of the Firm*, Englewood Cliffs, N.J.: Prentice Hall.
15. Davis D.B., D.W. Hands and U. Maki, eds. (1998), *The Handbook of Economic Methodology*, Cheltenham, U.K.: Edward Elgar.
16. Davis D.D. and C.A. Holt, eds. (1993), *Experimental Economics*, Princeton, N.J.: Princeton University Press.
17. Debzau A.T. and D.C. North (1994), «Shared Mental Models: Ideologies and Institutions», *Kyklos*, 47 (1), pp. 3–30.
18. Denzin N.F. and Y.S. Lincoln, eds. (2000), *Handbook of Qualitative Research*, Thousand Oaks: Sage Publications.
19. Denzin N.K. (2001), *Interpretive Interactionism*, Thousand Oaks: Sage Publications.
20. Dey I. (1999), *Grounding Grounded Theory. Guidelines for Qualitative Research*, London: Academic Press.
21. Dewey J. (1938), *Logic: The Theory of Inquiry*, New York: Henry Holt and Company.
22. Earl P.E., ed. (1988), *Behavioural Economics*, Aldershot, UK: Edward Elgar.
23. Ferber R. and W.Z. Hirsch (1982), *Social Experimentation and Economic Policy*, Cambridge: Cambridge University Press.
24. Fligstein N. (2001), *The Architecture of Markets. An Economic Sociology of Twenty-First-Century Capitalist Society*, Princeton, N.J.: Princeton University Press.
25. Friedman D. and S. Sunder (1994), *Experimental Methods. A primer for Economists*, Cambridge: Cambridge University Press.
26. Friedman M. (1953), «Methodology of Positive Economics», in Milton Friedman, *Essays in Positive Economics*, Chicago: The University of Chicago Press, pp. 3–43.
27. Fullbrook E., ed. (2003), *The Crisis in Economics, The post-autistic economics movement: the first 600 days*, London: Routledge.
28. Furubotn E.G. and R. Richter (1998), *Institutions and Economic Theory. The Contribution of the New Institutional Economics*, Ann Arbor: The University of Michigan Press.
29. Glaser B.G. and A.L. Straus (1967), *The Discovery of Grounded Theory: Strategy for Qualitative research*, Chicago: Aldine Publishing Company.
30. Gomm R., M. Hammersley and P. Foster, eds., (2000), *Case Study Method : Key Issues, Key Texts*, Thousand Oaks: Sage Publications.

31. Greenblat C.S. and R.D. Duke, eds. (1975), *Gaming-Simulation. Rational, Design, and Applications*, Newbury Park: Sage Publications.
32. Greenwood D.J. and M. Levin (1998), *Introduction to Action Research. Social Research for Social Change*, Thousand Oaks: Sage Publications.
33. Guerrien B. (2002), «Is There Anything Worth Keeping in Standard Microeconomics», in (Fullbrook, 2003), pp. 104–107.
34. Hamel J. (1993), *Case Study Methods*, Newbury Park: Sage Publications.
35. Hands D.W. (2001), *Reflection without Rules. Economic Methodology and Contemporary Science Theory*, Cambridge (UK): Cambridge University Press.
36. Hey J.D. and G. Loomes, eds. (1993), *Recent Developments in Experimental Economics*, 2 vols., Aldershot (UK): Edward Elgar
37. Hodgson, G.M. (1988), *Economics and Institutions*, Cambridge: Polity Press.
38. Hodgson, G.M., W.J. Samuels and M. R. Tool, eds. (1994), *The Elgar Companion to Institutional and Evolutionary Economics*, in two volumes, Aldershot (UK): Edward Elgar.
39. Hodgson, G.M. (2003), «John R. Commons and the Foundations of Institutional Economics», *Journal of Economic Issues*, Vol. XXXVII, n° 3, September, pp. 547–576.
40. James W. (1890), *Principles of psychology*, New York: Holt.
41. Joas H. (1993), *Pragmatism and Social Theory*, Chicago: University of Chicago Press.
42. Joscow P.W. (2003), *New Institutional Economics: A Report Card*, www.isnie.org
43. Kagel J.H. and A.L. Roth (1995), *The Handbook of Experimental Economics*, Princeton, N.J.: Princeton University Press.
44. Kasper W. and M. E. Streit (1998), *Institutional Economics, Social Order and Public Policy*, Cheltenham, UK: Edward Elgar, 1998.
45. Kuhn T.S. (1970), *The Structure of Scientific Revolutions*, Chicago: University of Chicago Press.
46. Levin M. and D. Greenwood (2001), «Pragmatic Action Research and the Struggle to Transform University into Learning Communities», in (Reason and Bradbury, 2001), pp. 103–113.
47. Locke K. (2001), *Grounded Theory in Management Research*, Thousand Oaks: Sage Publications.
48. Martin J. (2001), *Organizational Behaviour*, London: Thomson Learning.
49. Mead G.H. (1934), *Mind, Self, & Society*, Chicago: The University of Chicago Press.
50. Ménard C., ed. (2000), *Institutions, Contracts and Organizations. Perspectives from New Institutional Economics*, Edward Elgar: Cheltenham.
51. Merriam S.B. (2001), *Qualitative Research and Case Study Applications in Education*, San Francisco: John Wiley & Sons.
52. Mini P. (1994), «Cartesianism in Economics», in (Hodgson, Samuels and Tool, 1994), pp. 38–42)
53. Mirowski Ph. (1987), «The Philosophical Bases of Institutionalist Economics», *Journal of Economic Issues*, Vol. XXI, n° 3, September, pp. 1001–1038.
54. Morse J.M. ed., (1994), *Critical Issues in Qualitative Research Methods*, Thousand Oaks: Sage Publications.
55. Morales A. , ed. (2003), *Renascent Pragmatism*, Aldershot: Ashgate.
56. Mucchielli A., ed. (1996), *Dictionnaire des méthodes qualitatives en sciences humaines et sociales*, Paris: Armand Colin.
57. North D.C. (1981), *Structure and Change in Economic History*, New York: W.W. Norton & Company.
58. North D.C. (1990), *Institutions, Institutional Change, and Economic Performance*, Cambridge: Cambridge University Press.
59. North D.C. (1998), «Institutions and Economics», in Bechtel W. and G. Graham, eds., *Companion to Cognitive Science*, Blackwell Publishers: Oxford, pp. 713–721.
60. North D.C. (2000), «Understanding institutions», in Ménard (2000), pp. 7–10.
61. North D.C. (2003), *The Role of Institutions in Economic Development*, Occasional paper No.1, New York and Geneva: Economic Commission for Europe, United Nations.

62. Peirce C.S. (1868) «Some Consequences of Four Incapacities», in Peirce (1992), pp. 28–55.
- 62a. Peirce C.S. (1877) «The Fixation of Belief», in Peirce (1992), pp. 109–123.
63. Peirce C.S. (1878), «How to Make Our Ideas Clear», In Peirce (1992), pp. 124–141.
64. Peirce C.S. (1903a), «The Nature of Meaning». in Peirce (1998), pp. 209–225.
65. Peirce C.S. (1903b), «Pragmatism as a Logic of Abduction», in Peirce (1998), pp. 226 – 241.
66. Peirce C.S. (1905), «What Pragmatism Is», in Peirce (1998), pp. 331–345.
67. Peirce C.S. (1992), *The Essential Peirce. Selected Philosophical Writings*, Vol. 1, Bloomington: Indiana University Press.
68. Peirce C.S. (1998), *The Essential Peirce. Selected Philosophical Writings*, Vol. 2, Bloomington: Indiana University Press.
69. Polanyi K. (1957), «The Economy as Instituted Process», In Granovetter M. and R. Swedberg, eds., (2001), *The Sociology of Economic Life*, Oxford: Westview Press, pp. 31–50.
70. Poupart J. et al. (1997), *La recherche qualitative. Enjeux épistémologiques et méthodologiques (Qualitative Research. Epistemological and Methodological Issues)*, Boucherville (Quebec): Gaëtan Morin.
71. Ramstad Y. (1986), «A Pragmatist's Quest for Holistic Knowledge: The Scientific Methodology of John R. Commons», *Journal of Economic Issues*, Vol. XX, n° 4, December, pp. 1067–1105.
72. Reason P. and H. Bradbury, eds. (2001), *Handbook of Action Research*, Thousand Oaks: Sage Publications.
73. Roth A. E. (1988), «Laboratory experimentation in Economics: A Methodological Overview», *Economic Journal*, 98 (393), December, pp. 947–1031.
74. Rutherford M. (1996), *Institutions in Economics: The Old and the New Institutionalism (Historical Perspectives on Modern Economics)*, Cambridge: Cambridge University Press.
75. Saunders D. and N. Smally, eds. (2000), *The International Simulation and Gaming Research Yearbook Volume 8. Simulation and Games for Transition and Change*, London: Kogan Page Limited.
76. Schutz A. (1967), *The Phenomenology of the Social World*, Northwestern University Press.
77. Seckler D. (1975), *Thorstein Veblen and the Institutionalists: A Study in the Social Philosophy of Economics*, Colorado: Colorado Associated University Press, Boulder.
78. Silverman D. (1993), *Interpreting Qualitative Data. Methods for Analysing Talk, Text and Interaction*, Thousand Oaks: Sage Publications.
79. Silverman D., ed. (1997), *Qualitative Research. Theory, Method and Practice*, Thousand Oaks: Sage Publications.
80. Simon H. (1977), *New Science of Management Decision*, Englewood Cliffs, N.J.: Prentice Hall.
81. Smith V.L. (1982), «Microeconomic Systems as an Experimental Science», *American Economic Review*, 72 (5), December, 923 – 55 (pp. 61–93)
82. Smith V.L. ,ed. (1990), *Experimental Economics*, Aldershot (UK): Edward Elgar.
83. Stake R.E. (1995), *The Art of Case Study Research*, Thousand Oaks: Sage Publications.
84. Sternberg R. J. and T. Ben-Zeev (2001), *Complex Cognition. The Psychology of Human Thought*, Oxford: Oxford University Press.
85. Strauss A. L. (1987), *Qualitative Research for Social Scientists*, Cambridge: Cambridge University Press.
86. Strauss A. and J. Corbin (1998), *Basics of Qualitative Research. Techniques and Procedures for Developing Grounded Theory*, Thousand Oaks: Sage Publications.
87. Stringer E.T. (1999), *Action Research*, Thousand Oaks: Sage Publications.
88. Thomas W.I. and F. Znaniecki (1926), *The Polish Peasant in Europe and America*, 2 vols., New York: Knopf.

89. Tool M. R. ed. (1993), *Institutional Economics: Theory, Method, Policy*, Boston /Dordrecht / London: Kluwer Academic Publishers, 1993.
90. Usunier J.-C., Easterby-Smith M. et R. Thore (2000), *Introduction à la recherche en gestion*, Paris : Economica.
91. Veblen T. (1919), *The Place of Science in Modern Civilization*, New Brunswick: Transaction Publishers, reprinted in 2002.
92. Ward B. (1966), «Institutions and Economic Analysis», in *The Structure of Economic Science*, ed. Roy Krupp, Englewood Cliffs: Prentice-Hall, N.J., pp. 184–200.
93. Weber M. (1978), *Economy and Society: An Outline of Interpretative Sociology*, 2 vols., Berkeley: University of California Press; first published in 1921–1922.
94. Wilkes A.L. (1997), *Knowledge in Minds. Individual and Collective Process in Cognition*, Hove, East Sussex, UK: Psychology Press.
95. Williamson O.E. (1975), *Markets and Hierarchies: Analysis and Antitrust Implications*, New York: The Free Press.
96. Williamson O.E. (1985), *The Economic Institutions of Capitalism*, New York: The Free Press.
97. Williamson O.E. (2000), «The New Institutional Economics: Taking Stock, Looking Ahead», *Journal of Economic Literature*, XXXVIII (3), September, pp. 595–613.
98. Yefimov V. (1970), «Dvoystvenye otsenki v usloviakh neopredelionnosti» (Shadow prices under uncertainty), *Ekonomika i matematicheskie metody (Economics and Mathematical Methods)* N° 3, Moscow: Nauka.
99. Yefimov V. (1979), «On the nature of management simulation games», *Economicko-Matematicheskyy Obzor (Review of Econometrics)*, vol. 15, N° 4, Prague: Academia, pp. 403–416.
100. Yefimov V. (1981), «Gaming-simulation of the functioning of economic systems», *Journal of Economic Behavior & Organization*, vol. 2, N° 2, pp. 187–200.
101. Yefimov V. (1988), *Imitatsionnaya igra dlya systemnogo analiza upravleniya ekonomikoy (Simulation Game for System's Analysis of Economic Management)*, Moscow: Nauka.
102. Yefimov V. (1997), «Approche institutionnelle de l'analyse de la transition» (Institutional approach for transition analysis). *Revue d'études comparatives Est-Ouest*. Paris : C.N.R.S., N° 2, pp. 99–119.
103. Yefimov V. (2001) «Structures sociales en Russie, cellules et réseaux» (Social structures in Russia : units and networks), *Nouveaux Cahiers de l'IUED, Collection Enjeux*, N° 12, Paris & Geneva : PUF, pp. 29–52.
104. Yefimov V. (2003), *Economie institutionnelle des transformations agraires en Russie (Institutional Economics of Agrarian Transformations in Russia)*, Paris : l'Harmattan.

Стаття надійшла до редакції 23.06.2015