

KARL ROKITANSKY: HIS BOHEMIAN YEARS AND HIS RELATIONSHIP WITH JAN EVANGELISTA PURKYNĚ

On the occasion of bicentenary of birth

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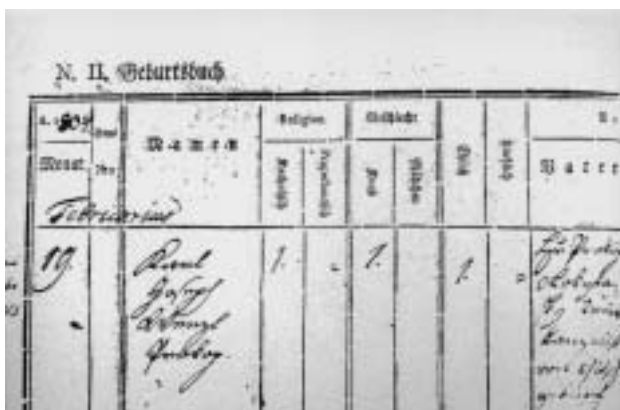
Summary: Karl Rokitansky was born on 19th February 1804 in the historic Czech town of Hradec Králové (Königgrätz). During 1821–1824 he studied for 3 years at the medical faculty of Prague University. In the archives of Charles University there is a record of Rokitansky's performance during these three years. At the university he met J. E. Purkyně who was teaching anatomy at that time. Relationship between the two world – renowned medical scientists of Czech origin is discussed.

Key words: Rokitansky; Purkyně; Charles University

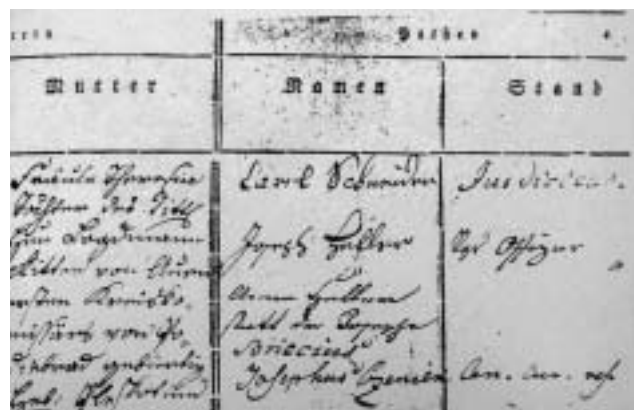
Karl Rokitansky was born on 19th February 1804 in the historic Czech town of Hradec Králové (Königgrätz), the capital of Eastern Bohemia. During the second half of the 18th century, the empress Maria Theresia had transformed the town into a military fortress surrounded by a belt of fortifications and the size of its civilian population had reduced to a mere 3500 (5). Rokitansky was probably born in house number 42 near the Large Square, close to the Cathedral of the Holy Spirit, the house now identified by a memorial plaque stating, in Czech: "Karel Rokitansky was born here on 19th February 1804". The relief on this

tablet is the work of the renowned Czech sculptor Myslbek, who was also responsible for the statue of Saint Wenceslas in Wenceslas Square, Prague. The plaque was unveiled with due ceremony in 1879, a year after Rokitansky's death (9).

Karl was the first child of his parents, born, interestingly enough, just five months after their wedding. In the "Geburtsbuch" the full name of the newborn Rokitansky is recorded as "Karl, Joseph, Wenzl, Prokop". His father Prokop's profession is given as "Kreiskanzelist"; his mother's name as Theresia (figs. 1, 2). During subsequent years, three more children were born into the family: Prokop, Marie and



N. II. Geburtsbuch		Geburtsdatum		Geburtsort		Mutter	
Jahr	Tag	Nachname	Vorname	Nachname	Vorname	Nachname	Vorname
1804	19	Rokitansky	Karl, Joseph, Wenzl, Prokop	Rokitansky	Prokop	Rokitansky	Theresia



Mutter	Vater	Stand
Theresia Tochter des Tittl. Herrn Logdman Ritter von Auen ersten Kreiskommissärs von Podiebrad gebürtig.	Prokop Rokitansky, Kreiskanzelist von Jitschin gebürtig.	Kreiskanzelist

Figs. 1,2: Inscription in the Book of Births (Geburtsbuch) of Hradec Králové on the birth of Karl Rokitansky.

(1): Namen – Karl, Joseph, Wenzl, Prokop. Vater – Prokop Rokitansky, Kreiskanzelist von Jitschin gebürtig.

(2): Mutter – Theresia Tochter des Tittl. Herrn Logdman Ritter von Auen ersten Kreiskommissärs von Podiebrad gebürtig.

Theresie. When Karl was eight, his father died at the age of just 42 years and his widow, with four children, struggled to make ends meet. Between 1813 and 1818, Rokitsansky attended the Hradec Králové grammar school (“gymnasium”), moving to Prague in 1818 to study, for three years, so-called “philosophy”, which was mandatory before university (10). In 1821, he enrolled at the medical faculty of Prague University, which was at that time known as “Charles-Ferdinand University”.

The medical faculty was located in the contemporary historic building of Charles University, the Carolinum. On the ground floor, a cloakroom today was, in Rokitsansky’s time here, the anatomical autopsy room. One can still see

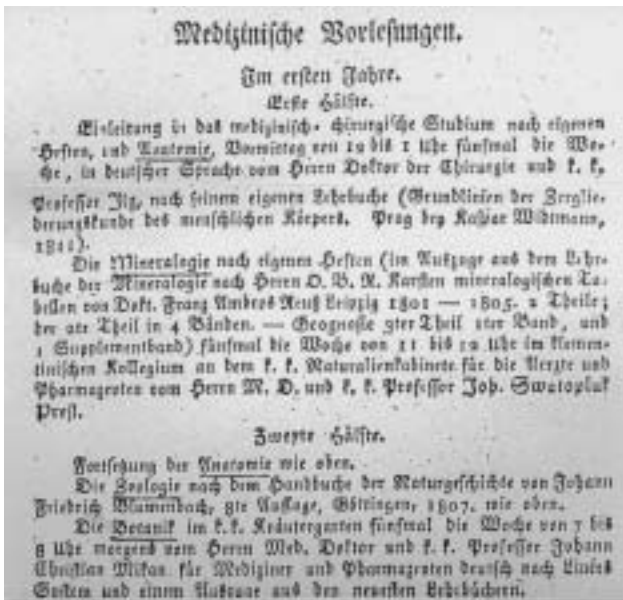


Fig. 3: Medical curriculum (Medizinische Vorlesungen) of Prague University for the first year in 1821/22.

Namen der Studierenden	Geburtsort	Geburtsjahr	Wohnort	Leistungen				Bemerkungen
				1. Sem.	2. Sem.	3. Sem.	4. Sem.	
Anton Jany	Prag	1802	Prag	1	1	1	1	
Anton Sedlitz	Prag	1802	Prag	1	1	1	1	
Karl Jany	Prag	1802	Prag	1	1	1	1	
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ing to the marks he achieved, he was by no means an outstanding student! Most of his final marks are “1”, which corresponds to “good”. Omitting marks for “manners” (“Sitten”), he achieved marks of “E”, for “Eminenter”, meaning “excellent”, on only two occasions – during his first year, for Anatomy, and his third year, for Theoretical Surgery (Figs. 4,5).

Also within these annals, there is an interesting finding regarding the spelling of our subject’s name. This is recorded four times and each time the spelling is different: *i* versus *y*, and *y* versus *ý* in Rok*í*tansky, and *c* versus *k* in Karl (fig. 6). If, in addition, we consider one further official version in the “Geburtsbuch”, we arrive, curiously, at a total of five alternative spellings of his name!

It is apparent from Rokitansky’s own biography (8) that his personal situation in Prague was not of the best. In order

to earn money, for example, he was forced to give private lessons, and there is further evidence for his financial problems in the official records of Charles University. Here, it is recorded that, although he managed to pay his tuition fees for the first and second years of his studies there, he was exempted from such payment for 1823/24, his third and final year.

In the autumn of 1824, at the age of 20, Rokitansky left Prague for Vienna. But that is another story...

In the second part of this paper, I would like to say something about the relationship between Rokitansky and another world-renowned medical scientist of Czech origin, J. E. Purkyně. Incidentally, both may be seen on the famous frescoes of Diego Rivera at the Cardiological Institute in Mexico City (figs. 7, 8). These depict those who have contributed most to the science of cardiology, Rokitansky being

Class.	Anatomie		Zoologie	
	Sitz.	Satzung.	Sitz.	Satzung.
	E	1	1	1

Class.	Anat.		Mineral.	
	Sitz.	Satzung.	Sitz.	Satzung.
	E	1	1	1

Class.	Physiologie		Chemie	
	Sitz.	Satzung.	Sitz.	Satzung.
	E	1	1	1

Class.	Physiologie		Chemie	
	Sitz.	Satzung.	Sitz.	Satzung.
	E	1	1	1

Fig. 5: Rokitansky’s marks during his studies in Prague, extracted from the catalogues of students; from top to bottom: first year – winter semester 1821/22; summer semester 1821/22; second year 1822/23; third year 1823/24. For details see text.

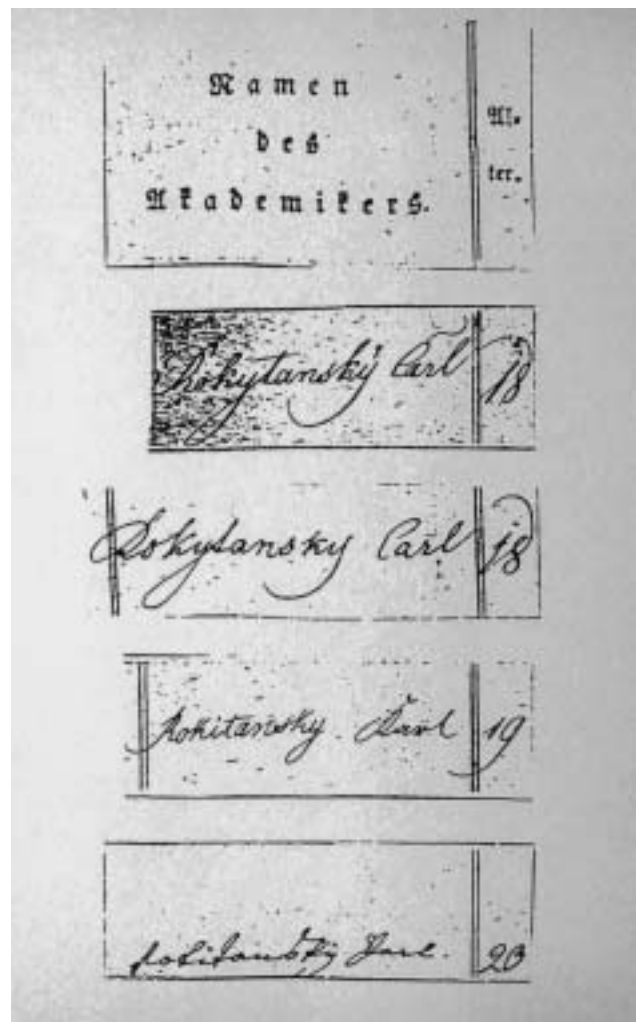


Fig. 6: Four different spellings of Rokitansky’s name extracted from inscriptions in the catalogues of students. The same order like in fig. 5.



Figs. 7,8: Rokitansky and Purkyně on the frescoes of Diego Rivera at the Cardiological Institute in Mexico City (details).

(7): Rokitansky (left side) showing to a specimen of a heart with congenital disease.

(8): Purkyně (right side) pointing to an illustration of fibres in the heart (Purkyně fibres); he is teaching a student (back).

present by virtue of his first systematic studies of congenital heart disease (7) and the thrombogenic theory of atherosclerosis, and Purkyně because of his discovery of the terminal components of the cardiac conduction system that now bear his name and are known universally as “the fibres of Purkyně” (11).

There were, however, some fundamental differences between these two eminent men. For example, whereas Rokitansky was a loyal citizen and supporter of the monarchy, Purkyně was a Czech patriot in favour of federalization and to the Austrian government (I am quoting here) “an incorrigible old man” and “the leader of the Czech separatists” (2).

Purkyně was born in 1787, sixteen years before Rokitansky. In 1818, he graduated from the Prague medical faculty and, in 1819, was appointed in the Department of Anatomy there as assistant to Professor Johann Georg Ilg. As I have already mentioned, Rokitansky embarked upon his medical studies in Prague in the autumn of 1821 such that Purkyně was his anatomy teacher during his first year there. Later, in his autobiography (8), Rokitansky comments on this encounter: “Im Seciersaale gab es keine Anleitung, da Prosektor Purkyně – der nachmalige Physiologe – sich kaum sehen liess, und auch, wenn er kam, uns nicht beachtete”. This criticism is in some ways difficult to understand, since it is clear from his later time in Breslau, and subsequently again in Prague, that Purkyně’s lectures were highly valued and that, as a teacher, he was held in great affection by his students. We also know, however, that the years from 1820 to 1822 were difficult for Purkyně; he applied repeatedly but in vain for a professorship, in Prague, Pest, and also in Graz, and was also involved in a difficult

relationship with a young woman, Adleta Desfour. The effects of this stressful situation may to some extent explain Rokitansky’s poor opinion of him! (4).

Purkyně left Prague University for the then Prussian city of Breslau (now Polish Wroclaw) in April 1823, where he was eventually appointed to the chair of Physiology and was followed 18 months later by Rokitansky himself, who moved from Prague to Vienna. As far as I know, there was no further contact between the two men for 40 years. In the meantime, Purkyně returned to Prague in 1850, having spent 27 years in Breslau, the most fruitful ones of his life. During this second period in Prague, he was not only a professor of the university and eminent scientist, but also an ardent patriot and one of the leading personalities of the Czech revival.

In 1863, in Vienna, Hofrath Rokitansky was appointed as a medical expert in the Ministry of Culture and Education (fig. 9), from which position he issued two booklets recounting his views concerning the role of universities and of medical faculties in particular: “Zeitfragen betreffend die Universität mit besonderer Beziehung auf die Medizin” and “Die Conformität der Universitäten mit Rücksicht auf gegenwärtige oesterreichische Zustände”. In these, he suggests that the Austrian universities be organized on a uniform basis with the University of Vienna pre-eminent. It was Purkyně who dared to challenge him. In the recently founded *Czech Medical Journal* he published, in 1863 and 1864, two papers sharply criticizing Rokitansky’s proposals, arguing that universities should not be regarded merely as institutions for learned men, but also as places where students could be practically educated and where the national and linguistic problems of Austria could be dealt with



Fig. 9: Karl Rokitansky - engraving by L. Jacoby, 1872.



Fig. 10: Jan Evangelista Purkyně - oil painting by the scientist's son Karel Purkyně, 1864.

also. Nor did Purkyně agree with Rokitansky's views concerning the pre-eminence of the University of Vienna, suggesting instead that provincial universities with equality of language should be established in individual countries of the monarchy (1, 2, 6).

By 1865, Purkyně was approaching his eightieth year and his activity was declining considerably (fig. 10). It was suggested, largely by the German contingent of the university, that he might be pensioned off. However, Rokitansky, who was in the position of having the power to agree such a decision, had great respect for Purkyně despite their previous differences. Correspondence between the two shows how Rokitansky tactfully suggested that, should Purkyně agree to retire, the latter's terms regarding his pension, the building of a new Department of Physiology and also the identity of his successor would be met. On this basis, Purkyně agreed to retire. Influenced by his students, however, he changed his mind and continued in his chair, Rokitansky eventually declining from his position of power (2, 3). Eventually, on Rokitansky's recommendation, Purkyně was knighted and, a year before his death in 1869, was awarded the Austrian Order of Leopold.

And Rokitansky died nine years later...

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