

Josef Velenovský, a great Czech botanist, philosopher and politician

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Abstract. A biographical sketch and the botanical work of Josef Velenovský is provided and some of his controversial philosophical and political views presented.

Key words: Balkan botany, Czech scientist, eccentric personality, Velenovský

The name Josef Velenovský (Fig. 1) is familiar to most botanists interested in the flora of the Balkan Peninsula. Yes, he is the author of the first Bulgarian Flora which was written in Latin and published in the year 1891 (*Flora Bulgarica*). However, his work in other fields of botany – plant morphology, mycology, bryology and palaeobotany – is less well known, despite the fact that he wrote some of these works in Latin and his work on comparative morphology was also published in the German language. His philosophical work, written mainly in the Czech language, is virtually unknown in his country of birth, let alone abroad.

We remembered Josef Velenovský's 150th birthday in 2008 and we commemorated the 60th anniversary of his death in 2009, thus it is interesting to look at the life of this great Czech scientist. There will be a brief repetition of biographical data and a brief overview of his botanical work, but the main aim of this article is to introduce some of his philosophical and political concepts which have endured and are regarded as revolutionary even today.

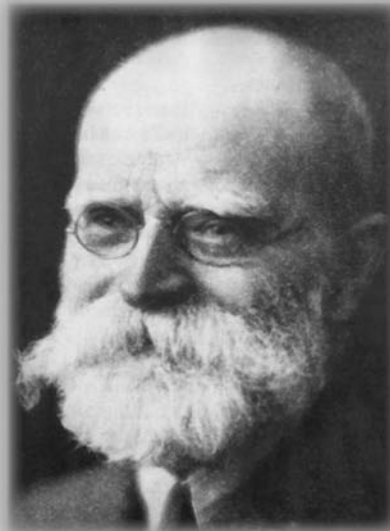


Fig. 1. Josef Velenovský (1858–1949).

Josef Velenovský was born into a family as one of ten children on April 22nd 1858 in Čekanice, near Blatná, in South Bohemia. He studied botany and philosophy at the Charles University in Prague during the years 1878–1883. Soon after beginning his studies he became an assistant of palaeobotany in the National Museum in 1879. Velenovský's first botanical field of study was thus phytopalaeontology. In particular, he studied the Czech Cretaceous flora in detail and he published a range of notable works on this theme. The most important of them is the tetralogy "*Flora Cretacea Bohemiae I-IV*" (published 1926–31), which was written in Latin, and can be regarded as a classical monograph on the Cretaceous flora.

Josef Velenovský became an assistant to Professor Ladislav Čelakovský at the Botanical Institute of the Charles University in 1883 and abandoned his palaeontological interests for some time. He became engaged in the study of present-day flora in the Balkans. The following year, he conducted his first journey to Bulgaria. He visited Bulgaria an additional five times: in 1887, 1889,

1893, 1896 and 1897. He undertook his second journey with his friend Karel Vandas and the third journey with Hermenegild Škorpil, who later became famous as a geologist and archaeologist in Bulgaria. During his third journey Velenovský met Václav Stříbrný who indefatigably collected plants for him together with Škorpil. The number of collectors who were supplying Velenovský with herbarium material from Bulgaria later increased to a total of sixteen. Velenovský wrote his work, *Flora Bulgarica* (1891) in Latin, based on material collected during the first three journeys and after his last journey to Bulgaria he published the second work, also written in Latin, *Flora Bulgarica – Supplementum I* (1898) based on material collected during the last three journeys. Petrova (1996) refers in detail to the importance of Velenovský for research on the Bulgarian flora. The statistics of species numbers reveal the following: Velenovský had published 2542 species, of which 158 were newly described in his work *Flora Bulgarica* issued in 1891. After publishing *Supplementum I*, the species numbers increased to 2877. Thirty-five years later, *Flora of Bulgaria* was published by the Bulgarian botanists Stojanov and Stefanov (1924–1925) where 2957 species were included, which is only 80 species more than what Velenovský had altogether compiled. Prior to Velenovský, a little more than 500 species from Bulgaria have been recorded, the data being scattered in the works of Grisebach, Janka, Boissier and others.

Some new species in Bulgaria were named by Velenovský to honour his plant-collecting colleagues. A striking example of one of those plants is the stone-shatterer, *Saxifraga stribrnyi*. This plant was originally described by Velenovský as a subspecies of *Saxifraga porophylla*, but later it was raised to species-rank by the Moravian botanist Podpěra. Some of the plant species described by Velenovský from Bulgaria were later treated as synonyms, but other species were recognized as species in their own right, such as *Ferulago confusa* Velen. In the latest Bulgarian Flora (Peev 1982), this species was included in *Ferulago sylvatica*. The Bulgarian state honoured Velenovský's contribution to the development of Bulgarian science by awarding him the medal of St. Alexander.

After finishing work on the Bulgarian flora, Velenovský became engaged in bryology. He diligently collected mosses in the surroundings of Prague and by the end of 1896 he had completed his manuscript "*Mechy české*" (The Bohemian Mosses). In this book

he refers to approx. 500 species of mosses, including their distribution in the territory of Bohemia. Later, he embarked on the study of liverworts. During the years 1901–1903 he published three volumes of his work "*Játrovky české*" (The Bohemian Liverworts). This work is sometimes subject to criticism because Velenovský refused to accept material from abroad and help from foreign researchers and based his work primarily on his own observations. He also refused to consider anatomical methods but placed his emphasis on morphology. In honour of Velenovský, the bryologist V. Schiffner named the moss *Tortula velenovskýi* Schiff., which was discovered by Velenovský in 1890 in the Prokopské-valley near Prague. The bryological work of Josef Velenovský is less well known throughout the world because it is written in Czech, but it still constitutes a very important historical source for studying the occurrence of mosses in the territory of Bohemia.

From the beginning of the 20th century, Velenovský dealt more and more with mycology. Over the years he gradually gathered a huge amount of mycological material so that the Czech Botanical Society could publish his magnum opus, "*České houby*" (The Bohemian Mushrooms) in 1920–1922. This work focused mainly on *Basidiomycetes* but Velenovský also plunged into the study of *Ascomycetes* and in 1934 his book, written in Latin with a German preface, "*Monographia Discomycetum Bohemiae*", containing 436 pages of text, was published. From this stage and beginning with this monograph, Velenovský became a publisher and published himself all his subsequent works, mainly the belletristic and philosophical ones, until his death. The mycological work of Josef Velenovský amounts to more than 2000 printed pages written during 34 years. Altogether, he described 2727 (!) new mushroom species of which the majority were relegated to synonymy, but approximately 190 – thus 7% – are acknowledged as species in their own right.

Besides botany, palaeobotany, bryology and mycology, Velenovský also dealt with plant morphology in detail. In 1905 his three-volume-set of "*Srovnávací morfologie rostlin*" was published which was simultaneously issued in the German language as "*Vergleichende Morphologie der Pflanzen*" (Comparative Morphology of Plants). Velenovský rejected the anatomical approach to the study of plant organs, scorning the "cutting of plants and observing them under the microscope" and strongly insisted instead, on the

comparative method. He also asserted here his philosophical views, working as though he was a scientist of nature, but at the same time, as an idealistic thinker inclining to mysticism. So he refers, for instance, to the spines of cacti as, “the latent creative energy knows how to conjure thousands of the most ingenious and beautiful forms from six perigon leaflets on an orchid flower, which even the most ingenious human fantasy is not able to combine, so the same energy of life created from mere spines on cacti, so many bizarre forms that we have to admire them as an incomprehensible work of nature”. Although some of Velenovský’s opinions on the evolution of plant forms were subsequently abandoned and replaced by other theories, nevertheless, his extensive morphological work is valuable because of the comparison and summary of a huge amount of morphological observations.

One can hardly believe that, as well as the vast botanical work stretching from mycology through palaeobotany to research on the Balkan flora, Josef Velenovský was still able to write other books outside botany. These are the philosophical works “*Přírodní filosofie I a II*” (Natural Philosophy vols. 1 & II, 1922), the summary of his philosophical opinions “*Poslední moudrost čili nauka o kosmickém duchovnu*” (The Ultimate Wisdom or the Teachings on Cosmic Spirituality, 1935), the book of literary critical essays “*Literární studie*” (Literary studies, 1928) and a book of short novels “*Obrázky*” (Pictures 1930). “*The Ultimate Wisdom or the Teachings on Cosmic Spirituality*” (1935) was also published in the German language as “*Die letzte Weisheit oder die Lehre vom geistigen Kosmos*” (1937).

One can consider his opinions and attitudes as original, even fascinating, and some of them are pronouncedly visionary and thus currently modern. However, a detailed description of his philosophical opinions and his views on society would go far beyond the purpose of this introductory article. Nevertheless, it is useful to accentuate some of those opinions and to accompany them with the respective quotations, because the above mentioned non-botanical writings were – except for one – written in Czech and are therefore accessible only to readers with a very good knowledge of the Czech language. Let us state here, that Velenovský was a grand master of the Czech language and his belletristic and philosophical texts are written in the beautiful, noble and archaic Czech of the 19th century.

Velenovský declared that the basic philosophical categories are matter, spirit and ether. The ether connects matter with spirit everywhere throughout space. The spirit is the connecting link for everything, and therefore the spiritual world is the true world. He sometimes uses the term “cosmic spirituality,” when referring to the spirit. Although Velenovský agreed with Darwin’s theory of natural selection, he stated that Darwin’s theory cannot explain everything, especially the huge diversity in the plant and animal world, as well as the complex symbiotic relationships between animals and plants. Velenovský was completely fascinated by this huge diversity and stated therefore, that it could not originate only from natural selection but must have been created by a spiritual creative energy as mentioned in the paragraph above on plant morphology. Concerning the evolution of the plant and animal world, Velenovský formulated twenty-three driving evolution principles, which are described in his book “*The Ultimate Wisdom*”. Velenovský also believed in reincarnation and in communication with the spirits of the dead. He attentively followed and read, for example, the German journal “*Zentralblatt für Okkultismus*” and quoted this source many times in his philosophical writings.

Velenovský’s views on society are extremely interesting and, with hindsight, visionary as well. For example, it is interesting to consider his opinion, that mass production should be prohibited in all cases where the respective article can be produced by a craftsman. In that way, many more people would earn their living and the social antagonism between the rich mass producers and exploited workers would be overcome, which would mean the removal of the seed of Bolshevism so deeply hated by Velenovský. When we think about this idea, we indeed shall come to the conclusion, that the restrictions on the scale of mass production and wholesale is, in the so called western civilization, considered taboo, though thousands of other limitations and restrictions do exist, for example the limitation on the speed of cars on roads and streets. Velenovský, ahead of his time, was also paying attention to the migration of people from the land to the towns and cities. He considered it as an undesirable phenomenon and was stating that “*the land can feed people, but the machines of mass and wholesale production cannot*”. It indeed sounds almost like a declaration from a manifesto of a contemporary radical Green Party. On the other hand, Velenovský would

disappoint the Green Parties of today because of his opinion concerning the emancipation of women or so called “gender studies”. He considered the emancipation of women to be one of the worst scourges of mankind and emphasised it particularly in the second volume of his “Natural Philosophy”.

It is interestingly provocative that, 36 years after Velenovský’s death, the book “*Natural Philosophy* vol. II (*Přírodní filosofie*, Díl II, 1922) was declared by the courts in Communist Czechoslovakia as *corpus delicti*, thus a thing by which a crime was committed. The author of this article was sentenced to three years imprisonment for subversion against the republic in the year 1985 and the book “*Natural Philosophy* vol. II” by Velenovský was confiscated! In that book Velenovský writes that all communists should be deported to a desert island where they would be allowed to live according to their rules. Once in ten years, armed inspectors should be sent to that island to bring the healed communists back to normal civilization.

Josef Velenovský sincerely hated the Russian Bolsheviks and attacked them sharply in his work “*Literary Studies*” (1932). He was of the understanding that the whole Russian revolution was a creation of the Jews. In his “*Ultimate Wisdom*”, on page 263, he, for instance, wrote, “*Let the nation be democratic on the basis of Christian fellowship and not on the basis of the Jew Marx and the syphilitic Asiatic Lenin*”. Velenovský never used the name “Marx” as such separately, nor wrote “Karl Marx” but always referred to “the Jew Marx”. The anti-semitism of Velenovský was very deep and sincere. Even in present times one could have problems with the authorities when quoting his anti-semitic statements as was the case in the example about subversion against the republic in Communist Czechoslovakia, mentioned above. It should be pointed out Velenovský’s opinions were considered as controversial not only after his death but already at the time of publication of his “*Natural Philosophy*”. In the preface to his “*Natural Philosophy*” he wrote, “*After the second volume of the 'Natural Philosophy' was published, consultation took place as to what to do in order to avoid the nation being intoxicated by that venom. All the journals in the whole republic were prohibited to mention even one word about that work. And afterwards they had me guarded as a traitor for three years, me, a greybeard and teacher of thousands of scholars?*”

Nevertheless, Velenovský’s anti-semitic views deserve a more extensive mention. Velenovský was con-

vinced that the Jews were the enemies of science and fine arts and were only interested in money and power, striving to overrule the whole world. He narrates it very beautifully in his story “*The Jew*” in the book “*Pictures*” (Obrázky), which represents a belletristic summary of Velenovský’s opinions on nature and society. The aforementioned story is a dialogue between a Jewish businessman and a young lecturer of botany. The Jew explains to the botanist that understanding nature is an activity where no money can be earned. It means that the botanist is thus a crazy fellow, devoting his time to a nonsensical activity. Velenovský was convinced that the Jews are a morally perverted nation and proposed in one of his books the same solution for Jews as he proposed for the Communists – namely to deport all the Jews to a desert island so as to isolate them from other nations. This was probably not the original idea of Velenovský because, before the outbreak of the Second World War, the German Nazis had prepared a similar solution, the so called Madagascar Plan. Here, Josef Velenovský was inspired by the work of the Dutch writer Egon van Winghene “*Arische Rasse, christliche Kultur und das Judenproblem*” from which book he quoted some ideas in the “*Ultimate Wisdom*”.

Nevertheless, Velenovský was ready to admit the occurrence of exceptions but considered them irrelevant. In the second volume of his *Natural Philosophy*, on page 262 he wrote, “*As fair judges, we have to admit though, that also among the Jews there are large-hearted people who are doing good for mankind. But it is also true that such Jews occur in such negligible numbers that they do not count*”.

Sometimes Velenovský contradicted himself. While in his “*Natural Philosophy*” he promoted the hybridization of nations, in other places in his work he appreciated the importance of patriotism and rejected the mixing of nations. In his book “*Literary Studies*” (Literární studie, 1932) he strongly condemned internationalism and unwittingly predicted the creation of the European Union when writing, “*Wherefore thus the borders of the European states? Make one Pan-Europe and place on its throne an international Jew. In this way the dreams of realistic madmen and Jewish Masons will be fulfilled*”. In another place in the “*Ultimate Wisdom*” (Poslední moudrost), on page 244, he wrote, “*Yes, we want to be international as well but in the defence against the Jewish poison*”. Velenovský was, in name, a member of the “Slavonic Anti-Jewish Party” but it is difficult to learn about this political party probably because of the taboo

of overt anti-semitism. In his books he often expresses his criticism of masons and he painted Freemasonry as a social pathological phenomenon. In the “*Ultimate Wisdom*” (Poslední moudrost) on page 259, Velenovský wrote, “*It seems to be the case today that nobody can make a political, scientific, artistic or financial career without being a Mason*”.

It may seem quite strange today but Josef Velenovský was a resolute opponent of the equal voting right and demanded this right should depend, among other things, on an achieved education level. A man without any education, or with only basic schooling, should have, according to him, one vote, and a university professor should have five votes. However, at the same time he advocated the plebiscite, which would restrict the absolute power of the government and parliament. Prior to World War I, he correctly realised the power of the media, especially at that time, of the newspapers. Velenovský condemned excessive bureaucracy and superfluous useless legislation, he criticized the accumulation of assets, mass production and wholesale, etc. On the other hand he idealized the inhabitants of the countryside having their livelihood in agriculture and pointed out the corporal and mental degeneration of urban-dwellers.

In the “*Ultimate Wisdom*” he wrote “*In countries, where the Jews have already captured everything, one can gain nothing in peace by election and diplomacy*”. At the very end of this book he states, “*The Jew is able to do a profitable business in rags, staffs or bones but also in world war and crazy Communism. As long as mankind does not want to understand that the mass industry and wholesale are a social depravity and will not establish the small business, retail and small scale agriculture, and will not suppress the luxury but regulate the unnatural reproduction of population, Jews shall reign. Ruling by Jews constitutes a symptom of a grave disease of mankind*”. Based on criticism of the above mentioned phenomena, he concluded that the white race is facing degeneration and downfall. He therefore saw the only hope and future for world civilisation is in the Far East, amongst the Chinese and Japanese people. On page 258 of the “*Ultimate Wisdom*”, he wrote, “*the Jewish plague shall destroy the white race but therewith shall perish the Jews as well, because the Yellows shall not accept them amongst themselves*”.

It is fascinating how Velenovský was able to connect or mix his philosophical views and political opinions with botany. For example, he wrote a multi-

volume syllabus “*Systematic botany*” for the students of Prague University. In one of the volumes in the text concerning the description of the coca-plant *Erythroxylon coca*, he suddenly closes the dry scientific description with the following sentence, “*Also the bloody Bolsheviks in the firing squads were intoxicated by cocaine during executions*”.

In daily life, Josef Velenovský was considered by many of his contemporaries to be a difficult eccentric to be endured. This might partly originate in his feeling of being a “*man of nature*” considering technical inventions and progress as harmful. He, for instance, never accepted the invention of the phone and refused to pick it up. He said that everybody could meet him personally and did not need the phone to talk. Concerning the phenomenon of technological progress he wrote in his “*Ultimate Wisdom*” on page 251 as follows, “*Technological inventions and the convenience ensuing from them have dazzled mankind to such a degree that an opinion was established that man is the master of nature and the universe and that the whole cosmos one day shall be at his service. These fools do not recognize that people are a completely passive entity in the cosmic concert, as are other creatures. By no means is it possible for man to shift the position of the Earth’s axis, the distance from the Sun, the movements of the Earth or of the Moon. He cannot change the borders of oceans and alike, he cannot irrigate the deserts of the Sahara and the Gobi or warm up the Polar Regions. Even the elements on his own globe he cannot command. He is quite powerless against winds, cyclones, floods, earthquakes, volcanoes, against the frost, dryness, yes, even against the mice, flies and grasshoppers. From all this we can see that the ‘incarnates’, no matter how perfect they may be, cannot rule nature. The cosmic processes are driven by higher beings, whose relations to the eternal laws we cannot comprehend*”.

Velenovský was distrustful towards most of his colleagues and based his works almost exclusively on his own observations. In botany, he especially distrusted the determination of plants by other botanists and he particularly resented the Hungarian botanists Janka and Degen. In the herbarium of Prague University (PRC) on one of the *schedae* (Fig. 2) we can read as a reminder of Velenovský’s “*love*” of Degen, the following words, “*and this is considered by the dumb Degen to be a different species*”. Among botanists who were active in the Balkans at that time, Velenovský had close contacts only with Pančič and Bornmüller. As a result of this “*non-collaboration*” with other botanists, almost

no species of higher plants were named in honour of Velenovský, while his “friends” Janka and Degen each has a Balkan endemic genus (*Jankea* and *Degenia*)!

However, Josef Velenovský was already perceived by his contemporaries as a “controversial personality”, especially due to his political opinions and this perception continues regrettably even today. One cannot deny that his work is massive in its output, huge in its scope and original in its ideas. To the Czechs, Velenovský’s work is a beautiful monument to the Czech language built by himself. The complete list of his botanical publications includes the paper of “Kotlaba a Skalický” (1958). The contribution of Josef Velenovský to the knowledge of the flora of the Balkan Peninsula, to the knowledge of the Cretaceous flora as well as to the knowledge of mosses and mushrooms is great and undisputable. Finally, the person of Josef Velenovský can be seen as a positive model even nowadays. Here was a man who did not escape from the problems of society to live in a scientific ivory tower. He had the courage to comment on them in his books and to be a member of a political party. This is vastly different from most of the present Czech botanists who meticulously detest politics and political involvement. Thirty years ago they escaped from the ruling regime of the Communist Party to the plants, retreating into the herbaria and natural habitats of the plants, but unfortunately, have not yet returned from there.

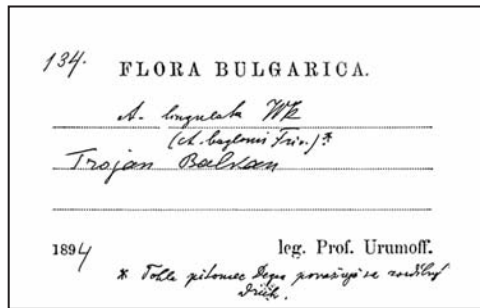


Fig. 2. Herbarium label with Velenovský’s opinion of the Hungarian botanist Degen.

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