

# PHILIP LENARD ALIAS LÉNÁRD FÜLÖP

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Received March 28, 1987  
Presented by Prof. Dr. G. Biró

## Abstract

The paper deals with the problem how far and how long can be considered Philip Lenard, born and educated in Hungary. Nobel Prize Winner in physics (1905) and later author of the disreputable nazi "Deutsche Physik" Hungarian.

It is an unparalleled case that Hungary, always so proud of intellectual achievements, should not claim a Nobel Prize holder as her own. Yet, this is what happened in the case of Lénárd Fülöp, and it was entirely natural and understandable. The outstanding theoretical physicist Samuel Goudsmit who during the Second World War was entrusted by the Supreme Command of the USA to collect informations about the scientific achievements of Germany and arrived in that country with the allied forces, wrote as follows; "When the US Army took Heidelberg Lenard fled the city. He probably feared that our men would shoot at sight such an important eighty-year old Nazi." When the soldiers found him they informed Goudsmit that "Germany's greatest scientist. . . . had surrendered . . . . what should they do with him? "Ignore him" — I said. "This for a Nazi was greater punishment than being tried in Nuremberg" [1].

In this paper I set myself a single goal; to prove that in spite of the absolutely justified protest Philip Lenard was a Hungarian scientist, or a Hungarian scientist as well, even though he professed himself to be a German. True, no nation would claim back a leading Nazi ideologist. But I felt that not only do I owe this statement to historical authenticity but it may enable us to get closer to a more profound analysis of a mystery of scientific history. The mystery is how an uncontestably important physicist could become the committed servant, even the instigator, of the most inhuman, most destructive and most stupid ideology and the deeds it perpetrated.

Lenard's scientific significance cannot be contested. Karl Ramsauer, his most talented student summed up Lenard's most important achievements in six points, including the Lenard Window—emission of electrons from the cathode ray tube to the atmosphere; the measurement of electron absorption in materials, the discovery that the atom is not dense; the experimental proof that

in the photoelectric effect the rate of the emitted electrons depends on frequency but not on intensity of light; the examination of the phosphorescence of metal compounds and the discovery of some fundamental properties of the process of lighting [2].

This prominent and very successful scholar also evolved shamefully antiscientific and antihuman theory of science based on obscure prejudice. He unfolded it in his "Deutsche Physik" in four volumes and in "Grosser Naturforscher", a book on the history of sciences. [3]. In these works and in numerous articles he defined "German" or "Aryan" physics in contrast to corrupt "Jewish" physics. In his view Aryan physics proclaimed profound experimenting, a heroic fight with Nature, consistent precise accumulation of knowledge—all of which vehemently reject the elegant and easy theories which characterize Jewish physics. The latter is built upon unearned success, unfounded hypotheses, and strives merely for practical, moreover material advantages and intentionally defile the lofty spirit of German science. In his view Einstein was the embodiment of evil who deserved to be persecuted as a pacifist Jew and the discoverer of a uniquely successful speculation which is empty and alien to the "Nordic" mentality.

For the sociology of knowledge the activities of Lenard and of Johannes Stark his similarly Nobel-prize winner fellow-in-arms and, in particular, the way how they tried to enforce their ideas founded obviously on prejudice both in cognitive fields and in professional politics, provide a still not sufficiently explored subject.

The perhaps most intriguing element of the mystery is that Lenard did not reach his conviction by exaggerated opportunism and not even during the Nazi period but very much earlier. He built up his philosophy step by step since 1918, made acquaintance with Hitler and became his follower years before 1933.

Another strange element in the mystery is that "deutsche Physik" which grew to a veritable movement after 1933 and was extended also to mathematics, could never attain the absolute predominance in Germany to which the fertile soil of Hitlerism predestined it, and during the Second World War it suffered a crashing defeat even in Germany [4].

Although the champion of "deutsche Physik" established his career mainly in Germany, its main stations being Bonn, Breslau, Heidelberg, Kiel and again Heidelberg, he belonged to Hungary as well.

He was born in 1862 in Pozsony Hungary, at the time. His birthplace, however, is a mere reference to his Hungarian citizenship and by far not sufficient to prove my earlier rather vague statement, because the problem whether someone belongs to a nation or not is not a matter of his birthplace alone but depends on a closely interwoven fabric of familial, linguistic, cultural and other relationships. The situation with Pozsony is especially complicated.

The city is known by three names. It is Pressburg for Germans, Bratislava for Slovaks and Pozsony for Hungarians. At the time of Lenard's birth the city was inhabited mainly by people of German descent, many called it Vienna's distant outskirts. There were also Slovak and Hungarian minorities, but the original mother tongue of the Lenard family, having come from Tirol, was obviously German.

Fülöp Lénárd attended Pozsony's principal secondary school for languages and practical sciences where the language of education in that period was almost 100% Hungarian. It was in that school that he acquired the fundamentals of knowledge, hence his Hungarian culture [5].

After graduation he enrolled—unexpectedly—in chemistry at the Budapest University, and studied the subject under the guidance of Károlyy Than, a great person of this science in Hungary. True, having finished the first year he continued his studies first in Vienna, then in Germany, but until he reached the age of 20 he lived in Hungary. Having in 1886 obtained his doctor's diploma he returned to Hungary and worked for a short period with Loránd Eötvös, another classic of sciences in Hungary. Then he moved to Germany for good [6].

Nevertheless, the Hungarian scientific community continued to claim Lenard as its own. Nothing could prove this more eloquently than the fact that in 1897 he was elected corresponding member of the Hungarian Academy of Sciences—a prerogative of Hungarian scientists exclusively.

Lénárd sent his inaugural address but he did not read it himself, nor did he read his Nobel lecture a few years later [7]. In 1908 the situation changed because the Hungarian Academy of Sciences bestowed on him honorary membership, a title that also foreigners may have.

Up to immediately before the First World War his name often appeared in the professional Hungarian press, mostly as “compatriot living abroad”. They reported on his outstanding achievements, successes, published his articles translated into Hungarian [8]. Győző Zemplén—may be the most talented Hungarian physicist of the period—on the occasion of the award of the Nobel Prize, published a work on his career. Another physics professor Jenő Klupathy grieved over the fact that Lénárd the prominent Hungarian scientist had to establish fame abroad. Zemplén stressed that Lénárd had not been lost completely to Hungary after his success abroad because he maintained his relations with his native country [9].

In the archives of the Hungarian Academy of Sciences I came across eight so far unknown letters by Lénárd which serve unequivocal proof of his relationships with Hungary, at least up to the First World War. The letters deal with an exchange of theses, publications, the death of a close friend in Budapest, timely matters which all testify to his attachment to the Hungarian world. In 1913 he wrote about his endeavours to help Eötvös to a Nobel Prize. In the

same year, after one of his regular visits to Budapest, he wrote how he regretted not having been able to call on Eötvös, Fröhlich and Zemplén during his stay and that he hoped to make up during his next visit—the letters all seem to prove his still living personal relations with the leading Hungarian physicists [10].

The fact is that with a single exception the letters were written in German. However in reply to a Hungarian letter he had received from a corresponding partner not yet identified, he wrote in 1911 “I am glad you did not write to me in German. Although I do no longer write in any other language [but German], I am very sensitive to linguistic errors. But I am sure you will hear with interest that I like to read Hungarian, so much so that for instance just very recently my wife presented me with Mikszáth’s *Two Elections* in Hungary on my birthday.” [11] (This novel has since become a classic.)

Over and above the official, cultural and personal ties Lénárd had important scientific relations with Hungary which, in an unusual way, go back to his secondary-school studies. I have mentioned that among Lenard’s important findings phosphorescence played a very important role. This discovery was published with a co-author, Virgil Klatt, his secondary school physics teacher in Pozsony. It was Klatt, a prominent experimenter and teacher who acquainted his later Nobel Prize winning pupil in the school laboratory not only with the fundamentals of physics and the technique of research work, but also with the subject that earned him fame and renown [12].

In 1904, in reference to their joint publication in Hungary, Lénárd wrote as follows. “Mr. Klatt used to be my physics teacher at the Pozsony secondary school and I owe him gratitude. On the last fifteen years we worked together on many occasions during my vacations in Pozsony, at other times we worked separately, proceeding each in his own way. I asked with stress to have Mr. Klatt’s name before mine as author of the book and I very much hope that my request will be met” [13].

It was not. Lénárd’s name stood first on the title page. This, however, does not alter the fact that Lénárd had learned the art of research in Hungary, practised it over nearly two decades in Hungary and published its result in Hungary [14]. He never forgot that his spiritual roots were in Hungary. He dedicated his book on luminescence published in 1928 to Virgil Klatt, his first physics teacher [15].

What went so far seems to be sufficient to prove that Lénárd could be regarded to be Hungarian, as well not merely because of his birthplace. Even the scant material I have found testify to his close and complex personal and intellectual relationships with his native country. And to this not only his colleagues but also Lénárd was alert. His calling the Hungarian Academy of Sciences “our Academy” and the pathetic signature “with patriotic greetings” (mit patriotischem Gruss) leave no doubt whatever about this [16].

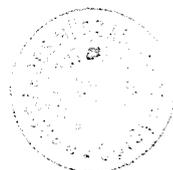
Yet both oral and written memories in Hungary consider Philipp Lenard a German who renounced his Hungarian descent and spoke despisingly about his native country. In the sources available to me, I could not find such proofs but we should remember that the last letter also came before the outbreak of the First World War. We may surmise that his relations to Hungary changed later, just as his Nordic or Aryan conscience developed later. In whatever way this happened we may state with assurance that Lenard belonged to Hungary at least up to the First World War, when—remember—he was past fifty. True, he lived long after that, he died in 1947. He should not be regarded to be merely a German scientist who was just born in Hungary.

While this statement makes the mystery of Lenard's biography even stranger, it points out a path toward its solution. We should examine whether Hungarian society has contributed only to his scientific and cultural education, and whether his other face, that of the notorious Fascist, has not also been formed by the same world? Whether Hungarian society which so easily and readily turned Fascist had not also a share in adding these features to his rather distorted portrait?

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