

**CORNERSTONES OF SERBIAN MEDICINE: DR VLADIMIR VUJIC**

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**UTEMELJIVAČI SRPSKE MEDICINE: DR VLADIMIR VUJIĆ**

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**ABSTRACT**

Professor Vladimir Vujic was the founder of the school of neuropsychiatry in the former Yugoslavia, and was especially influential in Serbia and Belgrade. He was born in Belgrade in 1894, but his father's service brought the Vujic family to Kragujevac, where he finished his primary school and attended the famous Gymnasium. As a volunteer he took part in the Balkan Wars and as a member of the medical corps he participated in the First World War, which also caused him to suspend his medical studies in Paris and Vienna. Then, in 1919, he went to Prague to study at the Karlov University and worked at the Neurological Clinic of Professor Haskovec where he became interested in neurology. In 1923, having finished his studies, he returned to Belgrade and started working at the Mental Hospital. He spent two years (1924–1925) on advanced professional training in Vienna, with Professor Wagner Jauregg, who received the Nobel Prize for Medicine 1927. At first, Vujic was an Assistant and then, in 1932, he became an Assistant Professor at the Faculty of Medicine in Belgrade. Although absorbed in his work, he managed to come to Kragujevac to celebrate the 20th anniversary of his graduation from the Gymnasium. In 1941 and again in 1945, he refused the position of the Major of Belgrade. He became a full professor of the Faculty of Medicine in 1946. He was elected the first Vice Dean of the Faculty of Medicine in Belgrade, and because of his scientific contribution he became a corresponding member of the Serbian Academy of Science in 1948. Vujic entered into a direct correspondence with many of the outstanding neurologists and psychiatrists of the time: Wartenberg, Cossa, Heuyer, Bersot, Lowenthal, and Levis. Professor Vujic published original works such as "Synesthesia of hallucinated voice and perception of colors," and other works on optical hallucinations in patients with schizophrenia, on optical images in a series of clinical entities, on interpretation of psychastenia, on the disappearance of lunatic ideas and change of faith in the course of cures, on affective intolerance, and many other topics. Professor Vujic also wrote some papers in the field of neurology. For instance, his monograph "Encephalitis Larvata" went through two editions even though it was published in the difficult post-war period (1948-1951). We should also point out his studies of the signs indicating encephalitis during flu epidemics, his "experiment with a book" as an indicator of extrapyramidal disorders, and his experimental

**SAŽETAK**

Profesor Vladimir Vujic je bio osnivač neuropsihijatrijske škole u prethodnoj Jugoslaviji, posebno u Srbiji i Beogradu. On je rođen u Beogradu 1894. godine, ali je službovanje njegovog oca dovelo porodicu Vujic u Kragujevac, u kome je završio osnovnu školu i poznatu Gimnaziju. Učestvuje kao dobrovoljac u Balkanskim ratovima i medicinar u Prvom svetskom ratu, koji mu prekida započete studije medicine u Parizu i Beču. Potom, 1919. godine, odlazi u Prag, da studira na Karlovom Univerzitetu, gde je radio na neurološkoj klinici Profesora Haškoveca i tu se usmerava ka neurologiji. Vraća se po okončanim studijama 1923. god. u Beograd, gde započinje rad u duševnoj bolnici. Dve godine (1924-1925) potom provodi na dodatnom profesionalnom usavršavanju u Beču, kod profesora Wagner Jauregga, dobitnika Nobelove nagrade za 1927. god. Prvo je bio asistent a potom, 1932. godine, je postao docent na Medicinskom fakultetu u Beogradu. Zaokupljen obavezama i naukom ipak stiže da dođe na proslavu dvadesetogodišnjice velike mature u Kragujevcu. Odbio je 1941. god. i 1945. god. da bude gradonačelnik Beograda. Postaje redovni profesor Medicinskog fakulteta 1946. godine. Biran je za prvog prodekana Medicinskog fakulteta u Beogradu, a zbog svog naučnog doprinosa postaje 1948. godine dopisni član Srpske akademije nauka. U direktnoj je prepisci sa velikanima neurologije i psihijatrije onog doba: Wartenberg, Cossa, Heuyer, Bersot, Lowenthal, Levis i dr. Profesor Vujic objavljuje originalne radove kao što je "Sinestezija halucinatornog glasa i precepcija boja", zatim radove o optičkim halucinacijama kod bolesnika sa shizofrenijom, o optičkim slikama kod niza kliničkih entiteta, o tumačenju psihoastenije, o nestajanju sumanutih ideja kao i o promeni vere tokom lečenja, o afektivnoj intoleranciji i dr. Profesor Vujic napisao je više radova iz oblasti neurologije. Njegova monografija "Encephalitis larvata" je u teškim vremenima doživela dva izdanja (1948-1951). Poznati su Vujićevi znaci koji ukazuju na encefalitis tokom gripoznih epidemija, zatim "ogled sa knjigom" kao indikator ekstrapiramidnih poremećaja ali i eksperimentalne studije o spavanju i promeni pritiska likvora. Do svih otkrića profesor Vujic dolazio je bez ikakvih instrumenata, samo blistavom observacijom i neumornim istraživanjem. Veliki patriota, briljantan predavač, izuzetno radan, visokoetičan, kritičar proizvoljnih i netačnih tvrdnji, bio je profesor koji je okupljao asistente i nastavnike uoči predavanja već u 5 h ujutru

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studies of sleep and changes of liquor pressure. Vujic had no instruments and all the discoveries he made were based solely on his observations and tireless research. He was a great patriot, a brilliant lecturer, a hard-working man, and a highly ethical critic of arbitrary and incorrect scientific claims. As a professor, he frequently gathered his assistants and teachers for consultations and preparations before lectures, even at his house at five o'clock in the morning. He was loved and respected by his students, for whose benefit he once spent his AVNOJ reward. He died prematurely, while serving as the Head of the Psychiatric Clinic in Belgrade. The Psychiatric Clinic of the Faculty of Medicine in Belgrade bears his name.

**Keywords:** neuropsychiatry, Serbia, founders, Vujic's signs

*"I have no fear of death, I am only sorry that my premature death will take away at least ten years of work.*

Professor Vujic,  
a few months before his death

Professor Vladimir Vujic was born February 13, 1894 in Belgrade. It remains unclear precisely when his father's service brought the Vujic family to Kragujevac. His father, Filip, was the Head of the Ministry of the Post Office and, as a civil servant, he was moved from one town to another for the good of the service (1).

The family lived in a small street opposite the famous Gymnasium founded by Serbian Prince Milos Obrenovic in 1833. Here, almost in the shadow of the famous Gymnasium, Vladimir finished his primary schooling and then enrolled in the Gymnasium, which he graduated from in 1912. He acquired his enthusiasm, patriotic spirit and a thirst for knowledge in the Grammar School and town itself. He could have easily been inspired both by professors and students, as he worked with such figures as Djura Jaksic, Radoje Domanovic, Radomir Putnik, and others.

After attending the Gymnasium, he participated in the Balkan Wars (1912–1913) as a volunteer. In 1913, he went to Paris. In the "City of Lights" he enrolled in the Faculty of Medicine and completed his first year there before continuing his medical studies in Vienna in 1914. When the First World War began, Vladimir took part as a member of the medical staff, but soon, at his own request, he was transferred to an infantry regiment. Together with other Serbian soldiers, he crossed into Albania. After the war, in 1919, Vladimir went to Prague. This was one of the crucial years for Vladimir: he was a third-year student of Medicine at the Karlov University, and worked at the Neurological Clinic of professor Haskovec, where, guided by this eminent professor, he became interested in neurology. He finished his medical studies in 1923, and left Prague to return to Belgrade, where he started working at the Mental Hospital in Guberevac (1).

According to Dr. Dusan Stojimirovic, "the state of psychiatry before 1910 was like this. We read Havelock Ellis, Forel, Meiner and Kraft-Ebing, who had just laid the foundation of that branch of medicine. Freud, who became known around 1910, was not taken too seriously, as he might never be, because psychoanalysis is a long lasting and expensive procedure both for the society and the individual. We had already had around 500 patients, who needed urgent and human help. Ease the misery, heal the man, or keep him in hospital for ever—that was our plan, therefore, in these circumstances, there was not much time for Freud's method. There is no superstitious respect for the mad in our culture, as in Turks, but he—the poor man, did not know

u svojoj kući radi dogovora i preslišavanja. On je bio poštovan i voljen od studenata na čiju je ekskurziju znao da potroši svoju AVNOJ-evu nagradu. Umro je prerano 1953. godine kao upravnik Neuropsihijatrijske klinike u Beogradu. Klinika za psihijatriju Medicinskog fakulteta u Beogradu nosi njegovo ime.

**Ključne reči:** neuropsihijatrija, Srbija, utemeljivači, Vujićev znak



what to do. He dragged them from one which doctor to another, from one monastery to another, and then he would often bring them to us to rack our brains about them once their relatives had given up on them. However, it can be said that our people started looking upon mentally ill patients with different, rational attitude even before 1900. From 1850 we were shepherds, then from 1850 we were peasants, and since 1900 we have had yet another social transformation. The cultural level of the country began to rise quickly. People gradually became aware that all illnesses, including mental, belong to the realm of medicine and not witchcraft, and that medicine can offer cure for them. Nevertheless, it must not be kept secret that people were fed up with epileptics and mentally sick and occasionally they were tied up to a wall ring, morally abused and inhumanly treated even by those who were once very fond of them. But since 1900 these abuses were not that common. The Government gave us the necessary credits to accept those who suffered and to take care of them in the Mental Hospital till they are dead or cured. Authorities even sent patients from villages to us in Belgrade, their families brought them to us even from the farthest parts of Serbia. Rich people still took their patients to Vienna or Graz, but there they were not offered more than they would have been in the Belgrade Mental Hospital. The standard of this hospital was the same as of any other mental hospital abroad, furthermore, it was better equipped and organized than other similar hospitals in the Balkans, or even somewhere in Europe. Each patient had three abundant meals, with a variety of food, while patients with severe physical illnesses got absolutely everything they needed."

To a great extent, this was the achievement of Dr. Vladimir Vujic, who worked in the Mental Hospital at Guberevac, Belgrade. His quest for knowledge took him to Vienna in 1924. There, he spent two years (1924-1925) at the clinic of Wagner Jauregg von Paulus (1857–1940), the winner of the Nobel Prize in Medicine in 1927 for his work on the treatment of progressive paralysis by inoculation of malaria. Still young, but experienced (including his time at war and his studies in Paris, Vienna, and Prague), possessing impeccable knowledge of neurology and psychiatry, fluent in French, Czech and German, and with some knowledge of Italian and Greek, he was elected an Assistant at the Faculty of Medicine in Belgrade. In 1923, he was elected an Assistant Professor (1, 2).

In 1932, Vladimir came to Kragujevac for the celebration of the 20th anniversary of his graduation from the Gymnasium, which indicates that he was very fond of Kragujevac and its Gymnasium (figure 1). He was promoted to Associate Professor in 1940. Until 1941 he was the family doctor for the Karadjordjevic royal family. Because of the great respect he enjoyed, he was offered the position of Major of Belgrade in 1941 and then





again in 1945, but both times he refused. He was elected a full Professor of Neuropsychiatry in 1946.

He was also elected the first Vice Dean of the Faculty of Medicine in Belgrade after the Second World War. This was a time of great creativity for Vladimir. As an excellent observer, he frequently discovered new phenomena and interpreted them in his own, ingenious way. His excellent teaching approach, which was strict and rigorous, gave him a reputation as both a respected academic and a loved professor.

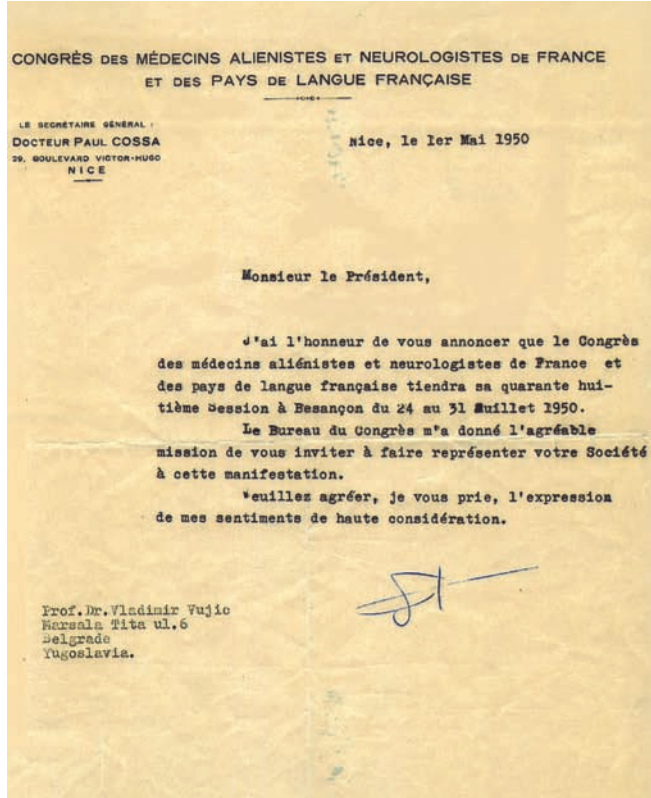
During the period from 1946 to 1952, he kept in direct correspondence with world-renowned neurologists and psychiatrists like Robert Wartenberg in San Francisco, Paul Cossa in Nice, Georges Heuyer and Henry Bersot in Paris, Milton Lowenthal in New York, Levis in London, etc. To provide an example of these letters, we have chosen a selection written by Robert Wartenberg and Paul Cossa (figures 2 and 3). In the letter dated January 8th, 1951, Wartenberg wrote to Professor Vujic: "We are sole mates as neurologists—we share the same interests... I am interested in everything coming from your pen".

In Prague, in 1921, while still a third-year student, he started his own experimental investigations. Even at this early stage of his career, he published a paper, titled "Synesthesia of hallucinated voice and perception of color" (1). Synesthesia was a phenomenon new to the literature of that time. He continued to investigate the problem of optical perception: he published another paper on optical hallucinations in cases of schizophrenia in 1940, and he presented his original clinical study of optical images in series of clinical entities at the Consortium of French Neuropsychiatrists in 1946.

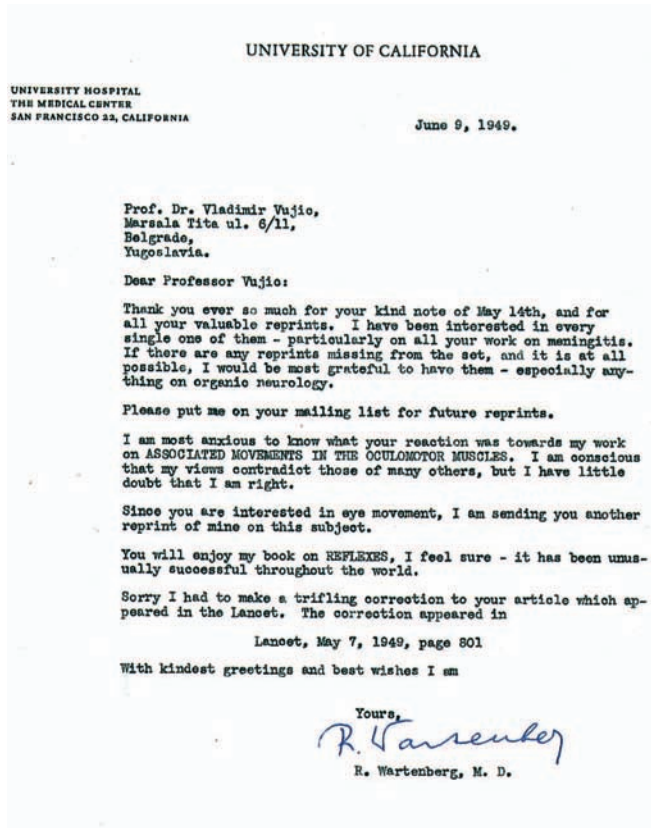
In these years, in light of the theory on changes at the level of psychical tension developed by Bergson, Vujic described paradoxical psychological phenomena such as the "illusory fall of a small object...on magnification and moving-away of objects." He also discussed Bergson's theory with Pierre Janet, giving a diametrically opposite interpretation of psychastenia to the one presented by Janet. He also pointed out the clinical significance of the discovery of the minimal pathology of ocular spectra on the optical pathways. The importance of this observation lies in the fact that the findings can indicate the existence of a brain tumor or intracranial hypertension with various causes. These discoveries were published by Vujic along with K. Levijen in Basel in the book "Die Pathologie des optischen Nachbilder" (3-5). Professor Vujic's areas of interests were very broad and also included the field of special psychiatry. In the period from 1930 to 1938, he investigated progressive pa-



**Figure 1.** Professor Vladimir Vujic, sitting the second from the left, at the 20-year anniversary of his Gymnasium graduation.



**Figure 2.** A private letter from Professor P. Cossa, famous French neurologist, to professor Vujic.



**Figure 3.** A letter from Professor R. Wartenberg asking for a reprint of one of Vujic's articles.



ralysis and published the first paper on disappearance of lunatic ideas in the course of cure and on the change of faith that occurs during the process.

At one of the world consortiums he attended, when one of the participants claimed that hysteria appeared only with still-primitive Serbs in the Balkans, he reacted patriotically but professionally and with dignity, responding, "Gentlemen, my small but heroic people are being offended here, although it is a scientific fact that hysteria exists worldwide. Furthermore, Freud's introduction of deep psychology and psychoanalysis was founded on the study of hysteria." Vujic's study on the frequency of progressive paralysis in different peoples compared to that of Serbs was written during this period. In this study he disputed incorrect and unscientific claims that classified Serbs as a "primitive" people (6).

As noted above, the breadth of Professor Vujic's work was very wide, but special attention must be paid to his debates on affectations and their role in everyday behavior and interpersonal communications. In 1949, at the Scientific Conference of Neuropsychiatry, he introduced a new term in this scientific field: "affective intolerance." Professor Vujic introduced psychology and psychopathology into the field of neuropsychiatry. He had a deep knowledge of psychoanalysis, although he was not an advocate of psychoanalysis in practice.

He was also a talented teacher whose students remember him as an excellent and interesting lecturer, given to demonstrating his skills at hypnosis. No wonder that his lectures were attended not only by students of medicine, but also by students of other faculties, educated people in general, and even laymen. His assistants and teachers were known to come to his office consultations and preparations even at five o'clock in the morning. The result of these brilliant lectures was the exceptional and extraordinary textbook "Medical Psychology with General Psychopathology" used by generations of Serbian students as the basic introduction to psychiatry (7). The shrewdness and wisdom of Professor Vujic can be illustrated by the following example. His close friend, a famous actor Dobrica Milutinovic, once saw a patient with Parkinson's disease and said, "this man looks as if he were holding a tray." Professor Vujic used this brilliant observation in his book "Encephalitis Larvata," and this description is still often cited by many professors in their lectures (8-10).

Professor Vladimir Vujic was also a man of principles, high morality and ethics in science as well as in everyday life. He was merciless in criticizing arbitrary and incorrect scientific claims, including those in the lectures at the Serbian Society of Physicians. His paper about the simulation of nervous and mental disorders is a good example of his critique of others (11).

Professor Vujic wrote numerous papers on a variety of topics in the field of clinical neurology, and these were frequently noted at an international level. In 1925, he described "Paradoxical blinking reflex and convergent eyeball tremor" (12). He also noted the existence of intentional tremor and introduced so-called the "breaking test" for use when finger tremor, a pathognomonic diagnostic sign of pseudosclerosis, appears. Professor Vujic was among the first scientists to discover the cause of polyneuritis epidemics in women, pointing to the use of apiol (parsley camphor) as an abortion agent. He also introduced the "experiment with a book" as a way of diagnosing the dying-out of automatic movements and a possible indicator of extrapyramidal disorders.

Professor Vujic searched for signs of encephalitis during flu epidemics for five years. The result of these investigations was his famous monograph "Encephalitis Larvata" (8). This book went through two editions in the Serbian language (1948, 1951),

even during the hard times after the war, when this was a rarity. American neurologists asked Professor Vujic to write something in memorial of Robert Wartenberg, so he gave a detailed description of his investigations in the field of larval encephalitis. Professor Vujic conducted his share of experimental work. His study on sleeping and change in liquor pressure should be especially remembered (13). It included a great number of clinically treated patients and it provides a basis for determining the existence of epilepsy without epileptic seizures. Throughout, Professor Vujic used no instruments; all his findings were based solely on his observation and investigation (14).

Professor Vladimir Vujic was a man of great morality and enormous erudition (Figure 4). He was a scholar and scientist, but also an extraordinary teacher (he spent his AVNOJ reward to take his 110 students on a traditional excursion to Opatija). From 1945 until his premature death in 1953 he was the Head of the Neuropsychiatric Clinic in Belgrade. He was a corresponding member of the Serbian Academy of Science from 1948 on, and the Psychiatric Clinic of the Faculty of Medicine in Belgrade bears the name of Professor Vladimir F. Vujic in his honor. Professor Vujic was also the founder of the school of neuropsychiatry in the former Yugoslavia, especially in Belgrade and Serbia.

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