SpringerWienNewYork

Wolfgang Regal
Michael Nanut

VIENNA

A Doctor's Guide

15 walking tours through
Vienna's medical history

Dr. Wolfgang Regal
Vienna, Austria

Dr. Michael Nanut
Vienna, Austria

Translation into English
Roderick O'Donovan

SpringerWienNewYork is part of
Springer Science+Business Media
springer.com

Illustration credits:
Bildarchiv des Instituts für Geschichte der Medizin der Medizinischen Universität Wien:
Pages 58, 62, 63, 146, 150, 153, 154, 155; printed with the kind permission of
Doz. Dr. Manfred Skopec.
Doz. Dr. Ernst Zadrobilek: page 83;
All other photographs and illustrations: Dr. Wolfgang Regal

Underground plan and Cityrailway: printed with the kind permission of the Wiener Linien
Plans and maps: Martin Gaal

Graphic Design and Typesetting: Martin Gaal
Printed by: Holzhausen Druck & Medien GmbH. 1140 Vienna
Printed on acid-free and chlorine-free bleached paper

SPIN: 11921080

With numerous illustrations, mostly in colour

ISBN-13 978-3-211-48949-9 Springer-Verlag Wien New York

Preface

Vienna – medically. One can look at Vienna from this perspective, too. There are traces to be found almost everywhere in the city, as not all that long ago Vienna was, from the viewpoint of medical history, regarded as the "Mecca of Medicine".

This book describes a total of 15 walking tours through old medical Vienna. Naturally, these tours are concentrated on the inner city and the ninth district; the former was once the heart of mediaeval Vienna while the Allgemeines Krankenhaus (General Hospital) was established in Alsergrund, as the ninth district is known. However, a number of tours lead visitors outside the city and reveal Vienna from a more hidden perspective, as they lie somewhat outside the beaten tourist path and so have their own special attraction.

Finding one's way around this book – and hopefully also around Vienna – is easy. Having decided on your tour you can orient yourself according to the respective overview map. But, as man doth not live by medicine alone, there are also a number of notes on art history and a list of good cafés and restaurants. This allows the experiences to be digested in an appropriately Viennese way.

A separate museum tour is devoted to museums without fixed opening hours, which contain special collections that exist only in Vienna.

We wish all of you, both those who are visiting the city for the first time and also those who regard it as "their" city, an enjoyable time exploring this "different" Vienna.

Wolfgang Regal
Michael Nanut
Vienna, spring 2007

Contents

An very brief history of Viennese medicine

Although Celtic and Roman physicians left traces, some of them more than 2000 years old, of their medical activities in Vienna, scientific medicine in Vienna began with the founding of the university in 1365. In the early years of the university the medical faculty played a minor, indeed rather modest, role. This changed, however, when Galeazzo di Santa Sofia was called from Padua to Vienna. He introduced anatomy as a subject and had the first anatomical dissection north of the Alps carried out in 1404. Together with his students he made botanical excursions known as "herbulationen" in the surroundings of Vienna, as he recognised that medicinal plants could be better studied in nature than in books. From the income from anatomical demonstrations Galeazzo had a faculty seal and a sceptre used at graduation ceremonies made. For the cost of the spectacle, the executioner and his trusty aids – the university received only the bodies of persons who had been executed – for instruments, burials, the requiem mass as well as for beer, wine and sweetmeats the students and other spectators had to fork out themselves.

There were no great achievements or innovations in the Viennese medical faculty during this period. The industrious doctor Matthias Cornax should, however, be mentioned. In 1549 he not only considered extracting a dead child from its mother but also carried this out and recorded the operation in words and illustrations. This is the first documented Caesarean section conducted on a living woman. But the Viennese doctor's diploma was, however, not particularly popular among students at the time: it was only when the Dutchman Paul de Sorbait took over the running of the faculty in 1666 that the degree was again regarded as something worth having. He encouraged the study of anatomy and has entered the annals of the faculty as a fearless but ultimately unsuccessful fighter against the plague.

A new era for Viennese medicine began with another Dutchman, Gerard van Swieten, whom Empress Maria Theresia called to Vienna from Leyden in 1745. He reorganised the entire Austrian medical system and reformed the study of medicine in an authoritarian fashion against all kinds of opposition. For Anton de Haën, whom he called to Vienna, he established the first university clinic in the Bürgerspital. De Haën was the first professor of the medical faculty in Vienna who did not instruct from the lectern, as it were, but directly taught students at patients' bedsides. Van Swieten and de Haën are today regarded as the founders of what is called the 1st Viennese School of Medicine. Under van Swieten the faculty acquired its first anatomy theatre and a botanical garden. Around the same time Leopold Auenbrugger developed his brilliant percussion method in Vienna but curiously neither van Swieten nor de Haën recognised its importance.

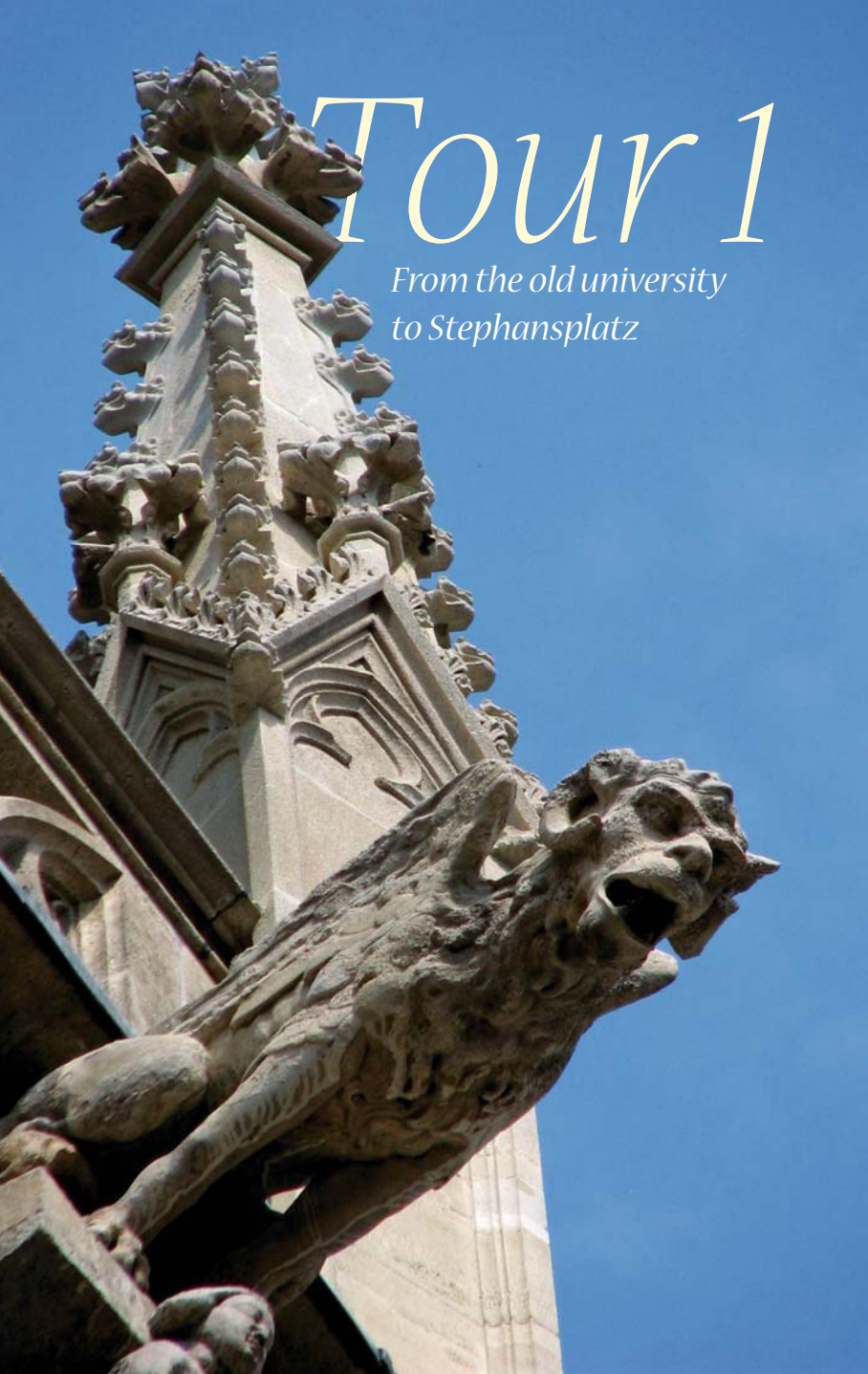
The successor in office to van Swieten was Anton von Störck who introduced experiments on animals to examine the effects of plant extracts and is regarded as a pioneer in the field of experimental pharmacology. Two theories that developed in Vienna at this time attracted considerable attention throughout Europe: Franz Anton Mesmer's theory of animal magnetism theory and phrenology as described by Franz Joseph Gall. Both of these were as greatly esteemed as they were hotly disputed. Despite all their errors both ideas are today regarded as pioneering concepts.

Viennese medicine achieved world-wide renown with the opening of the Allgemeines Krankenhaus (General Hospital) under Joseph II in 1784. One of the first directors of this hospital, Johann Peter Frank, established the basis for two new sciences: hygiene and forensic medicine. In 1812 Georg Joseph Beer founded the first ophthalmic clinic in the world here. Obstetrics as a separate area of medicine in Austria was established by the precursor of natural birth Johann Lucas Boër. Carl von Rokitansky revolutionised the field of pathological anatomy, Joseph Skoda perfected the methods of physical examination of the sick, making it into a subject that could be taught and learned. Ferdinand Hebra founded scientific dermatology and Ignaz Semmelweis, the "saviour of mothers" made his decisive observations in the old Allgemeines Krankenhaus. In 1874 Billroth carried out here the first successful removal of a larynx and in 1881 the first stomach resection. His predecessor Franz Schuh, surgeon and physician, dared to carry out the first punction of a cardial sac and also carried out the first narcosis by means of ether performed on the European continent. Sigmund Freud worked in a number of departments in this complex and the bloodless surgeon Adolf Lorenz founded modern orthopaedics. Guido Holzknecht established the basis for radiology and radiotherapy under the most primitive of circumstances. Through Tuerck and Czermak the laryngoscope became known worldwide and Friedrich Schaut and Ernst Wertheim developed their pioneering gynaecological operations.
The internists Hermann Nothnagel and Karel Frederik Wenckebach brought internal medicine to new heights. The entire medical world wanted to have the sensational anatomical preparations and textbooks of Josef Hyrtl. Three doctors were awarded the Nobel Prize for research work carried out in the Allgemeines Krankenhaus: the psychiatrist Julius Wagner-Jauregg in 1927 for malaria therapy for progressive paralysis; Karl Landsteiner in 1930 for the discovery of blood groups, and in 1914 Robert Bárány for his work on the vestibular apparatus of the ear.

After the 1st World War Vienna lost its reputation as a world centre of medical research and teaching. However, it proved possible to maintain a high standard of medicine even during the economically period inter-war period. This finally ended on 13 March 1938. After Austria's annexation by Nazi Germany many doctors, researchers and students were driven into exile or died in concentration camps. This represented an enormous loss that from which Austria has not really been able to recover to the present day.

» In my understanding of scientific activity history and research are so inseparably linked that, as I see it, the one is inconceivable without the other. «

Theodor Billroth (1829-1894)
Surgeon



Tour 1

From the old university to Stephansplatz

Route

- *Old University*
- *former Bursen district*
- *Academy of Sciences*
- *Sonnenfelsgasse (domus antiqua)*
- *Bäckerstrasse*
- *Lugeck (Federlhaus, Paracelsus)*
- *Rotenturmstrasse*
- *Stephansplatz (former cemetery, Virgil chapel)*
- *Stephansdom (catacombs, Kreuzkapelle, Zahnwehherrgott)*

Tour 1

Starting point:
Stubentor Underground station (U3)
1st District, Dr. Karl Lueger Platz
End: Stephansplatz City (Underground station U1/U3)
Duration: about 2 hours (not including visit to the catacombs).

Old University, Bursen district

Let's start our stroll through the old medical Vienna where everything began: in the district around the **Old University**. Here in the university founded in 1365 by Duke Rudolf IV – the oldest university in German-speaking Europe in continuous existence – the foundation stone for the Viennese Medical School that was later to become so famous, was laid. Around the building of the Collegium Ducale – today integrated in the Jesuit College – gradually a "Latin quarter" developed, known as the **Bursenviertel or district**. The Bursen were a kind of student residence where poorer students lived in cramped accommodation. Here they lived, studied, drank and fought – and did not have a particularly good reputation among the population of Vienna – from the Middle Ages to the opening of the New University on the Ring in 1884.

Academy of Sciences

The centre of this old academic Vienna is today one of the loveliest squares in the city, Universitätsplatz (today known as Dr Ignaz Seipel Platz, 1st District). It can be reached easily from the Underground station at Stubentor: take the exit Dr. Karl Lueger-Platz, walk up Wollzeile a few yards, take a right into Postgasse and then left under the archway of the Jesuit College. The square itself was created through the demolition of the oldest parts of the Viennese library buildings, in which the university hospital was located for a short time. The present, almost theatrical quality of the square dates back to the reconstruction of the university by the Jesuits in 1629,

Academy of Sciences.

Jesuit Church.

the construction of the Jesuit Church in 1631 and finally to the erection of the Aula building in 1756 – originally an extension to the university, today the seat of the **Academy of Sciences** (Akademie der Wissenschaften).

The aula building – no. 2 Dr. Ignaz Seipel-Platz – erected in the framework of a studies reform programme under **Empress Maria Theresia** was for one hundred years the main building of Vienna university and housed the medical and legal faculties. On the ground floor was the anatomical theatres – the first in Vienna –, the surgery lecture hall, the examinations hall and the chemical laboratory of the medical faculty. A corpse hoist connected the basement and the anatomy theatre. On warm days the smell of the corpses in the building is supposed to have been very unpleasant according to the law students. Until the 19th century the approach roads to the university district were closed off with chains during lectures to avoid disturbing students. In the year of the 1848 revolutions the military occupied the building, the specimens of the anatomical collection were in great danger. "My supply of preserving went down warlike throats" wrote the famed anatomist **Josef Hyrtl** in looking back at the time.To avoid the spirit preserving the around 2000 specimens also vanishing down the throats of thirsty soldiers, the collection was rapidly moved to the Josephinum on Währinger Strasse. Following rebuilding projects the lecture halls and the corpse hoist are no longer recognisable. The centre of the building is the Ceremonial Hall on the first floor with the ceiling paintings dating from 1755 showing allegories of the four faculties by Italian painter **Gregorio Guglielmi**. **Joseph Haydn** and **Ludwig van Beethoven** once conducted in this splendid hall. The Theology Hall is an insider's tip. It has a magnificent fresco by **F. A. Maulpertsch**, the last great fresco painter of the occident. The busts of deceased presidents of the Academy of Sciences adorn the large aula on the ground floor of the building. Here Austria's most famous doctor **Sigmund Freud** (1856 – 1939) graduated on 31 March 1881

Sonnenfelsgasse

We leave the square going up **Sonnenfelsgasse** and encounter a further trace of the old university: the "domus antiqua" that is connected with the University Church building by an arch. Visitors

Pedellhaus, "Domus antiqua" in Sonnenfelsgasse.

Pedellhaus balcony.

should make sure to see the pretty interior courtyard. From 1627 to 1884 no. 19 Sonnenfelsgasse was the administrative centre of the university. The building with the letters U and V for Universitas Viennensis on the wrought iron work of the balcony recall this fact. The window below the balcony belongs to the room that was once used as the university prision. Until 1783 the university enjoyed the privilege of its own legal administration. People at the university enjoyed a further privilege, if sentenced to death they were not hanged like members of the common public but were executed by the sword.

Sign painted on a building in Bäckerstrasse: "where the cow plays on the board".

Bäckerstrasse, Lugeck

Through the narrow lane behind the Academy of Sciences we reach **Bäckerstrasse** that runs parallel to Sonnenfelsgasse. No. 12 has a strange house symbol dating from the 17th century, "where the cow plays at the board": a cow wearing spectacles plays with a wolf – although today only the wolf's muzzle has survived – the game Tric Trach, a kind of boardgame that was very popular in mediaeval times and is today known under the name Backgammon. Between the two players stands a man with a fly swat aiming at a fly beside the cow's head. This house sign is interpreted as a sarcastic comment on the disputes between Catholics and Protestants: the cow with spectacles is said to symbolise the Catholics, the wolf the Protestants. The man with the fly swat is meant to symbolise the greedy lawyers who take the winner's side at the right time. The fly buzzing around unprotected and helpless is supposed to represent spirituality in this game. We turn to the right and at the corner of Bäckerstrasse and **Lugeck** we find the statue of **Johannes Gutenberg**, the inventor of book printing. It is historically documented that there was once a large hole on this square that even had a name on a plan of Vienna dating from 1547: Marcus Curtius Hole. To the present-day we do not know what the function of this hole was. There are many stories about this puzzle. It is also historically proven that one of the most famous doctors in Europe stayed at no. 6 Lugeck in a building known as the Federlhof: the doctor, magician and alchemist **Paracelsus** stayed here during his visit to Vienna.

Paracelcus.

Federlhof (Lugeck).

Rotenturmstrasse, Stephansplatz

With its six-storey tower and observatory the Federlhof was one of Vienna's most splendid buildings. Besides Paracelus the building also housed the military campaigner **Wallenstein**, who had a study of the his stars made here, and the philosopher, mathematician and natural scientist **Gottfried Wilhelm Leibnitz**. At the ice-cream salon on the corner we turn to the left and walk towards St Stephen's Cathedral. Here along **Rotenturmstrasse** the Möringbach flowed from Graben to the Danube, which at the time was roughly where the Danube Canal is today. The Möringbach was no romantic murmering and sparkling stream but a stinking open drain which took the sewage of the city to the river. In 1380 it was made into Vienna's first underground drain.

We soon reach the corner of Rotenturmstrasse and **Stephansplatz**. At the beginning of the 16th century the bookshop and printers of the brothers **Leonhard and Lucas Alantsee** was located here. These brothers ran one of the most famous printing houses of their time in Vienna. Their books, principally scientific and theological works, spread throughout Germany and Italy. Indeed even **Emperor Maximilian I** visited their book shop when he was in Vienna. Lucas Alantsee was clearly an enlightened individual for his time. He was the first Viennese to instruct in his will that his body should be opened after death. **Dr Mathias Cornax**, whom we shall encounter again in tour no. 2 did him this service and reported: "that in the cause of friendship the chest was opened in 1522 and it was found that more than half of the heart was rotten and pus-filled."

Cemetery, Virgil Chapel

We are now at the centre of Vienna, on Stephansplatz. It is hard to imagine that we are here walking across the oldest, formerly most popular and most fashionable cemeteries of Vienna. Most of the graves in this **cemetery** were around the Maria Magdalena Chapel, whose outline is marked in the paving, to the south of the main entrance to the cathedral. The remains of the cemetery chapel that was burnt down in 1781 were found during the excavation work for the Underground station Stephansplatz. During the building work the mysterious **Virgil Chapel** was found under the crypt of this chapel and can be seen from the Underground station. It is strange that in this crypt, which oddly is not mentioned in any chronicles, there is a spring but no nor-

Stephansplatz with the outline of the Magdalena Chapel.

mal means of access such as a door or stairs. Naturally this mystery has given (and continues to give) rise to many wild speculations.

St. Stephen's Cathedral

Before entering **St. Stephen's Cathedral** (Stephansdom) the symbol of Vienna, we stand for a short time in front of the main entrance, the Giant's Gate (Riesentor) in the west front of the cathedral. This entrance could be used only by the aristocracy and higher members of the clergy. The common people had to use the side entrances. On two engaged columns to the left and right of the entrance that are without any structural significance there are (amazingly) depictions in stone of male and female genitals. To the right is the vulva, possibly a reference to the Singertor, the former men's entrance on the south side of the cathedral, while on

St. Stephen's Cathedral. Symbol of a vulva to the right of the Riesentor.

St. Stephen's cathedral. Holy water font at the Crucifix Chapel.

St. Stephen's cathedral. Plaque in the Crucifix Chapel.

the left is the phallus that could stand for the Bischofstor, the women's entrance.Somewhat above these two columns there are two differently shaped windows in the facade – the only trace of asymmetry in the west facade. There has been much speculation about the deeper meaning of these obvious fertility symbols in a Gothic cathedral.They have been interpreted in different ways, for instance as a reference to a key and a lock that would have been understandable to church visitors, most of whom could not read, or as a reference to a special gnostic belief. The unusual depiction of Christ on the throne with bared knees directly above the Giant's Gate has and continues to provide fuel for speculation.

Catacombs

Since 1529 for reasons of health there had been a ban on burials in the cemetery around St Stephen's. As the corpses were not buried deep enough, and were exhumed again far too soon due to shortage of space, and the semi-decayed corpses were then taken down to the "Crufften" (crypts) beneath the cathedral, the smell of decay, especially in summer, contaminated the air in and around the cathedral. **Emperor Karl VI** finally had the cemetery closed for burials in the ground in 1732. But the expansion of the underworld necropolis, laid out partly in the late Middle Ages, but mostly in the Baroque period did nothing to improve conditions of hygiene that are inconceivable today. In the warm period of the year the smell of decay from the mass graves – between 1735 and 1783 over 10,000 corpses were buried in the **catacombs** – was so bad that on occasions the cathedral could not be used due to the "foul smell" in 1783. **Emperor Joseph II** finally forbade burial in the catacombs, too. Protests made by the church (the parish lost a great deal of money as a consequence), and also

Entrance to the catacombs.

Tour of the catacombs 1872.

a report that said the burials were no source of danger written by **Van Swieten**, the personal physician of Empress Maria Theresia and founder of the first Viennese Medical School were of no avail. The emperor remained unmoved. In the 19th century the crypts under St Stephens were still a kind of cabinet of horrors and tours were organised for tourists thirsting for sensations. There were still mummified corpses in the catacombs with which the tour guides could scare visitors. Through the building of Vienna's spring water supply line in 1873 (which meant that wells in individual buildings were no longer used) the ground water level in Vienna rose gradually. The increasing amount of dampness in the crypts destroyed these mummies entirely. Today, apart from a number of spaces filled with bones, the crypts are empty and offer little that might provoke goosepimples and shudders of horror. But the huge complex is worth seeing for its own sake.

Crucifix Chapel, Christ with a Toothache

After the tour fo the catacombs one can leave the underworld through the **Crucifix Chapel** at the north side of the cathedral. A plaque in the chapel recalls that on 6 December 1791 the remains of Wolfgang Amadeus Mozart were blessed in this chapel – outside the cathedral as this was less expensive. The skull with bat's wings on the outside wall of the chapel was once a holy water font. We now walk around the cathedral in a clockwise direction and at the outside wall of the central choir we come past a niche protected against the pigeons by netting. Here is the statue that is known as the **"Zahnwehherrgott"** (Christ with a Toothache) . Ac-

St. Stephen's Cathedral, west front.

Christ with Toothache.

cording to a legend drunken good-for-nothing young men once mocked this Man of Sorrows for his suffering facial expression and wrapped a cloth around his head, like in treating a headache. On the next day the young men had such terrible toothaches that even Paracelsus could not help them, and they realized that the pains were the punishment for their mockery. Filled with regret they asked for forgiveness on their knees in front of the statue. The pain vanished as quickly as it had started. The statue on the external wall is a copy at which one can still pray for relief from toothache and above all – despite the protective mesh – to make a donation; the original from the former cemetery is now protected from the wind and the weather on the west wall of the north tower hall inside the cathedral..

St. Stephen's Cathedral. Tree of the gods.

A few paces further on at the stairs leading up to the south Tower, in the middle of the stony urban desert at a small angle made by the south facade there is a magnificent tree. As is fitting for the proximity of a cathedral this is no normal tree but a so-called Götterbaum (tree of the gods) a Ailanthus glandulosa. The first examples of this tree that is native to China and Korea were brought to

Europe by Jesuits around the mid-18th century. In Vienna efforts to establish a native silk industry led to the introduction of the ailanthus moth, which was used to produce silk in China, and the ailanthus tree was used to provide food for the silkworms. As they were unsuccessful these attempts were abandoned and the moths released. And so it can sometimes happen that in the densely built-up heart of the city one encounters this moth which, with a wingspan of fifteen centimetres, is the largest and most magnificent moth in Vienna and whose worms live almost entirely on the leaves of ailanthus trees growing wild in Vienna.

St. Stephen's Cathedral, north-west front.