# INFLUENCE OF ERNST MACH'S IDEAS ON FRITZ MAUTHNER'S THEORY AND LUDWIG WITTGENSTEIN'S VIEWS

# Ekaterina Sergeevna Cherepanova<sup>\*1</sup> and Larisa Viktorovna Nizyeva<sup>2</sup>

 <sup>1</sup> Ural Federal University named after the first President of Russia B.N. Yeltsin, Mira Street 19, Ekaterinburg, 620002, Russia
<sup>2</sup> Ural branch of Russian Academy of Sciences, Sofyi Kovalevskoy Street 16, 620990, Ekaterinburg, Russia

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#### Abstract

In this article we propose to discuss three philosophical theories of Ernst Mach, Fritz Mauthner and Ludwig Wittgenstein, although they substantially differ from each other, they were developed within one philosophical tradition. If in Russia it is almost impossible to establish their connection on literature, on History and Philosophy of Science, then according to Austrian, German and American sources it is still possible to trace common points.

Keywords: Austrian philosophy, critique, language, silence, sensations

# 1. Introduction

Out of the three philosophers E. Mach, F. Mauthner and L. Wittgenstein who are obvious today for the global community and proved themselves worth as interesting and influential thinkers in the aspect of the Philosophy of language and Philosophy of Science, the figure of Ludwig Wittgenstein is considered to be the most outstanding: his works are thoroughly studied and investigated.

Ernst Mach unwittingly and paradoxically appeared in Russian Philosophy of Science as a political opponent of the very V.I. Lenin who was frightened that Mach's ideas got so popular among Russian Bolsheviks headed by A.A. Bogdanov. The figure of Ernst Mach undeservedly receded into the background of the Russian History and Philosophy of Science due to Lenin's massive critique in the 'Materialism and Empirico-Criticism'. Thus Mach took finally his place as a historical and philosophical fact and his works get little attention and are no longer investigated.

Basically Lenin was concerned that Mach denied the material as ontology foundation and thus he undermined historically the materialism foundation. Mach criticized German idealism, which could also mean in the end a critique of

<sup>&</sup>lt;sup>\*</sup>E-mail: dek316@mail.ru

dialectic and basic principles of Marxian theory of historical development. "Is it 'more economical' to 'think' of the atom as invisible, or as composed of positive and negative electrons? Is it 'more economical' to think of the Russian bourgeois revolution as being conducted by the liberals or as being conducted against the liberals? One has only to put the question in order to see the absurdity, the subjectivist of applying the category of 'the economy of thought' here. Human thought is 'economical' only when it correctly reflects objective truth, and the criterion of this correctness is practice, experiment and industry. Only by denying objective reality, that is, by denying the foundations of Marxism, can one seriously speak of economy of thought in the theory of knowledge." [1] That is why in Russian science Ernst Mach is associated mostly with Lenin's harsh critique. Meanwhile at the turn of XX<sup>th</sup> century Ernst Mach has became a symbol, his philosophy reflected dominating views and ideas in Austria and extended far beyond positivism, especially affecting the critique of language and literature of his time.

Despite of the fact that the oeuvre of the Austrian thinker Fritz Mauthner ranks high among numerous works on philosophy of language, his name is still little known in the modern Russian philosophy literature and appeared only due to the last researches of E. Cherepanova [2] and M. Soboleva [3]. Fritz Mauthner is mentioned as a rule rather as a development stage of the most recognized Austrian philosopher Ludwig Wittgenstein and first of all because Wittgenstein made just a casual remark on Mauthner, however, in order to distance himself from him: "all philosophy is 'Critique of Language' (but not at all in Mauthner's sense)" [4].

Fritz Mauthner defined language crisis and stated the necessity of its critique far earlier than Ludwig Wittgenstein. The famous Austrian researcher of Mauthner's philosophical oeuvre Elisabeth Leinfellner wrote: "Wittgenstein changed his understanding of language and this change was made in the direction of Mauthner. Mauthner in his turn has never left wild ground of the empirical language and empirical linguistics. In this sense Mauthner appears to be the forerunner of Wittgenstein and even the ancestor of Analytical philosophy as one of the dominating directions today in the whole world." [5] In this connection F. Mauthner is interesting not only in the light of his influence on Wittgenstein's ideas, but also as an independent philosopher who continued development of philosophical impressionism in the Philosophy of language, grounded by Ernst Mach in his main work 'Analysis of sensations'.

# 2. Mach's influence on Mauthner

It should be mentioned that due to his theory of knowledge and reflections on conceptions, sentences and rules Ernst Mach gained attention of a number of Austrian philosophers of language and literary artists. Similarly to many Austrian intellectuals he himself was not least at all interested in language problem from the literary-aesthetic point of view and admired the German aphorist G. Lichtenberg who was for him an example to follow. By the way, both Mauthner and Wittgenstein were also Lichtenberg's admirers. Despite of the special role of language critique in the Austrian spiritual history and especially in Philosophy and literature, according to Friedrich Stadler "there are precisely Mach's ideas on language criticism that seem to have been left out of the research to date" [6].

Ernst Mach considered himself to be first of all a physician, he found himself to be a passerby in Philosophy and he insisted that made only a sketch of his philosophy. However it was his firm position against Metaphysics as one of main features of Austrian philosophy which probably inspired him to apply to Philosophy. As A.V. Pertzev remarked "it may seem that E. Mach belonged to those thinkers who move from 'pure' Natural science to Philosophy and get involved in it seriously at mature age or even at the end of life. There are quite many such natural scientists engaged in Philosophy within and outside Russia. But there is absolutely different tradition which developed in Austria. Often people who were fond of Philosophy from youth age started to study Natural science – to be recognized!" [7] Thus Mach came to Philosophy through Physics and Physiology because he was looking there for forcible arguments to confirm his philosophical views and it can be proved by the following record in Mach's personal notebook he made on the 5<sup>th</sup> of October 1902: "The task of my life was to approach Philosophy out of Natural science point of view. I had to make a sacrifice of some prejudices. Now it relates to Philosophy." [6, p. 199]

Mauthner met Mach in 1872 in Prague where he listened to Mach's popular lecture 'History and Root of the Principle of the Conservation of Energy'. Although this lecture was devoted to Physics, it deeply impressed the philologist Mauthner who was far from Physics and had a significant influence on his following philosophical works. "Although I was not good at mathematical mechanics at that time - Mauthner confessed - this lecture gave me an impact which I experienced during decades. Because when I read this lecture again 30 years after, taking into account that I completely forgot what I read for the first time, I was surprised at language critical ideas contained in it and I was strongly convinced that I had already absorbed once these powerful wordings." [8]

Later Mach and Mauthner maintained written correspondence for many years. Mauthner confessed in one of the letters to Mach: "... I bethought unconsciously a concept of my work (Critique of language) as early as in 1872-1873... at that time I listened to your lecture on energy conservation with very good experiments. Then it became evident for me that my critique should be epistemological..." [6]

In the three-volume Contributions to the Critique of Language, Mauthner argued that language cannot convey the content of thought because thoughts embodied into words destroy the uniqueness of what is thought. Mauthner wrote: "My momentary experience is unique, therefore it has no name at the instant, and at the moment I name it, I put it into the stock of my memories and the uniqueness has gone. So, experience is always one step ahead of language." [9] Thus according to Mauthner reality can only be experienced, it cannot be embodied in words, because any effort to transfer experience into words generates empty phrases, "which bemuse neophytes without enlightening the initiate" [9]. In order to avoid this Mauthner called thinkers to silence, assuming that one should cease asking questions, because "answers will only multiply webs of words" [9, p. 210].

E. Mach and F. Mauthner have common views in relation to critique of the idea of 'I' in accordance with the tradition established by a Scottish philosopher David Hume (1711-1776). In this respect both thinkers E. Mach and F. Mauthner demonstrate another characteristic feature of Austrian philosophy according to which "... almost all philosophical works of Austrian thinkers contain analysis of sensations as a source of knowledge, substantiality of the 'I', possibility of the thing-in-itself. In the light of these assumptions D. Hume's philosophy seemed to be promising, fruitful and prospective for inheritance and development of ideas." [10]

D. Hume's theory is grounded on the idea that knowledge starts with experiment consisting of perceptions. Perceptions in their turn can be divided into impressions (sensations and emotions) and ideas (remembrances and imagination images). "In accordance with English tradition Hume analyses knowledge as external and internal experience. Consequently the experience generates in us ideas which are divided into simple ideas-impressions and ideas-reflections in relation to emotional states (pleasantness-unpleasantness). D. Hume raises a question what influences on imagination activity, why in the end different languages and different objects are learned and described in a similar way." [10]

D. Hume represents his philosophical concept of the 'I' in the following way "... when I investigate in the most intimate way something named by myself as my 'I', I always face some or another individual perception of warmth or coldness, light or shade, love or hate, suffering or delight. I just can not catch my 'I' as something existing beside perceptions and I can not possibly capture anything else than some perception. If my perceptions are temporally ceased as it happens in a deep dream, then during all this time I do not realize my own 'I' and thus the I can be really considered as not existing." [11]

Ernst Mach's principle of the economy of thought plays a great role in the critique of language and its mythological part in particular. As language critique begins with violation of the traditional triad 'reality-idea-statement [word]', the reality appears in absolutely unearthly light, which is conditional due to impossibility to go outside complex of sensations. Scientific theories with their all value and importance do not change or disclose the secrecy of the hidden, do not influence the mystery of the psychic reality, finally they all deal with all the same – with elements.

Language is unable, but it is not a human problem, it is rather a philosophical problem. No language is able to convey to the full extent, exactly and in finest details those sensations which are experienced by a person, in fact any person and in any language. The sensations are unique and instantaneous. And still there are some possibilities that remain. That is why whereof we cannot speak, thereof we must be silent. In other words it is possible to create some kind

of language field in which a person can mystically imaginary see, experience or try to reproduce - as it happens in poetry – those feelings and emotions which may take place. However it is impossible to convey a sensation directly. The reality escapes from language irrespectively to language comprehension level. The reason is in language itself, it is just the nature of language.

Mach impressed Mauthner that he allowed Philosophy to speak about sensations using conventional language, to find sensations to be real and to consider them not only to be a subjective opinion or something up to the minute but also as something which can be measured and physically described. Mach draws his attention to the problem connected with the reality, it is a question of how real our sensation are, he shows that the sensations are real, they exist and they are important for knowledge. According to Mach sensations can be and shall be taken into account, because they are a part of our knowledge and we will have to describe sensations. It is worth trying to describe this reality, but we have to remember that language describes this reality quite poorly.

Mauthner's linguistic critical theory appeared and developed based on scientific and historical language critique and here it detects similarity with Mach's Natural science methodology. Perception, language when they are used as a metaphor, led Mauthner to epistemological scepticism and agnostic mystique which ultimately facilitate inflow of Science into art. "Our image of the world is subjective from its bottom step where we can name sensations only metaphorically using language up to the finest thinking abstractions." [12] In Mauthner's opinion language is well adapted to poetry but poor to Science and Philosophy exactly due to its metaphorical nature, because "the metaphorical nature of language precludes all univocity and thereby makes any sort of precise scientific knowledge impossible" [13].

#### 3. Silence in Mauthner's and Wittgenstein's philosophy

Although many researchers establish connection between Mauthner and Wittgenstein due to the quoted statement from the Tractatus in the beginning of the present article that Wittgenstein understands language critique "not at all in the sense of Mauthner", let us suppose that a fundamental common point for both philosophers was silence.

Mauthner's silence suggests an attempt to create undivine language mystique in the spirit of Meister Eckhart – the most beautiful of what a person can speak is actually of that he, being wise, can be silent. Silence supposes not only and not at least logical construction, silence rather preserves purity and clearness of the sensation, which guaranties the reality, because it is given in the psychical realm. Mauthner called it "critical knowing, language critical mystique" [12]. Wittgenstein's silence is of another sort. "Mauthner differed from Wittgenstein in holding that there exists no meta-language in which to define the limits of the sayable." [9]

Wittgenstein acknowledged language predominance and found knowledge possible, but only in case of correct language treatment. "Unlike Mauthner, whose injunction to silence annuls methodology, Wittgenstein affirmed that language can delimit the sayable." [9, p. 210] Although Wittgenstein denied Mauthner's influence on him, according to Elisabeth Leinfellner, Mauthner directly influenced on Wittgenstein. Leinfellner discovers this influence in the affinity of views of both philosophers (for example, Wittgenstein's theory of language games on one hand and Mauthner's public game, they both give an example with the ladder in their works), she presents quotes from Mauthner's and Wittgenstein's works in such a way that it is difficult to determine to whom of the two thinkers they belong.

Despite the fact that Wittgenstein tended to avoid scepticism and contradictions inherent to Mauthner, there still can be discovered some kind of mystical tendency in the last paragraphs of the Tractatus similar to the philosophic style of Mauthner: "We feel that even if all possible scientific questions can be answered, the problems of life have still not been touched at all. Of course there is then no question left, and just this is the answer... There is indeed the inexpressible. This shows itself; it is the mystical." [4]

# 4. Mach's influence on Wittgenstein

If we speak about conceptual affinity, then Mach and Wittgenstein just like all Austrian philosophers are united first of all by antimethaphysical position. According to Dr. Friedrich Stadler, Wittgenstein agreed with Mach that it is impossible to express anything about the world as a whole: "in the Tractatus there is an attempt to separate the expressible by words sphere (nature) of Science from the sphere of Metaphysics, Ethics, mystique and religion which cannot be expressed using words, using pure structural theory of language reflection and to divide in such a way between the scientifically expressed and metaphysical 'sign'. In this context Wittgenstein's often quoted statements and postulates which are in the end of the Tractatus, reflecting unexpressed of Ethics and Aesthetics, but at the same time suppose their predominance over Science as well as consider Philosophy methods as natural scientific antimetaphysics. Mach would agree with it." [6, p. 48]

Antimetaphysical critique of Kant's philosophy inevitably raised a question on language critique. If we cannot say, that there is some objective giveness, which we must acknowledge and take into account, and that is why we must orient on immediate experience given us in our sensations, representations, in imagination, on immediate experience of our intellectual reflection, then the question on truth shall be transferred to language field. In this case we must agree on those language forms in which we describe reality immediately observed and under which conditions this description can be accepted as true. Thus the question of truth is either a question of correct sensations description or it is impossible to do as Maithner says. It is only possible to try to reproduce this sensation once again as impressionists used to do it on pictures, to try to convey

a similar sensation through metaphors and images without giving their names directly, i.e. keeping mystical silence.

Wittgenstein offers another variant. He offers to make a statement indeed true and provable using means of Logics and methodology of logical investigations. It is important for Science, which cannot do without it. Wittgenstein's focus on accompanying of scientific knowledge corresponds to a great extent to Mach's wish that Philosophy would make an attempt of that linguistic turn i.e. real language analysis in order to identify a possibility to describe the truth or to describe our representations using language.

#### 5. Conclusions

Mach is considered to be a positivist, but he was a not logical positivist in the sense that he offered economy of thought and to rely on positive knowledge based on direct perception of sensations. Mach's positivism was based on observations of a physical scientist and experimentalist. Wittgenstein is considered to be a logical positivist because he relied on the belief that rules of Logics enable language to describe the observed reality correctly, including a scientific experiment. Thus Mach and Wittgenstein can be united by their orientation on positive knowledge, on research in general and understanding of Natural sciences.

Unlike Mach and Wittgenstein, Mauthner was not a positivist, he does not provide foundation for positive knowledge in this philosophical works, but he creates conditions for development of fine art methods to convey sensations. Mauthner constructs his world images on the base of Mach's sensualistic concept. Mauthner's language critique has become an attempt to think over in a new way relations between language and reality. The reality can only be experienced experimentally, but it is impossible to realize in language.

Meanwhile both thinkers agree that there are ethical, aesthetical and mystical spheres which language is unable to describe, and that such world despite of the absence of the proper name in language, is not less valuable for people than that world which can be embodied in the only possible strict system of Natural science sentences.

Based on this discussion we would like to point out once again a global influence of Mach. In European discussion of History and Philosophy area Mach's ideas remain actual, they are studied and researchers return to them not only in the context of positivism, but also in the context of phenomenology, theory of culture, art and language critique.

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