



The legacy of Václav Trnka: modern medical education in Slovakia and Hungary in the eighteenth century

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Abstract

A fresh start of higher medical education in Slovakia and Hungary is closely related to Trnava (Nagyszombat). The University of Trnava had originally been established in 1635 but the Faculty of Medicine was added only later, in 1769, when the name of the university was also changed to Royal Hungarian University of Sciences. A fresh graduate, Václav Trnka from Křovice (1739–1791), was appointed as head of the Department of Anatomy. He was not only an anatomist, but a real polymath of the second half of the eighteenth century practicing medicine as well as becoming the Dean, then the Rector of the University. He has lived and acted within several countries of Central Europe, or rather, the Austro-Hungarian monarchy during the reign of Empress Maria Theresia, then her son Joseph II. Born in Bohemia (now Czech Republic), studied and graduated in Austria, then finally was appointed as the first Professor of Anatomy of a newly established medical faculty in Upper Hungary (now Slovakia). In 1777, the university was moved first to Buda, then to Pest (now parts of the capital of Hungary), and the Faculty of Medicine was not separated from the rest of the faculties before the end of the Second World War. Following several institutional and name changes, this Medical Faculty is considered as the foundation of the present Semmelweis University. Trnka was a prolific author, publishing more than 20 monographs covering various branches of clinical medicine, however, no anatomical work may be connected to his activity. And as a typical intellectual of the era, he was a keen and talented musician composing several canons.

Keywords Václav Trnka z Křovic · Wenzel Trnka from Krzowitz · Trnka Venczel · Royal university of Buda and Pest · Anatomy education · History of anatomy

On October 18, 1739, Václav (Wenzel or Vencel) Trnka (Fig. 1) was born in Tábor (Bohemia, presently in Czech Republic) to a noble family ‘Trnka z Křovic’ (Trnka from Krzowitz). He spent his childhood in Transylvania (part of present Romania) and Upper Hungary (present Slovakia) and attended his elementary schools studying, most probably, in Hungarian [3]. As for his university studies, it is assumed that he went to Prague to study medicine where he was a student of Josef Tadeáš Klinkoš. Later he moved to Vienna

to continue with his medical education under Johann Lorenz Gasser and there he met with his future patron, Gerard van Swieten, the court physician of the Habsburg Empress. In 1770, Trnka graduated from medical school [2, 5, 7, 10]. Based on the recommendation of van Swieten, he was admitted at the Vienna Military Hospital to gather material for his doctoral degree, defended his thesis ‘On Hip Disease’ and become Doctor of Medicine in 1770. Then, again by the recommendation of van Swieten, he became Professor of Anatomy at the freshly founded Faculty of Medicine of the University of Trnava (Upper Hungary, present Slovakia) [10].

The name of Václav Trnka is closely linked to the beginning of modern medical education. In the eighteenth century, upper Hungary (present Slovakia) did not have its own higher education centres, those wishing to enrol in higher education to get a scientific degree had to travel as far as Vienna, Krakow, Prague, Leipzig, Heidelberg, Padua or Bologna.

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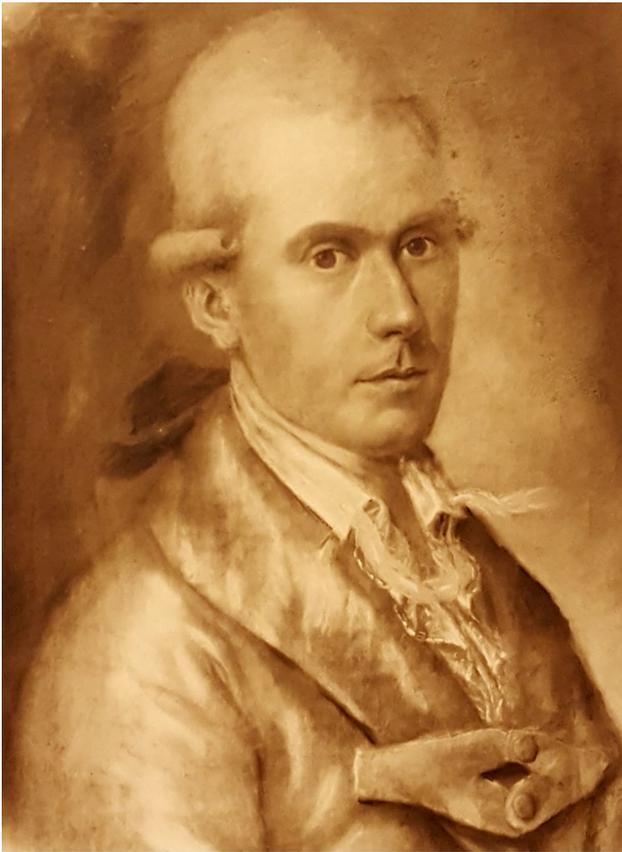


Fig. 1 Portrait of Václav Trnka. Museum of the Department of Anatomy, Histology and Embryology of the Semmelweis University, Budapest, Hungary

During the earlier centuries, several universities or academies were established in the Hungarian Kingdom out of which the University of Pécs is the oldest [12]. It was founded in 1367 by the Anjou king, Louis the Great, and had only three faculties, including medicine, since Theology was not taught in Pécs. In 1395, this was followed by a short-lived *Universitas Budensis* in Óbuda (Old Buda), already having a medical faculty, founded by Sigismund of Luxembourg, the later Emperor. Later another university, the *Universitas Istropolitana*, or as it was incorrectly named, the *Academia Istropolitana*, was established by Pope Paul II in Pozsony (now Bratislava, capital of Slovakia). It was active between 1465 and 1491. It came to existence by the request of the Hungarian king Matthias Corvinus and it had all four faculties including medicine with only two academic members, one for theory and one for practical skills, but sadly no data on the potential graduates have survived [8].

In 1635, a university was founded by the Habsburg Emperor Ferdinand II and Jesuit Cardinal Péter Pázmány, the Archbishop of Esztergom, to recatholicise the region and introduce higher education in Upper Hungary. The location was Trnava, also called Little Rome at that time due to its

numerous churches, now it is the seventh most populated city of Slovakia. The new University of Trnava was placed in a Jesuit convent and soon became an important educational institution not only in Hungary, but welcoming students from present Slovakia, Hungary, Croatia and Romania [1]. Originally it was composed of the Faculty of Theology and Faculty of Philosophy, while in 1769 the Faculty of Medicine was added by Empress Maria Theresa who changed its name to Royal Hungarian University of Sciences [4]. But soon after that, due to abolishment of the Jesuit order by Pope Clement XIV in 1773, and the unsafe political situation in the Austro-Hungarian monarchy together with the unbearable conditions in the current buildings, as observed during a visit of Emperor Joseph II, the university was moved to the Royal Palace in Buda (presently seen on the right bank of the Danube in Budapest, capital of Hungary) in 1777. The patronage of the University was transferred to the Sovereign of Hungary as well as changing the name to Royal Hungarian University of Science. In 1784, the University was transferred to Pest (presently lying on the left bank of the Danube in Budapest, capital of Hungary) and the name was again changed to Royal University of Sciences of Pest and the language of tuition was transformed from Latin to German. Later it was again renamed and the language of tuition changed to Hungarian. After the Second World War, the Faculty of Medicine and the Faculty of Theology were established as separate universities and the remaining torso was named as Eötvös Loránd University of Sciences after the renowned Baron Loránd Eötvös de Vásárosnamény (1848–1919) [4].

The Faculty of Medicine of the University Trnava comprised three theoretical departments (Anatomy; Pathology, Physiology and Pharmacology; Botany and Chemistry) and two clinical departments (Internal Medicine; Surgery, Obstetrics and Ophthalmology), each of them led by a newly appointed young graduate of the Medical School in Vienna, with the imperial approval of the Empress Maria Theresa. The first Dean of the Faculty of Medicine was Jan Gilg from Gilgenburg, a native from Moravia (present Czech Republic) and a town physician in Trnava. At the beginning, the teaching took place during the entire week except for Sundays with lectures being held by a teacher reading the Latin text from an approved textbook without discussing or adding any comments. Then, after 1775, education started to enjoy more freedom, also textbooks, other than the recommended ones, were published and used following the approval of the dean [8].

Trnka was appointed to be the Head of the Department of Anatomy at the Faculty of Medicine in Trnava in 1770. From the beginning, he struggled with shortness of cadavers to be used for educational purposes and so he had to introduce the dissection of animals. Again, his patron and friend, van Swieten, came to help and Trnka was finally supplied

with necessary dissection tools as well as the cadavers of executed criminals from the near-by Bratislava and Nitra. Although Trnka was an excellent anatomist, he has never compiled his own anatomical textbook but rather relied on the works of renowned anatomists and surgeons, such as Winslow, Weiss (Albinus), Schaarschmidt or von Leber [11]. In Budapest, the Department of Anatomy was housed in the convent of the Jesuits, and the teaching process was made more efficient using thousands of anatomical wax models produced by Fontana's workshop in Florence. With the exception of one model (Fig. 2), the prestigious donation of the Emperor was lost and/or destroyed during the



Fig. 2 Wax model produced by the Fontana's workshop in Florence, Italy, to demonstrate the female internal organs. Museum of Medical History, Budapest, Hungary

Second World War [9]. In 1786, Trnka took over the Chair of Pathology, became Professor of Internal Medicine, Dean of the Faculty of Medicine (three times) and Rector of the University (1786–1787). He died on May 12, 1791 [6].

Trnka was a real medical polymath of his time and published some 27 monographs discussing different topics, i.e. tetanus (Fig. 3), malaria, diabetes, amaurosis, tympanitis, haemorrhoids, and heart diseases (Fig. 4). The language of the monographs was originally Latin, but many of them were later translated to German as well. Besides practicing and teaching medicine, Professor Trnka was a keen musician and composed dozens of canons.

As a major figurehead of modern medical education, Vaclav Trnka together with his patron and friend Gerard van Swieten has reopened and reorganised medical education in the land of the Austro-Hungarian monarchy. The legacy of this remarkable person will have to be cherished and he

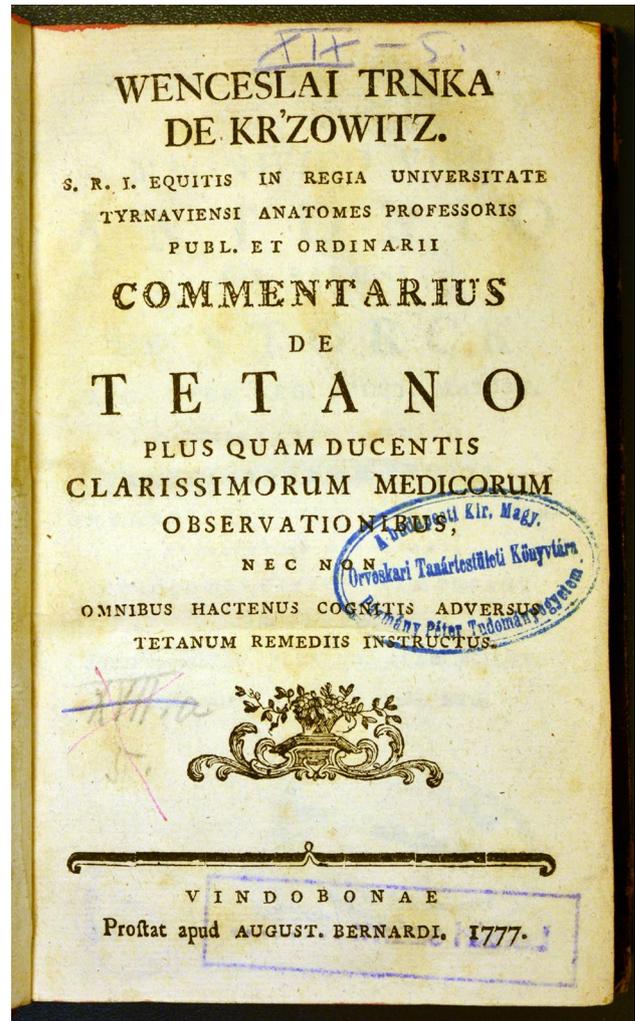


Fig. 3 *Commentarius de tetano* (Central Library of the Semmelweis University, Budapest, Hungary)

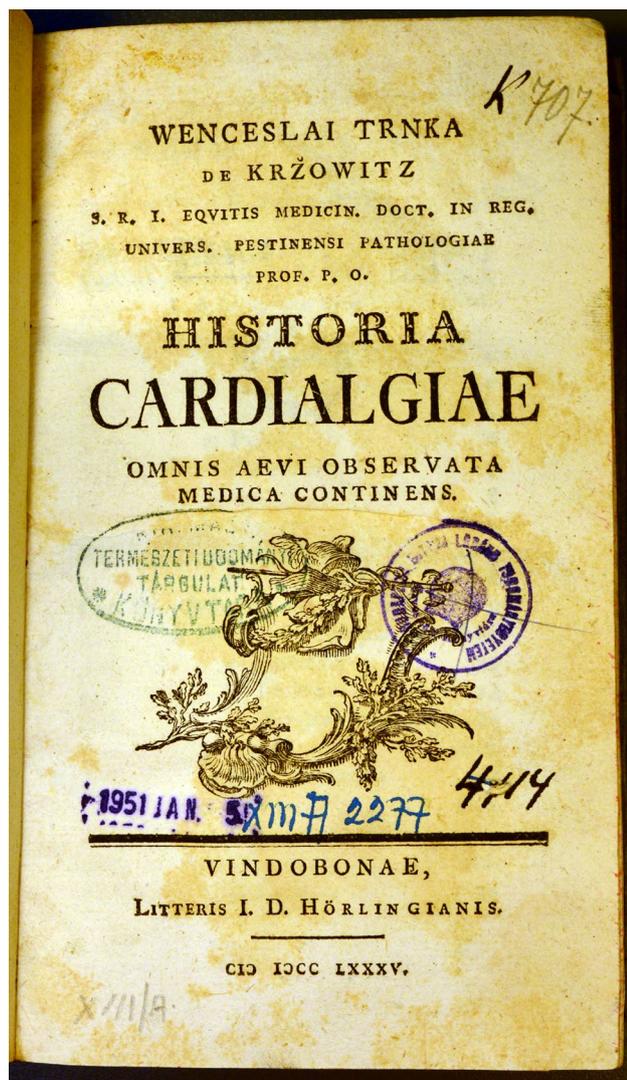


Fig. 4 *Historia cardialgiae* (Central Library of the Semmelweis University, Budapest, Hungary)

himself should be remembered as the founder of modern anatomy education in Slovakia and Hungary. Vaclav Trnka z Křovic was a principal personality embodying a truly innovative intellectual of his era.

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Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

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