FROM THE OLD ANATOMICAL SPECTATORIUM TO THE PRESENT LOUIS DEROUBAIX MUSEUM OF ANATOMY AND EMBRYOLOGY

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It was as far back as 1824 that an inventory of the École de Médecine de Bruxelles was conducted, under Dutch rule, noting the existence of "numerous anatomical specimens". It should be noted that as early as 1733, the Collège de Médecine de la Ville de Bruxelles had an "anatomical operations" room, where Professor Charles-Joseph Van Rossum (1705-1798), from the Université de Louvain, was a lecturer in 1735, and received a human skeleton for use as a teaching aid.

The Université Libre de Bruxelles (ULB), formerly the Université Libre de Belgique, was established in 1834. Four years later, the City of Brussels gave the hospices' anatomy office to the ULB, in the Palais Charles de Lorraine, in the heart of the capital. At the time, the collection was curated by Pierre-Joseph Graux (1795-1873), Professor of Anatomy, who also ran the internal clinic at Saint-Pierre Hospital.

In 1838, the "Musée anatomique des hospices déposé à l'Université" (hospices' anatomical museum at the Université) was officially established, with Louis-François Joseph Deroubaix (1813-1897) serving as its first curator, while simultaneously curating the pathological anatomy unit of Saint-Jean Hospital. Over the years, the collections were inevitably enriched by specimens dissected by human anatomy professors and their teams; excavations of a basement adjoining the *aula magna* revealed mounted anatomical pelvic specimens.

In 1842, the Université moved to Palais Granvelle, formerly a criminal court, where the Anatomy Laboratory had several rooms, as reflected in the building plans: a cadaver storage room and preparation room in the basement; an amphitheater, two dissection rooms (the cadavers were transported there by elevator), a surgical instruments room and a room for the Faculté de Médecine collections on the ground floor; and a laboratory on the first floor. The successive anatomy professors -Graux, Deroubaix, Joseph-Guillaume Sacré (1829-1915) and Charles-Théodore Hauben (1835-1927)- prepared a number of anatomical specimens in these premises. While Deroubaix was an exceptional dissector, particularly in the areas of arthrology and myology, he excelled foremost in neurology: three of his outstanding dissections of cranial nerves of the vegetative nervous system are still preserved at the Museum today.

From 1893 to 1929, the anatomical museum was built in the "Cité scientifique", as requested by the Université, in Parc Léopold, as part of the Institute of Anatomy and Histology. This was thanks to funding from the City of Brussels and the industrialist and donor, Raoul Warocqué (1870-1917), following the plans of architect Jules-Jacques Van Ysendyck (1836-1901). Warocqué had seen first-hand the poor conditions in which medical students practiced dissections in Saint-Jean Hospital and took classes in Palais Granvelle. Indeed, in 1884, Professor Léon Vanderkindere (1842-1906) reported that "collections […] were incomplete or absent. Yet everyone knows that medicine cannot be taught as an abstract science; it involves many observational components. How can one study anatomy without anatomical parts?" (10, 27).

The Institute of Anatomy, built on the former site of the royal zoological garden's elephant park, was divided into two wings: one for the forensic medicine unit, and the other for anatomical dissection rooms and laboratories (the cadaver preparation room and large dissection room were expanded in 1905). These two wings were separated in the centre by a vast, three-floor amphitheater, built following the anatomical theatre model. The original amphitheatre was subsequently replaced by a fully-fledged auditorium, illuminated by high bay windows. The same rafters over that construction now house the spectatorium, where cadavers and other teaching aids were lifted using a hoist, still in place today. Various objects are displayed in the spectatorium gallery: skeletons; plaster anatomical casts of the brain and torso made by Adolphe Nicolas, Marius-Adolphe Augier and Paul Roux; wax casts over real histological parts (Maison Tramond, Paris) and other human anatomy preparations.

The establishment of this anatomy laboratory in these new premises coincided with the adoption of the pedagogical principle of direct demonstration or immersion, a method promoted by Professor of Physiology and Embryology, Paul Héger (1846-1925), whereby experimental practices replaced explanatory ones. Students had neither comfortable seats, nor desks for taking notes; this stripped-down environment ensured their undivided attention.

Moreover, Paul Héger and his colleagues, admirers of German experimental science, wanted the anatomical facilities to follow the German model more than the standards being used in France. It should be noted that this auditorium still exists today: its façade was declared to be historic by the region of Brussels in 1988, but not its interior, which needs significant restoration work. The Université was nevertheless quite proud of the amphitheater; it had photographs taken of the massive overhead projector that was kept there starting in 1910, to showcase its use of cutting-edge technology of the time. The Museum today preserves objects relating to the history of this spectatorium, including two wooden railings and historical photographs. In 1904, Professor Albert Brachet (1869-1930), added embryology to the curriculum in addition to anatomy, established a well-known scientific school and consolidated the collections. “Photographs taken around 1927 […] show specimens on display in the auditorium, some of which are still used today” (3, 61). After 1927, ceroplastic models of embryos *in toto* and models showing the development of organs (such as the heart), produced by the German studio, Ziegler, and subsequently complemented by the hand-written corrections of Professor Jean Pasteels (1906-1962), completed the Museum’s range of teaching tools; a mounted “shattered” skeleton (disjointed bones) was also added to the collection. In 1929, the collections were again relocated, this time to the site of the former gendarmerie station at the Porte de Hal, the cradle of Brussels’ medical facilities, within the Cité médicale, thanks to funds from the Rockefeller Foundation. The large wall medallion honouring Albert Brachet, once hanging in the entrance of the Insitute of Anatomy of the Porte de Hal, is now kept at the Museum.

It was there that Professor Albert Dalcq (1898-1933) fostered the use of body bequest; preparations in that context were incorporated into the collection of the Museum of Anatomy and Embryology, which also keeps embryo casts. Dalcq also created a picture library of anatomical charts. His successor, Jean Pasteels, subsequently received an anatomy/pathology collection from the neighbouring Saint-Pierre Hospital, and an anthropological collection of plaster casts of human fossils (Homo erectus, Homo sapiens neanderthalensis, Homo

sapiens sapiens, etc.) from the Royal Institute of Natural Sciences of Belgium, provided by Anthropologist and Anatomist, François Twiesselmann (1910-1999). Dalcq and Pasteels also created three-dimensional *gastrula* models, still preserved today. The stages of embryonic development were shown using human foetuses and embryos from miscarriages or surgeries, while a new teratology collection consisted of newborns with severe malformations (siamese, anencephaly, etc.).

In 1991, the entire Faculté de Médecine moved to the new university hospital campus in Anderlecht, on the outskirts of Brussels. This provided a more suitable space for the Museum, and helped to build new collections, including of comparative anatomy; human dental pathology with wax models representing oral pathologies provided by Stomatology Professor, Hyacinthe Brabant (1907-1975) and his successors; and bone pathologies (achondroplasia, scoliosis, trauma, tumours, infections) from the pathological anatomy unit. Plastination techniques enabled providing the collections with dry specimens, while a virtual museum with computer modelling simulated joint motion. A comparative anatomy collection of the mastication apparatus, composed of specimens from the first cycle of veterinary medicine studies, includes a few skulls (crocodilian, feline, rodent, and primate) and teeth of various species.

Today, a range of new teaching aids are used: in anatomy and embryology classes, fresh specimens that are plastinated or extracted from their preservation liquid are placed under a camera. In addition, the anatomy laboratory has an X-ray scanner for computerized axial tomography (CAT) of the main specimens. These non-invasive studies of ancient and precious specimens were developed by Professor Stéphane Louryan (b1958). The Museum today and its collections, curated by Stéphane Louryan, reflect the strong historical nexus that has existed between teaching and research since the establishment of the ULB. The proven pedagogical value and usefulness of the ancient and newer specimens held here are a testament to the longevity of the collections and quality of instruction.

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