

KAREL ENGLIŠ'S METHODOLOGY OF SOCIAL SCIENCES IN COMPARISON WITH WORK OF FRIEDRICH A. HAYEK

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Abstract

The aim of this article is to analyse Karel Engliš's methodology of social sciences in comparison with work of Friedrich A. Hayek (1899–1992). Karel Engliš (1880–1961) is the most influential economist of the interwar era of Czech and Czechoslovak economics, that being true both in the sphere of theory and practical policy. Engliš was a member of the so called Brno School of Economics, along with other authors, notably Václav Chytil (1907–1980) and Jan Loevenstein (1886–1932), which developed and used its own particular methodology of social sciences and economics in particular based on teleological conception of economic phenomena. This conception of economics is in some aspects similar to that of the better known Austrian School of Economics, that consequently developed by the end of 20th Century into one of the most influential heterodox school of economics and which uses a teleological methodology of its own. This article points out some similarities and differences between both variations of the teleologically based Schools of Economics, using the work of Karel Engliš and Friedrich A. Hayek as the referential points.

Key words: teleology, methodology of social sciences, Karel Engliš, F. A. Hayek

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Introduction

Economics is one of the most dynamic social sciences of the recent era. Few other fields of social sciences have drawn so much attention and talent, as the branch that concerns itself with human behaviour between ends and scarce means which have alternative uses. Also since its inception as a separate science at the end of 18th Century the economics underwent a significant development that aimed to rival that of natural sciences. In fact it was indeed due to this ambition that economics gradually started to evolve from a so called “moral science” to its current form that uses many tools originally utilized by the natural sciences like physics,

particularly mathematics, empiricism and methodological induction. This journey from a moral science to a traditional science which gained pace with A. Marshall's "Principles of Economics" in 1890 reached its climax with publication of the famous essay by Milton Friedman titled "The Methodology of Positive Economics" in 1953. This essay marked the point when the majority of economic scientists accepted the traditional method for the field of economics as either an exclusive or at least prevalent method. However there have long existed different approaches to the field of economics and with the global financial crisis of 2008– 2009 the attention started to slowly shift to examination of these "dissent" streams of economics. This article picks two such examples, these being the methodology of economic science by Nobel Prize laureate Friedrich A. Hayek (1899–1992) and interwar Czechoslovak economist and several times minister of finance Karel Engliš (1881–1961).

Friedrich A. Hayek was a world renowned economist, who is today famous for many insights into crucial economic phenomena, these being the especially division and utilization of knowledge between independent economic agents and the spontaneous nature of economic order (along with other social orders). Lesser known are his ideas concerning the nature of economics as a science and methodology of science in general. Although Hayek belonged to the established tradition of economics named after its place of birth the Austrian Economics, he gradually came to revise some of its basic tenets and conceptions during his life. His theory of economic methodology thus reflects at the same time elements of the theory of his mentor Ludwig von Mises (1881–1973), but also shows some influence of theory of his personal friend, well known philosopher of science Karl Popper (1902–1994), along with some original concepts by Hayek himself – this is precisely described in the article of Caldwell (2009) and Birner (2014). Other authors analysing the methodology of social sciences in Hayek's works are (Boettke, 2015).

Karel Engliš on the other hand is virtually unknown outside of the contemporary the Czech Republic and even there his name is usually mentioned in connection with his many and undisputed practical achievements in the political arena, rarely with the development of an original economic methodology that was a part of Engliš's wider theory of the complex system of science as a whole. This is mainly due to the unfavourable course of fate that struck Czechoslovakia in the 20th Century, since the development of Engliš's theory was stopped at first by coming of the second world war and closure of Czechoslovak universities by the Nazi occupation forces in 1939 and later by expulsion of Engliš and like-minded "bourgeois" scholars from universities after the Communist coup of 1948. For more than four decades lay his work dormant, being replaced by the socialist economics of the new regime and only after

velvet revolution of 1989 new attention could be paid to these once original, yet now half-forgotten ideas (Vencovský, 2000; Fuchs, 2000; Krameš, 2011). Only few articles compare the attitudes of methodology of Hayek and Engliš (Horych, 2019) or attitudes of Engliš's ideas and the Austrian School (Bazantova, 2016).

The main goal of this essay is to present and compare two branches of heterodox, i.e. non-mainstream, economics especially with regards to their methodology of economic science itself and its relation to the other social sciences. While both strands here discussed are sometimes termed by a concept of “teleological” economics or science, they display some both some similarities and differences, which will be elaborated further in this article.

1 Methodology of Economics (and other social sciences) of F. A. Hayek

Friedrich August von Hayek was born on 8 May 1899 in Vienna in what was then the monarchy of Austria-Hungary. His father August von Hayek was a physician and botanist who taught courses as a *privatdozent* at the Vienna University and passed on to his son his own scientific passion. Unlike his father however, young Friedrich Hayek was drawn more to the sphere of social sciences, and after the end of WWI enrolled at the Vienna University and later received doctorates in law (1921) and political sciences (1923), whilst focusing his attention mainly on economics (that was traditionally taught at the faculties of law in Austria-Hungary and successor states).

During his studies at the Vienna University Hayek became familiar with the distinct tradition of economic thought that was founded in Vienna by the economist and university professor Carl Menger (1840 –1921). This school of economic thought became known as the “Austrian” or sometimes also “Vienna” School of Economics. The basics tenets of the tradition were established by Menger in his major works, the “*Grundsätze der Wirtschaftslehre*” (1871) and “*Untersuchungen über die Methode der Socialwissenschaften*” (1883). In these works, Menger introduced an innovative conception of economics that was based primarily on the notions of the subjective theory of value, deductive scientific method and methodological individualism. Menger believed that economic analysis must begin with the individual, analyze his action with regards to his subjective motive of action and then proceed to more complex social phenomena, rather than the other way around. This groundwork was later expanded by the second generation of authors, two university professors Eugen Böhm von Bawerk (1851–1914) and Friedrich Wieser (1851–1926). It was through the contact with these two distinct economists, Eugen Böhm von Bawerk being a

family acquaintance and Friedrich von Wieser becoming his teacher at the Vienna University that Hayek learned the basics and method of the Austrian School.

Just as important was however the influence of another great Austrian, the chief economist of Vienna Chamber of Commerce, Ludwig von Mises (1881–1973). It was Mises, who took the apparatus of the Austrian School and applied it to the issues of socialist commonwealth, which resulted in his famous work titled *Socialism* (orig. “*Die Gemeinwirtschaft*”) published in 1922. This book used the subjective theory of value, methodological individualism and deductive reasoning to demonstrate, that rational economic calculation was impossible in a centrally planned economy, which was then the goal of majority of socialist political parties. This work made a great impression on Hayek and gradually led to Mises becoming Hayek’s teacher and intellectual mentor. Mises also passed on Hayek his more sophisticated and complex theory of human action that expanded Menger’s original ideas concerning the nature of economic science. This conception of economic science was named *praxeology* by Mises and was later elaborated upon in great detail in Mises’s *opus magnum* “*Human Action*” (1949). This work and Mises’s theory, the praxeology, forms the basis of the Austrian Economic methodology to this day.

This article does not focus on the praxeology itself, it will therefore only sketch main tenets of the theory and for a greater detail and fuller picture, thorough reading of “*Human Action*” is recommended. Some explanation is however required for the following explanation of Hayek’s own methodology, because it draws significantly from it. Praxeology is in essence a teleological theory of human action, a science focused on explaining the phenomenon of purposeful human action by using deductive reasoning and *a priori* categories, leading to a universally valid theory. This conception of economic science thus differs in several aspects from that of natural sciences. It does not use mathematical models, since it doesn’t operate with exact data. This is mainly due to its refusal to include empirically gained data and proceed with inductive reasoning on their basis, which is what natural sciences generally do. Since praxeology aims at explaining the human action in general, a priori terms, it doesn’t allow for any empirically gained data, as these reflect only particular set of circumstances, that cannot be readily used to generate general laws of human action.

If one is to understand Hayek’s own conception of economic methodology, a more complex research is required, since Hayek never wrote a single volume dedicated purely to general theory of economics. His *opus magnum* “*Law, Legislation and Liberty*” that consists of three volumes in total (1973, 1976, 1979) elaborates more on the general theory of social order and the phenomena of spontaneous order, than on elementary economic questions.

Therefore one has to go through numerous Hayek's articles to find the answers. There are four articles, that are especially significant in this regard, these arranged in the chronological order of their publication are "Economics and Knowledge" (1936, in Hayek 1980, p. 33–56), "Facts of Social Sciences" (1942, in Hayek 1980, p. 57–76), "Degrees of Explanation" (1955) and "The Theory of Complex Phenomena" (1967). This is important to keep in mind, since Hayek's methodology gradually evolved during his life and methodologically speaking Hayek of 1936 is a different person to Hayek of 1967.

Therefore starting with "Economics and Knowledge", we find Hayek accepting much of his Mises's methodology. Hayek explicitly regards the *praxeology* as a proper method for the study of isolated individual's action (though he calls it "*Pure Logic of Choice*" rather than praxeology – the term was established only later in 1949 in "Human Action"). The only point of difference between him and Mises consists of perceived limits of the method – Hayek saw praxeology as useful in explaining how isolated individual acts, in cases of more individuals however, this method was not sufficient and required addition of an empirical element with regard to assertions about knowledge of acting agents. Thus, in Popperian terms, a verifiable, or falsifiable portion of economic theory was allowed to accompany the unverifiable/unfalsifiable praxeology. This is a very important point, since it marks the start of departure of Hayek from the purely praxeological position – something that other Austrians would refuse to do and later would criticize Hayek for.

In "Facts of Social Sciences", Hayek basically affirmed his earlier position, with placing emphasis on difference of data used by social and natural sciences. The very nature of data used by social sciences, including economics, does not allow for exact methods utilized by natural sciences and failure to respect this distinction was critical and potentially even dangerous according to Hayek. Economics could not meet the same criteria of exactness and predictive ability, that natural sciences can, and should not attempt to do so. Rather limitation of its scope should be recognized and respected. Even inexact theory that does not provide quantitative answers may still serve a purpose in explaining the human action. According to Hayek this applied to spheres of economics, sociology and history in particular. This however was not the case of natural sciences, that were generally capable of such models and predictions.

A significant change came later with publication of "Degrees of Explanation" in 1955. Here Hayek revised his earlier stance, since he no longer advocated strict distinction between sciences about human action on one hand and natural phenomena on the other, and instead began to place emphasis on the nature of particular examined phenomenon. While his

understanding of economics and its limits remained essentially the same, he came to regard many phenomena of natural sciences in the same way. The complex nature of these forbade exact and precise predictions and allowed only for general predictions made in kind about what may be expected in certain circumstances.

Finally, in 1967 with publication of “The Theory of Complex Phenomena” Hayek finished his methodological journey. The article contains his final acceptance of distinction between simple and complex phenomena, instead of earlier dichotomy of natural/social sciences. Hayek developed in greater detail his ideas originally sketched in Degrees of explanation and asserted that more complex phenomena, regardless of their social or natural character, are capable only of explanation and prediction in patterns, not exact quantifiable figures. Thus the economist can only provide pattern predictions with the regard to many economic phenomena, just as the biologist can only provide pattern explanation and prediction when it comes the phenomenon of evolution. Just as in Degrees of explanation Hayek still regards these pattern predictions and explanations useful for human purposes, since despite their inexact character they still help us understand the surrounding world and make better decisions.

In conclusion we might say that although Hayek’s position on general scientific methodology evolved through the course of his life, some aspects remained relatively stable. With the regard to the topic of this article, the most important one is his insistence on inappropriateness of mathematical methods in economics. That includes a refusal to use very specific and exact economic models based on empirically gained data that aimed to establish universally valid laws of economics. Generally speaking, Hayek refused the very ambition of making economics more “scientific” in traditional sense. Economics according to Hayek will never be able to match these criteria and make exact and precise, quantitative predictions. However, that does not mean that its findings are useless or insignificant. They may still serve many good purposes, while at the same time the honest recognition of limits of economics expresses the wider acceptance of limits of human capabilities in the infinitely complex world.

2 Karel Engliš and the Order of Thought

Situation is somehow more straightforward in the case of Karel Engliš and his methodological conception of economics. Engliš was renowned for his systematical approach and this trait is well reflected in his works. Unlike Hayek, Engliš’s positions do not shift significantly during

his life and show remarkable consistency. Also Engliš managed to publish a general work on methodology of science titled “Malá Logika” (loosely translated as “Theory of the Order of Thought” – hereinafter abbr. as “TOT”) in 1947. Publication of a subsequent larger, more elaborate volume was prevented by the Communist coup of 1948. Even though it is worthwhile to read other Engliš’s articles and treatises, this book itself is capable of standing alone as it contains many of Engliš’s general ideas about the nature and system of science and is capable of providing a faithful picture of Engliš’s conception.

For the purposes of this article, we shall only briefly mention Engliš’s methodological works that preceded TOT, these being “Teleologie jako forma vědeckého poznání” (eng. “Teleology as a Form of Scientific Cognition”, 1930) and “Ekonomie a Filosofie” (eng. “Economics and Philosophy”, 1931), and further on draw mainly from TOT with regard to the conclusions.

When establishing his system of science, Engliš starts with the notion of the order of thought, which is defined by Engliš as “*system of concepts that is due to their interrelation an instrument of capture and processing of the picture of reality, as it is relayed by our senses, into ideas of the mind.*” (Engliš, 1947, p. 24). This is important, because Engliš then proceeds to identify three possible modalities of cognition, these being ontological, teleological and normological and each of these spheres has its own methodology, which consequently leads to three distinct branches of science. Ontological cognition is based on the notion of causality and serves as the method of natural sciences. On the other hand the teleological cognition is based on the notion of finality (end-means relation) and serves as the method of economics. Finally the normological cognition is based on the notion of validity of the norms and serves the purposes of normative sciences (i.e. particularly ethics and jurisprudence), (Engliš, 1947, p. 39-50).

Teleological method of economics is similar in many aspects to the praxeology of Mises. It is an *a priori* system of theoretical explanation of purposeful human action that is based on methodological subjectivism, notion of finality (end and means chosen to reach it) and is essentially methodologically individualist (although Engliš did also examine economic orders based on collectivist ideas in his other works, 1938). From these (omnipresent) circumstances of human action Engliš derives the basic concepts of economics, e.g. the law of diminishing returns, the existence of marginal categories (especially the marginal utility), the principle of maximization of utility and other. These concepts are universally valid and guide every purposeful human action. Due to its nature, teleological method is incapable of providing exact and precise quantitative explanations and predictions, only causal sciences are

capable of generating such results. Engliš's conception of economics is thus surprisingly similar to Mises's praxeology (both Engliš and Mises refer to the works of the other, which implies they were familiar with the ideas of each other, at least to some extent).

Unlike Hayek though, Engliš's theory of the order of thought and modes of human cognition does categorically separate the human knowledge accordingly to the source of cognition, not accordingly to the complexity of the phenomena. Instead of searching for similarities between social, natural and normative sciences, Engliš developed a complex system of science as a whole that accommodates all three branches (ontological, teleological, normological) according to their method of cognition while using a unifying notion of the order of thought that is common to all of them (Horych, 2019). The result is an impressive system of science that may still serve as a guide to the better understanding of the nature of science in general and different sorts of human cognition. Its possibilities however remain as of today mostly unexplored due to language barrier – the original book of Engliš “Malá logika” (1947) was available only in Czech, while its German translation appeared only in 1961 – and unfavourable circumstances of its publication.

Conclusion

Let's conclude this article with the analysis of similarities and differences of the theories of both authors. Both examined authors start their economic analysis using a teleologically based methodology, i.e. both Hayek and Engliš perceive economic concepts and phenomena as essentially teleological, inexplicable in terms of causality and physical properties and processes. This consequently leads to a common position on the issues of the limits of economic science, where both perceive economic explanation and predictions as *ex definitione* inexact and not quantitatively precise, their nature instead being in kind or pattern-like. This approach positions them into a dissent position as opposed to the contemporary economics, that principally aims to use the same methods as natural sciences with the same goals and ambitions.

What is different between both authors is their understanding of the more general system of science and the place of economics in it. While Hayek initially drew from teleological theory of human action of his mentor Ludwig von Mises called *praxeology* (or also *Pure Logic of Choice*), and distinguished between facts of social and natural sciences, later in his life reconsidered some aspects of his position and with a more sceptic approach to possibilities of natural sciences started to classify scientific phenomena with regard to their

complexity instead. He thus arrived at more universal position with regards to different branches of science.

Engliš on the other hand developed his own original notion of the order of thought and proceed to classify knowledge according to its source of cognition. His system of science thus consisted of three sections of science – ontological, based on the notion of causality, teleological, based on the notion of finality (end \leftarrow means relation) and normological, based on the notion of validity of the norm. Together these modes of cognition represented complete account of possible human cognition and their respective branches of science represented general science as a system of all human knowledge. However, a scientist must always keep in mind which method is the proper one for a particular field of science, if he is to avoid a methodological mistake. Unifying factor between different branches of science according to Engliš is not a common method, but the notion of the order of thought as the universal way, how human mind gains and processes different kinds of information.

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