

The organ as a divine instrument of cosmic harmony

Music of the Spheres

MARCIN ZGLIŃSKI

Institute of Art, Warsaw
Polish Academy of Sciences
marcinzgliński@ispan.pl

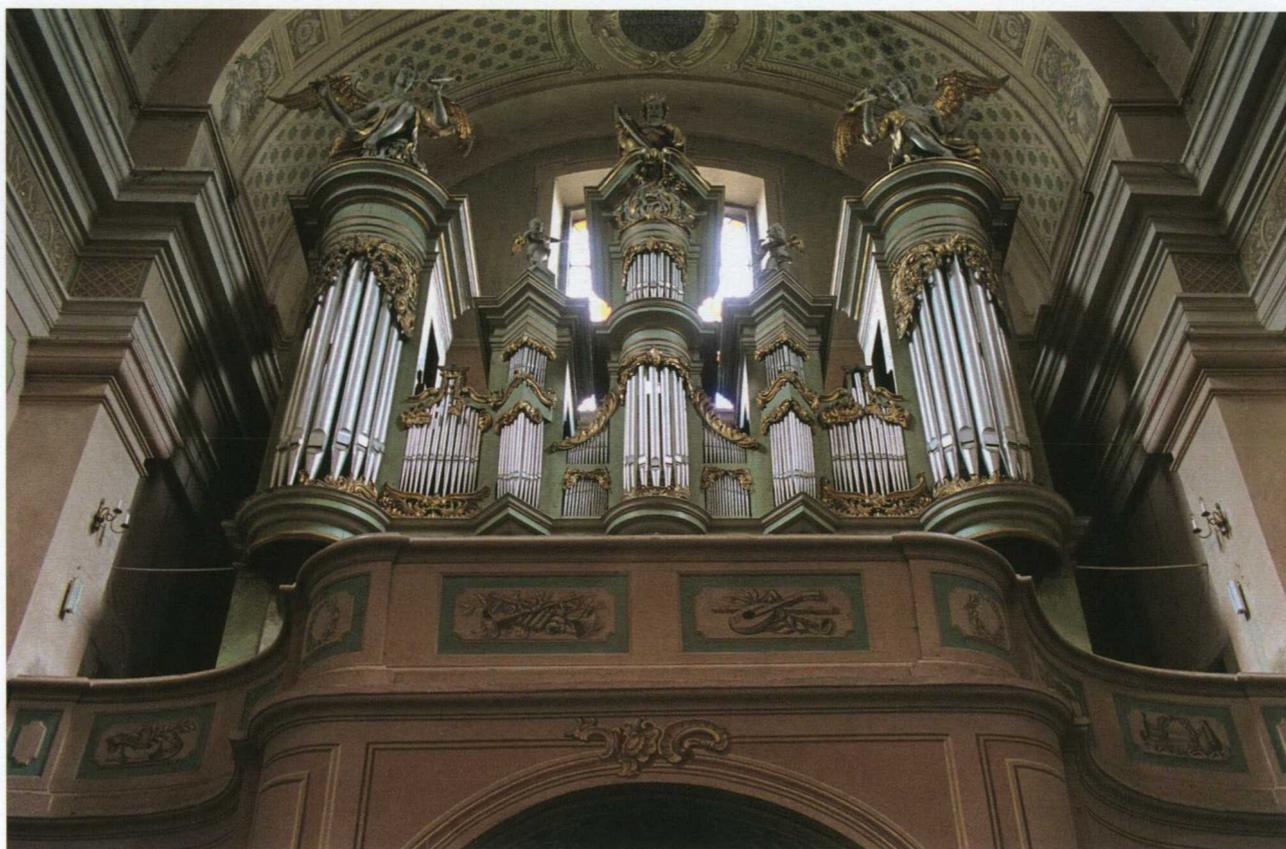
Church organs began to be used in the liturgy in Europe from the Early Middle Ages, and all the way until the Enlightenment they were seen as an exceptional instrument of a sacred nature whose very sound paid eternal homage to divine laws

Church organs are one of the most complex, refined, and fascinating phenomena in European culture, both in physical and spiritual terms. Constituting a kind of *Gesamtkunstwerk*, the organ has musical functions repre-

ented by the complex mechanism of the sound-making apparatus that are tightly and inseparably bound to its architectural and decorative housing (known as the organ case or *prospect*). For centuries, organs were among the most complex mechanical devices in existence, requiring their makers to possess a wide range of skills. Although they were not as indispensable elements for the celebration of the liturgy or the administration of other sacraments in Christian churches as altars or baptismal fonts, organs nevertheless did usually occupy a privileged position – being situated directly opposite the altar starting in the late Middle Ages, and later in Lutheran churches even being fused into a single organic structure encompassing the altar itself.

Divine origin

Above all, however, organs were a source of harmonious tones, perceived as divine music, as a reflection of cosmic harmony. This notion of the more-divine-than-human



Piotr Placzkowski/Reporter

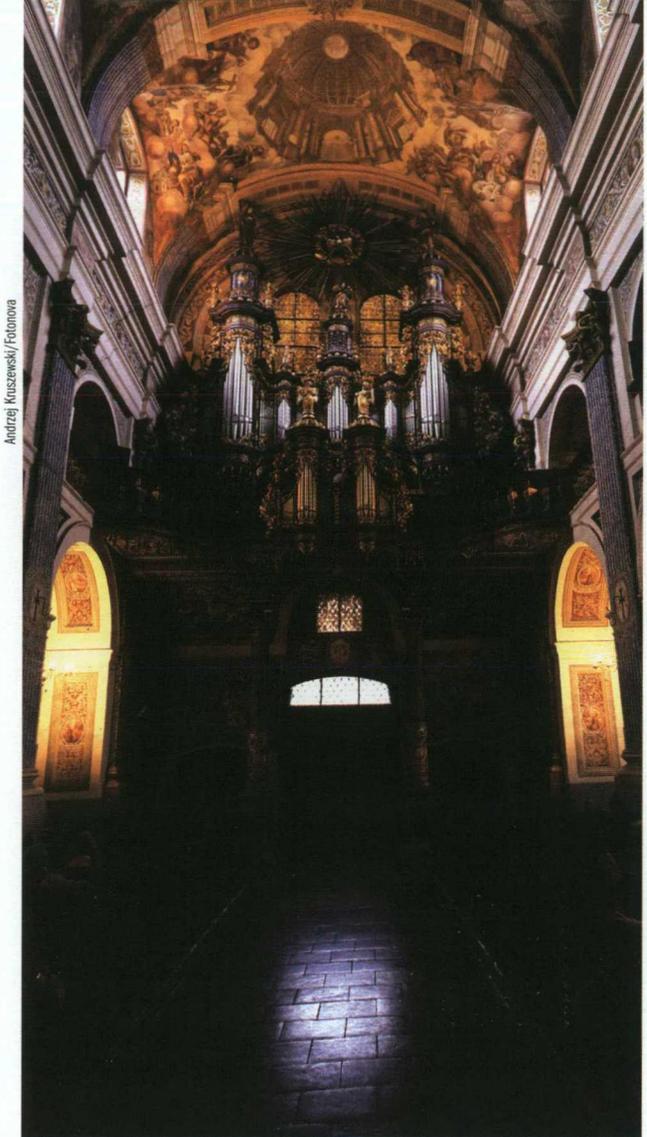
Organ in the baroque Church of the Most Holy Trinity in Tykocin on the Narew River, built 1760-1761, probably by the Warsaw organ-builder Józef Antoni Wierzbowski

nature of the organ is conveyed by the Greek inscription on an organ *positive* constructed in 1494 by Lorenzo de Pavia: "The hands of a mortal made this divine work, which stuns the senses of both gods and men" (ΤΟΥΤΕΡΓΟΗ ΘΕΟΕΙΔΕΣ ΟΝΗΤΟΥ ΧΕΙΡΕΣ ΕΠΟΙΥΗ / ΘΕΛΓΟΝΑΜΑΝΘΡΩΠΩΗ ΟΥΡΑΝΙΩΗΤΕ ΦΡΕΝΑΣ). Such sacralization of the church organ, carried out here in the neo-Platonic spirit of the Renaissance at its high point, was not by any means an isolated phenomenon. Another excellent example is to be found in an anonymous homily transcribed in the early 18th century in the Bernadine monastery in Vilnius (Wilno), comparing the process of constructing organs to divine creation itself. "And so God acted after the fashion of the organ-builder, who when devising an organ rends some pipes from but wood to sound lower, and casts others from tin to give higher tone; rends some of them larger for mightier sound, others smaller for paler tone; guilds some to bedeck the facade of the organ, and paints others with but common dye and erects them in the rear; yet he arranges all so that their pleasant sound should serve the divine glory in churches, give good cheer to the people and encourage them to reverence. In this way God the Almighty, *ludens in orbe terrarum*, created one man with disability, endowing another with might, strength, and skill; painted one man's countenance like a wondrous picture, rendering another's, as you might say, in slipshod fashion; left one man of short stature, low to the ground, raising another head and shoulders above the rest; appointed one man to hold high office and bedecked him with dignity and rich surplus, while another has to treat behind other men and raise his hat to each of them. Yet God arranges all in such a way that everyone, of all attributes, should together lift one voice of Thanksgiving and gratitude to God".

This parallel between the work of the Creator and the work of the master organ-builder is quite exceptional, because not many crafts or even arts were considered to be worthy of comparison to acts ascribed to God. Nevertheless, it was above all the homily that drew the attention of simple churchgoers to the organ as an *exemplum* of the divine or even cosmic harmony of creation, reflected in both the musical harmony of its tones and in the social order. In the borderlands of Latin European civilization and on the threshold of the Enlightenment, this perhaps represented the final echo of Pythagorean-Platonic concepts and images harking back to antiquity – of cosmic realms and heavenly bodies whirling through them, with a harmony bound, through the divine numbers, to the harmony of the human spirit and the harmony of audible tones.

For sacred music only

Boethius's tripartite division of music (in his *De institutione musica...*) – into the cosmic music of the spheres, inaccessible to the senses (*musica mundana*), the metaphysically understood music of the human spirit, which



Andrzej Kuszewski/Fotomowa

Organ in the pilgrimage church in Święta Lipka (Heiligelinde) built in 1719–1721 by the Königsberg organ-builder Johann Josua Mosengel, carvings by Christian Peucker

resounds with the fullest harmony in communion with God, during the extasy of prayer (*musica humana*), and ordinary music accessible to sensory perception (*musica instrumentalis*) – fundamentally determined not only the perception of church organs, but also their architectural form, iconography, and decoration. Nevertheless, despite their exceptional character organs still remained musical instruments, which like others emit audible sounds. There thus needed to be some justification for elevating their status above that of other instruments, thereby predestining them as an instrument of the liturgy. And so, the organ was perceived as having an objective nature, and as being independent of the organist's individual traits. The player of this instrument essentially only determines the length of each tone; other parameters like timbre and volume – which for other instruments are individualized and subjectively contingent upon the performer's artistry – here remain conclusively fixed when the pipes are fitted. The organist has almost no influence over the quality of the sound, as no matter who or what depresses a key, the sound will be the same. It is this subjective invariability that symbolizes the eternal, imperishable endurance of God's laws ruling creation, taking on a transcendental, even cosmic dimension.

The organ as a divine instrument of cosmic harmony



Krzysztof Karolczyk/Agenjoja Gazeta

Decoration detail from the organ of Saint Peter and Paul Church in Kraków, the oldest baroque church built in the territory of contemporary Poland, executed around 1733 probably by local sculptor Antoni Frączkiewicz

The divine nature of organs and their transcendental nature predestined them to be built exclusively for sacred music. Performing secular music upon them constituted an act of profanation, even an act of violence. Like in the case of the implements of the liturgy, there was a conviction that such an act desecrated an organ, making it necessary to re-consecrate it. Sometimes, to "atone" for such an act of secularization, organs had to go unused for a long duration; only such silence could perform the purification of the tarnished instrument. As the *musica humana*, the harmony of the human soul "singing out in prayer," stood above instrumental music, so the human voice, through its ties to physiology and the sensual domain, clashed with organs' metaphysical image.

A reflection of this notion is to be found in the Bavarian folk legend about master organ-maker Joseph Gabler's alleged use of the *vox humana*, a type of pipe that excellently imitates the sound of singing, when constructing the magnificent organs at Weingarten (1737-50). In order to achieve such a sound the master ultimately had to employ the services of the devil, forging a pact for his soul in order to obtain an enchanted metal he then added to the alloy. Ultimately, however, his ploy proved a failure – the *vox humana* indeed imitated the sound of singing remarkably well, yet such organs refused to play sacred music and their sound always had a secular, sensual nature. A trial was held and this fatal sound, with its human, material nature that shattered the divine cosmic harmony of organs, was slated to be burned. It was only then that the instrument recovered its properties.

Celestial bodies on organ cases

The above-described notions imparted organ cases with a metaphysical dimension, both in their illusionary, perspective aspect, and in terms of the set of symbols

and images that customarily adorned them, associated with divine, cosmic music, the harmony of the spheres and the angelic orchestra. Such symbology is, it seems, highly universal, its scope encompassing the music-making angels and cherubs, as well as King David and Saint Cecilia, conducting the heavenly orchestra. Also frequently depicted were images of the "instruments" of cosmic music – whirling stars (*Zymbelsterne*) and the suns, set in motion via artistic mechanisms, imitating the orbits of the heavenly bodies whose rotation was held to be set to the music of the spheres. Such devices, which presented the eyes and ears of churchgoers with a substitute for the inaccessible sensual perception of the harmonious "cosmic" music, were already employed in the late Middle Ages yet attained their peak popularity in the era of the Baroque, with its predilection for *concerto* and theatricalization. A significant role here was played by the well-known work *Musurga Universalis* (1650) by the Jesuit theologian, polyhistor, and music theoretician Athanasius Kirchner, which devotes a separate chapter to the operation of automatons and mechanisms, *machinamenta harmonica*, that produce music imitating the voices of nature, in wonderfully combining sound with the motion of animal and human figures. Nevertheless, what in Kirchner's complex philosophical notions was perceived as a reflection of the cosmos as the most perfect musical instrument (his book contained a print showing the impressive fronts of an organ being played by the personification of Divine Wisdom), was viewed quite differently a century later. Although *machinamenta* were still in vogue and a point of admiration in the first quarter of the 18th century, they soon began to be treated by people of the Enlightenment age as an exemplification of bad, tacky taste. In 1772, the English traveler and organist Charles Burney described the famous mobile drectoration of the organ at Berlin's garrison church as a "church puppet show." In the times of Goethe and his *Tonlehre*, when the conviction emerged that mathematics could not explain by any means all sound-related phenomena, the organ was conclusively divested of its special symbolic status as a miraculous phenomenon of divine provenance. ■

Further reading:

- M. Zgliński. (2003). *Organ Cases in the Baltic Sea Region As Religious and Political Propaganda, 1500-1800*, [in:] *The Nordic-Baltic Organ Book. History and Culture*, Göteborg, p. 63-74; also in: *Power and Persuasion. Sculpture in its rhetorical contexts*. (2004). Warsaw, p. 49-62.
- M. Broniewski. (2004). *Barokowy prospekt organowy w kościele Łaski w Jeleniej Górze*, Poznań.
- E. Smulikowska. (1994). *The Polish Organ. The Organ-Cases in Poland as Works of Art*, Warsaw.
- M. Tiella. (1976). *Das Positiv von Lorenzo da Pavia*, „Acta Organologica”, Bd. 10, s. 82.