

Characteristics of decorative wooden flooring in the Castle Museum in Łańcut

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Abstract: *Characteristics of Decorative Wooden Flooring in the Castle Museum in Łańcut.* The paper presents an analysis of research on decorative wooden flooring in the Castle Museum in Łańcut. It focuses on the characteristics of design, structure and the wood species used, paying attention to their anatomic features and the state of flooring preservation. Taking into account the size of the site and the modifications of interiors that took place at different moments in time, all the features under investigation proved to be very diversified.

Decorative flooring is present in twenty rooms of the Castle, in total there are thirty one different tile patterns, while six are repeated. In Łańcut, the tiles are mostly solid, with additional intarsia; less frequently they have the form of classic layer tiles.

Keywords: flooring, parquet, panel, tile, structure, design, Łańcut, castle

INTRODUCTION

The floors with intarsia in the castle in Łańcut are one of the most interesting objects of this kind in Poland, because of their elaborate form, high artistic quality, diversity, and most of all - as a set that has been fully preserved in its original state. Although the flooring in the Royal Castle in Warsaw or in the Wilanów Palace is definitely more impressive as far as the design is concerned, those floors exist today only as a reconstruction.

The Museum in Łańcut has over one hundred diverse rooms; the majority of them are covered with wooden flooring. In twenty rooms decorative flooring can be found, in the remaining rooms there are various kinds of plank parquets and frieze floors, as well as floorboards.

DESIGN CHARACTERISTICS

In different rooms there are diverse kinds of tile layout. They may be placed on the whole surface, repeating a single pattern, in some cases they are surrounded by bordure with a rosette in the middle, as in the Rococo Salon and in the Columned Apartment, or just have the rosette, as in the Dining Room over the Gate. The most sophisticated ornaments can be found in the Ball Room that boasts six different tile patterns.

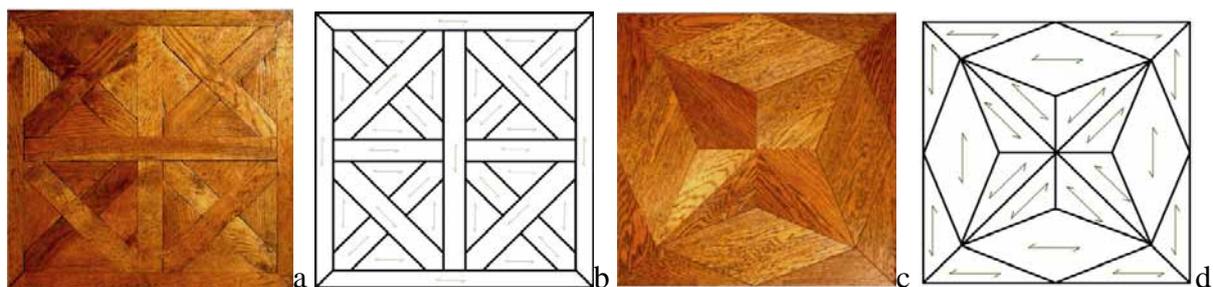


Fig. 1. Tile from the Master's Study (a - tile view, b - pattern and fibre direction) and from the Salon of the State Apartment (c - tile view, d - pattern and fibre direction).

The tile design may be quite simple – geometrical, using just one (Fig. 1) or a couple of wood species (Fig. 2-5) or quite complex - based on stylized plant motifs.

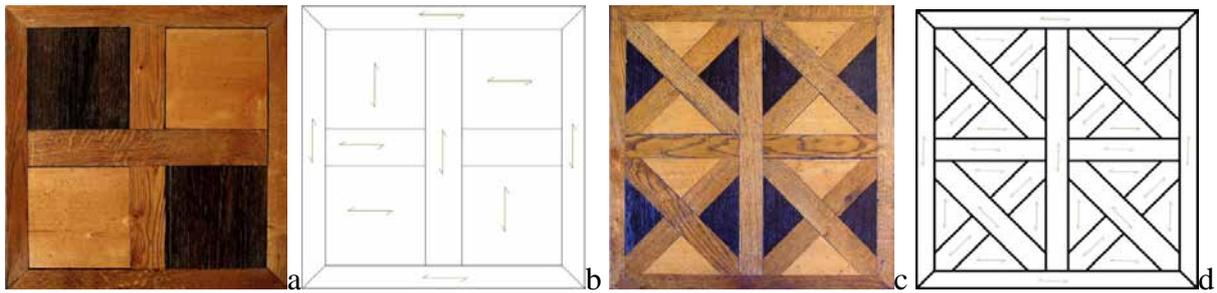


Fig. 2. Tile from the Sculpture Gallery (a - tile view, b - pattern and fibre direction) and the Chapel (c - tile view, d - pattern and fibre direction).

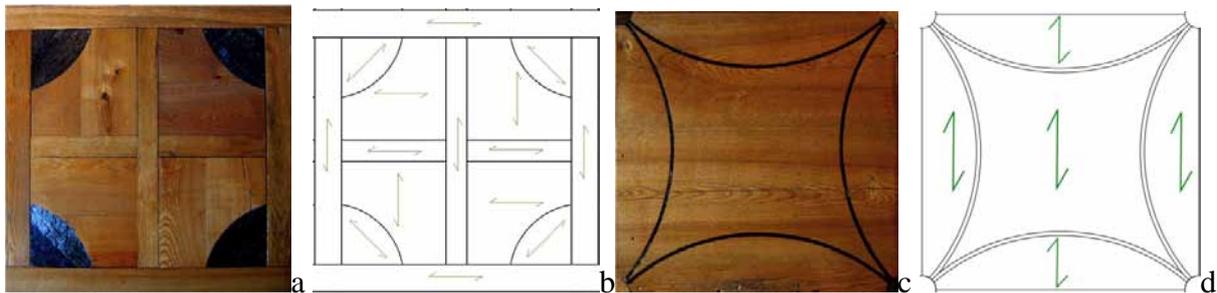


Fig. 3. Tile from the Entrance Salon (a - tile view, b - pattern and fibre direction) and the Bachelor's Apartment (c - tile view, d - pattern and fibre direction).



Fig. 4. Tile from the Bathroom of the State Apartment (a - tile view, b - tile design and fibre direction).

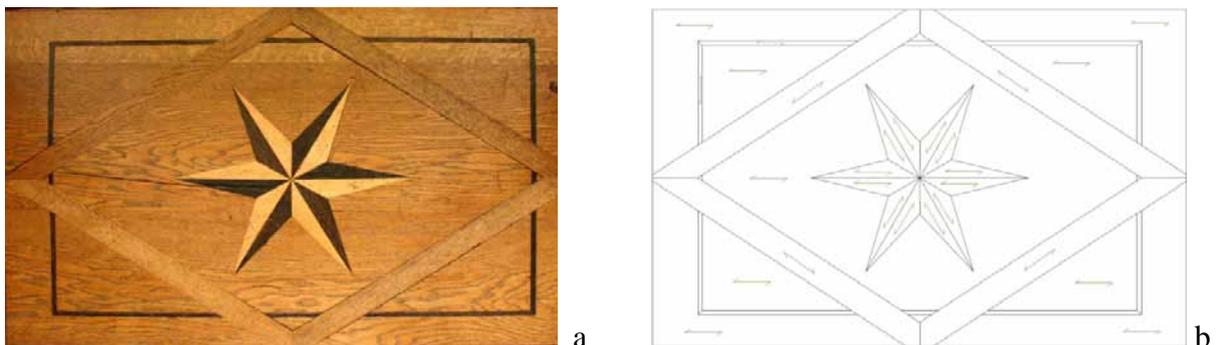


Fig. 5. Tile from the Ball Room (a - tile view, b - design and fibre direction).

In Łańcut, in twenty rooms, there are in total thirty seven tile designs with intarsia, including thirty one that are not repeated.

In nine cases, the tiles have their pairs that repeat the pattern, yet the wood species are inverted (Fig. 6, 7 and 8). This solution is used in furniture making for the Boulle inlays. These were made by cutting the pattern at the same time in two (or more) boards of different

wood species or other materials and then interchanging the background and pattern elements. The reversed tiles are used for decorative purposes in one of the rooms in a chessboard layout (Ladies' Bedroom) or for the decoration of two rooms in an inverted colour pattern (e.g. the Rococo Salon and the Columned Salon).



Fig. 6. Tile from the Boucher Room and the Corner Salon (a - tile view, b - design and fibre direction).



Fig. 7. Tile from the Rococo Salon the Columned Salon (a - tile view, b - design and fibre direction).



Fig. 8. Tile from the Ladies' Bedroom (a - tile view, b - design and fibre direction).

The flooring decoration was created probably by adapting the flooring types that existed before; for this reason, it is often quite inconsistent as far as its structure and style is concerned, sometimes it even differs within one single room (Ladies' Bedroom). Moreover, there is no reference made in any of the rooms to the wall or ceiling decoration. Only in the Billiard Room (also called the Room of Paintings) the sticks and the balls included in the decoration identify the function of the room.

The designs in the Łańcut Castle do not make any direct reference to the popular French tiles, there are also no references to the flooring of the neighbouring manor houses [Swaczyna, Kędzierski, Różańska, Szymczyk, Tomusiak, Rżewska 2010].

FLOORING STRUCTURE

The flooring in the castle is of a diverse structure, both traditional (Mączyński 1953) as well as unusual solutions may be found.

In some of the rooms, the bottom surface of the flooring is uneven; therefore it is necessary to apply sand as base (Fig. 9A). In other interiors, the tiles are installed on a blind floor, which provides them with a lot more stability (Fig. 9B).

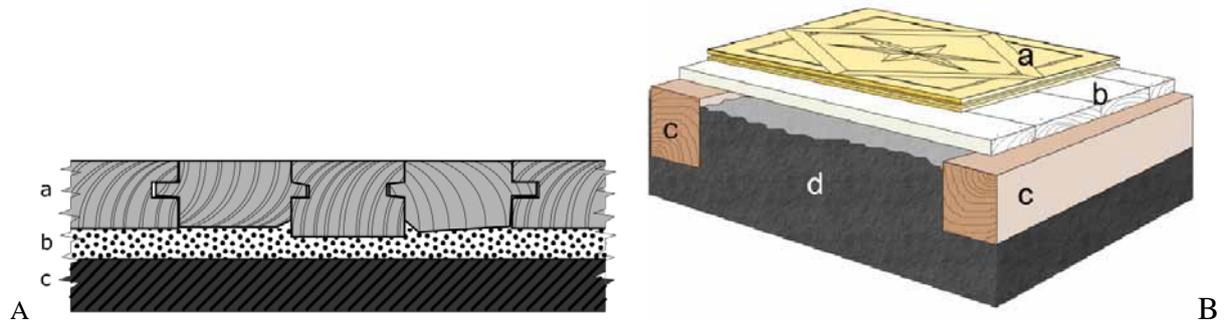


Fig. 9. Manner of flooring installation in the Chapel (A: a – tile, b – sand, c - concrete) and the manner of flooring installation in the Ball Room (B: a – tile, b – boarding, c - ceiling beams, d – sand)

The oak parquet in the rooms on the first floor has different dimensions in each of the rooms, being about 220-295 mm long and 110-147 mm wide. All the planks have a uniform section – radial. On the bottom side the planks are only rough-hewn and the differences in their thickness are quite considerable (Fig. 10a), both between the individual planks, as within one single plank, and their dimensions range between 12 mm and 35 mm.

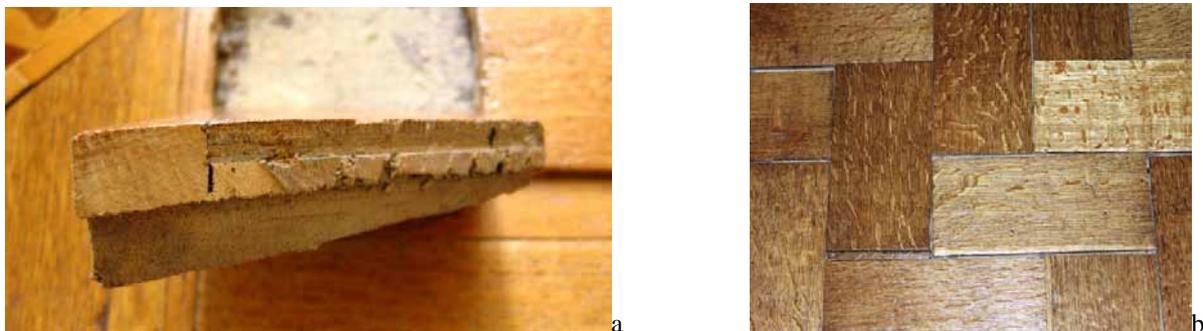


Fig. 10. Example of a plank from the Rococo Salon showing the difference in thickness and the gaps that appeared as a result of wood shrinkage and an example of their compensation with wooden battens.

The tapering of the boards and the uniform radial section of their top surface suggest that the material was acquired by quartersewing - a manner that is not very economical but gives a stable timber type [Krzysik 1978]. In addition, such solution gives interesting aesthetic effects thanks to the lustre that is visible in this oak wood section.

The uneven, bottom side of the flooring required a supporting layer that would adjust to its shape and that would provide it with stability at the same time. For this reason, the planks were placed on a layer of sand. In the rooms on the first floor, the sand layer has 0.5 m and is located directly on the ceiling.

In the Chinese Apartment, a slightly modified version of this structure was applied. Here, the uneven bottom side of the parquet planks also made it necessary to place them on sand, yet the layer is not as thick as in the remaining rooms on the first floor, it amounts only to 32 mm. Additionally, between the flooring and the boarding there are beams, 100 mm wide

and placed at the interval of about 370 mm. The sand is spread on the boarding that is placed on ceiling beams, and the gaps between the boards are filled tightly with straps of linen. The flooring in that room is in much better state than in the Rococo Salon, however it may not be determined clearly if was the structure that influenced the state of preservation so positively, because the visiting route does not lead through the Chinese Room.

In the rooms where a thick layer of sand was applied, one may observe that the flooring level is lower in the places where the visitors pass. This is caused by the sand moving sideways.

In case of the flooring on the ground floor in the Chapel and in the Master's Study, where the sand layer is thin (about 20 mm), and underneath it there is a stable concrete base, no changes caused by the shifting of the sand base can be seen. Just as in the case of the Chinese Apartment, another additional factor that undoubtedly influenced the state of the flooring positively, is the fact that they are not constantly available to the visitors.

In the Ball Room and in the Great Dining Room the flooring tiles are placed on boarding, which is located on ceiling beams. This provides a much more stable surface and, in spite of intense use of these rooms, significant damages occurred only on the tiles located directly next to the entrances. The tiles are made of boards that are 27 mm thick, while the fossil oak is inserted in them to the depth of 5 to 10 mm, depending on the pattern.

The planks are fixed with the tongue in groove joint, while the tiles are fixed to one another with the spline joint.

INFLUENCE OF WOOD SPECIES ON FLOORING USAGE PROPERTIES

In almost all the types of wooden flooring present in the castle, the most used species is oak wood. Only the board floors were not made of oak, and in the Bachelor's Apartment it is present only in the form of dark oak intarsia.

Among the castle flooring there are thirty four tiles, in which several different wood species were applied. In the places that were more intensely used, it is clearly visible that different wood species are worn to a different degree, which is confirmed by the wear resistance and hardness tests [Swaczyna, Tomusiak, Kędzierski, Koryciński, Policińska-Serwa 2009].

In the Museum, there are only three tiles that are made of just one wood species (in all of these cases it is oak), whereas the highest number of different species that can be found within one single tile amounts to five.

In total, in all the floors of the Castle there are seven different wood species: oak, dark oak, maple, walnut, ash, cherry and mahogany.

STATE OF PRESERVATION AND CAUSES OF DAMAGE

In most of the rooms the flooring is well preserved. The most severe damage can be observed along the walking routes of the Museum, which are intensely used. It is visible especially on the elements made of dark oak, which tends to crush a lot in particular in the area of room entrances.

On the first floor, in the Northern wing of the Castle where the oak parquet was placed directly on the sand (with no boarding), as a result of high stresses related to numerous tourists visiting the Museum, the base shifted towards the sides causing the joint tongues of the planks to break.

Some of the damages that appeared before the war were provisionally fixed by fastening the planks that had changed their position with nails.

In the Great Dining Room, at the end of the room, next to the servants' entrance, there are marks left by the barrels with food that stood there.

In most of the parquets, gaps appeared as a result of shrinkage of the drying wood; sometimes they are filled with wooden battens (Fig. 11b).

Nowadays, the wooden flooring is maintained by applying and rubbing beeswax into it each year. Moreover, the fact that the tourists are obliged to wear protective felt footwear also has a positive influence on the state of preservation of the Łańcut flooring, because it significantly reduces the apparition of damages related to wear and indentations in the wood.

In the case of the flooring where the parquet is placed on sand and which is located on the visiting route, restorative intervention was needed in order to stabilise the base.

SUMMARY

Taking into account the size of the site and the modifications of interiors that took place at different moments in time, all the features under investigation proved to be very diversified.

The antique flooring designs in the Castle-Museum in Łańcut are diverse, some are geometrical and others have complex compositions of stylised plant ornaments.

The selection of wood species in the flooring containing intarsia is wide and focused on aesthetic values, and not those related to the usage.

Flooring structure is quite diverse, it may even differ within one single room.

The present state of the parquets and their intense usage require solutions that will make it possible to stop the degradation of that beautiful flooring, while at the same time still permitting the access of visitors to the site.

ACKNOWLEDGMENT

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REFERENCES

1. Swaczyna I., Tomusiak A., Kędzierski A., Koryciński W., Policińska-Serwa A., 2009: Indentation and abrasion resistance of decorative wooden flooring of the Castle in Łańcut [in:] Ann.WULS-SGGW, For. And Wood Technol., no 69.
2. Swaczyna I., Kędzierski A., Różańska A., Szymczyk A., Tomusiak A., Rżewska Z., 2010: Wzornictwo drewnianych posadzek w zabytkowych obiektach powiatu kolbuszowskiego (*Wooden Flooring Designs in Antique Buildings of the Kolbuszowa County*) [in:] Ann.WULS-SGGW, For. And Wood Technol., no 71.
3. Mączyński Z., 1953: Poradnik budowlany dla architektów (*Construction Handbook for Architects*).
4. Krzysik F., 1978: Nauka o drewnie (*Wood Science*).

Streszczenie: *Charakterystyka ozdobnych drewnianych posadzek w Muzeum – Zamku w Łąncucie.* W pracy przedstawiono analizę badań ozdobnych drewnianych posadzek w Muzeum – Zamku w Łąncucie. Przedmiotem zainteresowania była charakterystyka wzornictwa, konstrukcji, użytych gatunków drewna, ze zwróceniem uwagi na jego cechy anatomiczne, oraz stanu zachowania posadzek. Z uwagi na skalę obiektu oraz przebudowy wewnątrz w różnych okresach wszystkie obserwowane cechy okazały się bardzo różnorodne. Ozdobne posadzki znajdują się w dwudziestu pomieszczeniach Zamku, w sumie jest trzydzieści jeden niepowtarzalnych wzorów tafli, a sześć się dubluje. W Łąncucie spotykamy głównie tafle lite dodatkowo intarsjowane, rzadziej klasyczne tafle warstwowe.

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