

ANTONINA ŻABA\*

## THE MYTH ABOUT CONNOISEURSHIP IN RELATION TO PERSPECTIVE, IN OTHER WORDS, ILLUSIONISTIC-ARCHITECTURAL PAINTING IN POLAND

---

### MIT O ZNAWSTWIE PERSPEKTYWY, CZYLI O MALARSTWIE ILUZJONISTYCZNO- -ARCHITEKTONICZNYM W POLSCE

#### Abstract

It is commonly considered, that baroque painting depicting architectural elements on face partitions of building in illusionistic way needed the painter to have deep knowledge of constructing perspective charts. Research conducted in Poland (in its current borders), according to the author, do not confirm this thesis. They show that our artists, most commonly used ready-made patterns from perspective tractates and pattern books, but most of all from tractate by unquestionable master of this kind of painting, the Italian Andre Pozzo (1642–1709). The article it also presents the connection with selected paintings in Poland With baroque tractates and pattern books. Furthermore, comments on perspective rules education of baroque craftsmen and artists were included.

*Keywords: P. Decker, A. Pozzo, J.J. Schübler, perspective, geometry, illusionistic architectural painting, quadrature, baroque, illusion*

#### Streszczenie

Powszechnie uważa się, że barokowe malarstwo przedstawiające w sposób iluzjonistyczny elementy architektoniczne na licach przegród budowlanych wymagało od malarza głębokiej znajomości zasad konstruowania wykresów perspektywicznych. Przeprowadzone na terenie Polski (w jej obecnym kształcie) badania, zdaniem autorki, nie potwierdzają tej tezy. Wskazują one, że nasi artyści najczęściej wykorzystywali jedynie gotowe wzorce z traktatów perspektywicznych i wzorników, przede wszystkim z traktatu niekwestionowanego mistrza tego rodzaju malarstwa, Włocha Andrea Pozzo (1642–1709). Wskazano na związek wybranych malowideł w Polsce z barokowymi traktatami i wzornikami oraz scharakteryzowano cechy głównych ośrodków działalności artystycznej. Przedstawiono uwagi na temat kształcenia zasad perspektywy wśród barokowych rzemieślników.

*Słowa kluczowe: P. Decker, Andrea Pozzo, J.J. Schübler, perspektywa, geometria, malarstwo iluzjonistyczno-architektoniczne, kwadratura, barok, iluzja*

---

\* Ph.D. Eng. Antonina Żaba, Department in Chair of Building Engineering and Building Physics, Faculty of Civil Engineering, Silesian University of Technology.

Architecture as „painters’ muse”<sup>1</sup> in a particular way inspired the creators of illusionistic architectural paintings in the Baroque, when painting „became architecture” in the perception process of architectural works enriched with paintings which in illusionistic way depicted architecture – from construction elements to little details. These paintings were investigated and described by representatives of many fields and scientific disciplines. Some of them are representatives of sciences such as: humanities (art historians), art (conservators, painters) but also technical – architects, geometricians<sup>2</sup> and surveyors. In literature by art historians [4, 6, 8, 9, 17–19] these kinds of paintings were presented synthetically. The literature discusses the most important paintings in our country, their creators, schools, style features and the influence of foreign patterns and artists on paintings in Poland. This group of researchers also presents opinions on geometrical features of Baroque paintings which are the topic of our discussion and which are referred to as “paintings” in further parts of this article. The most advanced research on geometrical issues has been presented in the publications of D. Folga-Januszewska [4 i 5]. In her articles, the author describes basic geometrical assumptions which accompany the process of preparing perspective sketches for paintings. The schemes of floor plans and sections included in these publications [4] demonstrate these assumptions<sup>3</sup>. According to them, the creator of the idea of fusion between a structural object (truly existing) and an object depicted in painting (illusionistic object) started his work with planning characteristic of an architect, not a painter. The creator of this idea decided, if the structural space limited with architectural partitions after introducing the painting should:

- have the same space, i.e. illusionistic details should only fulfill or enrich this space, as it happens when we introduce moldings, pictures, balustrades or columns;
- have a bigger space, be higher by one or more tiers or longer by another room.

The described paintings of partitions of architectural objects have enriched architecture for many centuries. But only in Baroque<sup>4</sup> were there bold solutions in use, in which:

- behind structural altars there extended deep, illusionistic choirs or byways;
- churches’ naves, which looked like multitier yards of monumental buildings, were seen as non-blinded, opened to heaven, flooded with Italian light<sup>5</sup> (Ill. 1).

<sup>1</sup> The term is quotation of the title of I. Zuziak’s publication [20].

<sup>2</sup> In this article, people teaching geometry in architectural and civil engineering departments of technical universities and painting and its conservation of artistic universities. Also, people conducting research on paintings which use geometrical methods.

<sup>3</sup> Also discussed in *Quadratura* by I. Sjöström [14].

<sup>4</sup> In Italy, test solutions were often introduced in the Renaissance, but the period of the highest development of the tendency to use illusionistic architectural painting in architecture is the Baroque.

<sup>5</sup> According to I. Sjöström [14], this solution was called quadratura. This opinion is not shared by many researchers connecting the term quadratura with every illusionistic picture of architecture. The author shares the view of I Sjostorm. She thinks however, that the most important thing when including a painting in the quadratura category is the presence in ceiling paintings of a deformation of high, traditionally vertical architectural elements commonly known as “collapse of illusionistic architecture” [6] or its “swinging” (see ill. 1).

The creator also had to decide how to connect the elements of construction of the structural part of the object with the illusionistic elements. Like in traditional architectural structures, the most important was the direct “setting” of the high vertical construction elements, such as pillars and columns of the top floors, on the vertical elements of the bottom structural floors. He also had to decide which parts of structural horizontal partitions (ceilings and vaults) would be “removed” from the object, to obtain the effect of a higher interior, opened to the ever sunny heaven. After constructing the floor plan and section i.e. registering the object’s structure, the creator started the construction of the perspective view of the designed object. As when considering outside views of architectural objects, the point of the observer had to be defined, the location of his/her eye and viewport, onto which the perspective view of the object was projected. Then this view had to be constructed, and only then could it be transferred to the partition<sup>6</sup>. The presented process is the maximum process. The creator of such a program had to know the complete design apparatus of an architect. He had to think like an architect. He had to have the architect’s wisdom and skills. In the case of preparation of a painted project for an object, which had already been built before, he had to think of its “rebuilding”, most commonly, of its “extension” or “superstructure”. Basing on graphical notation of the extension or superstructure design he constructed a perspective view of the object, with pre-fixed location of the observer’s stance and eye and the projection plane<sup>7</sup>.

Education of future painting creators was provided in masters’ workshops of this kind of painting, but also in schools of fine arts. An example of such a school can be Academy of St. Lucas in Rome, founded in 1577. Part of education in this school were lessons of geometry and perspective<sup>8</sup>. These classes were so popular among artisans, who were not students of the Academy, that its Senate had to pass a special resolution forbidding artisans from taking part in lectures<sup>9</sup>.

Another way of education was individual study of tractates and skilled masters’ works. During their journeys around Europe artisans mostly studied the works which adorned churches. Individual study of perspective tractates was harder because they were difficult to obtain. These tractates were also usually written in the languages foreign to our artists<sup>10</sup> and it was not easy to study instructions written in the hermetic language of geometry.

<sup>6</sup> Often the decision to transfer to partition was preceded by making of a modello, an easel painting or water-color of the painting to be shown to the investor for approval, which was small in comparison to the wall painting.

<sup>7</sup> In some Baroque churches before construction of monumental main altars their illusionistic representations were painted. They were based on perspective views of the altars constructed basing on their floor plan and views (depicted in rectangular project). The reason to do so was lack of funds for “real altar”, lack of time or necessity to check the design in 1:1 scale. Such process was conducted in the university church in Wrocław.

<sup>8</sup> M. Karpowicz [7] writes about the preserved geometric instruments, and the classroom is described by W. K. Stattler [16].

<sup>9</sup> See M. Karpowicz [7].

<sup>10</sup> J.I. Kraszewski [10] writes that the author of “the first perspective painting in Polish language” was S. Grzepski (1524–1570). This information is, however, not confirmed by any other sources or preserved publications by Grzepski.

An attempt to use the instructions on making perspective charts required skills of creation and reading of floor plans and sections, which could be too difficult for many painters. That situation made them use ready-made patterns and copy the paintings they had an opportunity to see<sup>11</sup>.

However, the person who did not have any of these skills or did not use them could draw a ready-made view of the perspective designed by someone else from tractates for architects, builders and painters or copy specific pages from the tractates. It was possible to enlarge them to required dimensions and sketch them on the walls<sup>12</sup>.

In the work of E. Rastawiecki *Dictionary of Polish painters...*, where statutes of painters' guilds of Poland are often quoted, we cannot find any information on the education of painters in the field of perspective or learn if it was necessary to master perspective to pass the master-exam in a painters' guild. It was, however, demanded from master candidates in builders' guilds<sup>13</sup>. Guild organizations required building masters to pass the guild statutory exam in professional skills. In Museum of Cracow there survived examples of the exams, called master exams. The most interesting master exams were written between XVII and XVIII century. Six of these Works presented in the article by Z. Rewski [13], present perspectives of cross vaults. The obligation to make them is included in the 3<sup>rd</sup> paragraph of Cracow's masons' guild statute. The statute was written in 1618. Interestingly, the guild prepared the text of the statute and Cracow's city council presented it to Sigismund III (1566–1632) for approval. He extended the proposed version with the above mentioned 3<sup>rd</sup> paragraph. In it we can read that a candidate for a master must "...in the presence of the elders draw a cross vault...". The preserved drawings of vaults show that some perspective was connected with same graphical pattern. Z. Rewski describes Cracow's master exams as drawings of "*partly wrong perspective*" or showing "*weak mastery of perspective rules*"<sup>14</sup>. A characteristic feature of Cracow's master exams is the fact that their authors did not use basic elements of the so called geometric apparatus. They did not record the object's construction in the form of floor plan or section, did not define point and location of the observer's eye or the location of viewpoint (background).

<sup>11</sup> An example of such imitations is the vault painting in the Franciscans' church in Wieluń, which, according to the author, makes reference to the vault painting by Johann Michael Rottmayr (1656–1730) in the university church in Wrocław.

<sup>12</sup> Real difficulties started when the painting was to be painted on the vault. In that case the creator had to modify the pattern, presenting the object in collinear perspective on a flat surface to non-collinear picture (on vault's surface). Making such a modification was necessary also when the creator designed collinear perspective by himself.

<sup>13</sup> J.J. Schüler writes about the problems adepts of building arts had with the guild requirement of constructing the perspective chart of cross vault in the XVIIIth century [15].

<sup>14</sup> Preserved vault drawings show, that part of perspective referred to common graphical pattern. According to the author, base for part of Cracow's master exams could be graphic works included in D. Brabaro [1].

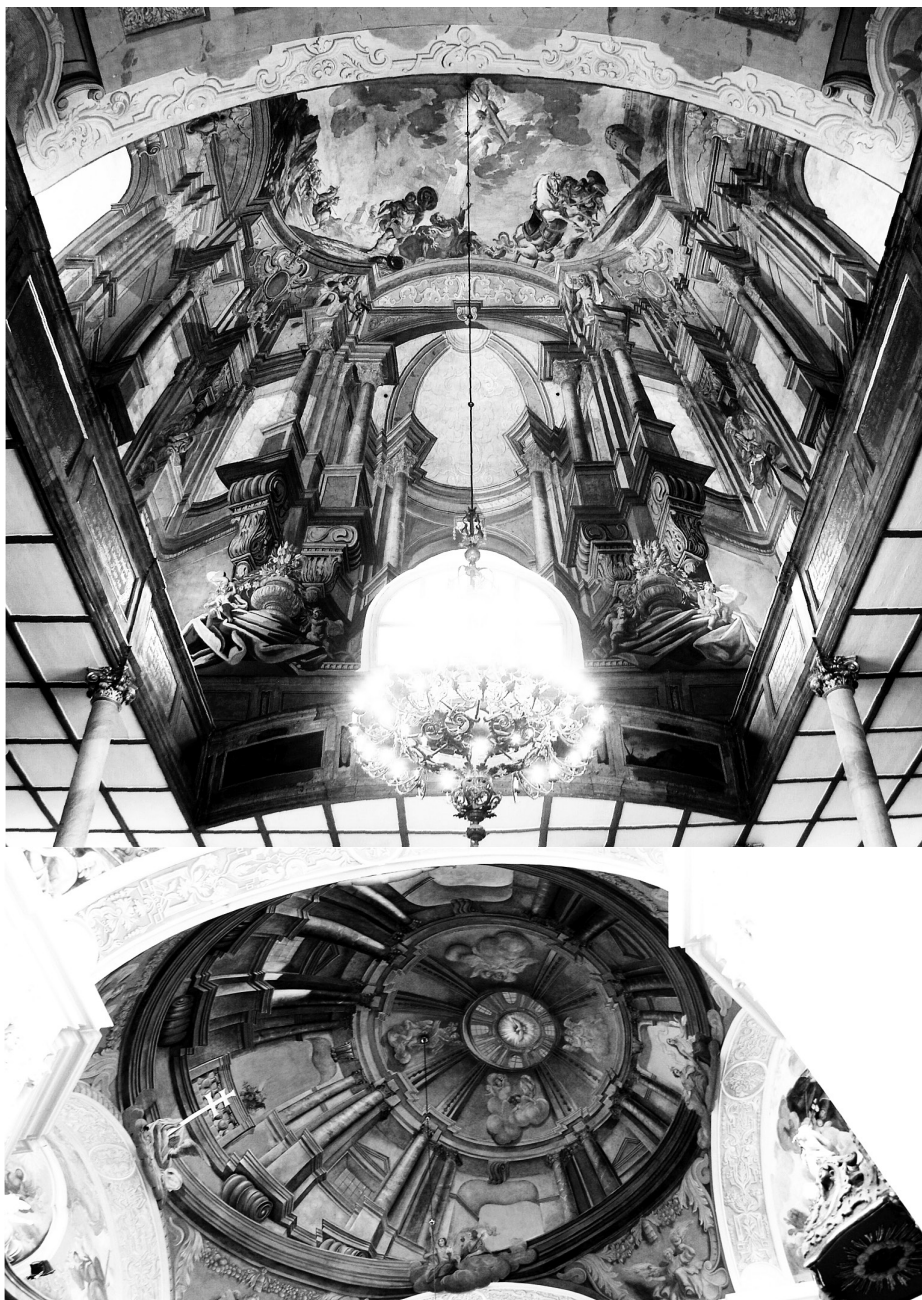
Among paintings in Poland we can find examples of copies of concepts from perspective tractates, mostly from the tractate by A. Pozzo<sup>15</sup> with mistakes that were made by the publishers copying the originals. Good examples are paintings depicting illusionistic vault: M. J. Meyer (?–1737) in the Jesuit church in Święta Lipka and A. Swach (1668–1742) in the Franciscans' church in Poznan. In the latter, the incompetence of the artist is really easy to see. He failed to properly connect illusionistic architecture with the vault's surface. An example of an artist using tectonic solutions is W. Żebrowski (?–1765) “cutting” a big hole in the vault and drawing in it the pattern from Pozzo's tractate in the church of Immaculate Conception of the Blessed Virgin Mary in Łęczyca. Surprising effects of using a Pozzo's pattern in an object where the vault's proportions were different from those proposed in the tractate were achieved by an unknown artist<sup>16</sup> in Łosiów. A solution that is interesting because of its originality is the painting in Kobylka, where the artist G. Łodziński painted a “quadratura”, as if he had never had contact with any pattern or painting of this kind. We also have examples of creative perspective developments of Pozzo's patterns based on the knowledge of perspective, e.g. in baroque churches in Brzeg, Cracow, where patterns were adjusted to the different proportions of vaults.

Perspective as an example of a central sketch has always been a field of architects' interest. It is a method described in a number of manuals for them, but today most of all in standard drawing. It seems, that “architectural” research based on the knowledge of perspective possessed by architects and geometers can effectively supplement works of art historians.

<sup>15</sup> In Silesia Works of P. Decker (1677–1706) [3] were also used, e.g. F. Hoffmann (1699 or 1701–1766) in a church in Oleśnica (painting does not exist anymore) or J.W. Neunhertz (1689–1749) in Krzeszów (illusionistic vault, connected in literature with A. Pozzo's pattern).

<sup>16</sup> T. Chrzanowski [2] says it is a painting by J. Kuben (1697–1770 or 1771).





III. 1. Illusionistic architectural paintings in churches: garrison church of Exaltation of the Holy Cross, Jelenia Gora (picture at the top) and the monastery church of Mother of God, Lubiń (picture below) (photo by author, 2013)

## References

- [1] Barbaro D., *La pratica della prospettiva di monsignor Daniel Barbaro ...: opera molto vile a pittori, a scultori & ad architetti: con due tauole, vna de' capitoli principali, l'altra delle cose piu notabili contenute nella presente opera*, Venetia: C & R. Borgominieri..., 1569, p. 153.
- [2] Chrzanowski T., Kordecki M., *Sztuka śląska opolskiego: od średniowiecza do końca XIX wieku*, Wydawnictwo Literackie, Kraków 1974.
- [3] Decker P., *Fürstlicher Baumeister, Oder Architectura Civilis: Wie Grosser Fürsten und Herren Palläste, mit ihren Höfen, Lusthäusern, Gärten, Grotten, Orangerien, und anderen darzu gehörigen Gebäuden füglich anzulegen, und nach heutiger Art auszuzieren; Zusamt den Grund-Rissen und Durchschnitten, auch vornehmsten (Band I)*, Augsburg, 1711.
- [4] Folga-Januszewska D., *Wprowadzenie do zagadnień przedpozzowskiej perspektywy iluzjonistycznych malowideł ściennych*, Biuletyn Historii Sztuki, nr 2, 1981, pp. 203-212.
- [5] Folga-Januszewska D., *Perspektywiczny traktat J.J. Schüblera w Muzeum Narodowym w Warszawie. Przyczynek do historii teorii perspektywy XVI–XVIII*, Rocznik Muzeum Narodowego w Warszawie, XXXIII–XXXIV, Warszawa 1989–1990.
- [6] Karpowicz M., *Barok w Polsce*, Arkady, Warszawa 1988.
- [7] Karpowicz M., *Jerzy Eleuter Siemiginowski, malarz polskiego baroku*, Zakład Narodowy im. Ossolińskich, Wrocław 1974.
- [8] Kowalczyk J., *Andrea Pozzo a późny barok w Polsce, Cz. I. Traktat i ołtarze*, Biuletyn Historii Sztuki, nr 2, 1975, pp. 162-178.
- [9] Kowalczyk J., *Andrea Pozzo a późny barok w Polsce, Cz. II. Freski sklepienne*, Biuletyn Historii Sztuki, nr 4, 1975, pp. 335-350.
- [10] Kraszewski J.I., *Materiały do historii sztuki w Polsce: Słownik malarzów polskich, tudzież obcych w Polsce osiadłych lub czasowo w niej przebywających, przez Edwarda Rastawieckiego, z dołączeniem szesnastu rycin, wizerunków celniejszych artystów*, T. I, Wilno 1850.
- [11] Pozzo A., *Perspectiva pictorum atque architectorum/Der Mahler und Baumeister Persepctiv (Band I i 2)*, Augsburg, 1709.
- [12] Rastawiecki E., *Słownik malarzów polskich, tudzież obcych w Polsce osiadłych lub czasowo w niej przebywających, przez Edwarda Rastawieckiego, z dołączeniem szesnastu rycin, wizerunków celniejszych artystów*, T. I, Nakład autora, Drukarnia S. Orgelbranda Księgarza i Typografa przy ulicy Miodowej nr 195, Warszawa 1850.
- [13] Rewski Z., *Majstersztyki krakowskiego cechu murarzy i kamieniarzy XVI–XIX wieku*, [in:] K. Piwocki (red.), *Studia z historii polskiej*, t. 5, Państwowy Instytut Sztuki, Zakład Ossolińskich, Wrocław 1954.
- [14] Sjöström I., *Quadratura. Studies in Italian Ceiling Painting*, Acta Universitatis Stockholmiensis, Studies in the History of art, XXX, 1978.
- [15] Schübler J.J., *Perspectiva pes picturae*, t. 1 i 2, Norymberga 1719–1720.
- [16] Stattler W.K., *O akademii malarstwa i rzeźby w Rzymie przez Woyciecha Kornelego Stattlera*, Człon. Tow. Naukow. Krakow, [in:] *Rozmaitości naukowe*, Drukarnia Szkoły Głównej, 1829, 74-85.
- [17] Stoga A., *Quadratura w malarstwie polskim XVIII w. Malowidła na sklepieniach*, Biuletyn Historii Sztuki, nr 2, 1981, pp. 365-375.
- [18] Stoga A., *Malarstwo ścienne na Warmii w XVIII w. i jego oddziaływanie*, [in:] *Sztuka I poł. XVIII wieku*, Warszawa, 1981, pp. 249-264.
- [19] Witwińska M., *Topografia i kierunki malarstwa ściennego w Polsce około połowy XVIII wieku, polichromie kościelne*, Biuletyn Historii Sztuki, nr 2, 1981, pp. 180-202.
- [20] Zuziak I., *Architektura muzą malarstwa. Motywy formy architektonicznej w malarstwie europejskim nowej ery*, Wydawnictwo Politechniki Krakowskiej, Kraków 2009.