The German Rundbogenstil and Reflections on the American Round-Arched Style

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This article investigates the German Rundbogenstil *and its influence on the American "round-arched style." A stylistic and theoretical phenomenon of the 19th century, the German* Rundbogenstil *held both a specific and a generic meaning: as a contemporary building style and as a term for historical round-arched architecture. In modern scholarship, the* Rundbogenstil *has come to denote any round-arched building with Romanesque or Italianate features designed by certain early to mid-19th-century German architects. A general contextual analysis of the complex nature of the 19th-century round-arched styles or "tendencies" in Germany helps to define more precisely the* Rundbogenstil. *Following a theoretical and stylistic examination of major monuments in Karlsruhe, Munich, and Berlin, the present paper outlines the salient characteristics of the* Rundbogenstil *and its influence in America in the hands of certain central European emigrant architects in New York and two major mid-19th-century American architects. The fundamental theoretical change which the style underwent in the United States in both of these groups warrants a distinct label—the American "round-arched style."*

IN THE OPENING CHAPTERS of his *Architecture: Nineteenth and Twentieth Centuries,* Henry-Russell Hitchcock sought to define and organize the pivotal cultural, theoretical, and stylistic changes between 1750 and 1790 with the term *Romantic Classicism.*[1] Hitchcock never explicitly defined the term, no doubt intending by its very evocativeness to suggest "the ambiguity of the dominant mode of this period in the arts . . . ,"[2] that is, to describe classical monuments built in a romantic age. Hitchcock continued this theme in the chapter entitled "The Doctrine of J.-N.-L. Durand and its Application in Northern Europe," in which he emphasized rightly the enormous influence which the professor of architecture at the Ecole Polytechnique in Paris had throughout northern Europe, particularly in Germany. Hitchcock described Durand's *Précis des leçons d'architecture donnés à l'Ecole Polytechnique* (1802–1805) as "a sort of bible of Romantic Classicism," whose lessons such major architects as Leo von Klenze, Friedrich von Gärtner, and Karl Friedrich Schinkel imbibed. And it is by way of Durand's influence in northern Europe that Hitchcock introduced the term *Rundbogenstil,* "a phase of Romantic Classicism" which was "peculiarly German."[3] According to Hitchcock's definition, the round-arched style was generically Italianate, with Early Christian, Byzantine, Romanesque, Italian Gothic, and quattrocento variants, but treated in a distinctly German way. The *Rundbogenstil* was thus characterized as an open-ended style consisting of "variants" which, in combination with a penchant for simple geometric forms and smooth surfaces, were ultimately derived from Durand's own eclecticism and stylistic and methodological peculiarities.

There is no question that Durand's architectural theories and methods of composition were of enormous importance to Germany.[4] The *Précis* was familiar to German architects, some of

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1. The term *Romantic Classicism* had been coined in 1922 by Sigfried Giedion in his *Spätbarocker und romantischer Klassizismus,* Munich, 1922, and was introduced in English in 1944 by Fiske Kimball in his article "Romantic Classicism in Architecture," *Gazette des Beaux-Arts,* LXXXVI, 1944, 95–112.

2. Henry-Russell Hitchcock, *Architecture: Nineteenth and Twentieth Centuries,* New York, 1958, xxvii. Subsequent references are from the most recent edition, 1977.

3. Hitchcock, *Architecture,* 47, 55.

4. The influence of Durand is mentioned but not specifically addressed in David Watkin and Tilman Mellinghoff's recent book *German Architecture and the Classical Ideal,* Cambridge, Mass., 1987, where the authors use the term *Romantic Classicism.* The inclusion of some discussion of the *Rundbogenstil* in their book presumes that it is somehow related to German classicism, certainly in part due to the architects' common utilization of Durand. It is important to note, however, that the first stylistic "battles" fought by the proponents of the *Rundbogenstil* were, in fact, with the Neoclassicists.

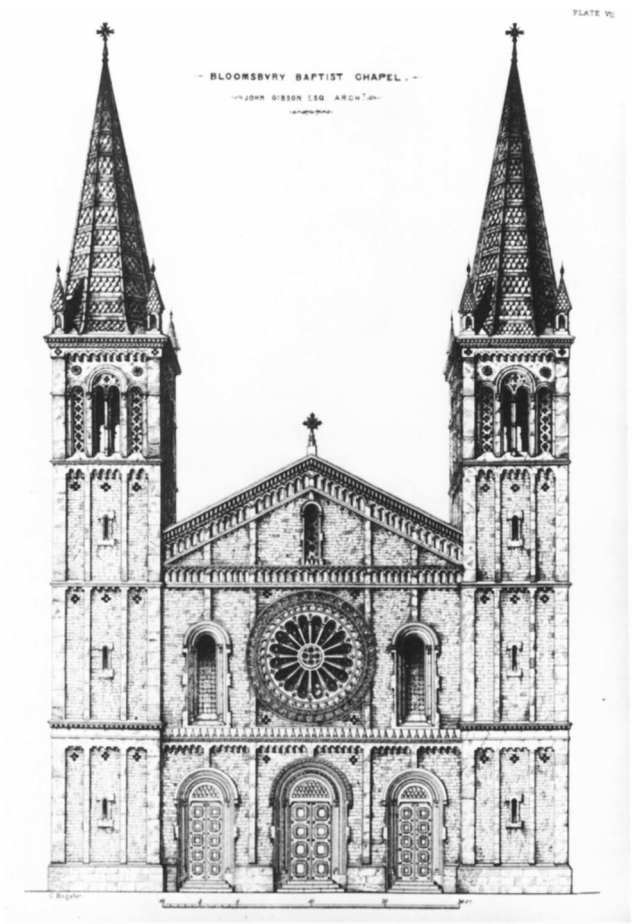

Fig. 1. John Gibson, Bloomsbury Baptist Church, London, 1848, front elevation (*Civil Engineer and Architect's Journal,* 1848, Pl. 7).

whom, including Klenze, actually studied with Durand; and as early as 1806, Durand's teachings were translated into German.[5] Nonetheless, the presentation of this period of German architectural history under the double rubric of Romantic Classicism and "The Doctrine of J.-N.-L. Durand," leads to significant misunderstandings. Thus, such architects as Klenze and Gärtner, who actually represented two radically opposed architectural philosophies, are grouped together as having been influenced by French styles and methods which were, in truth, so widespread as to be only partially useful as a means of classification. To cite Klenze as a practitioner of the *Rundbogenstil,* as Hitchcock did, is especially ironic in view of the fact that the architect was one of the principal opponents of the style.

There were, in fact, at least three round-arched styles or, more accurately, tendencies that emerged in early 19th-century Germany and are generally but improperly associated with the term *Rundbogenstil.* A close look at these styles or tendencies will reveal significant differences in theory and intention which are reflected or sponsored by divergent views of history; and by recognizing these differences one is better able to isolate the peculiar meaning and influence of what was originally termed the *Rundbogenstil.*

The first of these three tendencies was the *Neuromanik* or neo-Romanesque, developed in the Rhineland around 1815–1820 and prompted, according to such historians as Albrecht Mann and Michael Bringmann, by an impulse to preserve historical monuments there. For instance, in 1812 the Romanesque fragments from the demolished Martinskirche in Bonn were reused in the building of the Sebastianskapelle in Bonn-Poppelsdorf. Thirteen years later, in 1825, Ferdinand Nebel designed an octagonal building with Romanesque details and annexed it to the western tower of an 18th-century church.[6] The *Neuromanik* changed during the second half of the 19th century into what Mann dubbed *dogmatischer Historismus* which, instead of the mixing of forms, involved an unambiguous striving for archaeological correctness and the revival of specific historical epochs that was made possible by the increased knowledge of medieval architectural history. Bringmann has recently demonstrated how the *Neuromanik* extended beyond the boundaries of the Rhineland and was embraced eagerly by Kaiser Wilhelm II of Prussia as a symbolic style which would promote an association between the new *Reich* of 1871 and the golden age of the *Kaiserreich* during the Hohenstaufen period of the Middle Ages. As a result, many of the buildings executed during Wilhelm II's reign deliberately imitate the transitional Romanesque forms of the *Stauferzeit,* with the Kaiser-Wilhelm-Gedächtsniskirche in Berlin of 1891–1895 (badly damaged in World War II and now preserved as a ruin) being a good example.[7]

The German *Neuromanik* was, no doubt, a manifestation of the international Romanesque Revival that appeared elsewhere and later in Western Europe in the middle years of the 19th century. In England this revival, usually known as the Norman or Lombard style, served as an alternative to the more popular Gothic. Although the style did not possess the same cultural implications as the German *Neuromanik,* in England it was often adopted by dissenting and nonconformist groups in order to

5. See, for example, C. F. A. von Conta, *Grundlinien der bürgerlichen Baukunst nach Herrn Durand,* Halle, 1806. Conta had studied for a short period at the Ecole Polytechnique with Durand, and his book presents a condensed version of some of the French professor's lectures which Conta attended in Paris and later developed into a book. In his introduction Conta states that Durand's *Recueil et parallèle des édifices en tout genre, anciens et modernes,* Paris, 1800, was already well known to German architects.

6. Michael Bringmann, "Studien zur neuromanischen Architektur in Deutschland," Ph.D. diss., Ruprecht-Karl-Universität, Heidelberg, 1968, 18. See also Albrecht Mann, *Die Neuromanik: eine rheinische Komponente im Historismus des 19. Jahrhunderts,* Cologne, 1966.

7. Michael Bringmann, "Gedanken zur Wiederaufnahme staufischer Bauformen im späten 19. Jahrhundert," in *Die Zeit der Staufer,* Württembergisches Landesmuseum, Stuttgart, 1977.

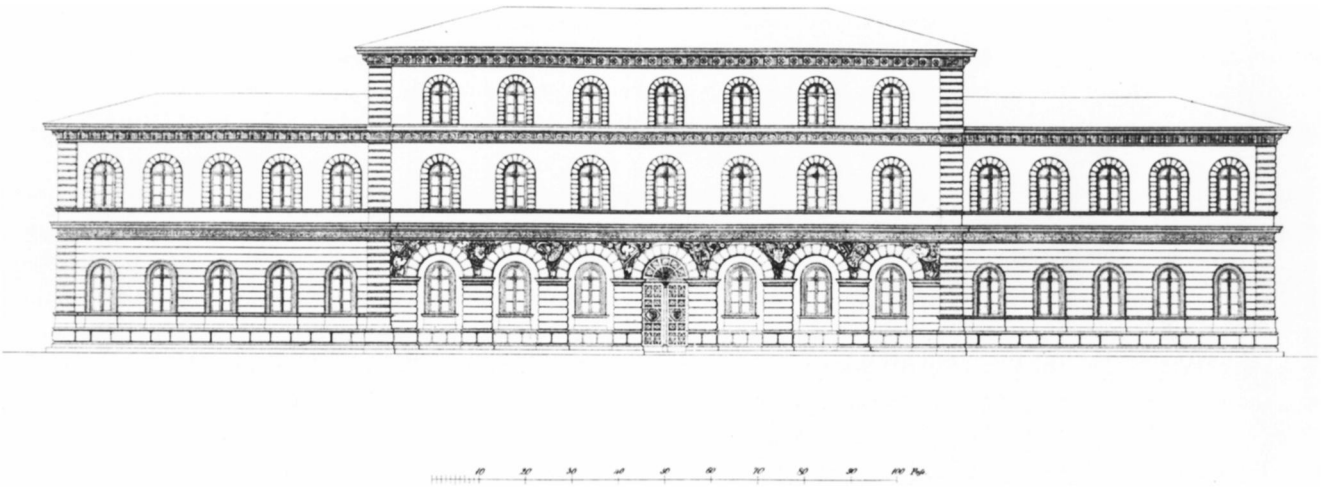

Fig. 2. Leo von Klenze, Kriegsministerium, Munich, 1824, front elevation (Leo von Klenze, *Sammlung architektonischer Entwürfe,* Munich, 1830, Pl. 3).

avoid the High Church associations of the Gothic. The neo-Norman style of churches like John Gibson's Bloomsbury Baptist Church in London of 1848 exhibited such generic features of the Romanesque as twin towers, Lombard banding, and arcuated corbel tables (Fig. 1). Ornament often indicated the geographic ancestry of such buildings, and in this case the Norman tooth moldings surrounding the doorway distinguish Gibson's church from the more Germanic decorative detail of *Neuromanik* examples.

The second direction is represented by such architects as Leo von Klenze in Munich or Georg Moller in Darmstadt, who viewed themselves as working within the classical tradition, for they believed in the absolute perfection and tectonic truth of Greek architecture and accepted the legitimacy of Roman and Italian Renaissance architecture as a preservation and development of that tradition. Such round-arched buildings as Klenze's Alte Pinakothek (1826–1836) or the Kriegsministerium (1824, Fig. 2), both in Munich, are usually described as among the earliest Renaissance Revival buildings in Germany and sometimes, as with the Kriegsministerium, have been inaccurately labeled as representative examples of the *Rundbogenstil.*[8]

Finally, there is that stylistic direction properly called the *Rundbogenstil,* a definition of which first requires a brief analysis of the 19th- and 20th-century usage of the term. Heinrich Hübsch introduced and popularized it in his 1828 essay *In welchem Style sollen wir bauen?* (In Which Style Should We Build?), a rhetorical question to which the architect answered unequivocally "the *Rundbogenstil.*"[9] The *Rundbogenstil* referred not only to a mode in which to build, as Hübsch used it, but also to historical round-arched architecture. Thus, in his book *Der kleine Byzantiner* (1857), the architect Carl Heideloff stated that the *Rundbogenstil* or "Byzantine" style was "also called the neo-Greek, Old Gothic (pre-Gothic), Frankish, Saxon, Norman and Carolingian style," reflecting the struggle of the period to establish proper historical terminology.[10] Despite its range of meaning and largely because of Hitchcock, we understand the *Rundbogenstil* today as a popular mode of building in Germany from the late 1820s to the 1860s employed by such architects as Leo von Klenze, Friedrich von Gärtner, Karl Friedrich Schinkel, Heinrich Hübsch, and their students. As used by Hitchcock and more recent writers, the term is deceptively convenient and has come to denote a greater range of building and a longer time period than was actually intended by its early users.

8. For the Alte Pinakothek, see Peter Böttger, *Die Alte Pinakothek in München,* Munich, 1972. For the Kriegsministerium, see Hitchcock, *Architecture,* 55; Spiro Kostof, *A History of Architecture: Settings and Rituals,* New York, 1985, 574; and Marvin Trachtenberg and Isabelle Hyman, *Architecture from Prehistory to Post-Modernism,* New Jersey and New York, 1986, 437–439, where the authors describe Schinkel's Italianate Court Gardner's Villa as *Rundbogen.*

9. Heinrich Hübsch, *In welchem Style sollen wir bauen?,* Karlsruhe, 1828. The essay was republished in 1984 by C. F. Müller, Karlsruhe, with a preface by Wulf Schirmer.

10. Carl Heideloff, *Der kleine Byzantiner,* Nuremberg, 1857, 11–13: "auch neugriechischer, altgothischer, (vorgothischer), fränkischer, sächsischer, normännischer und carolingischer Styl genannt."

The German Rundbogenstil

In order to define more accurately the *Rundbogenstil* and distinguish it from other round-arched styles or tendencies in Germany, it may be more useful to view it from the 19th-century perspective, thus recovering meanings which have been lost in the past century and a half. A logical place to begin this contextual interpretation would seem to be Hübsch's *In welchem Style sollen wir bauen?,* the *Rundbogenstil*'s manifesto.[11] However, despite its importance in publicizing the round-arched style, in some respects the essay is not as useful in helping to understand the *Rundbogenstil* as are writings of the 1840s, when its theory had been more fully assimilated and codified. A theoretical analysis, followed by its application to key monuments in Karlsruhe, Munich, and Berlin, makes possible a clearer definition of the style than has previously been available.

In a series of debates on architecture between J. H. Wolff, professor of architecture at Kassel, and Rudolf Wiegmann, professor of architecture at Düsseldorf, which were published in the early 1840s in the Vienna *Allgemeine Bauzeitung,* Wolff favored trabeation and the Greek style in general, and he favored the architect Klenze, who was a principal exponent of this style and approach. Wiegmann championed Hübsch, the Romanesque *Rundbogenstil,* and vaulted buildings that employed a semicircular arch. These debates, which began in the late 1830s, came to a peak in 1843, when the issues became the major topic of discussion at the Second Congress of German Architects and Engineers held at Bamberg. The antithetical positions assumed by Wolff and Wiegmann were reflected in the essays delivered at the conference and collectively entitled *Architrav und Bogen* ("Architrave and Arch").[12] The concluding essay, *Kann der romanische Baustil als herrschendes Princip gelten in unserm jetzigen Bauwesen?* ("Can the Romanesque Style Be of Value as a Guiding Principle in Our Present Way of Building?"), addressed the viability of the *Rundbogenstil* as a more progressive and authentically German way for architects to build. This essay, written by Wilhelm Stier, commenced with the standard arguments for the style that Wiegmann had promoted in his debates with Wolff. These arguments fell into four categories: spiritual, cyclical, economical, and technical or constructive.

Both the spiritual and cyclical arguments for the *Rundbogenstil* were framed within a Hegelian system of historical determination whereby the antithetical Greek and Gothic were tempered by the synthetic *Rundbogenstil.* For instance, Wiegmann held that Greek art, an art of the senses, had evolved during the Gothic period into an art of the spirit, with the result that the essence of a true and ideal art, which occurred during the Romanesque period, had been passed over. Similarly, in his cyclical argument, Wiegmann contended that both the Greek and the Gothic had lived through periods of growth, blossoming, and decay, and were therefore historically and artistically complete and incapable of further development. On the other hand, the Romanesque was prematurely interrupted by the Gothic, thus making its continuation and perfection in the 19th century both more promising and more suitable. Wiegmann concluded: "This style lies in the middle between the two extremes of the antique and medieval direction; thus it may presently be worth the most serious consideration, since one has already made a significant step from extravagant spiritualism to a true human and Christian view of God and the world and art. The great task of the near future appears in all regards to be the preparation for that age, of which the blossoming time of the antique Greek conception and that of the Christian Middle Ages were the opposing extremes—that is, the age of the reconciliation of the spiritual and the sensual, the complete harmony between the objective and the subjective, which touches our sphere of living, be it in the area of art or science."[13] Economical and technical or constructive arguments had as their basis an underlying nationalism in that it was deemed appropriate that German architects build in either brick or locally available stones like sandstone and limestone, rather than in marble, which was more suitable for southern Europe. As the stone in northern countries is more fragile and incapable of spanning large distances it only made sense that German architects should employ vaulted construction as opposed to trabeation, and pitched rather than flat roofs to offset bad weather conditions.

Such material and climatic determinism had been expressed by Hübsch in his 1828 essay and found its logical development six years later with the construction of his Catholic church of

11. Although Hübsch's essay was instrumental in popularizing the *Rundbogenstil,* it is important to note that already by 1810 Schinkel had described the *Rundbogenstil* in a publication accompanying his plans for the rebuilding of the Petrikirche (discussed below). In addition, as early as January 1828, Gärtner expressed ideas in his writings which would develop into *Rundbogenstil* theory and practice.

12. "Beiträge zur Feststellung des Principes der Baukunst für das vaterländische Bauwesen in der Gegenwart," *Allgemeine Bauzeitung,* VIII, 1843, 309–339.

13. Rudolf Wiegmann, "Gedanken über die Entwicklung eines zeitgemäßen nazionalen Baustyls," *Allgemeine Bauzeitung,* VI, 1841, 213–214: "Lag aber dieser Styl in der Mitte zwischen den beiden Extremen der antiken und mittelalterlichen Richtung, so dürfte er auch gegenwärtig, da man bereits einen bedeutenden Schritt vom extravaganten Spiritualismus zur wahrhaft menschlichen und christlichen Anschauung Gottes und der Welt und der Kunst gethan hat, der ernstlichsten Berücksichtigung werth sein. Denn die grosse Aufgabe der nächsten Zukunft scheint in allen Hinsichten die Vorbereitung desjenigen Zeitalters zu sein, von welchem die Blüthezeit der antiken griechischen Bildung und des christlichen Mittelalters die entgegengesetzten Extreme waren—nämlich der Zeit der Versöhnung des Geistigen mit dem Sinnlichen, der vollkommenen Harmonie zwischen dem Aüesserlichen und Innerlichen, welches unsere Lebenssphäre berührt, sei es im Gebiet der Kunst oder der Wissenschaft."

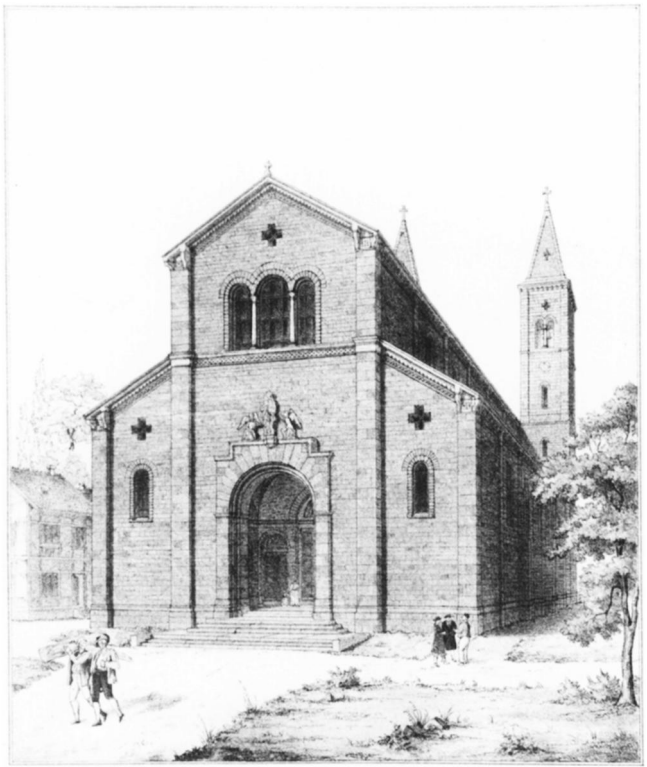

Fig. 3. Heinrich Hübsch, St. Cyriakus, Bulach, 1834–1837, perspective view (Heinrich Hübsch, *Monuments de l'art chrétienne depuis Constantin jusqu'à Charlemagne,* Paris, 1866, Pl. 63; from the Avery Architectural and Fine Arts Library, Columbia University).

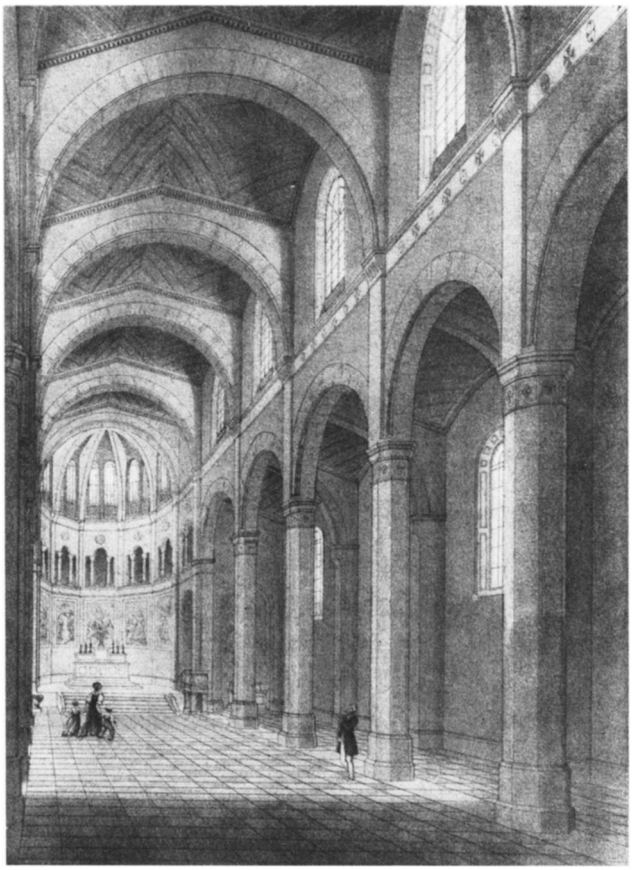

Fig. 4. Hübsch, St. Cyriakus, interior (Hübsch, *Monuments de l'art,* Pl. 63; from the Avery Architectural and Fine Arts Library, Columbia University).

St. Cyriakus at Bulach (Figs. 3 and 4), a church in which Hübsch had, for the first time, applied many of the technical and stylistic innovations suggested in 1828. St. Cyriakus, which had increasingly become a model for the architect's conception of ecclesiastical design, was published in both of Hübsch's major architectural treatises following *In welchem Style sollen wir bauen?*[14] In 1838, one year after its consecration, the perspective view appeared in his *Bauwerke,* and both the exterior and the interior appeared in Hübsch's last work, *Die altchristlichen Kirchen,* the first part of which appeared in 1858 and was later republished in French in 1866.[15] In the text accompanying the plates in the *Bauwerke,* Hübsch boasted that St. Cyriakus was completely vaulted on the interior and was made of finely dressed sandstone on the exterior at a relatively low cost, thus reiterating the argument based on economics. The architect attributed a major cost-cutting ingredient to his reduction of the wall mass, including everything from the transverse arches to the slender polygonal piers of the nave arcade. Another innovation was the particular form of vaulting, a modified barrel vault only one-half brick deep.[16] The exterior consisted of relatively small blocks of a local sandstone, another material which Wiegmann would later recommend, employed here with terracotta trim. The basilican plan with twin towers at the eastern end reflected Hübsch's increasing preference for this organization; and the ornament, a synthesis of Greek and Romanesque detailing, was equally typical of his mature work. In short, St. Cyriakus embodied Hübsch's modernized Romanesque in its technological updating and its exploitation of traditional materials and building techniques to accommodate 19th-century requirements. Yet Hübsch might have applied his technological innovations and choice of building materials to the Gothic style. His preference for the Romanesque was therefore partly an expression of aesthetic bias.

14. Joachim Göricke, "Zu den Kirchenbauten von Heinrich Hübsch," in *Heinrich Hübsch, 1795–1863: Der große badische Baumeister der Romantik,* Karlsruhe, 1983.

15. Heinrich Hübsch, *Bauwerke,* Karlsruhe, 1838, and Hübsch, *Die altchristlichen Kirchen nach den Baudenkmalen und älteren Beschreibungen und der Einfluss des altchristlichen Baustyls auf den Kirchenbau aller späteren Perioden,* Karlsruhe, 1858–1862. See also Hübsch, *Monuments de l'art chrétienne depuis Constantin jusqu'à Charlemagne,* Paris, 1866. The Bulach church appeared on Plate 63 in both the German and French editions.

16. Hübsch, *Bauwerke,* 54–56.

Fig. 5. Klenze, Allerheiligenhofkirche, Munich, begun 1826, perspective view (Stadtarchiv München).

Meanwhile, as Hübsch was developing his round-arched style in Karlsruhe in the 1830s, Friedrich von Gärtner, the greatest practitioner of the *Rundbogenstil* or *Gärtnerstil* as it came to be known in southern Germany, developed the *Rundbogenstil* concept of synthesis in a personal way that was to have considerable stylistic impact in Western Europe and America. Gärtner's impact was largely due to his position since 1820 as professor at the Academy of Architecture in Munich, where he trained an impressive number of students in the round-arched system. Several of these students emigrated to America, and others published books on the round-arched style, with the most popular being Karl Möllinger's *Elemente des Rundbogenstiles* (Munich, 1845).

Gärtner's goal of a synthesis of Greek and Gothic forms, which Wiegmann was to recapitulate forcefully as one of the major features of the *Rundbogenstil,* was already evident in an important letter, dated 13 January 1828, to his friend Johann Martin von Wagner. Gärtner, having recently visited Italy where he delighted in the Early Christian basilicas, stated: ". . . [I] am of the opinion that something must lie between the austere Greek or strictly formulated architectural rules, and the pure, feeling-inspired, fantastic [ones] of the Middle Ages, so that if they could be combined, [it] would prove the best for Christian, and especially Catholic churches."[17] Gärtner went on to say that he presented his ideas, accompanied by plans for a church, to both the academy and King Ludwig I. Everyone approved of it "except for Klenze, who attacked and dismissed it, muttering a few superficial civilities about its artistic merit." Thus, he alluded to the famous rivalry which was to grow between himself and the arch-Hellenist Klenze.

The great irony of this confrontation is that Klenze had already unwittingly created in the Allerheiligenhofkirche (begun in 1826, Fig. 5) what was later regarded as one of the earliest examples of a *Rundbogenstil* building in Munich or, for that matter, in Germany. The philhellene Klenze had not been sympathetic to the "byzantine style" of the church but he was forced to employ it when Ludwig I, after having visited Palermo in 1823, wanted a copy of the Cappella Palatina in Munich.[18] Ludwig I, in his compulsive desire to make his new capital city historical, began commissioning buildings in different styles from various epochs, whether Greek, Gothic, or Byzantine.[19] The Allerheiligenhofkirche ultimately had little to do with the Cappella Palatina, as Klenze usually managed to compromise to his advantage with the stubborn Ludwig in designing his buildings. Rather, the church's exterior was inspired by such 12th-century Lombard Romanesque basilicas as S. Zeno in Verona; and the interior, with its succession of domes and barrel vaults, was inspired by such Venetian-Byzantine churches as S. Marco in Venice. However, as much as Klenze may have been

17. Quoted in Klaus Eggert, *Friedrich von Gärtner: Der Baumeister König Ludwigs I,* Munich 1963, 21–22: Gärtner, ". . . und der Meinung bin [ich], daß zwischen diesen strengen griechischen oder überhaupt den schulgerechten strengen architektonischen Regeln, und dem rein Gemütlichen und phantastischen des Mittelalters etwas liege, daß wenn es vereint werden könnte sicher das beste für christliche nämentlich katholische Kirchen seyn müßte."

18. Günther-Alexander Haltrich, *Leo von Klenze: Die Allerheiligenhofkirche in München,* Munich, 1983, 37.

19. For an excellent discussion of Ludwig I's artistic policies, see Winfried Nerdinger, "Weder Hadrian noch Augustus—Zur Kunstpolitik Ludwigs I," *Romantik und Restauration: Architektur in Bayern zur Zeit Ludwigs I, 1825–1848,* Munich, 1987.

partly responsible for the introduction of the *Rundbogenstil* in Munich and Germany with this church, he never vacillated in his belief that, regardless of the climate or native materials of a country, the Greek style should be adopted.[20]

It was really Gärtner who systematically developed the *Rundbogenstil* in Munich. He introduced it there c. 1827–1828 in two buildings, the Ludwigskirche (Figs. 6 and 7) and the Staatsbibliothek, both of which stand on the Ludwigstrasse, the *via triumphalis* of Ludwigian Munich. A white, twin-towered limestone edifice, the Ludwigskirche (1829–1844) was described in 1829 in the *Kunstblatt* as being built, according to Ludwig I's wishes, "in the purified byzantine style," Byzantine being a contemporary synonym for the *Rundbogenstil.*[21] With its biforiated windows, arcuated corbel tables, and Lombard banding, the church shared with Klenze's Allerheiligenhofkirche a decorative vocabulary that was both German and North Italian Romanesque, although its cruciform plan, ribbed groin vaulting and the lush, naturalistic carving of the interior are closer to early Gothic. Both churches exhibit the flexibility of the round-arched system: plans could be basilican or cruciform; interior arrangements Byzantine, Romanesque, or early Gothic; and, on the exterior, architectural elements were generically medieval, with the round arch receiving the central, visual focus. Despite their similarities, however, there is a significant difference between the two churches. Klenze's heavier reliance on historical prototypes combined with his obvious disinclination to synthesize classical and medieval elements in order to create a modern style are in contrast to Gärtner's intentions at the Ludwigskirche, where his more deliberate striving for a fusion of Greek and Gothic forms is evident in both the exterior and interior. The stark horizontality of Gärtner's church is carefully balanced by the verticality of the towers. On the interior such medieval features as the ribbed groin vaults, transverse arches, and compound polygonal piers of the nave are adjoined to side aisles, which are vaulted with a succession of classically inspired domes. This juxtaposition of classical repose and Gothic verticality and the peculiar mixture of Byzantine and Romanesque ornament imbued the Ludwigskirche with an appearance that was decidedly more modern and a-historicist than Klenze's Allerheiligenhofkirche. In short, the final impression was intended to be a progressive, improved, "purified" Romanesque, continuing where the historical *Rundbogenstil* left off.

The same process of modernization via synthesis is also evident in the planning history of the Staatsbibliothek (1831–1842; Figs. 8, 9, and 10). Ludwig I originally wished a copy of the 16th-century Palazzo Ruspoli in Rome, published in 1798 in Charles Percier's *Palais, maisons et autres édifices modernes déssinés à Rome.*[22] The similarities of the two buildings are evident in their strong horizontal emphasis and absence of façade projections, yet Gärtner transformed and updated the Renaissance building into a *Rundbogenstil* design by giving it round arches in combination with medieval detailing—in this case the corbel table and the cresting. The Staatsbibliothek was also considered modern in that it was an early experiment in the unstuccoed brick building or *Rohbau* (raw building) in Munich. Interest in the *Rohbau* as a more truthful way in which to build began in Germany in the middle to late 1820s in the work of Schinkel in Berlin and Hübsch in Karlsruhe. Gärtner played an equivalent role as the architect who introduced and gave credibility to unstuccoed brick construction in Munich.[23] On entering the Staatsbibliothek, one encountered an elaborate marble stairway, which was flanked on the second floor by 16 columns of white marble and roofed by a barrel-vaulted ceiling with frescoes by Friedrich Christoph Nilson (1811–1879). The capitals were exuberantly Romanesque in their naturalistic rendering of acanthus, as well as other identifiable flowers, although not as abstracted and stylized as authentic medieval carving. The interior of the library showed the same loose mixing of medieval elements (barrel and groin vaulting, Romanesque carving) with classical aspects (the grand Franco-Italian baroque entrance), all combined with the rather timid adoption of fresco painting. These elements are typical of Gärtner's style of interior decoration.

Such progressive updating in the Staatsbibliothek is in contrast to Klenze's more traditional Kriegsministerium (Fig. 2) or his quattrocentesque Residenz of 1826, a near copy of the Palazzo Pitti, which were intended to represent a continuation of the grand tradition of classicism. Thus, it would be inaccurate to describe the Staatsbibliothek as neo-Renaissance or as representing the Renaissance variant of the *Rundbogenstil.* It was not viewed as such in its own day, when it was more often called Byzantine. Although 20th-century historians have tended to emphasize the similarities of the Kriegsministerium and the Staatsbibliothek and the points of view of their architects, contemporaries noted their disparities. For instance, reporting in 1851, Ernst Förster specifically discriminated between the two leading styles in Munich, one represented by Klenze and derived from the "architectural forms of antiquity, especially those of

20. Leo von Klenze, *Anweisung zur Architektur des christlichen Cultus,* Munich, 1822, 21.

21. For the best summary of the planning history of the Ludwigskirche, see Frank Büttner, "Die Planungsgeschichte der Ludwigskirche in München," *Münchner Jahrbuch der bildenden Kunst,* XXXV, 1984, 189–218.

22. The employment of a model in Percier is not surprising, as Gärtner had studied in Paris with Percier and Fontaine between the years 1812 and 1814. See Oswald Hederer, *Friedrich von Gärtner,* Munich, 1976, 38–39. There is no proof of Hederer's claim that Gärtner also studied with Durand.

23. "Ueber Rohbau und dessen Ausbildung in München," *Allgemeine Bauzeitung,* XV, 1850, 9–20.

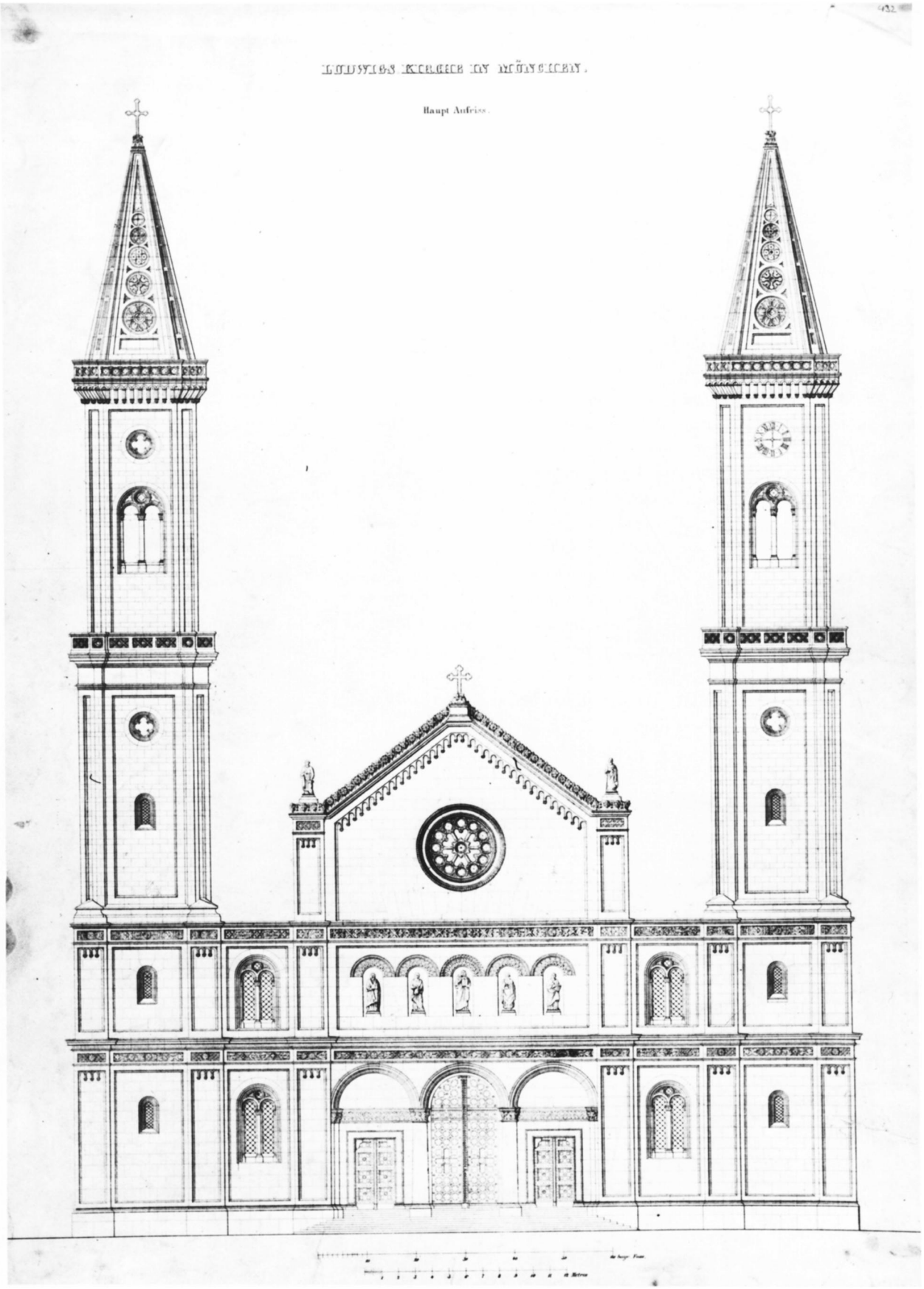

Fig. 6. Friedrich von Gärtner, Ludwigskirche, Munich, 1829–1844, front elevation (Friedrich von Gärtner, *Ausgeführte, Gebäude,* Munich, 1844–1845, Pl. 2; Architektursammlung, Technische Universität, Munich).

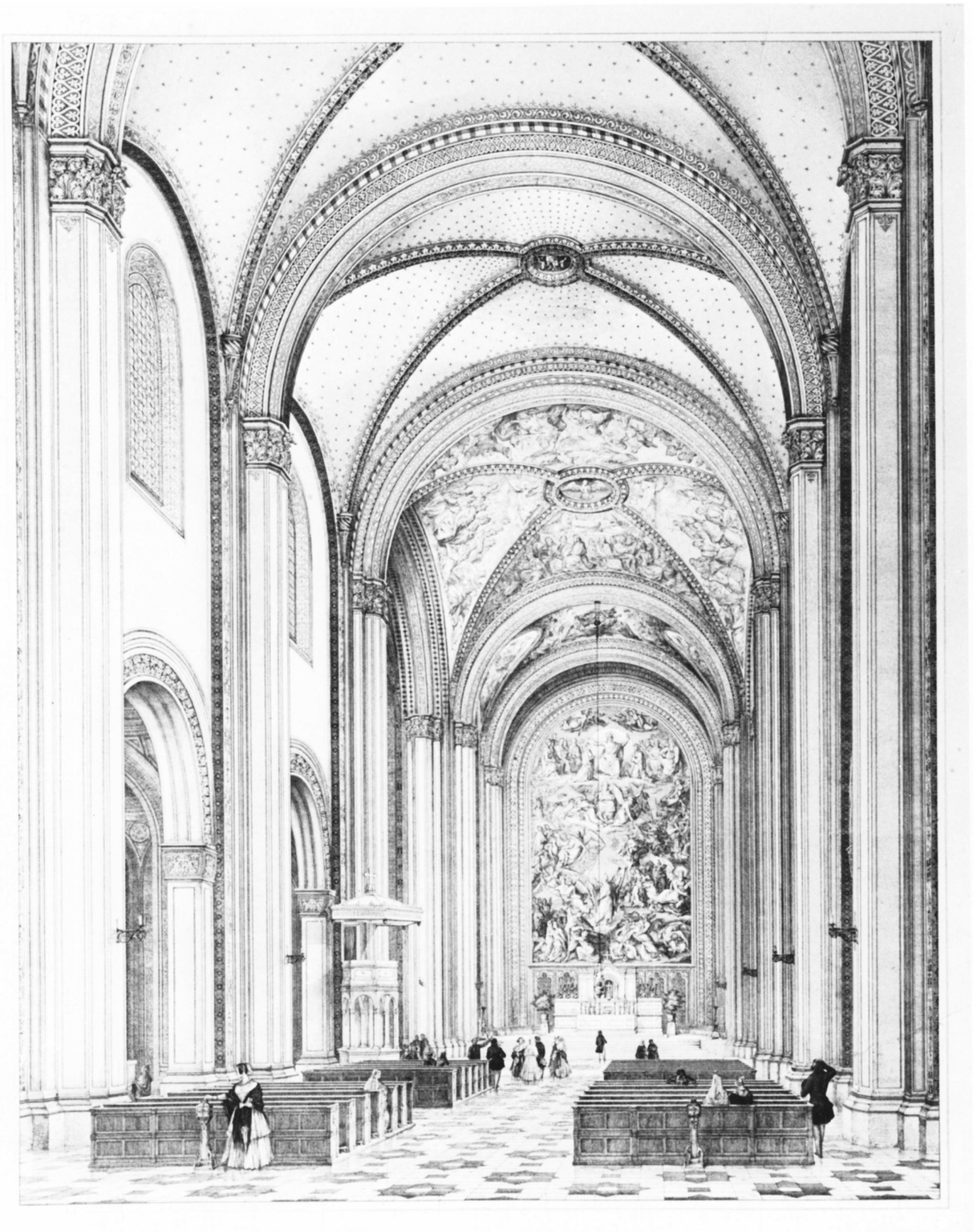

Fig. 7. Gärtner, Ludwigskirche, interior (Gärtner, *Ausgeführte Gebäude,* Pl. 9; Architektursammlung, TU, Munich).

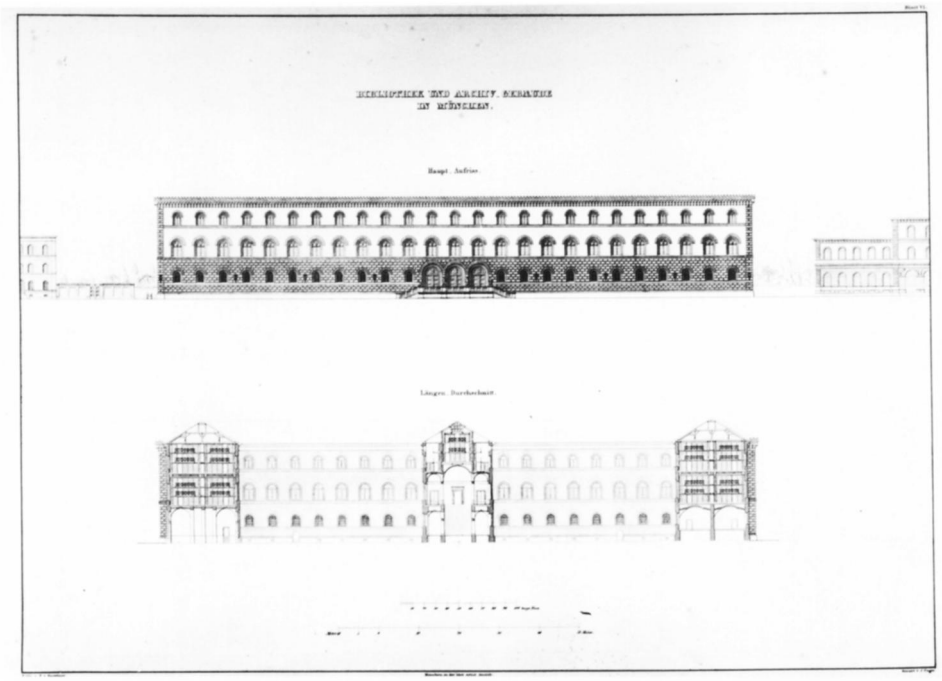

Fig. 8. Gärtner, Staatsbibliothek, Munich, 1831–1842, front elevation (Gärtner, *Ausgeführte Gebäude,* Pl. 6; Architektursammlung, TU, Munich).

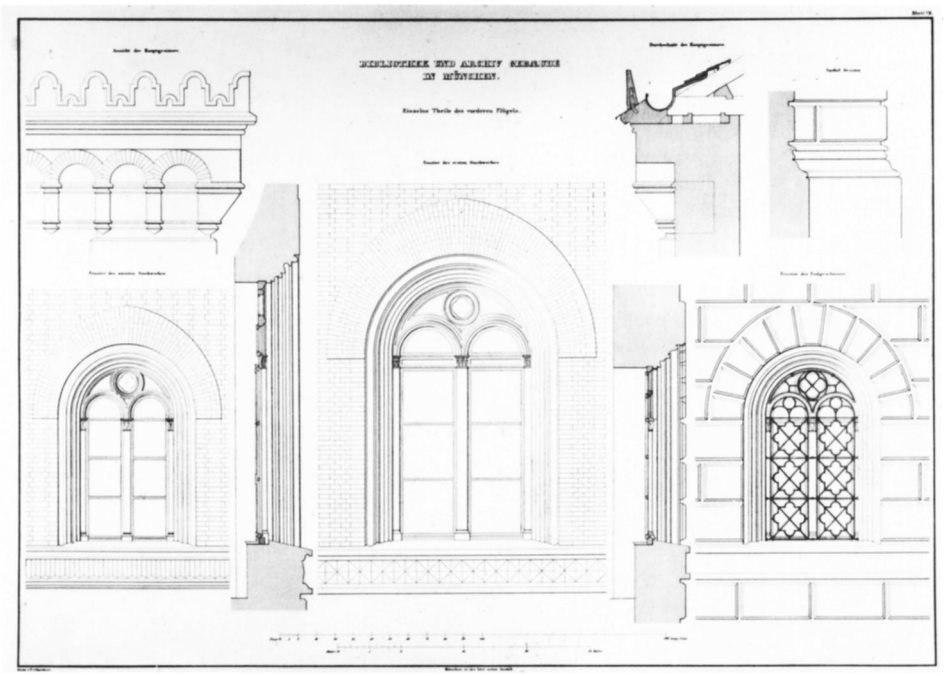

Fig. 9. Gärtner, Staatsbibliothek, details of exterior (Gärtner, *Ausgeführte Gebäude,* Pl. 7; Architektursammlung, TU, Munich).

Greece," and the other by Gärtner whose decoration was drawn from "early Romanic [Romanesque] buildings and Byzantine MSS.," and which was "full of progressive ingredients."[24] In 1878 the *Allgemeine deutsche Biographie* described Gärtner as "the architect who, under the long-lived benevolence of King Ludwig, displaced Klenze's classicism with his romanticism, introducing the second great building period in Munich and impressing it with the stamp of his personality."[25] To be sure, Gärtner and Klenze shared a respect for Durand's method of composition whereby buildings could be designed on squared paper, using a grid with axes, as well as general stylistic similarities. However, to make the shared influence of Durand or a vague syntax of classicism the critical bond between these architects is to misinterpret their own artistic intentions and to overlook the polarities contemporaries found in their work.

A further demonstration of the permeation of the round-arched style was provided by its appearance in Berlin around 1830 in a small but significant segment of the work of Karl Friedrich Schinkel and its subsequent development in the 1840s by his students. It is fitting testimony to Schinkel's genius that, as early as 1810, his writings manifest the basic tenets of the *Rundbogenstil* later to be expounded by Hübsch, Gärtner, and Wiegmann.

During the summer of 1811, Schinkel composed a lengthy commentary that accompanied his plans for the rebuilding of the Petrikirche, the parish church of Kölln (a suburb of Berlin), which had burnt in 1809. Restricted to using some of the old, unharmed walls of the church, Schinkel devised a centralized building with a dome over the crossing and round-arched openings (Fig. 11). In the accompanying description—Schinkel's first major publication, preceding the first volume of his *Sammlung architektonischer Entwürfe* by eight years—he formulated his ideas concerning a synthesis of style.[26] These ideas had been alluded to one year earlier in the text accompanying his Gothic design for the mausoleum for Königin Luise.[27] In his description of both of these projects, Schinkel set up Greek and Gothic architecture as antithetical styles that German architects should strive to synthesize. A combination of classical principles of beauty with the spiritual qualities found in medieval architecture could help the German architect attain perfection in the future. Schinkel wrote, "It seems that the two poles of art already lie developed before us and that the fusion of both opposing principles into a synthesis of art—that of the antique, which proceeds directly from the practical life and impels this life, and that of the Christian period which proceeds from something higher and strives to withdraw from the worldly life to something found deep within—will become a task for posterity, and that the progressive development of this union will necessarily result from the prevailing corresponding circumstance of the total culture of the human race."[28]

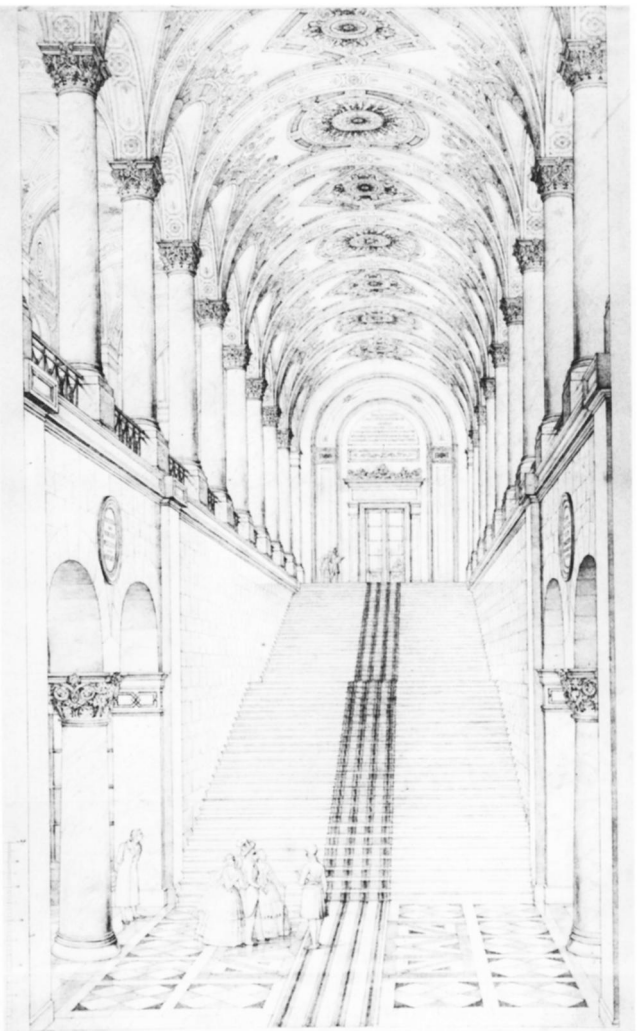

Fig. 10. Gärtner, Staatsbibliothek, interior (Gärtner, *Ausgeführte Gebäude,* Pl. 19; Architektursammlung, TU, Munich).

24. Ernst Förster, "Art in Munich—Its Present Position and Prospects," *Civil Engineer and Architect's Journal,* XIV, 1851, 445.

25. *Allgemeine deutsche Biographie,* VIII, 1878, 380: ". . . ist derjenige Baukünstler, welcher Klenze's Classicismus in der Gunst des Königs Ludwig lange Zeit durch seine Romantik verdrängend die zweite große Bauperiode in München eingeleitet und ihr den Stempel seiner Persönlichkeit aufgedrückt hat."

26. Schinkel's plans and description of the Petrikirche were published under the title *Architektonischer Plan zum Wiederaufbau der eingeäscherten St. Petrikirche in Berlin, vom Geheimen Oberbauassessor Schinkel, mit 3 Kupfertafeln,* Berlin, 1811. A full transcription of the commentary is provided in Paul Ortwin Rave, *Karl Friedrich Schinkel,* 3 vols., Berlin, 1941, I, 167–177.

27. For a summary of the evolution and philosophical underpinnings of Schinkel's thoughts of a style synthesis, see Norbert Knopp, "Schinkels Idee einer Stilsynthese," in Werner Hager and Norbert Knopp, eds., *Beiträge zum Problem des Stilpluralismus,* Munich, 1977, 245–254.

28. Quoted in Rave, 176: Schinkel, ". . . scheint es, daß die beiden Pole der Kunst schon entwickelt vor uns liegen, und daß die Verschmelzung beider entgegengesetzter Prinzipien zu einer Synthese der Kunst—das der Antike, welches unmittelbar vom praktischen Leben ausgeht

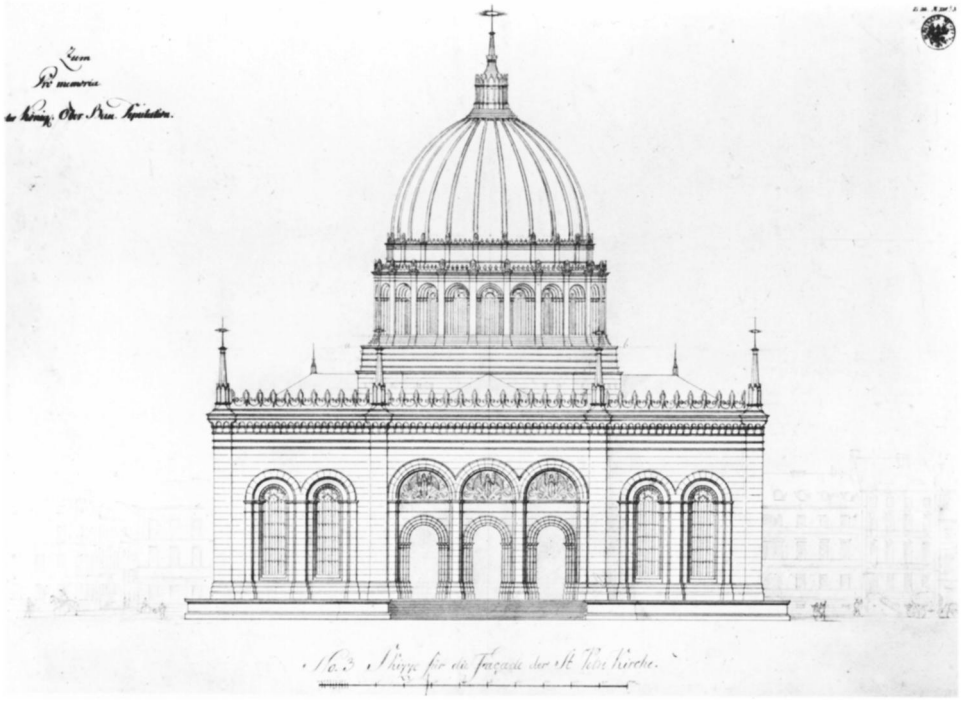

Fig. 11. Karl Friedrich Schinkel, Design for the Petrikirche, Berlin, 1811, front elevation (Sammlung der Zeichnungen, National-Galerie, Berlin, DDR).

This essay is also noteworthy in that it reflects Schinkel's absorption with a style synthesis as an appropriate form for Protestant church architecture. In Schinkel's mind this problem was part of the larger issue of how certain types of construction reflected the spiritual psyche of a people. In his description for the design of the Petrikirche, he discussed his attempt to endow the building with "a character of sublimity" and "especially to distinguish it from buildings for worldly purposes." According to Schinkel, the high cupola of the Petrikirche was what distinguished the church from more "worldly buildings" by its "deep earnestness and even by a bolder, more symbolic character of a thoroughly and consistently realized system of construction."[29] The employment of vaults throughout the interior was a practical and symbolic attempt by the architect to avoid the trabeated architecture of antiquity and its worldly implications. Schinkel also described his efforts to balance the two "opposing principles" of the Greek and Gothic by offsetting the horizontal lines of the body of the church by the vertical lines of the pilasters and pinnacles. His design, with its concomitant description, displayed a consistent attempt to reconcile and synthesize elements from classical and medieval architecture, not unlike Gärtner's similar essay at the Ludwigskirche. Thus, in style and concept the Petrikirche project was *Rundbogenstil,* although Schinkel did not name it as such. Its importance lay in the fact that his criteria, based on spiritual, technical, and cyclical reasoning, anticipated Wiegmann's arguments of the 1840s by three decades.

It was the responsibility of the *Schinkelschüler* to develop and materialize the master's ideas after his death in 1841. Three of his most talented pupils—Friedrich August Stüler, August Soller, and Ludwig Persius—particularly assumed this task with the assistance of Friedrich Wilhelm IV, who was a great patron of architecture as well as a talented architect. Following his accession to the Prussian throne in 1840, he and the students of Schinkel were instrumental in determining the character of church building throughout the entire kingdom of Prussia, largely through a single publication begun in 1844, the *Entwürfe zu Kirchen, Pfarr- und Schulhäusern.*[30] Published by the Königliche Technische Bau-Deputation, the series illustrated designs by architects such as Stüler, Soller, and Persius, who were in the service of the Prussian king. Most of the designs (Figs. 12, 13, 14, and 15) were in the *Rundbogenstil,* thus providing con-

und zum Leben treibt, und das der christlichen Zeit, welches von einem Höheren ausgeht und aus dem irdischen Leben in ein höheres, im tiefen Innern sich findendes zurückzuziehn begehrt—Aufgabe werde für die gesamte Folgezeit, und daß die stufenweise Entwicklung dieser Vereinigung notwendig hervorgehen werde aus dem jedesmaligen korrespondierenden Zustande der Gesamtkultur des Menschengeschlechtes."

29. Quoted in Rave, 176: Schinkel, ". . . durch einen tieferen Ernst und selbst durch eine kühnere, mehr symbolische Art eines überall konsequent durchgeführten Konstruktionssystems. . . ."

30. Königliche Technische Bau-Deputation, *Entwürfe zu Kirchen, Pfarr- und Schulhäusern,* Berlin, 1844–1862.

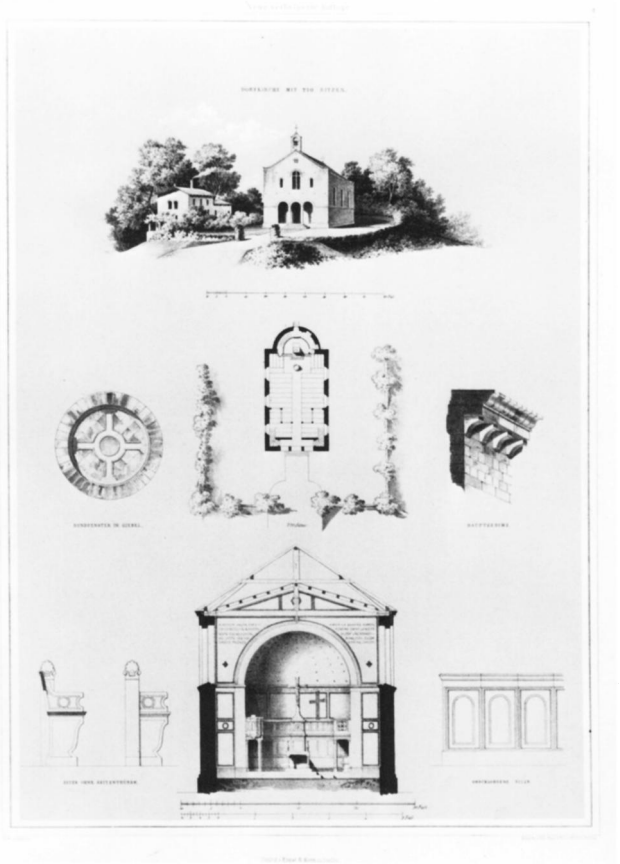

Fig. 12. F. A. Stüler, Village Church with 270 Seats, c. 1844, perspective, plan, section, and details (Königliche Technische Bau-Deputation, *Entwürfe zu Kirchen, Pfarr- und Schulhäusern,* Berlin, 1862 edition, Pl. 6; Architektursammlung, TU, Munich).

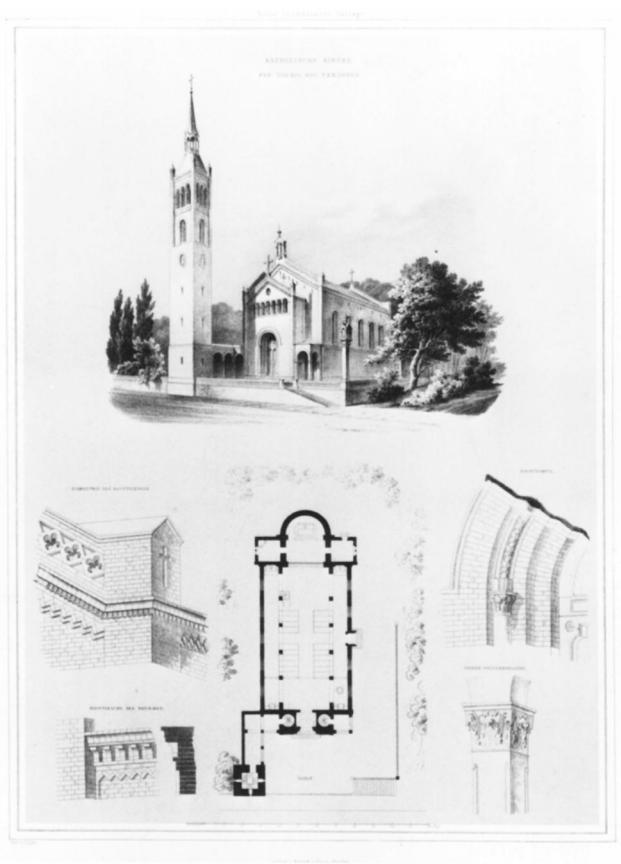

Fig. 13. August Soller, Catholic Church for 750–800 People, c. 1844, perspective, plan, details (Königliche Technische Bau-Deputation, *Entwürfe zu Kirchen,* 1862 edition, Pl. 7; Architektursammlung, TU, Munich).

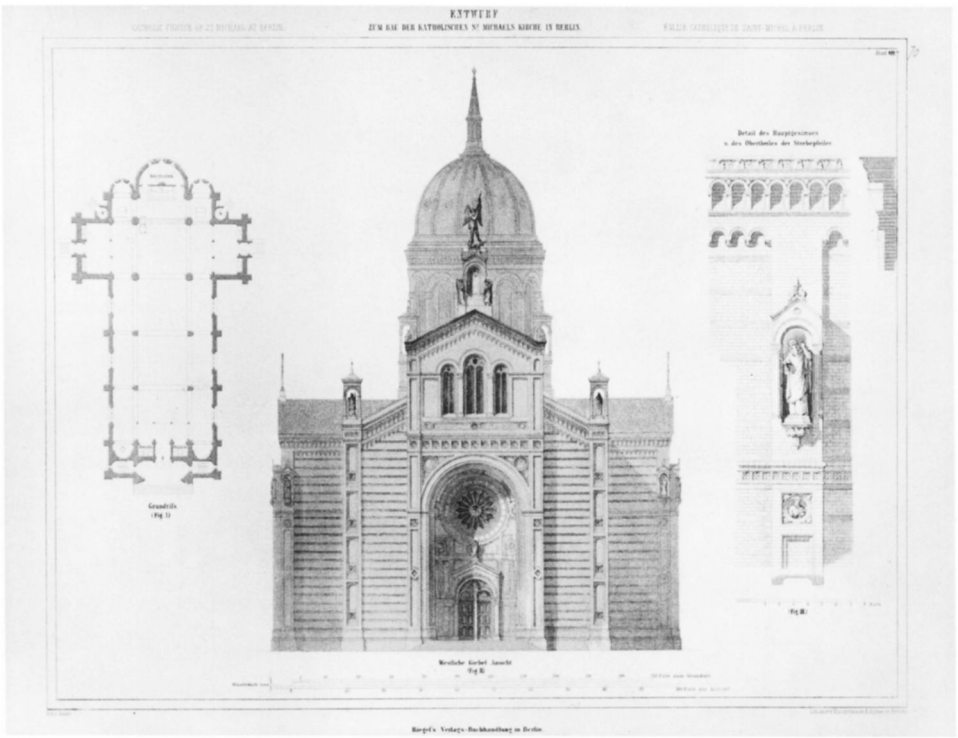

Fig. 14. Soller, Michaelskirche, Berlin, 1845–1861, front elevation, plan, details (Königliche Technische Bau-Deputation, *Entwürfe zu Kirchen,* 1862 edition, Pl. 70; Architektursammlung, TU, Munich).

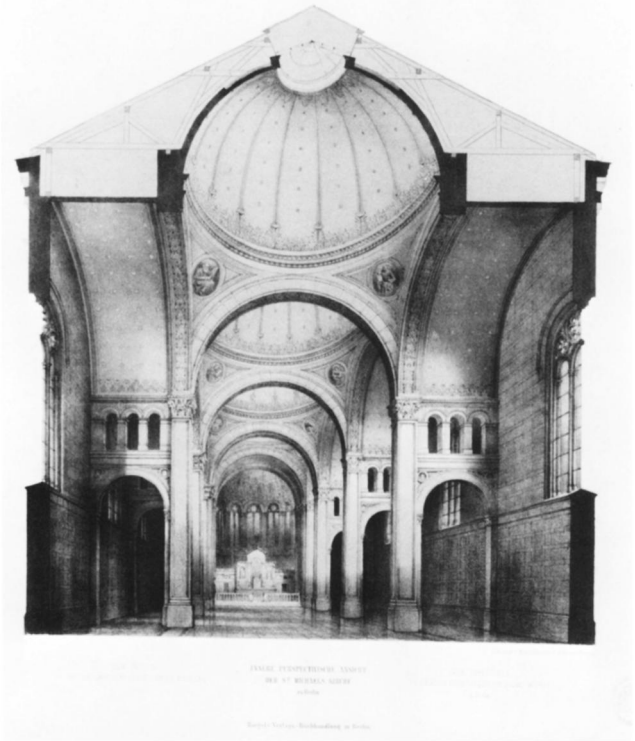

Fig. 15. Soller, Michaelskirche, interior (Königliche Technische Bau-Deputation, *Entwürfe zu Kirchen,* 1862 edition, Pl. 72; Architektursammlung, TU, Munich).

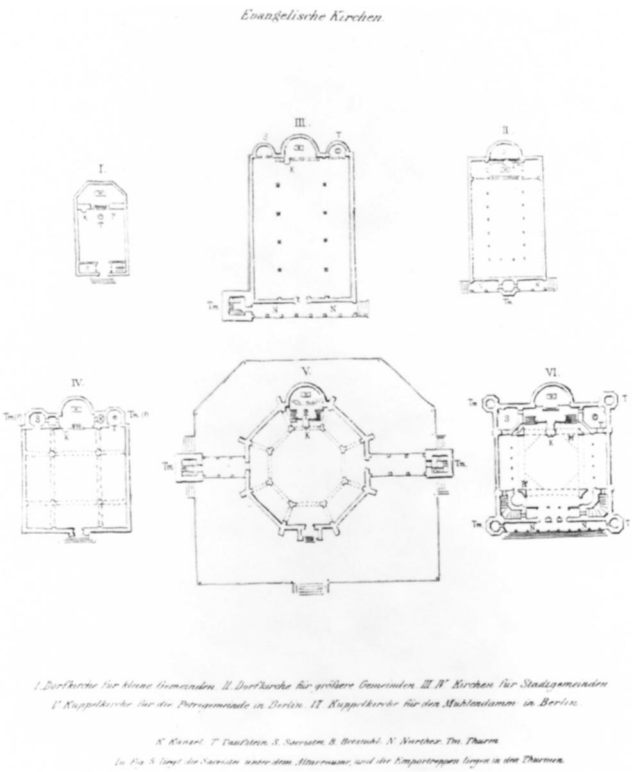

Fig. 16. F. A. Stüler and J. H. Strack, Designs for Protestant Churches, 1842–1843 (*Allgemeine Bauzeitung,* 1843, 287).

sistent forms for Prussian ecclesiastical design. The collection was also significant in that it was the major means of transmission of the Prussian ecclesiastical *Rundbogenstil* to America, especially in the years around 1846–1855.

The *Entwürfe zu Kirchen* represented the materialization of Friedrich Wilhelm IV's preoccupation with the problem of developing a church type that would suit the fundamental teachings and liturgical needs of the Protestant church. This concern was reinforced by the timely influence of C. K. J. Bunsen, the minister and Prussian diplomat who had suggested to the king the form of the Early Christian basilica as suitable to the Protestant conception of church building and had recommended a revival of the Early Christian liturgy.[31] In 1822 Bunsen published *Die Basiliken des christlichen Roms,* with plans, elevations, and interiors of approximately 30 Early Christian basilicas.[32] As a result, many of the Protestant church designs (and some Catholic ones) in the *Entwürfe zu Kirchen,* and, indeed, many of the churches erected during the reign of Friedrich Wilhelm IV, show a predilection for the Early Christian form.

The first results of the attempt by the Prussian king and his architects to establish a Protestant church type dated back to 1843 to the Second Congress of German Architects and Engineers at Bamberg. At this conference, where the *Rundbogenstil* was a central issue, F. A. Stüler and J. H. Strack exhibited a series of church designs (Fig. 16) which they had devised after a trip to England in the summer of 1842. Friedrich Wilhelm IV had sent the two architects to England to study the tradition of Protestant architecture there. The church plans evolved by Stüler and Strack and exhibited at Bamberg consisted of six variations, which would eventually form the germ of the *Entwürfe zu Kirchen.* All of the churches were unstuccoed brick, and all were in the *Rundbogenstil.*

The plan at the top left (Fig. 16: I) represented a typical plan for a *Dorfkirche* or a small village church. An oblong building without aisles, it contained an altar in the polygonal apse and a pulpit to the left in front of the altar. In typical English fashion, a bell-cote was to be placed in the center of the west façade surmounting the gable.[33] The *Dorfkirche* exhibited at the 1843

31. Ludwig Dehio, *Friedrich Wilhelm IV von Preussen,* Berlin-Munich, 1961, 41. See also Eva Börsch-Supan, *Berliner Baukunst nach Schinkel, 1840–1870,* Munich, 1977, 127.

32. C. K. J. Bunsen, *Die Basiliken des christlichen Roms,* Munich, 1822.

33. Joseph Egle, "Bericht über die Ausstellung zu Bamberg," *Allgemeine Bauzeitung,* VIII, 1843, 285.

Bamberg conference was eventually published by Stüler as the "Village Church with 270 Seats," one of the earliest designs in the *Entwürfe zu Kirchen* (Fig. 12). The churches had similar interior arrangements, and the exterior of Stüler's published design was unstuccoed brick and in the *Rundbogenstil,* with medieval ornament consisting of a small oculus and a bell-cote.

In the churches for larger congregations differences between Protestant and Catholic church types could be readily distinguished. The remainder of the plans of churches exhibited at Bamberg, which illustrate ideas for larger village or city churches, were of two types—basilican (Fig. 16: II and III) and centralized (Fig. 16: IV–VI). The latter were considered especially conducive to Protestant worship, for the centralized plan provided a better viewing and hearing of the preacher and thus offered an advantage over the basilican plan, which was usually chosen for aesthetic reasons. Exterior arrangements varied: the west or east fronts could be twin-towered (Fig. 16: IV–VI); one tower could be placed in the center of the west façade (Fig. 16: II); or a portico with a single tower to the left could be employed (Fig. 16: III).

As with the *Dorfkirche,* several of the Bamberg plans for larger churches were eventually translated into designs for the *Entwürfe zu Kirchen.* An example is August Soller's "Catholic Church for 750–800 People," which was unusual as one of the few designs for Catholic churches published in the series (Fig. 13). Soller's church is similar to one of the designs exhibited at Bamberg (Fig. 16: III) in its basilican plan with a bell tower to the left connected to the body of the church by an arcuated portico. The projected Catholic church was a *Rundbogenstil Rohbau,* the exonarthex of which contained a register of round-arched windows with an oculus above and with a single bay of the lower arcade adjoining its right side. Knowledge of the exhibition of Stüler's and Strack's designs at Bamberg with their accompanying description also reached an American audience. In 1872 Alexander Saeltzer, a German architect who had emigrated to America in 1842, wrote a treatise on acoustics, and in this document he translated entire passages from the Bamberg conference without citing his source. In this treatise, Saeltzer discussed the contributions made by Schinkel, Stüler, and Strack in the realm of Protestant church design and mentioned that the Prussian government published plans for churches, although he did not specifically name the *Entwürfe zu Kirchen.*[34]

Although Soller's church was never erected, his Michaelskirche in Berlin of 1845–1861 was unanimously proclaimed by contemporaries to be the most significant church of the post-Schinkel period and was viewed as a point of departure for a new development in architecture (Figs. 14 and 15). The foundation for the Catholic church was laid on 14 July 1851, although the planning had begun several years earlier; it first appeared in the 1852 edition of the *Entwürfe zu Kirchen.* The interior (Fig. 15) was described as having an arrangement similar to the church of S. Salvatore in Venice, begun in 1506 according to plans by Giorgio Spavento and Tullio Lombardo. Especially noted was the spectacular vaulting system which consisted of a succession of domes on pendentives in the nave, separated by powerful transverse arches. Supporting the domes on the sides were barrel vaults whose weight was supported by concrete piers on the interior and buttresses on the exterior. The walls below the barrel vaults were pierced by three arches on top of a larger arch through which the side aisles were connected. A fourth dome stood over the crossing.[35]

The Michaelskirche (Fig. 14) was a *Rohbau* consisting of two colors of striated brick. What most prompted remarks on the forward-looking qualities of the church, however, was its synthesis of antique (Renaissance) and medieval elements. The *Entwürfe zu Kirchen* noted: "As the exterior views show, [the architect] attempted to attain a conception of form, which, as much as was allowable, combines antique with medieval building forms and presents a synthesis which appears to promote the Germanic way of feeling in church building, to the extent that the pure medieval style cannot find application."[36] Thus, the Michaelskirche was theoretically a *Rundbogenstil* design in its synthesis of Renaissance and antique forms (domes, barrel vaults) with medieval ones (brick wall, buttresses, and an essentially medieval ornamental vocabulary), a synthesis which began with Schinkel's Petrikirche project. Its incorporation of High Renaissance forms was a harbinger of the increasingly additive and synthetic properties of the style, which would continue to develop in Berlin in the 1860s.

Having looked at the various manifestations of the *Rundbogenstil* in Karlsruhe, Munich, and Berlin, it is useful to summarize the important characteristics of the style and to present a more precise definition of it. Arising simultaneously in the period c. 1827–1828 in the writings and projects of Hübsch, Gärtner, and Schinkel, the *Rundbogenstil* was perceived as possessing the characteristics necessary for the creation of a pan-German style. Historically, its building materials were brick and fragile stone like sandstone and limestone. Germany's "technostatic experience" (a phrase used by Hübsch) existed in the vault rather than the post and lintel, the latter of which was

34. Alexander Saeltzer, *A Treatise on Acoustics in Connection with Ventilation,* New York, 1872, 44–47, where Saeltzer translates sections from J. Egle's "Report" (see n. 33). Saeltzer is discussed below.

35. *Entwürfe zu Kirchen* (1862 edition), 38–39.

36. *Entwürfe zu Kirchen* (1862 edition), 38: "Wie die äusseren Ansichten ergeben, ist auf diese Weise eine Formenbildung zu erreichen gesucht worden, welche soviel als überhaupt zulässig erscheint, die Antike mit den mittelalterlichen Bauformen verbindet und eine Verschmelzung darstellt, die die deutsche Gefühlsweise beim Kirchenbau, sofern nicht der rein mittelalterliche Baustyl zur Anwendung kommen kann, zu fordern scheint."

considered more conducive to building in southern Europe where the stones were less fragile and could span larger distances. As a result of these and other contentions by the champions of the *Rundbogenstil,* verbal battles ensued between them and the proponents of Neoclassicism in Germany—or those who believed in the preservation of the classical tradition which extended from the Greek period to the Renaissance.

Viewed theoretically, this new style would be created by synthesizing elements found in the "thesis" of Greek architecture and the "antithesis" of the Gothic. Viewing the Greek and Gothic as opposites—spiritually (pagan vs. Christian) and technologically (trabeation vs. arcuation)—was not uncommon in 18th- and 19th-century architectural theory. The concept had been discussed in French academic circles at least as early as the mid-18th century. Yet, to view Romanesque architecture as embodying this synthesis and to forge a successful new style from it was a thoroughly German ideological notion. The 19th-century *Rundbogenstil* represented an improvement or purification of forms gleaned from the historical *Rundbogenstil,* that is, round-arched architecture from the Early Christian to the Romanesque period (with some quattrocento elements), whose zenith was believed to have occurred during the Romanesque period.

For Hübsch, Gärtner, Schinkel, and their students, the round-arched style offered a building system that avoided the extremes of the Greek and the Gothic. Practically speaking, the synthetic properties of the style involved the construction and organization of the building, as well as its ornament. Churches could take the form of the basilica, the Greek cross, or the Latin cross. Exteriors were characterized by the dominance of the round-arched opening; and ornament, restricted to bordering areas, could possess classical elements or the lush naturalism of the Gothic but was most often Romanesque or Byzantine in inspiration. Architects preferred working in unstuccoed brick or in local sandstone or limestone. The use of vaulting was frequent, although roofs could have open timberwork, as was especially represented in the work of the *Schinkelschüler.* The *Rundbogenstil* was, therefore, a flexible but distinctive system, with an ability to accommodate the tastes of Bavarian and Prussian kings. It flourished for about four decades, beginning in the late 1820s, and was not as long-lived as the *Neuromanik* or neo-Romanesque, which became increasingly archaeological as the 20th century drew near.

Reflections of the Rundbogenstil *in America*

Despite its relative brevity as a stylistic and theoretical entity, the *Rundbogenstil* was enormously influential, particularly in America, in the period 1845–1865. Carroll L. V. Meeks was the first historian to draw attention to a Romanesque Revival in America before that introduced and made famous by Henry Hobson Richardson in the 1870s; and Meeks postulated that its stylistic sources came from Germany, although he did not illustrate or discuss in detail any German buildings.[37] Now that a more precise definition of the German *Rundbogenstil* has been presented, it is possible to make fresh observations on the American material and draw some tentative conclusions about it.

Terminologically, it is noteworthy that the name *Rundbogenstil* was never adopted here, although a popular synonym "Byzantine" was frequently applied to the purest examples of the style, that is, to those buildings designed by architects trained in Germany. Other adjectives applied frequently to the style were Romanesque, Norman, Lombard, Anglo-Norman, and Lombard-Venetian. Indeed, it is unlikely that most American architects distinguished between a *Rundbogenstil* school in Germany and other round-arched tendencies emanating from Germany and England. Given the confusion of terminology, it is perhaps best to adopt the appellation "American round-arched style," in order to capture the distinctiveness of the American contribution. *Rundbogenstil* influence was transmitted to America through a number of central European architects who emigrated here, beginning in the early 1840s and continuing as a result of the political and economic instability brought on by the Revolution of 1848, as well as through architectural publications.

When comparing broadly the native traditions of Germany and America, one is struck by the differences between a climate of highly theoretical discourse, involving such major architectural figures as Gärtner, Klenze, Hübsch, and Schinkel, and an architectural milieu that was only beginning to be professionalized. Perhaps as a consequence of this situation, the theoretical basis of the *Rundbogenstil,* which involved not only the style and materials of a building but also its ornamental and structural systems, seems to have been of little consequence to the American architect or builder. The specialized ornamental vocabulary and the carefully conceived attempts at combining and updating systems of construction that are evident in Hübsch's St. Cyriakus and Gärtner's Ludwigskirche are not evident in American buildings. In short, the loss of German theory in America contributed to the conflation of mid-19th-century round-arched styles or tendencies. In ecclesiastical design, this resulted in the fusion of the *Rundbogenstil* with the international Romanesque Revival; public buildings looked generically Romanesque, Italianate, Renaissance, or simply round-arched. These edifices did not represent a progressive synthesis of Greek and Gothic architecture; rather, they existed side by side with Greek and Gothic buildings in an atmosphere of stylistic pluralism. Even the central European emigrant architects who played a major role in the transmission of *Rundbogenstil* influence to America such as Charles Blesch, Henry Engelbert, and Alexander and Edward

37. Carroll L. V. Meeks, "Romanesque before Richardson in the United States," *Art Bulletin,* XXXV, 1953, 17–33.

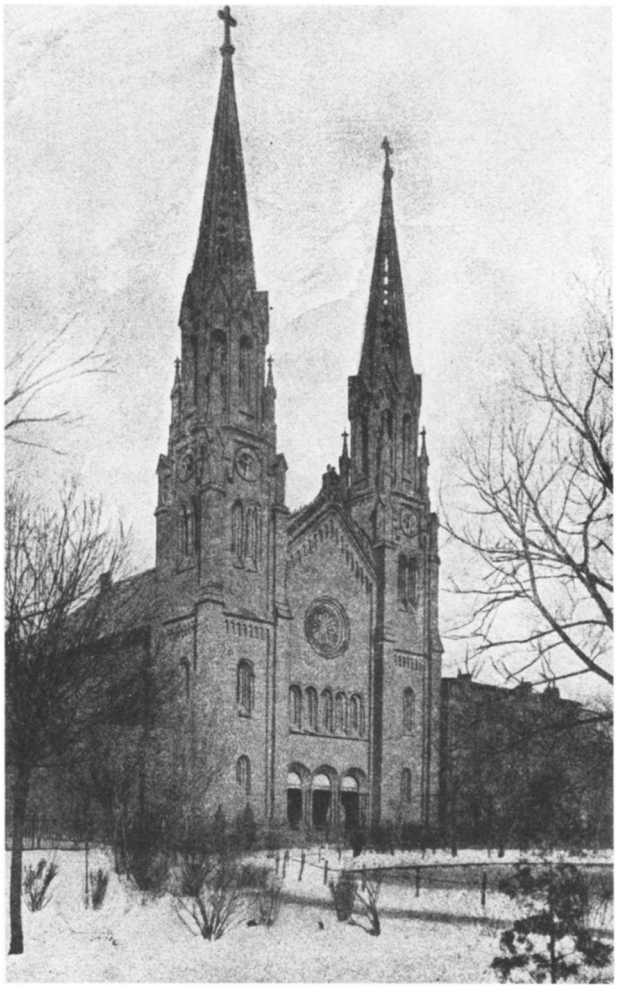

Fig. 17. Charles Blesch and Leopold Eidlitz, St. George's Episcopal Church, New York City, 1846–1848 (Henry Anstice, *History of St. George's Church in the City of New York* 1752–1811–1911, 180; Copyright 1911 Harper & Row, Inc.; reprinted by permission of Harper & Row Publishers, Inc.).

Fig. 18. Blesch and Eidlitz, St. George's, rear view (*Putnam's Monthly,* September 1853, 245; Courtesy of John Hay Library, Brown University).

Saeltzer—all active in New York and with ties to Munich or Berlin or the manner of these schools—apparently reflect the new ambience. Not surprisingly, their major buildings were often modeled on the paradigmatic examples of the round-arched style in Germany—the Ludwigskirche and the Staatsbibliothek in Munich and the Michaelskirche in Berlin.

St. George's Episcopal Church in New York (Fig. 17), designed by the firm of Blesch and Eidlitz and erected between 1846 and 1848, was a striking transcription of Gärtner's Ludwigskirche (Fig. 6). A contemporary account described it as "in the Byzantine style" and "the most chastely designed and most sincerely built church in New York City."[38] Charles Blesch (also known as Otto Blesch) studied at the Academy of Architecture with Friedrich von Gärtner.[39] Born in Prague in 1823, Leopold Eidlitz studied at the Vienna Polytechnic, having a professed interest in engineering and architecture, although he lacked Blesch's more formal architectural training. According to the critic Montgomery Schuyler, the cooperation of Blesch and Eidlitz at St. George's, the firm's first major commission, only went so far as the preparation of the drawings; Schuyler quoted Eidlitz as having said: "The exterior was mainly his [Blesch's] and the interior mainly mine."[40] This division of labor at the church makes perfect sense in view of their relative strengths, Blesch in architectural design and Eidlitz in engineering.

38. "New York Church Architecture," *Putnam's Monthly,* II, 1853, 236–237.

39. Karl (Otto) Blesch was born in Bingen, not far from the city of Mainz. He began his studies with Gärtner at the Academy of Architecture in 1839 at the age of 22; the normal matriculation was four years. The firm of Blesch and Eidlitz began to appear in Doggett's New York City Directory in 1846 with an office at 11 Wall Street; Blesch's name was dropped as of 1854. It appears that he had returned to Munich by 1853, where he died on 17 November of that year. I would like to thank Winfried Nerdinger, Director, Architektursammlung, Technische Universität, Munich, for making a list of Gärtner's students available to me, where I found the information regarding Blesch's training and his return to Munich.

40. Montgomery Schuyler, "A Great American Architect: Leopold Eidlitz," *Architectural Record,* XXIV, 1908, 165–166.

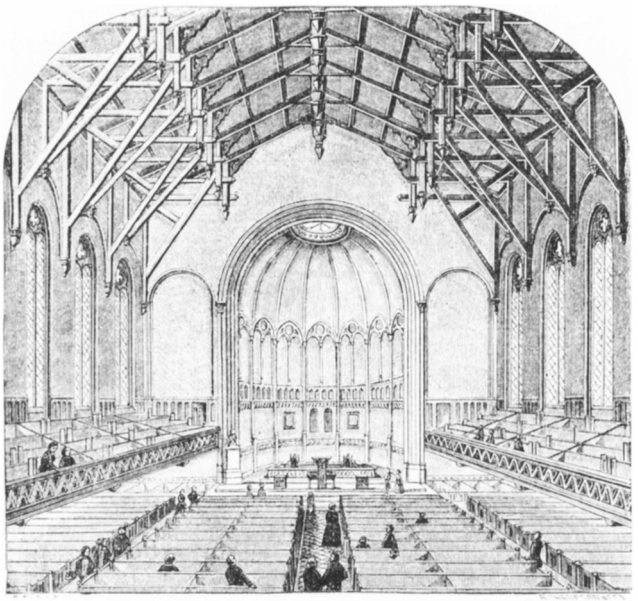

Fig. 19. Blesch and Eidlitz, St. George's, interior (*Putnam's Monthly,* September 1853, 246; courtesy of John Hay Library, Brown University).

Blesch's borrowings from his teacher's Ludwigskirche are obvious despite the glaring contrast in color, brown freestone for St. George's and limestone for the Ludwigskirche. Both churches have a similar organization: a ground floor with three portals, five arches in the middle, and a rose window in the gable. Blesch deleted the single narrow bays between the core of the church and the towers in the Ludwigskirche and substituted multigabled towers with polygonal spires resembling those at the Cathedral at Gelnhausen. The detail is bookishly close in some instances, as in the cornice of the gable, where Blesch copied Gärtner's corbeling and crenelation. Blesch's treatment of the middle register varied from the source in his elimination of Gärtner's beltcourse and the transformation of niches into round-arched windows. Blesch also substituted an apse (Fig. 18) based on the one at the late antique Basilica at Trier, for Gärtner's flat choir wall. In effect these borrowings gave St. George's a generically German Romanesque appearance, whereas the Ludwigskirche was inspired by Italian and German sources and was intended to represent a modernization of those forms. At St. George's one senses nothing of the striving for synthesis or the progressive spirit which were the major impulses for Gärtner and the proponents of the *Rundbogenstil.*

Although the Bavarian Byzantine exterior of St. George's was well received, it was Eidlitz's interior which induced the most frequent exclamations of wonder. The original interior was a spacious *Saalkirche,* consisting of a large auditorium with a timber-trussed ceiling and with galleries on three sides (Fig. 19). As originally built, these galleries were not supported by pillars but by large iron elbows anchored into the side buttresses. This technical feat, which facilitated visibility of the minister,

Fig. 20. Henry Engelbert, Fifth Avenue Baptist Church, New York City, 1856, demolished (*Frank Leslie's Illustrated Newspaper,* 14 May 1856, 373; courtesy of the American Antiquarian Society).

was frequently remarked on at the time and contributed to the early fame and success of Eidlitz. In short, the interior of St. George's was based partly on the practical aesthetic of the engineer rather than the architect's attempt at combining classical and medieval systems of construction evident in the interior of the Ludwigskirche (Fig. 7). As a result, St. George's was a hybrid church, lacking the external and internal consistency of its Munich model.

St. George's was not the only example in New York of a church based on a *Rundbogenstil* model. In 1856, Henry Engelbert, a German immigrant about whom little is known,[41] designed the Fifth Avenue Baptist Church, the interior of which (Fig. 20) was based on Soller's Michaelskirche in Berlin (Fig. 15). Engelbert's church, since demolished, had a brownstone Romanesque façade, with twin towers and a large rose window

41. Engelbert's name first appears in Doggett's New York City Directory in 1852 in partnership with John Edson at 85 Nassau Street in Manhattan.

Fig. 21. Alexander Saeltzer, Astor Library, New York City, 1849–1853, showing 1859 and 1881 additions (courtesy of the Library of Congress).

in the gable, not unlike St. George's.[42] As with the latter church, it was the engineering that elicited the most comment, especially the innovative lighting of the interior, which was provided by 12-foot, iron-sashed skylights in the center of each of the three nave domes. This idea, as well as the interior organization of domes on pendentives, separated by transverse arches and supported by barrel vaults, came from Soller's Berlin church. Engelbert even went so far as to copy the decorative details for his church, which was richly frescoed throughout.[43]

Nevertheless, Engelbert's church was by no means as structurally daring as its source, since he did not allow windows in the side or rear walls; and he used nine buttresses on both sides of the church, as opposed to Soller's six. The Michaelskirche contained a transept with a dome over the crossing and was brilliantly lit from the side and rear walls, as well as from the roof. On the exterior the brick polychromy of the Michaelskirche and the conscious combination of antique/Renaissance and medieval elements were part of the *Rundbogenstil* concept of progressive synthesis. On the contrary, the twin-towered brownstone exterior of the Fifth Avenue Baptist Church looked generically Romanesque like St. George's. In form and detailing both of these churches were typical of the American round-arched style in their lack of theoretical assertiveness. The results were wan, inconsistent renditions of German *Rundbogenstil* models.

Perhaps the best-known German emigrant working in mid-19th-century New York was Alexander Saeltzer, previously mentioned as the architect whose 1872 treatise on acoustics contained passages gleaned from the 1843 Bamberg Congress transcripts. Saeltzer was trained at the Bauakademie in Berlin,[44] where he could have collaborated on Schinkel's building projects, although he would not have studied directly under the master.[45] The exterior of his best-known work, the Astor Library in New York of 1849–1853 (Fig. 21), was loosely based on a Munich precedent, the Staatsbibliothek of 1831–1842 (Fig. 8). To model the New York library after the one in Munich was only natural, as the Staatsbibliothek was well known in America, not only as a major example of the *Rundbogenstil,* but also for its vast literary holdings. As it happens, Alexander Saeltzer also had direct ties to the architectural community in Munich: Edward Saeltzer, a relative with whom he emigrated to America, studied with Gärtner at the Academy of Architecture.[46] Alex-

42. The only description I have been able to find of the Fifth Avenue Baptist Church is in *Frank Leslie's Illustrated Newspaper,* 14 May 1856, 373, where an interior and exterior view are reproduced. The exterior view is small and difficult to read.

43. *Leslie's,* 373.

44. No formal list of students who trained at the Bauakademie is available. However, Saeltzer's name is found, along with that of his relative Edward Saeltzer, in a book containing a list of members which is kept at the Architekten- und Ingenieur-Verein in Berlin, which they joined on 2 October 1841. His membership in this architectural club, along with other articles from the period which mention Alexander Saeltzer as a student of Schinkel, are adequate evidence that he did, indeed, study in Berlin.

45. E. Börsch-Supan, *Berliner Baukunst,* 13.

46. Edward Saeltzer was born in Eisenach and began his studies with Gärtner on 25 April 1831. This information was found on the list of students who studied with Gärtner at the Technische Universität, Munich (see n. 39).

ander and Edward arrived in the United States in 1842;[47] their names first appear in Doggett's New York City Directory in 1844–1845 and continue until 1846–1847, when Edward's name no longer appears. Although Alexander was solely responsible for the design of the Astor Library, he was no doubt well acquainted with Gärtner's Bavarian *Rundbogenstil* through his relative. Following a competition, Saeltzer's plans were selected in the spring of 1849; the foundation for the library was laid on 14 March 1850; and the building (425 Lafayette Street) was completed in the summer of 1853.[48] As completed, the library consisted of the five bays on the right of the building as it appears in the photograph taken in 1904 (Fig. 21; neither of the additions of 1859 and 1881, to the left of the original building, was designed by Saeltzer).

In the fifth annual report of the trustees of 1853, the library was described as being in the Byzantine style.[49] It shared with Gärtner's Staatsbibliothek a rusticated sandstone basement with three round-arched entrances, two upper floors of brick, and a succession of semicircular, biforiated windows. The treatments of the façades were somewhat different: instead of Gärtner's flat lintels, Saeltzer substituted hood moldings (found on other buildings by Gärtner), giving the New York library a more assertive, three-dimensional surface. In its original proportions and slightly projecting pavilions, the building possessed none of the Staatsbibliothek's extravagant, unarticulated horizontality. Much of the decorative detailing, such as for the windows and capitals, was Romanesque, but the prominent console cornice was classical in contrast to Gärtner's heavy, medieval corbel table (Fig. 9). Like the Munich library, the Astor Library was a *Rohbau,* although it lacked the Staatsbibliothek's delicate mixture of light-colored brick and exterior polychromy. It is unclear to what extent a brick building was perceived in America as a revolutionary, more honest mode of building rather than an economical one; the limited building budget for the Astor Library possibly suggests the latter. In any case the differences between the Astor Library and the Staatsbibliothek are as telling as their similarities. In its borrowing from Gärtner and its medieval detailing (biforiated windows, hood moldings), the New York library could be described as *Rundbogenstil.* Yet the classical cornice and the organization and proportions of the original façade are evocative of the Renaissance palazzo or more recent Renaissance Revival commercial buildings in New York. In sum, the subtle material, structural, and ornamental complexities of Gärtner's Staatsbibliothek seem to have been universalized into an amalgamation of Romanesque details and Renaissance forms and taste.

The round-arched buildings of Blesch, Engelbert, and Saeltzer represent the direct influence of the *Rundbogenstil* in America. All were designed by architects trained in Germany; all had specific German monuments as sources of inspiration. Once the *Rundbogenstil* reached American shores, however, it was immediately transformed. When applied to ecclesiastical edifices, the round-arched style was identified with a more straightforward Romanesque Revival; in public buildings, it often assumed Italianate or Renaissance characteristics. These buildings were not proclaimed as heralding a new architectural direction or as creating a modern style, as they were in Germany.

The influence of the *Rundbogenstil* on native American architects is a more complex issue, not the least because of their essentially English, non-Continental architectural heritage; yet some observations concerning the German emigrants may also be made of American architects under the influence of the *Rundbogenstil.* Since architectural publications played a key role in the dissemination of German influence on native American architects, the impact of the round-arched style first began to be felt in America around 1846–1847, slightly after Gärtner's seminal buildings, the Ludwigskirche and the Staatsbibliothek, were published and when the first issue of the *Entwürfe zu Kirchen, Pfarr- und Schulhäusern* appeared.[50] Thus, the models for German architects served a similar role for American designers, and if the degree to which native American architects comprehended this foreign style is impossible to measure, it is possible to isolate examples of direct knowledge of the *Rundbogenstil* in their work. As examples, it is useful to analyze buildings by two major mid-19th-century American architects, Thomas Alexander Tefft and Richard Upjohn, whom we know were well acquainted with the *Rundbogenstil.*

Tefft, an architect who practiced in Providence, Rhode Island, from 1846 to his premature death in 1859, was one of the first professionally trained architects in this country, having graduated from Brown University in 1851.[51] Tefft owned an impressive architectural library, including works by Gärtner, Klenze, and Schinkel, as well as other German architects. His admiration for the German *Rundbogenstil* was also evident in his writings. In a lecture which he delivered to the Teacher's Institute in Portsmouth, Rhode Island, in 1851, he stated that "the round

47. Edward's and Alexander's names are found on lists of immigrants arriving in New York on 6 August 1842. Both architects listed "artist" as their occupation and Eisenach as their birthplace. *Index to Passenger Lists of Vessels Arriving at New York, 1820–1846,* Roll 84, M-261, National Archives, Washington, D.C.

48. For a general history of the Astor Library, see Harry Miller Lydenberg, *History of the New York Public Library,* New York, 1923. See also my article (in preparation) on Alexander Saeltzer and the Astor Library.

49. *Annual Report of the Trustees of the Astor Library [for 1853]; Made to the Legislature January 26, 1854,* Albany, 1854, 10–11.

50. Friedrich von Gärtner, *Ausgeführte Gebäude,* Munich, 1844–1845. For the *Entwürfe zu Kirchen,* see n. 30.

51. There is no monograph on Tefft, but an up-to-date, illustrated catalog accompanied the exhibition, *Thomas Alexander Tefft: American Architecture in Transition, 1845–1860,* Brown University, Providence, 1987.

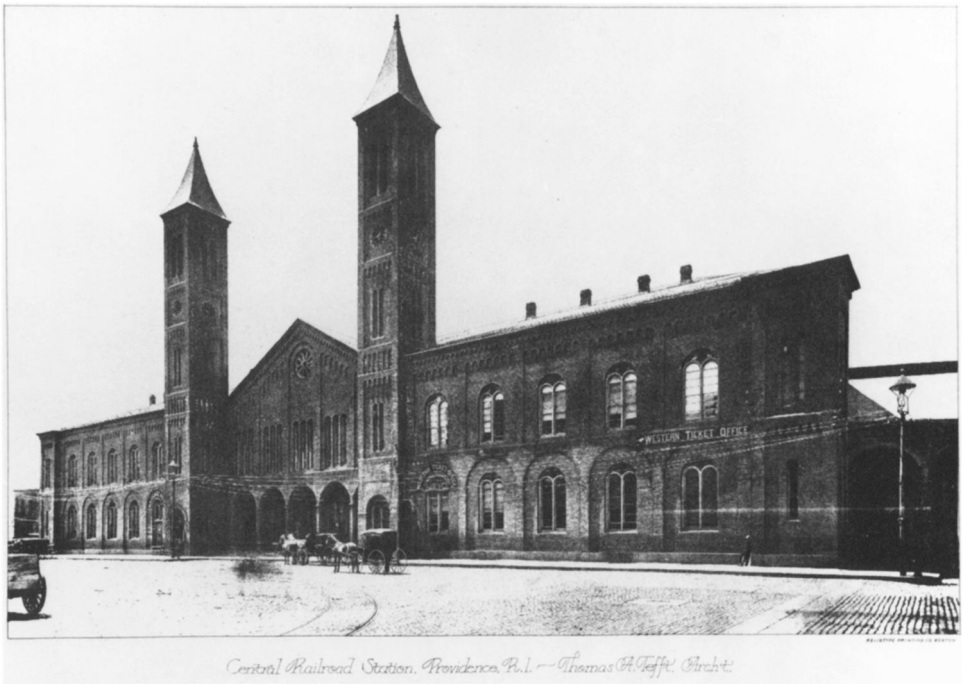

Fig. 22. Thomas Alexander Tefft, Union Depot, Providence, Rhode Island, 1847, destroyed 1886 (*American Architect and Building News,* 1886, no. 546).

arch school of Germany is employing much innovation and originality in their designs and we hazard but little in predicting a favorable result."[52] As a freshman at Brown and a draftsman in the firm of Tallman and Bucklin, Tefft designed his best-known work, Union Depot in Providence of 1847–1848 (Fig. 22). The 750-foot railroad station was the largest in America when built; its monumentality and fine detailing moved Hitchcock to call it "the finest early station in the New World."[53] The central twin-towered section of the main block was an arresting, if somewhat naive, reworking of the Ludwigskirche (Fig. 6) although, unlike Blesch at St. George's, Tefft retained the integrity of Gärtner's horizontal proportions. Flanking the square towers of the station were two-storied wings consisting of six bays of round-arched windows. Extending from the wings were arcaded passageways (barely visible in the photograph), which terminated in octagonal pavilions. As it happens, arcaded loggias also flanked the Ludwigskirche—a feature Tefft obviously knew through published drawings of the Munich church.[54] Tefft justified his use of church-like towers by placing a bell and clock in them. The right wing of the main block held a ticket office and ladies' and gentlemen's rooms; the left wing contained a restaurant and a news depot. The second floor was reserved for offices and exhibition space often used by the Rhode Island Society for the Encouragement of Domestic Industry.[55] The octagonal pavilions, a feature Tefft derived from Gärtner's Neue Südfriedhof (New South Cemetery) in Munich, served as baggage rooms. Such indiscriminate assimilation and reinterpretation of general forms and details from Gärtner's work reflected the bookish dependency of the architect's early career.

In the station's materials and ornamental details Tefft exhibited a creativity unmatched in the work of the emigrant architects, transforming the pristine limestone of the Ludwigskirche into red brick, a material which better suited the utilitarian function of the building. The opulent Byzantine and Romanesque ornament of the Munich church was replaced by the more structural detailing of pilaster strips and corbel tables. Tefft's library provided ample sources for such ornament of Lombard Romanesque inspiration: he owned Möllinger's *Elemente des Rundbogenstiles,* which illustrated various patterns for corbel tables, and Ludwig Runge's *Beiträge zur Kenntnis der Backstein-Architektur Italiens* (Contributions to the Knowledge of the Brick Architecture of Italy), published in 1846. In short, Tefft made

52. Thomas A. Tefft, "The Cultivation of True Taste," a lecture delivered at the Teacher's Institute, Portsmouth, Rhode Island, 24 October 1851, Tefft Papers, Rhode Island Historical Society, Providence, 14.

53. Hitchcock, *Architecture,* 138.

54. Tefft owned Gärtner's *Ausgeführte Gebäude,* Munich, 1844–1845, where the Ludwigskirche was featured.

55. *Thomas Alexander Tefft,* Brown University, 148.

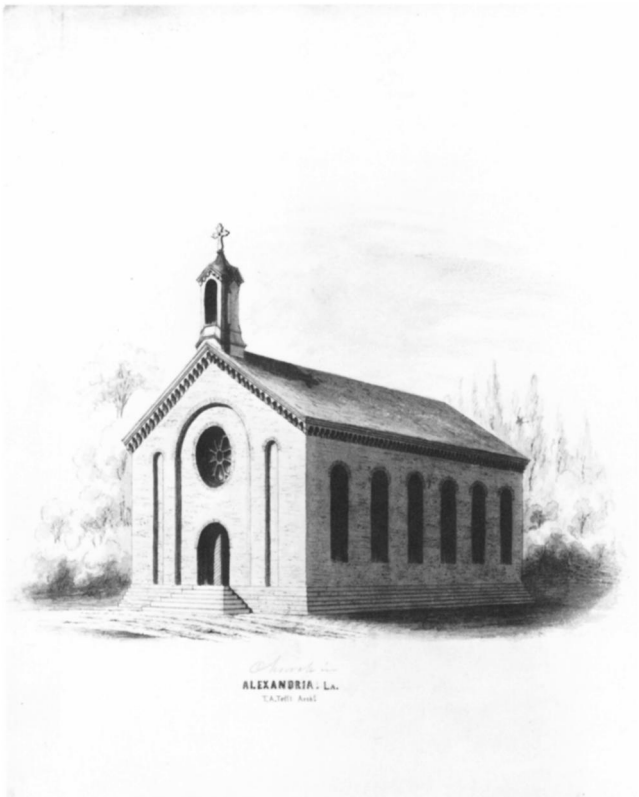

Fig. 23. Tefft, Unidentified Church in Alexandria, Louisiana, c. 1856, presentation drawing (Brown University Archives).

the Ludwigskirche a *Rohbau,* one which rivaled German examples (and exceeded American ones like the Astor Library) in its artistic use of decorative and structural unstuccoed brick. Tefft later admitted that the introduction of an ornamental brick architecture to America was to be his life's work.[56] Union Depot was an impressive and early example of this ambition.

For his ecclesiastical design, Tefft frequently turned for inspiration to the *Entwürfe zu Kirchen,* the 1846 and 1852 editions of which he owned. There exists an annotated tracing by him of Stüler's "Village Church with 270 Seats" (Fig. 12) in the Tefft archive at the John Hay Library at Brown University. The simple one-room plan, brick exterior, and minimal Romanesque detailing of Stüler's village church appealed to the New England architect, who applied the formula to a host of rural churches and schoolhouses in Rhode Island and elsewhere, as in the small, unidentified church in Alexandria, Louisiana (Fig. 23). The interiors of these churches and schoolhouses, as well as other buildings by Tefft, rarely had much in common with their German counterparts. Rather, they reflected the exigencies of the local patrons.

Richard Upjohn, America's most influential mid-19th-century architect, also relied on the *Entwürfe zu Kirchen* for the

56. I. Edwards Clark, "Thomas A. Tefft and the Introduction of Brick Architecture to America," *American Architect and Building News,* XXIX, 1886, 283.

Fig. 24. Upjohn, Harvard College Chapel Project, 1846, presentation drawing (Avery Architectural and Fine Arts Library, Columbia University).

design of his unexecuted Harvard College Chapel Project of 1846 (Fig. 24). The chapel, resembling Soller's "Catholic Church for 750–800 People" (Fig. 13), had a similar Early Christian basilican plan with a semicircular apse and an exonarthex connected by an arcuated portico to a detached *campanile.* The fenestration in the bell towers of the two churches is nearly identical; the principal difference lay in Upjohn's treatment of the spire, where he opted for a more Italianate version of Soller's northern medieval spire. Executed in brown wash, the delicate atmospheric rendering of the exterior indicates that Upjohn intended the building to be constructed of the yellow or buff brick also preferred by the Prussian round-arched school.

Tefft and Upjohn offered the most advanced designs of their day in America, and in this respect they were the counterparts of Hübsch, Klenze, Schinkel, and Gärtner in this country. In both cases the architects were familiar with contemporary German design and certainly aware, at least by 1846, of a distinct *Rundbogenstil* school. This awareness is evident in some, although not all, of their round-arched work. In both instances, they applied their understanding of the German style with intelligence and a surprising creativity that in some ways was lacking in the work of the German emigrants; yet, as with the latter group, American architects tended to borrow in a superficial manner. As a result, *Rundbogenstil* influence was evident on exterior forms and surfaces and rarely incorporated into interior ensembles. Buildings looked generically Romanesque, Early Christian, or Italianate, with preponderant Romanesque detailing; but they did not respond to the theoretical pretensions of their German models.[57]

A more precise definition of the German *Rundbogenstil* sharpens our understanding of its influence in America: we now know that the style was spread through the work of emigrant architects and through books; and we can identify individuals, buildings, and publications through which the style first made its impact here c. 1846–1847. While the American examples provide some indication of the extent to which the *Rundbogenstil* was fundamentally transformed, this discussion hardly exhausts the complex nature of the *Rundbogenstil* and its influence in America, serving rather to illustrate a broader field of study opened up by a clearer comprehension of the German development.

57. This lack of architectural theory in the American round-arched style does not mean there were no important ideological reasons for its adoption, especially by the Congregationalists. See, for example, William H. Pierson, Jr., "Richard Upjohn and the American Rundbogenstil," *Winterthur Portfolio,* XXI, 1986, 223–242, and Gwen W. Steege, "The *Book of Plans* and the Early Romanesque Revival in the United States: A Study in Architectural Patronage," *JSAH,* XLVI, 1987, 215–227.