

And on the right, you see an inlaid chest of drawers... A formal and content analysis of the syllabi of the National Heritage Institute
Jakub JAREŠ; Veronika VEČEŘOVÁ

Summary: The study reflects the state of guide texts (syllabi) currently used in the heritage properties of the National Heritage Institute. This is one of the results of a project of revitalization of tour activities being jointly implemented by the National Heritage Institute and the Faculty of Education of Charles University. The research team compiled a corpus of 87 guide texts from 48 buildings managed by the National Heritage Institute while taking into account their various sizes, attendance levels, and typological diversity. The research included a thorough analysis of all selected texts, divided into formal and content parts. Evaluation of the texts was inspired by the review process of scientific periodicals. Each text was assessed by at least two evaluators independently of each other. In the event of their disagreement, an evaluation was done by a third reviewer. The evaluators recorded their answers in a single structured form. The resulting data were used to create a comprehensive unit that has a revealing value about the entire corpus of sources.

The formal analysis showed that only a third of the texts stated the date of their creation, and only in 5 cases did the text contain both the exact date and the time of the update. The author of the text is also mentioned only in 32 cases, while in the remaining 55 this information is not traceable. The range of examined syllabi was very diverse, ranging from 2.3 to 327 standard pages, with an arithmetic average of 30.4 standard pages. The vast majority of texts adhered to a "room-by-room" model, with a thematic division of the tour appearing only in rare cases. Most of the syllabi (61 of 87 examined), were two-stage, 6 syllabi showed an even more elaborate three-stage structure, while 20 syllabi were single-stage.

The content analysis showed that 57 syllabi of 87 did not contain a central topic, but rather offered a number of sub-topics. The evaluators pointed out that certain syllabi were characterized by "factual fragmentation". It is interesting to correlate the presence of a main topic with the note that the evaluator enjoyed reading the syllabus (22 out of 30), which confirms our assumption about the attractiveness of clearly thematically defined tours. The results of the analysis also showed that few syllables had clearly defined actors; in the vast majority of cases, characters appeared in disconnected episodic roles. It was also found that the gradation of the texts was very low; only in 7

of 87 cases did evaluators state that the text graduates. The evaluations also showed a low interpretive potential of the texts, with descriptiveness and encyclopedism prevailing in most (72) cases. Only in 6 cases did the texts try to actively engage visitors. In response to the question of whether the syllabus described the uniqueness of the object, the evaluators agreed that 37 syllabi were successful and 50 were not. On the same note, there was a high correlation between the ability of the text to capture the uniqueness of the building and the ability to engage the reader (32 of 37).

The authors of the study conclude that many texts lack a more thorough consideration of why the information provided should be heard and, above all, how it should be relevant to visitors. The syllabi usually focus on a description of the architectural character of the heritage property and the mobiliary and other items located inside the property, as well as an effort to convey a comprehensive and encyclopedic overview of knowledge about the property rather than addressing the visitors as recipients of the message. At the same time, the authors believe that such a lack of conceptual consideration is more common at higher levels than in syllabi written by a specific author. It is rather a manifestation of the unclear educational goals of the public presentation of heritage properties as such.

At the same time, the analysis shows that there are cases of good practice. These are mostly newly written syllabi that have a clear and comprehensible structure; they are able to formulate and develop a strong central theme and transform it into an engaging message.

Illustrations: Fig. 1. Some of the syllabi analyzed in the research; Fig. 2. Participants in the workshop "Syllabi – How to change the unchanging", which took place in October 2019 at the castle in Libochovice; Fig. 3. In February 2020, the castellans and permanent guides met over the syllabi for the second time, this time in Kroměříž. Pictured is a discussion of the principles of syllabus creation; Fig. 4. Castellan tour in Vimperk during the Summer School of Heritage Education; Fig. 5. Artistic motif for a series of workshops organized as part of the NAKI project.

Carpentry and joinery work on a town tenement building in the second half of the 19th and the beginning of the 20th century – their preservation and presentation in a museum environment

Lukáš HEJNÝ

Summary: The second half of the 19th and the beginning of the 20th century brought with it an

unprecedented amount of innovation and change across all areas of society and the way it operated. In the field of construction and building trades, these involved changes in the way knowledge was transferred, where vocational education and the use of a number of new materials were becoming increasingly important, or, due to innovations in processing technologies, more widespread use of already known materials. The onset and possibilities of using these materials in construction practice is associated with the development of railways, which resulted in the termination of almost all construction production that was exclusively tied to available local material resources. However, changes in designs of city tenement houses were only very gradual, however, brought about primarily by their economic advantage.

Despite the change in the carpenter's position within the organization of construction, high demands were still placed on carpentry work, and the carpentry craft maintained its position in the hierarchy among others. In larger cities, joinery that focused on construction or furniture production began to diversify more due to the increasing industrialization of production and the use of machinery.

The basic raw material for carpentry work is lumber – a sawmill assortment usually produced in sawmills on steam-powered multi-blade machine saws. The better availability of machine saw production, the possibility of transport by rail over longer distances, growing demand and the associated demands on productivity led to an increase in the number of machine-cut beams used for carpentry work. Compared to previous periods, carpentry machining remained virtually unchanged and took place exclusively by hand. The first woodworking machines for cutting and planing material gradually appeared in carpentry shops. Power was provided by steam engines and transmitted to the individual machines, then gradually replaced by the electric motor from the beginning of the 20th century. With the advent of machining, the spatial scheme of the carpenter's workshop changed, and the requirements grew for its hitherto relatively modest floor plan.

In town tenement houses, the carpenter created auxiliary/temporary structures: sheeting pits during foundation work, scaffolding, formwork under vaults, and various supporting assembly structures, as well as permanent ones: trusses and ceilings, wooden partitions intended for plastering, door frames, and rough floors. The joiner provided the construction of windows and doors, partition walls, wall and ceiling linings, and more sophisticated floor construction.

The basic and most important source of knowledge of carpentry and joinery is the houses themselves, but the collections of museum

institutions also have an irreplaceable function. With the decrease in the occurrence of structures and elements in the buildings themselves and their transfer to museum collections, the importance of these collections proportionally increases. The National Technical Museum, through the Center for Architectural Heritage of the National Technical Museum in Plasy, carries out systematic collection activities in the field of historical building materials. It presents part of it in its exhibition of historical architecture.

Given the limited capacity of museum preservation and presentation, exemplary representatives of the individual types of carpentry and joinery work found in town tenement houses of the second half of the 19th and early 20th century must be selected with an awareness of their wide variability within the architectural fund; these must then be generally characterized. Such examples of individual constructions include gable scaffolding, ring formwork for niches and vaults, purlin trusses, beamed ceilings with reed beams, frame construction doors with beam frames, castle windows or, in addition to deck floors, also parquet and slatted floors.

Illustrations: Fig. 1. A clearly visible form of carpentry and joinery work on a city tenement house. Work of a student of the Czech Polytechnic Institute from 1898; Fig. 2. A combination of carpentry and joinery. A carpenter's beam frame completed with a strip of triangular profile for better connection to the surrounding masonry in combination with a joinery lining and door wings of a frame construction with a groove for inserting the infill. School joinery work from the turn of the 19th and 20th centuries; Fig. 3. Haptic models of traditional joinery joints for testing their functional principles; Fig. 4. Model of a masonry sawhorse. School carpentry work from the turn of the 19th and 20th centuries; Fig. 5. Haptic educational model documenting the process of production of a traditional ledged joint; Fig. 6. Composition of pole scaffolding; Fig. 7. Town house from the end of the 19th century with scaffolding variants: hanging, "poleless", and ladder. Historical period model; Fig. 8. Formwork for a trough vault. Historical model from the turn of the 19th and 20th centuries; Fig. 9. A haptic model supplemented by pictorial instructions is irreplaceable for understanding the principle of static truss operation; Fig. 10. A typical purlin truss of a townhouse with collets, a pair of sloping saddles and rafters terminated on the ledge of the attic wall at various heights. School carpentry work from the turn of the 19th and 20th centuries; Fig. 11. Due to its dimensions and the nature of the structure, a wooden beam ceiling with reed beams cannot be transferred to the museum environment and subsequently exhibited, even partially. It is therefore appropriate to approach the presentation of its composition and its principle of operation through a didactic model, ideally on an actual scale; Fig. 12. Beam ceiling of a parsimon system with plaster ceiling, brick decking, and flooring design variants. Historical model from the beginning of the 20th century; Fig. 13. Typical front door of a tenement house in Prague's Vinohrady from the end of the 19th century with all characteristic elements; Fig. 14. A wing

of an inter-room double-wing door from a Prague tenement house in Malá Strana from the end of the 19th century and a drawing of the construction of its second wing for educational purposes; Fig. 15. Double (cabinet) window with the usual division of the wings into the shape of the letter "T". The upper ventilation wing is tiltable by means of a mechanism controlling the outer and inner wing at the same time. The lower wings are closed by means of a wheelbase, which in this case is not controlled by the standard rotating toggle but by a sliding rod. The box at the top of the window is intended for placing blinds. School joinery work from the turn of the 19th and 20th centuries; Fig. 16. Two views of a double (cabinet) window, from the interior and exterior side. The upper wing of the inner frame is openable and rectangular in shape, while the outer is drop-out and semicircular. Other typical features of this type of window from the period around 1900 include the method of profiling the wing frames, corner angles reinforcing their joints, sheet metal weep holes, cylindrical hinge shape, elegant type fittings including bumpers and differently shaped toggles at the outer and inner window, window blind placed in the upper window part, and more; Fig. 17. Internal shutters of frame construction with folding panels into the space between the outer and inner frame of a double window. School joinery work from the turn of the 19th and 20th centuries; Fig. 18. Models of low panels of frame construction with filling. School joinery work from the turn of the 19th and 20th centuries; Fig. 19. "Nine stone" variant of the typical "four stones" pattern of single-layer oak parquet from the end of the 19th century; Fig. 20. Variants of the method of laying screed floors. School joinery from the turn of the 19th and 20th centuries.

The Prague metro: Architecture and heritage potential of the oldest section – route I. C

Matyáš KRACÍK

Summary: The study deals with the architecture of the oldest section of the Prague metro, line I. C, which was put into operation in 1974. The introduction presents the literature and the current level of knowledge on this topic. The first part of the text describes the complicated and long history preceding the construction of the metro. The construction began in 1966 as an underground tram, but it became the target of criticism by some transport experts as well as those who supported preserving the values of the Old Town of Prague, to which its realization would cause irreversible damage. Critical members of the professional public and advisers from the Soviet Union recommended building a metro, and in 1967 the government decided to change the commenced construction to a classic metro. The urban design and architecture of the metro were conceived by the team of the chief architect of the entire project, Jaroslav Otruba, who cooperated with a number of institutions, especially with

the Department of the Chief Architect. The project work was provided by the newly established company Metroprojekt. This being the first metro in Czechoslovakia, the government willingly accepted an offer of Soviet assistance in its construction. This offer would certainly have been difficult to reject in the atmosphere of growing normalization. The Soviet influence on the architectural concept of the stations is characterized by the use of stone, atypical for Czech architecture and imported from various parts of the former Eastern bloc. This concept, with its added touch of Brezhnev monumentalism, did not appear in later sections. The value of the architectural design of section I. C lies in its characteristic unifying concept as a whole and simultaneously in the original design of the individual stations. In particular, the vestibules of the stations are designed with regard to the urban relations of their surroundings. The most significant realizations of the route are the Vyšehrad surface station, which is part of the Nuselský Bridge, and the Muzeum transfer station with its extensive vestibule in the upper part of Wenceslas Square.

The article aims to evaluate the architecture of the oldest section of the Prague metro as part of post-war architecture. This is related to a reflection on the possible heritage protection of certain stations. The current situation is such that stations located in the historic city center enjoy protection under the title of Prague Heritage Reserve. However, it is important that officials see the value in them. A systemic approach to protection would consider it appropriate to declare the two best stations (Muzeum and Vyšehrad) as cultural heritage properties in themselves. The value of the route also lies in the whole, however, and therefore it would be appropriate for any modifications to other stations to follow a conceptual approach (methodology) that respects their original architectural design. Many stations, especially their vestibules, underwent degrading interventions primarily related to the installation of commercial premises and the liquidation of works of art.

The conclusion states the thesis that the general public perceives the metro primarily as a means of transport, which frees it from the widespread stigma of the often-condemned architecture of the previous regime. Due to the high functionality and durability of its architectural solution, the I. C metro line represents one of the few preserved public interiors of the 1970s.

Illustrations: Fig. 1. Layout of the first subsurface tram construction. Water structures, internal press, 1967; Fig. 2. Layout of subsurface tram routes. Water structures, internal press, 1967; Fig. 3. Jiří Rathouský, first official orientation plan of the metro, 1973; Fig. 4. Moscow, Begovaya metro station; Fig. 5. Pražského povstání metro station, original

lighting design; Fig. 6. Hlavní nádraží metro station, original condition; Fig. 7. Hlavní nádraží metro station; Fig. 8. Jiří Rathouský, metro orientation system; Fig. 9. Florenc (Sokolovská) metro station; Fig. 10. Florenc (Sokolovská) metro station, stone tiles in the vestibule; Fig. 11. Hlavní nádraží metro station, perspective drawing from project documentation; Fig. 12. Muzeum metro station, floor plan and section; Fig. 13. Muzeum metro station, vestibule; Fig. 14. I. P. Pavlova metro station, original lights in the entrance in the ground floor of a house; Fig. 15. Vyšehrad metro station; Fig. 16. Vyšehrad (Gottwaldova) metro station, floor plan and section; Fig. 17. Pankrác (Mládežnická) metro station; Fig. 18. Kačerov metro station, vestibule; Fig. 19. Budějovická metro station, vestibule, original condition; Fig. 20. František Čubr, air supply duct station in Vrchlického sady.

Will guided tours survive? Survey results among visitors to heritage properties

Kateřina SLÁDKOVÁ

Summary: Visiting heritage sites is one of the most popular cultural activities in the Czech Republic to take place outside the household. In the age of modern technology and countless opportunities to spend free time, it is worth asking whether the offer of these sites, based primarily on a guide service, is meeting the expectations of today's visitors. Why do people visit heritage sites, and according to what criteria do they choose them? Do they prefer classic group or individual tours? And what demands do they place on guides? We looked for answers to these questions through a questionnaire survey that took place during the 2019 visitor season on 22 monuments managed by the National Heritage Institute. Castles, chateaux, monasteries and a garden were represented among the buildings. A total of 3,399 Czech-speaking respondents, all over the age of 15, participated in the survey. The aim of the research was to gain knowledge about current visitors to heritage sites and about their current preferences regarding the types and forms of tours.

The basic characteristics of visitors to heritage sites (age, gender, education, social context of the visit, frequency of visits): All age categories from the age of 15 were represented in the survey, and no particular age group significantly prevailed. The data confirmed the seasonal specifics involved in visiting heritage sites; seniors take tours more often outside the main tourist season while families with children visit mainly during the summer holidays. Women predominate (60%) among the respondents. Up to 80% of respondents have a high school or higher education. The share of university-educated visitors is 34%, which is a significantly larger share than in the general population. Visiting heritage sites

can be understood as a kind of social activity, since people usually do not come alone (only 1%), but accompanied by other people, most often family members, friends, or with a tour. 45% of the respondents visit heritage sites at least 3 times a year.

Motivation and criteria for choosing a heritage site: Visitors to heritage sites are not only led by a desire for knowledge, but more and more often they also expect the visit to provide them with an emotional experience or a rest in a pleasant environment. The answers vary across generations. In the younger and middle generation, the need for an emotional experience from a visit slightly prevails over cognitive motivation, or it is in combination with it. On the contrary, the desire to learn something about the heritage site dominates among the older generation of visitors over 55 years of age. Only a small part of visitors (6%) come to the sites for external socio-cultural reasons, such as merely because of family (as accompaniment) or simply out of habit.

Approximately 60% of visitors choose heritage sites in a targeted manner according to certain criteria, such as the importance of the site, interior, exterior, and the offer of programs. Just over 40% of visitors choose heritage sites rather randomly, such as a visit resulting from their proximity to the heritage site (e.g. on vacation or passing by).

For most people, the most important source of information when planning a visit to a heritage site is the recommendation of acquaintances or friends (over 50%). The second most widespread source is the individual heritage site's website or Facebook, followed by information from the media.

Tour preferences: The survey results clearly confirm that _ visitors prefer a guided group tour to an individual tour. Demand for mobile applications and technologies is minimal in the environment of heritage sites, including the youngest group of visitors aged 15–24. Most often, people choose a classic guided tour. They prefer medium-long tours (45–60 min.), but even shorter tours (30 min.) are welcomed by a third of the visitors.

Guide competencies: Among the guides, visitors especially appreciate the attractiveness of the narrative combined with good rhetorical skills. Tours should be led by a well-trained guide who is able to captivate with engaging content (professional, but not encyclopedic) and a good level of speech. If it is evident that the guide finds their job fulfilling and entertaining, they are already met with approval. Cultivated humor is also an important element. Visitors clearly prefer the personal approach of a personal guide to technological innovations and applications.

A good guide significantly contributes to the overall impression of a visit to a heritage site. It is therefore extremely important to constantly foster the guide's

professional growth and to also provide them with advice in the area of communication or working with groups in addition to professional provisions. A guide appreciated by visitors is able to properly balance their "deep knowledge, true interest, and ability to present".

Illustrations: Fig. 1. Map of the Czech Republic showing the distribution and types of heritage buildings where the questionnaire survey of visitors took place; Tab. 1. The table shows the planned and actual numbers of respondents at individual heritage sites where the questionnaire survey took place; Tab. 2. Overview of individual types of tours that were on offer at heritage sites included in the research in 2019; Fig. 2. The wording of the questionnaire which was submitted for visitors to complete at selected NPÚ sites; Fig. 3. Graph showing the representation of respondents to the questionnaire survey by level of attained education; Fig. 4. Social context of visits: the graph shows with whom the respondents most often visit the heritage sites. However, the actual proportion of visitors who came with a group tour may be higher. Their involvement in the survey was limited to prevent a substantial part of the questionnaires at some facilities being filled in by participants from a single group; Fig. 5. Motivation: the graph shows the most common reasons that respondents stated for visiting heritage sites; Fig. 6. Criteria for selecting a heritage site: the graph shows what criteria the individual age groups follow when selecting the site they will visit; Fig. 7. Frequency of visiting heritage sites: the graph shows how many times the respondents visited the given heritage site at which the questionnaire survey was carried out; Fig. 8. Information sources: the graph shows what information sources tend to be decisive for respondents when choosing a heritage site; Fig. 9. Length of tour: the graph shows which tours the respondents prefer and seek out the most based on their duration; Fig. 10. Preference of tours: the graph shows which types of tours (group or individual) offered at heritage sites are most suitable to the respondents; Fig. 11. Preference of type of guided tours: the chart shows the preferences of respondents in terms of requirements for guided tours; Fig. 12. Competences of guides: the graph shows which guide qualities at heritage sites are most important to the respondents.

Registered cultural heritage properties and current case law

Martin ZÍDEK; Michal TUPÝ

Summary: In recent times, administrative courts have adopted several important judgments that deal with the interpretation of §42 paragraph 1 of the Act on State Heritage Care. This provision addresses today's protection of cultural heritage properties which were incorporated into the state lists according to the previous law on cultural heritage properties from the year 1958. The provisions of §42 paragraph 1 of the Act on State Heritage Care is a transitional provision which addresses not only

the actual continuity of the provision of protection to cultural heritage properties according to the new regulation, but it also must deal with the fact that the law on state heritage property care is built on different principles of protection of cultural heritage than the circumstances behind the revision from 1958. The article also describes the revision valid under the effectiveness of the Act on Cultural Heritage Properties and the then-valid definition of a cultural heritage property, including the rules of registration of cultural properties. For a long time, the interpretation of the provisions of §42 paragraph 1 of the Act on State Heritage Care remained on the sidelines of both professional literature and case law of the administrative courts. However, the problems of interpretation of this provision were already known at the beginning of the new millennium. Relatively surprisingly, the issue of interpretation of the principles contained in §42 paragraph 1 of the Act on State Heritage Care has become the subject of litigation only in recent years. These judicial disputes are connected with the fact that the lay and professional public has only recently begun to use the institute's decisions on determining the legal relationship which was enshrined in the administrative procedure as of 1 January 2007. The aforementioned provision of the administrative procedure thus became a legal instrument that helped owners of cultural heritage properties, protected under the provisions of § 42 paragraph 1 of the Act on State Heritage Care, try to relativize the legal basis for the protection of these cultural heritage properties. Two judgments of the Supreme Administrative Court in particular have become decisive for the interpretation of the provisions of §42 paragraph 1 of the Act on State Heritage Care, specifically judgments ref. no. 9 As 330/2016-192 from 7 February 2018 and ref. no. 5 As 157/2019-27 from 13 November 2020. The first judgment resolves the interpretation of the aforementioned provision concerning the circuit of cultural heritage properties which were entered into the state lists kept according to the law on cultural heritage properties until 31 December 1987. The second judgment resolves the circuit of cultural heritage properties registered in the same list after 1 January 1988, for which the designation of late registered heritage properties was applied.

Restoration research of the painting *Allegory of Painting* by Jan Kupecký (1666–1740): Possibilities of interpretation

Zuzana ŽILKOVÁ; Marcela VONDRÁČKOVÁ

Summary: The material substance of the artwork represents a valuable source of information which in turn can provide important facts about the process of the artwork creation itself as well as the artist's particular choices and procedures. Information acquired by a detailed technological restoration examination, and an analysis thereof, fundamentally enriches the existing knowledge of the technological art history, commonly obtained mainly from literary sources. The level of knowledge of the life work of Jan Kupecký, an important Baroque painter originally from the Kingdom of Hungary and who worked in Rome, Vienna, and Nuremberg, is currently not very complex, especially from this point of view. A proposed study could thus also contribute to art historical research on the topic.

Information concerning the stratigraphy of painting layers and their material composition is derived based on a comprehensive non-destructive restoration examination using optical-physical methods and a subsequent analysis of the samples. By means of such an examination, the resulting study aims to find answers to diverse questions concerning precision of the dating, the motives of the author's changes, pentimenti, and other painting technique particularities.

In this study, the *Allegory of Painting* is being related to artworks from the same period while sticking to the dates given in recent literature. The defining dates are 1707, when Kupecký came to Vienna from Italy, and 1716 as the year when the painting was allegedly ordered, perhaps from Jan Josef, Count of Vrtba. The examination was focused on artworks from the property of the National Gallery Prague with undoubted authorship by Jan Kupecký.

Until recently, the artwork was connected with the *Allegory of Sculpture* by Petr Brandl – according to this theory, both paintings would have been created during the summer of 1716, when Kupecký was in Prague. Jan Josef, Count of Vrtba (1669–1734), the highest burgrave of the Kingdom of Bohemia, was identified as the probable commissioner of the paintings. Recently, however, this hypothesis was questioned by Lubomír Slaviček, when he identified the work with a painting from the inventory of the Liechtenstein collection at the Fryšava chateau (Břežany near Znojmo) from 1801.

Although a certain affinity in a very similar compositional approach to the assignment is undeniable, the claim that the paintings were created on the same order cannot be confirmed. On the contrary, the assumption that Jan Kupecký

could have created the painting shortly after arriving to Vienna on the commission of Jan Adam Ondřej, Prince of Liechtenstein (1657–1712) seems more likely from the art historian's point of view.

The canvas, as the only used support of Kupecký's paintings, is of a plain weave with a density of 10–11 × 8 threads per cm². By observing the particularities about the canvas support and ground, we can conclude that the canvas was provided with a ground layer probably already stretched. The ground is two-layered with a lower brown-red layer and an upper one made of ochres and lead white.

The *Allegory of Painting* was painted gradually in individual steps by the layered technique, which is based on a mutual translucency of colored layers and glazes, giving the painting depth and smoothness of transition. According to the analyzed samples, Kupecký also used the newly invented Prussian blue as a blue pigment, in addition to azurite and ultramarine. This pigment, according to the latest findings, was first synthesized in Berlin in 1706 by Johann Jacob Diesbach, and it reached Paris around 1710 by the latest. The historical mention of the order of the Prussian blue pigment in Austria is first documented for the monastery in Melk in 1716.

Interesting author's changes were revealed on the painting – observed especially in the comparison of photography in visible light and X-rays. The most remarkable change is evident in the figure of the allegory, which in the original layout was turned to the viewer with her back exposed with a pleated drapery falling from her left shoulder diagonally towards the lower right corner of the image.

According to the comparison with the available selected artworks from the property of the National Gallery Prague, the painting *Allegory of Painting* is a typical representative of the given period of Kupecký's oeuvre and painting style. The similarity to works dated to year 1711 is undeniable both in the painting support used, the ground layer, and the painting technique.

In the question of the dating of the *Allegory of Painting*, we take into account the use of Prussian blue in the lower layers, the more widespread use of which in this region dates back to 1710, as well as individual aspects of painting technique similar to artworks created around this year. The presented study offers arguments for the precision of the dating of the painting *Allegory of Painting* by the end of the first decade of the 18th century, at the earliest. However, later dating of the artwork is also not excluded on the basis of the presented comparison. The comparison within this study was limited by pre-selected time and location parameters of the examined range of artworks, so it will therefore be

essential to supplement the article with further knowledge and comparisons across Kupecký's undoubtedly very diverse work.

Illustrations: Fig. 1. Allegory of painting: a) X-ray, b) ultraviolet photography (UVR), c) ultraviolet photography in false colors (FCUV), d) ultraviolet fluorescence (UVL), e) fluorescence in the visible spectrum induced by blue visible radiation (VIVL), f) photography in visible radiation (VIS), g) infrared image in false colors (FCIR), h) fluorescence in the infrared spectrum induced by visible light (VIL), i) infrared reflectography (IRR); Tab. 1. The works of Jan Kupecký owned by the National Gallery in Prague from the period between 1706–1716, when he worked in Vienna, used for comparison with the Allegory of Painting; Fig. 2. Petr Brandl, Allegory of Sculpture, oil on canvas, 90 × 80 cm, after 1710, National Gallery in Prague, inv. no. O 2738; Fig. 3. Bend of the canvas of the painting Allegory of Painting at the left edge: a) X-ray image with a graphic drawing of damage to the canvas caused by switching to a narrower tension frame (yellow arrows – holes in the canvas from nails, vertical line – canvas fold), b) photographs in side vigorous lighting, c) photographs in the visible spectrum; Fig. 4. Stratigraphic sketch of a microsample taken from the painting site of a green laurel wreath; Fig. 5. Arent de Gelder, Self-portrait as Zeuxis, oil on canvas, 141.5 × 167.3 cm, 1685, Städel Museum, Frankfurt, inv. no. 1015; Tab. 2. Summary of the color of the substrate and the probable methods of its application in selected works; Fig. 6. Details of the lower strokes of the light underpainting which do not correspond to the more detailed upper painting: a) Allegory of Painting, b) Own portrait of the artist painting the portrait; Fig. 7. Detail of a painting of laurel leaves with legible painting construction; Fig. 8. Detail of the painting with visible traces of used brushes; Fig. 9. Author's changes in the painting Allegory of Painting: a) X-ray image, b) overlap of X-ray image and photograph in visible light with reduced saturation for better clarity of pentimenti, c) image of infrared reflectography; Fig. 10. Details of a vein painting on a temple visible in an image of infrared reflectography manifested in daylight by a bluish cold tone under the glaze layer of the incarnate (visible spectrum, IRR): a) Allegory of Painting, b) Portrait of painter Karel Bruni in miniature, c) Self portrait, d) Self portrait of the artist painting a portrait;

Comparing the technique of portraiture painting on selected works by Josef Mánes

Hana BILAVČÍKOVÁ; Václava ANTUŠKOVÁ

Summary: The presented article deals with a comparison of painting techniques in the works of portraiture by Josef Mánes. As part of the interdisciplinary research project Painter Josef Mánes (1820–1871) – between Romanticism and Realism, Applied and “Beautiful” Art, National and International,

Academicism and Modernity, GAČR 19-10562S, extensive restoration and scientific research of selected works was carried out. In his work, Mánes initially used classical approaches, which he adopted in his family from his father Antonín and during his studies at the Academy of Fine Arts. Later works also reflect the stimuli he received during his study travels, and his painting approach is more defined. Mánes used various base materials in portraits and elsewhere, which he also chose with regard to the purpose of the work. He often worked with factory-printed canvases with light backgrounds. For later works, he also used tinted red base materials. The basic character of his work is very brilliant drawing; this was also recorded on the underdrawings of the examined paintings. Painter changes in the composition were often observed in smaller studies before the final painting. His peak work period is characterized by a more relaxed drawing style and more frequent changes of composition. Some paintings were completed at the stage when certain parts of the painting are only indicated in the underdrawing. Within the studied paintings, a development in the construction of the color layer could be observed. In his early works, he frequently used translucency of the background or underpainting, which was created very expressively in some paintings but was not used much in the final painting. A typical feature of Mánes' work is the building of volume using laid covering tones. Later, he began to underlay his paintings with a gray underpainting or a full-area underlay with a top coat. For painting, he used paints bonded with drying oil. In one picture, walnut oil was specifically confirmed, the use of which will be the subject of further investigation, as it was not commonly used at that time. The wide range of pigments identified on works from different periods shows that Mánes did not shy away from new pigments which would have been available on the market for a relatively short time. The subject of follow-up research will be works from other genres; the obtained results will be compared with existing knowledge so that Mánes' painting technique can be described in its entirety.

Illustrations: Fig. 1a–c. Portrait of Anna Náprstková (1a), after 1850, oil on canvas, 87.5 × 65.5 cm (oval), NGP; O 12693, diffused visible light; Portrait of the Children of the Lawyer Haušild (1b), circa 1851, oil on canvas, 97.5 × 114 cm, NGP; O 9478, diffused visible light; Říp Region (1c), 1863, oil on canvas, 41 × 64.5 cm, NGP; O 2924, scattered visible light. The images show a reddish background; Fig. 2a, b. Stratigraphy of a sample from the lower edge of the painting Josefina (1855, oil on canvas, 74 × 59 cm, NGP; O 16236) in visible (2a) and UV light (2b). On the canvas (1) there is a yellow-orange (2) and a white (3) layer of substrate. On it lie a brown layer of paint

(4), a strongly bonded layer (5) and a layer of varnish (6); Fig. 3a, b. Portrait of Archduke Forester Antonín Hoppel (3a), circa 1846, oil on canvas, 44 × 34.5 cm, NGP; O 5054; scattered daylight and IR reflectography (3b), in the IR image we can observe slight shifts in the shape of the face; Fig. 4a, b. Portrait of Archduke Forester Antonín Hoppel – detail of arm (4a), circa 1846, oil on canvas, 44 × 34.5 cm, NGP; O 5054; strong side light (4b), in the detail of the painting we can observe significant brush strokes coming from the underpainting; Fig. 5a, b. Portrait of Eufemie Hoppelová, née Sameschová (5a), circa 1846, oil on canvas, 43.5 × 35 cm, NGP; O 5055; diffused daylight and IR reflectography (5b), the image shows slight shifts in the shape of the face and changes in the sleeves of the dress; Fig. 6a, b. Portrait of the children of the lawyer Haušild – detail, circa 1851, oil on canvas, 97.5 × 114 cm, NGP; O 9478, diffused daylight (6a); IR reflectography (6b), the picture shows a pencil underdrawing supplemented by a linear brush underdrawing; Fig. 7a, b. Josefina, 1855, oil on canvas, 74 × 59 cm, NGP; O 16236, diffused daylight (7a); IR reflectography (7b), through the color a sub-drawing made by pencil and brush shines through, research also revealed significant painter changes in the composition – shifts in the area of the shoulder and hands; Fig. 8a, b. Josefina, 1855, oil on canvas, 74 × 59 cm, NGP; O 16236, diffused daylight (8a); IR reflectography (8b), the image demonstrates the demarcations of the format, which was painted in later layers and finally engraved into the wet painting using the other end of the brush; Fig. 9a, b. Portrait of Baroness Jana Kotzová of Dobř – detail of a flower in her hair (9a), circa 1866, oil on canvas, 61 × 54 cm, octagon, NGP; O 5083, diffused daylight; strong side light (9b), engraved transferred drawing of a flower is visible in the hair; Fig. 10a, b. Quido Mánes, 1840, oil on canvas, 29.5 × 25 cm, NGP; O 709, diffused daylight, the image shows traces engraved probably with the other end of the brush in a wet painting; Fig. 11a, b. Portrait of Anna Náprstková – detail of hands (11a), after 1850, oil on canvas, 87.5 × 65.5 cm, oval, NGP; O 12693, diffused daylight; IR reflectography (11b), the IR image shows the backing by the cool tones on the fingers; Fig. 12a, b. Stratigraphy of a sample of a green hazel flower in her hair from the painting Portrait of Baroness Jana Kotzová of Dobř (ca. 1866, oil on canvas, 61 × 54 cm (octagon), NGP; O 5083) in visible (12a) and UV light (12b). In the lower part of the sample there is an organic layer (1), on which lie a colored (2) and a brown (3) layer. In the upper part, this is connected by a gray-beige (4) and an organic (5) layer. On the surface and in the left part of the sample there is a green layer (6) and an organic varnish (7).