

ABSTRACTION & ECONOMY

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Abstraction & Economy

Myths of Growth

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DE GRUYTER

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17,000 Iron
Bolts Don't Lie

On Economy,
Abstraction,
and Truth in
Otto Wagner's
Postsparkasse

Translated by Lian Rangkuty

Taking Otto Wagner's Austrian Postal Savings Bank (Österreichische Postsparkasse, or PSK) in Vienna as an example, Patrizia Grzonka describes architectural abstraction. She relates Wagner's geometric style to the elementary formal vocabulary of the revolutionary architecture of the Enlightenment, linking it to an economy of shapes and materials as well as the channeling of light. Transparency and light play decisive roles here, just as they do in Wagner's Länderbank. Grzonka also references John Soane's design for the Bank of England and the impact it had on the paradigm shift in bank architecture, in which transparency implies a comprehensive spatial order that suggests a parallel awareness of varying locations and of continual activity.

Patrizia Grzonka studied art history in Zurich and Rome. She lives as an art and architecture historian, theorist, and critic in Vienna, and is a lecturer at the University of Applied Arts Vienna. She wrote her doctorate at the Vienna University of Technology, Faculty of Architecture and Spatial Planning, with research on the Viennese architectural historian Emil Kaufmann and the concept of autonomous architecture.

¹ Hasler and Tomaselli examined the construction evolution of the marble panel cladding used in the Stadtbahn Pavilions on Karlsplatz, the Kirche am Steinhof, and the Postal Savings Bank, including an analysis of the nails that were used and their casings. The detailed analysis revealed that the prefabricated 13 cm custom nails have an iron core with a head and shank, covered with a lead cap and an aluminum casing. (Hasler and Tomaselli 2018, 96.)

The transparent canopy of the main entrance of Otto Wagner's Austrian Postal Savings Bank (Österreichische Postsparkasse, or PSK) in Vienna – built for the Imperial Royal Postal Savings Bank from 1904 to 1906 – is supported by slender aluminum columns with surrounding rings. The legendary cashier's hall houses ventilation units (also made of aluminum) whose functional, and at the same time sculptural, character is unique. In addition, the façade boasts 17,230 bolts or “nails” with a wrought-iron core and cap designed by Wagner himself. For a long time, it was thought that these iron bolts were merely decorative and they were referred to as “dummy nails” (Hasler and Tomaselli 2018, 96). However, through meticulous material analysis it was discovered that these bolts were, in fact, the means by which the thin marble slabs were secured over a bed of mortar.¹ The nails are therefore not make-believe, they are not lying. In the building, Wagner not only employed aluminum as an ultra-novel building material, but also included other structural innovations: gray linoleum for the floor in the entrance area and in the cashier's hall, which also features glass blocks, and reinforced concrete for structural purposes. Each of these elements is employed in ways that are true to the material; nothing is concealed or kept unknown. (fig. 1, 2)

Wagner biographer Josef August Lux (1871–1947) was among the first to regard these materials as milestones of technical and aesthetic innovation, when he pointed out that this new development unfolded in only a short period of time, spanning from the draft of Wagner's Länderbank (1883–1884) to the Postal Savings Bank:

Questions concerning material come to the fore. Reinforced concrete, glass, marble, aluminum, hard rubber, etc. make up the [Postal Savings Bank]. All of these are new words! No architect would have thought of them at the time when the Länderbank was built. Otto Wagner was the one who discovered them. Even if he did not invent these materials, he gave them their present meaning; it was he who discovered their utility in architecture. (Lux 1914, 70)

Otto Wagner is considered a protomodern architect in the lineage of Karl Friedrich Schinkel and Gottfried Semper. His most innovative buildings, all of which were built in quick succession at the turn of the



¹ Otto Wagner, Postal Savings Bank, main entrance on Georg-Coch-Platz, 1010 Vienna



² Otto Wagner, Postal Savings Bank, linoleum floor

nineteenth to the twentieth century – the Austrian Länderbank, the Postal Savings Bank, and the Kirche St. Leopold am Steinhof (St. Leopold Church at Steinhof, hereafter Kirche am Steinhof) – also exhibit some enigmatic ornamental features that, from today’s perspective, appear difficult to reconcile with the “purely utilitarian style” perceived by contemporaries of the era and even by Wagner himself. On the one hand, these include the façade nails of the Postal Savings Bank and the Kirche am Steinhof, but also the monumental angels (known as acroteria) on the roof of the Postal Savings Bank and the wreaths of the Kirche am Steinhof. All of these elements seem to contradict the doctrine of architectural abstraction, based solely on construction principles and a “geometric” style that eliminates all figurative elements, as later introduced into the modernist canon by Walter Gropius at the Bauhaus or by Le Corbusier in the form of pillars in the reductive building style of the 1920s. ^{fig.3}

This text aims to examine various aspects of Wagner’s Postal Savings Bank under the banner of abstraction. To what extent can this building be described as abstract? In what ways does it correspond to a later conception of abstraction? And what is the relationship between its abstract elements within the context of its time?

WAGNER’S MODERNISM

The “rumor” of modernism suggests that everything it encompasses is new and different, and that it sought to present itself in a radically different way by completely breaking with history. Bruno Latour – and he was not alone – provocatively challenged this paradigm shift in his book *We Have Never Been Modern* (1993), by demonstrating that modernity was never truly achieved. Otto Wagner himself adopted an ambivalent position between tradition and modernity, and was only partially the innovator for which he is predominantly known. However, as architectural historian Werner Oechslin recently ^{2018, 21} noted, there was hardly anything “that the later discussion of ‘Bauhaus Modernism’ and ‘International Style’ addressed [...] that was not already present in Otto Wagner’s work.” Vienna’s Postal Savings Bank can therefore be seen to



³ Otto Wagner, Postal Savings Bank, façade (detail)



⁴ Otto Wagner, Postal Savings Bank, aluminum-clad supports, cashier’s hall

² Lux writes that Wagner himself grew up in a sober and reduced building designed by Theophil Hansen in Vienna-Penzing Lux 1914, 20.

reflect some aspects of this hybrid status: for example, the strictly symmetrical and axially aligned façade with a central avant-corps as well as the massive masonry construction and the resulting monumentality are clearly committed to tradition, while the modern main entrance made of aluminum, steel, and glass belies the fact that, for all its simplicity, this is a representative building. Wagner was both a master builder deeply rooted in tradition and a sophisticated innovator of architecture who operated fiercely close to the pulse of his times.

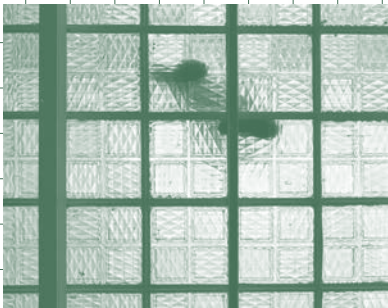
On the one hand, Otto Wagner's "avant-garde" ideas were born out of his immediate Viennese environment, where the romantic, historicist works of Theophil Hansen² and Ludwig Förster in the "Moorish" or Renaissance round-arch style were among the new Viennese buildings that characterized the period. Wagner's early buildings in Vienna, such as the apartment building on Stadiongasse and the Länderbank on Hohenstaufengasse, exhibit a clear influence of these "elementarist" (reductive) tendencies. On the other hand, Wagner owed much to a sojourn in Berlin, where he studied at the Bauakademie in 1860 and 1861 under a student of Karl Friedrich Schinkel, and where he became acquainted with the latter's insistence on using contemporary building materials such as iron. Wagner was able to incorporate these influences into his teaching at the Academy of Fine Arts in Vienna, where he worked as a professor from 1894 and vocally advocated for an early modernist program. His book *Die Baukunst unserer Zeit*, first published in 1895 under the title *Moderne Architektur* Wagner 1902, originally started out as a course book Wagner 1895. Wagner's *ibid.*, 8 vision of urban architecture, which called for Haussmann-like "tabula rasa" cuts, was propelled by the economic dynamics of the Gründerzeit (1848–1873), driven by everything that represented "modern life," as he formulated it in his book. The architect understood this to not only include "motor vehicles" and "aircraft," but also military technology such as cannons that could be mobilized by "armies of millions" Wagner 1895, 8. He turned away from the imitation of architectural styles, as was typical in historicism, toward a deliberate reorientation of architecture that would draw on contemporary technical and aesthetic ideals, incorporating the latest developments in construction technology. Thus, the image of the Postal Savings Bank became Wagner's realized personal vision of a new understanding of architecture, one which sought to capture the modern spirit through innovation and uncompromising attention to every detail of the design: from planning to construction and on to the interior furnishings, everything was designed to form a type of total work of art. fig. 4

ECONOMY AND ABSTRACTION

The vision of this new architecture sought out new building tasks that accompanied industrialization, capitalism, and the great mass movements of the nineteenth century: train stations (such as Otto Wagner’s urban railway as an infrastructural project); world exhibition pavilions (Wagner designed a pavilion for the 1873 Vienna World’s Fair); as well as zoological gardens and stock exchanges (Wagner participated in the competition for the Amsterdam Stock Exchange, which was ultimately built by Hendrik Petrus Berlage); and museums (a design by Wagner for the Wien Museum remained unrealized). These building projects around 1900 also included banks, which had become increasingly important as a distinct type of building since the foundations of modern states in the eighteenth and nineteenth centuries. Initially, banks still favored classical Greek motifs, including porticoes, pediment canopies, and colonnaded halls that suggested stability. However, by the turn of the century, they began to embrace a new zeitgeist that increasingly reflected the evolving character of capitalist metropolises. The demands for efficiency, management of human flows, and the subtle elegance of “eternal” values began to replace the old ideal.

Parallels can be drawn here to the English architect John Soane (1753–1837), who pioneered a semantic prototype for bank architecture that exemplified the use of light in the splendid Bank of England that opened in 1808 in London. The building complex for the second oldest central bank in the world was characterized by its generous proportions, light wells, domed halls, and numerous offices. Due to space constraints, this structure was demolished in the 1920s and 30s and replaced by a new building. Soane’s glass-covered barrel vaults of the side-arms brought light into previously dimly lit spaces, comparable to Wagner’s design for the Postal Savings Bank’s cashier’s hall, which features a generous glass roof and, above all, a transparent floor that also serves as the glass ceiling of the basement. ^{fig. 5} The intricate lighting designs that Soane employed can still be appreciated in his private residence in London, which now houses Sir John Soane’s Museum.³

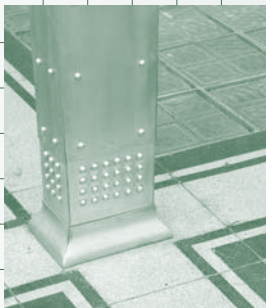
³ It has proved impossible to verify whether Wagner knew of Soane’s bank. There are, however, a number of references to the Anglophilia among turn-of-the-century Viennese notables, such as Arthur von Scala, director of the Museum of Art and Industry, Felician von Myrbach of the School of Arts and Crafts, or Josef Hoffmann’s enthusiasm for Charles Rennie Mackintosh, whom he tried to include in the Vienna Secession’s exhibition in the fall of 1900, an exhibition that was very well received (Boeckl, 2020). It is difficult to imagine that Wagner, as a highly informed contemporary, would not have taken note of these tendencies.



⁵ Otto Wagner, Postal Savings Bank, floor of cashier’s hall from below



⁶ Otto Wagner, Postal Savings Bank, cashier’s hall



⁷ Otto Wagner, Postal Savings Bank, cashier’s hall (detail)

Wagner's Postal Savings Bank stands out as a prime example of the new architectural spirit of its era, combining innovative approaches to internal movement and workflow optimization, efficient floor plan arrangements, and state-of-the-art technological advancements. Although it maintained some connection to the grandiose and formal style that dominated official building projects of its era, Wagner's design for the Postal Savings Bank represented a significant departure from the conventional approaches of his contemporaries. "His" classical repertoire was based less on Greek classicism than on a broader, "universal" classicism. According to Wagner biographer Lux, the previous Länderbank building had "a glass ceiling over the courtyard, counters built between the pillars and arches of the arcades, and the *cour d'honneur* had been turned into a cashier's hall. Instead of the now-impossible grand *cortège*, the business-minded public crowded into the central space." And, "[I]t is only a small step, relatively speaking, from here to the Postal Savings Bank. The 'historical' fades away and gives way to the abstract idea of this novel floor plan, which is condensed outwardly into new monumental forms by the technical aids of the time. The guiding notion of *functionality* has triumphed" ^{Lux, 1914, 73, fig. 6, 7}

TRANSPARENCY – LITERALLY AND SYMBOLICALLY

Even in Wagner's own time, Lux ^{1914, 49} emphasized the clarified, self-explanatory floor plan as the most important element of his new architecture and declared it to be "abstract": "The most significant thing that modern architecture could produce was [...] the floor plan. It was not functionality, etc., but the floor plan." This aligns with the most important demand of all modern architecture, which ultimately sought to highlight, or even render comprehensible rather than obscure, the true nature of a building's purpose through its appearance. From here, the veracity of construction became the paradigm of modern architecture from Adolf Loos to Mies van der Rohe.

What distinguishes Wagner's concept for the Postal Savings Bank from his later designs is both the symbolic and literal role that light plays in it as an immaterial building material. The cashier's hall is illuminated by natural daylight that enters through the glass ceiling of the spacious courtyard. Additionally, innovative glass blocks allow light to penetrate the hidden interior spaces of the basement, something that represents an absolute architectural first. Another visionary idea, still relevant today, manifests itself in the side wings adjacent to the cashier's hall and their use of non-load-bearing walls that offer the possibility of being adapted to new uses. This type of flexible floor plan was truly groundbreaking. When considering this tendency to dissolve physical boundaries between areas and to organize spaces into free-flowing spatial

continuities, we can see a conceptual anticipation of ideas that did not come to full fruition until the height of the avant-garde movement. ^{fig. 8}

For a long time, the myth of modernism owed its enduring appeal to the idea of transparency and openness, as materialized here. The myth forms the axis of the rationality and enlightenment of the late eighteenth century since Immanuel Kant.⁴ Colin Rowe and Robert Slutzky emphasized (in an essay that was hotly debated in the 1960s) the complex intermingling of transparency and space as the actual conceptual feature of modern architecture: “Transparency, however, implies more than an optical characteristic, it implies a broader spatial order. Transparency means a simultaneous perception of different spatial locations. Space not only recedes but fluctuates in a continuous activity” ^{Rowe and Slutzky 1964.}⁵ With reference to Luc Boltanski and Ève Chiapello’s *The New Spirit of Capitalism* (1999), Douglas Spencer ^{2018,}⁹ interpreted the phantasms of “smooth surfaces and elegant forms wrapped around its structural armatures” as symptoms of an “architecture of neoliberalism.” Spencer’s ^{2018,}⁹ primary concern lies with Zaha Hadid’s BMW Central Building in Leipzig, which, in his view, exemplifies the ways in which contemporary architecture has been driven by the mechanisms of neoliberal economic paradigms and the prioritization of precarious labor, despite its veneer “providing an image of socially oriented collectivity.” It would be worth discussing more broadly whether Wagner’s conceptual and spatial adaptation to an ethics of the economic in the Postal Savings Bank, under the banner of the modern flows of money, could be described as an “architecture of capitalism” in a manner analogous with Spencer. The new spirit of efficiency – open and transparent floor planning, material authenticity, constructive veracity, among other factors – would thus constitute the impetus driving the reductive utilitarian style. ^{fig. 9}

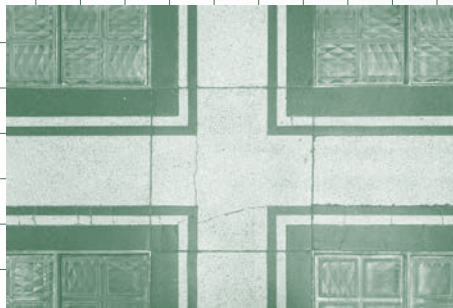
Upon its completion in 1906, Wagner’s Postal Savings Bank provoked both enthusiasm and outrage. The reactions that were triggered by this radically reduced architecture also echoed anti-Semitic sentiments prevalent in the Viennese cultural climate of the turn of the century. The reasons for this are not only rooted in the shockingly exposed “naked” architecture, but also in architectural similarities with one of Wagner’s

⁴ The metaphorical sense of the term *Aufklärung*, known in English as the Enlightenment or the Age of Reason, implies light as a symbolic medium for illuminating concepts. Viennese architectural historian Emil Kaufmann traced the **twentieth century’s** modern architecture movement from the Enlightenment-era architecture of the eighteenth and nineteenth centuries in his posthumously published book Kaufmann 1955.

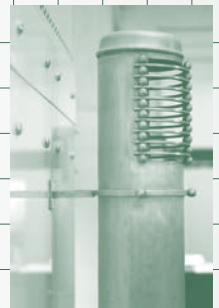
⁵ Rowe and Slutzky’s concept is based on an analysis of certain works of Cubism, particularly those of Juan Gris, which emphasize flatness to an extreme degree. According to Detlef Mertins, this concept of flatness also implies a “fear of space” Mertins 1996.



⁸ Otto, Austrian Postal Savings Bank, lower first floor, below the glass floor of the cashier’s hall



⁹ Otto Wagner, Postal Savings Bank, floor of cashier’s hall



¹⁰ Otto Wagner, Postal Savings Bank, cashier’s hall, ventilation body

6 The church was the subject of disparaging comments, including it being characterized as being of a "foolish Assyrian-Babylonian style," and the claim that the church was "un-Christian."

7 "Transillumination" (*Durchleuchtung*), or enlightenment, as a paradigm of the time was finally also realized as "literal" transparency by means of X-ray radiation discovered by Wilhelm Conrad Röntgen in 1895 – in other words, concurrently with Wagner's design of the Postal Savings Bank.

earlier buildings, the Jewish synagogue on Rumbach Street in Budapest, built in 1873. In her monograph on the building, Ines Müller highlights abstract details of the central avant-corps, such as the ornamentation and especially the columns of the portico or the protrusion of the façade, all of which constitute links to the Postal Savings Bank, but also to the Kirche am Steinhof built shortly after the Postal Savings Bank: "The possibility that Wagner quite consciously drew on principles of synagogue building when he designed his 'Modern Church' seems to me [...] to be a distinct possibility. That he nowhere openly stated this seems understandable in view of the taboo surrounding the subject" Müller 1992, 91.⁶

As is well known, Vienna's Kulturkampf (battle of cultures) not only took on restrained but also openly anti-Semitic features. Wagner was a supporter of the anti-Semitic Viennese mayor Karl Lueger (1844–1910), as documented in his diary notes. For this reason and due to the public polemic, Wagner may have been reluctant to openly discuss his reference to the Jewish place of worship, and thus too the principles of abstraction in nonrepresentational ornamentation. Consequently, if we are to continue with our metaphor of lying, not the whole truth of the matter is spelled out.

On the other end of the spectrum, the abstract principle is counteracted by those fatal tendencies of modernity that eradicated all superfluous elements and ultimately culminated in a total obsession with racial purity. Abstraction, purity, and hygiene – these too form an axis of progress-driven rationality.

HYGIENE AND ECONOMY

According to Otto Wagner, various architectural decisions concerning the Postal Savings Bank were justified by hygiene measures. Cleanliness, purity, and the optimization of processes went hand in hand with the appropriate use of materials. He justified the installation of dedicated employee changing rooms at the bank by stating that "hanging up and storing wet garments and umbrellas in the office spaces [...] can be deemed inadmissible due to the resulting deterioration of air quality" – Asenbaum et al. 1964. The technical and fantastic innovations of the heating and ventilation systems in the Postal Savings Bank represent the architectural embodiment of a "pure" modernity.⁷ fig. 10 And for the first time, in service of hygiene, a vacuum cleaner was used on a large scale to achieve the sanitation demanded by the transparent glass architecture Tabor 1996, 52. In one of Wagner's lithographs, there is a small but telling detail: the figure of a street sweeper in the promotional graphic for the apartment building at Neustiftgasse 40. The presence of this person, along with two pedestrians, seems intentional, as the depiction was created as an advertisement. It is almost as if Wagner hoped to

sweep away the dirt of historicism and make way for the new ideals of modernism.

Truth and lies are not always easy to distinguish. A 2020 publication has revealed that Otto Wagner was also a brilliant media strategist who utilized all the latest developments of the field (Nierhaus 2020). The book details how Wagner himself intervened in the presentation of his photographs, from arranging and staging the subjects to retouching the finished prints by hand. As Werner Oechslin (2018, 21) has pointed out – and even if it is only incorporated into the cityscape through metal bolts and aluminum as “aesthetic forms” (*schönheitliche Formen*) – in the new era, it is ultimately the “face of a city” that counts.⁸

⁸ Proceeding from here, this also pertains to the establishment of the “image” (Bild) as a planar construct that was born from the problem of two-dimensionality – a topos of the turn of the century – which would play a decisive role in the twentieth century. Wagner, in particular, anticipated the “imago picta” (Oechslin 2018) of façade elevations through the use of flat façade designs featuring a repertoire of horizontal lines.

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