

LOST AND FOUND HERITAGE CONSERVATION AND RESTORATION OF A DOWRY CHEST FROM GORJ COUNTY

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Abstract:

This paper contains information about the conservation and restoration of a painted dowry chest, dated from the beginning of XX century, located nowadays in the heritage of the Feldioara city hall. Active interventions of Conservation-Restoration took place in the Restoration Laboratory from Faculty of Wood Engineering and Furniture Design from Transilvania University of Brasov. The case study approach was done based on the scientific investigation of the object and going through the logical stages of restoration of support and pictorial layer with compatible and reversible materials, in accord with the principles of restoration. Donating the piece and including it into the future local Museum's collection will ensure its rescue regarding stylistic framing and history of the piece and its rediscovery in a form as close as possible to the original one.

Key words: *cultural heritage; dowry chest; polychrome wood; scientific conservation; microscopy; colour integration.*

INTRODUCTION

Cultural heritage represents the ensemble of inherited resources, identified as such and which represent an expression of values, beliefs, knowledge and traditions in continuous evolution (Timar 2003, Timar 2022).

Over the time, due to socio-political factors, many valuable movable or immovable heritage assets have been lost or left at the disposal of people and authorities faced with hostile times. The Bruckenthal Museum launched the first signal about the abandoned cultural treasure through a large-scale exhibition, in 1991. Thus, thanks to the sustained efforts of an ensemble of specialists, researchers and museographers from the country and abroad, the cultural heritage began to be found, little by little (Iamandi et al. 2016). An important category of movable heritage rediscovered and salvaged is painted furniture or decorative objects. The variety of painted objects ranges from icons or religious objects, to furniture specific to peasant houses including: hangers, various cabinets, benches and dowry chests (Olaru 2014, Babița and Timar 2015, Beldean 2022).

The origin of the dowry chest is unknown, but it has been used since Antiquity, both by the Egyptians, as well as by the Greeks and romans. Indispensable in the world of the village, the dowry chest remains one of the most important objects in the country house. Kept at the end of the bed, the chest contained the bride's dowry. The bride brought everything she needed to the groom's house: clothes, towels, carpets and many others, all made by her. In such conditions, the dowry chest was maintained until late in many

households as an essential interior piece, transmitted from generation to generation, as a valuable element of the family heritage.

The objective of the study was the conservation and restoration of a painted dowry chest from the Gorj area. The presented case study highlights the specific problems of this type of furniture and the intervention plan.

GENERAL PRESENTATION OF THE OBJECT

The painted dowry chest is today part of the collection of the Feldioara Town Hall. The legacy passed down to the Merticaru family from Feldioara, the chest comes from the Oltenia area (Gorj county), being donated for including in the collection of the future museum in the town of Feldioara. A "traveling" heritage together with the family to which it belonged, the object tells the story of a complex community in which each member makes his contribution, enriching the material and immaterial local heritage.



Fig. 1.
The dowry chest before restoration.

The dowry chest was made probably in a carpentry workshop, by manual processing of spruce wood, resulting almost smooth surfaces. The joint of the boards was done in the tongue and groove, and the metal elements such as: hinge, side handles, nails were manufactured in a blacksmith workshop. It presents geometric and floral polychrome decoration (primer, pigments, binder, varnish), grouted in the knot area, as well as two chromolithographs applied to wood with animal hide glue (portraits of a girl and a boy).

The dowry chest has the dimensions L: 118cm, W: 50cm and H: 40cm, parallelepiped shape, consisting of four walls, bottom, lid, inner case and metal elements (handles on the sides, metal hinges for attaching the lid to the dowry box). At the bottom, the dowry box has three sides made of slats fixed with metal nails. On the front, it shows a single decorative baguette fixed in 3 nails and metal discs on the right side, the one on the left is missing, as can be seen in Fig. 1.

Dated at the beginning of the 20th century, this type of painted dowry chest, with decoration enriched by the application of chromolithographs, was made in urban workshops and then sold through fairs, thus also reaching Romanians in the village. Many similar pieces can be found in the southern part of Romania, but we find variations of the "Brasov dowry chest" with garlands of flowers and portraits applied in other regions of the country, in Moldavia for example. On the cimec.ro website we can see a dowry chest classified in the Fund, dated to the first quarter of the 20th century and which is part of the collection of the Lower Danube Museum in Călărași, with a chromolithograph with King Ferdinand and Queen Maria (4). This type of chest marks an important moment in which the traditional painted decoration, which contains symbolic floral (tree of life) and geometric elements, adapts and updates, capitalizing on the new decorative techniques available at the time.

As part of the partnership between Transilvania University and Feldioara City Hall, the chest was restored in the Restoration Laboratory, representing a complex case study and practice for the Polychrome Wood Restoration discipline.

ANALYSIS OF THE CONSERVATION STATUS

Before the restoration, the dowry chest had sticky dirt, exfoliation and gaps in the painting layer, cracks, xylophagous insects attack, gaps between the planks, previous inadequate repair interventions (changing the position of a hinge, applying 4 sticks on the inside of the lid to support the planks, fastened with bent nails on the front of the lid). These can be seen in Figure 2. The improper storage conditions of the object over time, variations in temperature and humidity, the influence of natural light on the chest, as well as swelling and shrinkage of the wood, all caused cracks, aging of the binders, changes in the appearance of the varnish.



Fig. 2.
Foto outer lid and interior chest.

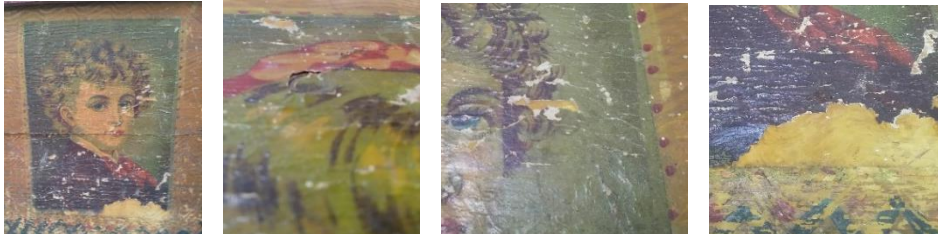

A thorough detailed of the types of defects, depending on the location on the object and the type of material, is presented in Table 1. The specific degradations of the wooden material, the pictorial layer, the chromolithographs and the metal elements are presented.

DIAGNOSIS

Table 1

Types of defects

| Material | DAMAGE |
|-----------------|---|
| Wooden stand | Cracks Lack of wood materials (lack of the left decorative baguette – fronton) Distance between the planks, fronton with the sides Loss of flatness of boards Poor previous repairs - 4 pegs attached with bent nails - lid Holes and galleries caused by the attack of xylophagous insects (Family <i>Anobiidae</i>) Dirt, rust spots, pencil marks Rust (functional wear) |
| | |
| Pictorial layer | Gaps and detachments Powdery Dirt Brown varnish |
| | |

| | |
|-----------------|---|
| Cromolitographs | Detachments and gaps in stationery and colour Cracks Dirt and brown varnish  |
| Metal elements | Products of corrosion Previous repairs  |

SCIENTIFIC INVESTIGATIONS USEFUL FOR APPROACHING THE STUDIED CASE

Following the analysis of the initial state of conservation, the object was subjected to some investigations in order to develop the concept of restoration (Babița and Timar 2015). In order to evaluate the materials and techniques used to make the painted chest, several investigations were made with the aim of getting to know the piece in detail and deciding on future restoration interventions. The investigations carried out are presented below.

Optical microscopy

A portable digital optical microscope with a built-in camera with a magnification power of up to 1000x was used to investigate the painting layers (Fig. 3a). This investigation was useful to understand the pictorial stratigraphy and correctly approaching the restoration of the object.



Fig. 3.
Microscopic investigation directly on the object. Analysis of the baguette on the front panel.

The analysis of a small sample from the pictorial layer, already detached, highlighted the different layers of the painted decoration and their sequence: preparation - primer, colour film and protective layer of darkened varnish, with deposits of dirt (Fig. 3b). Also, several areas on the surface of the object were analyzed which revealed degradations at the level of the pictorial layer: fine networks of cracks (Fig. 4 a,b,c), numerous areas with exfoliation and detachments (fig. 4d), sticky dirt (Fig. 4 e, g, h), aged varnish (Fig. 4 f).

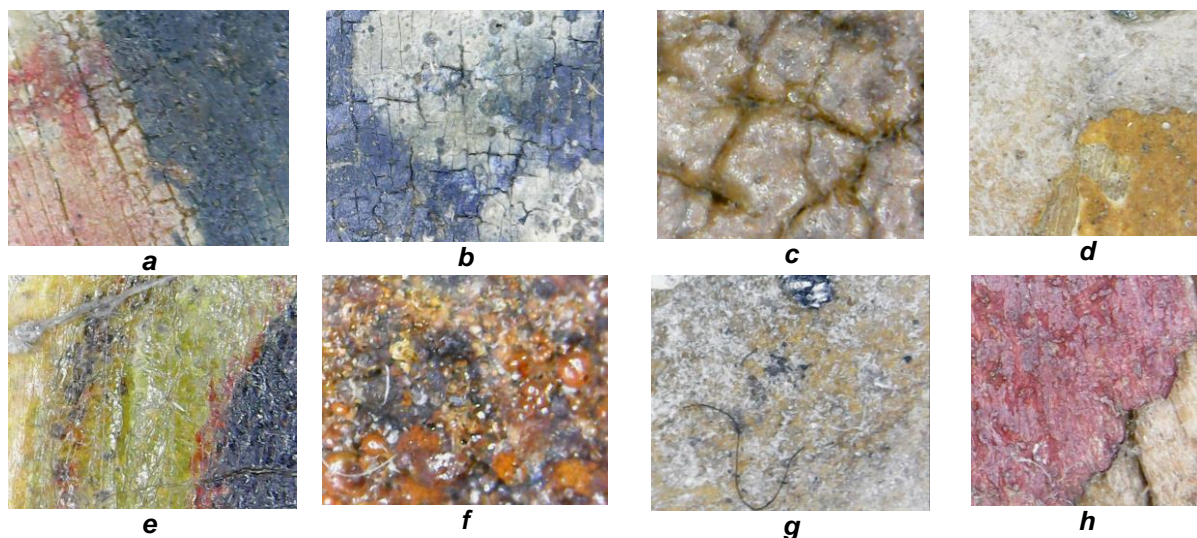


Fig. 4.

Defects identified on the pictorial layer: a, b, c - cracks in different colors, d - gap, e, g, h - dirt deposits, f - varnish coagulation and staining.

Radiant light visualization

Visualization in radiant light allows us to observe the following types of degradation:

- the loss of flatness of the front panel of the chest caused by the different behaviour of the component elements over the time under the influence of fluctuations in microclimatic parameters and the occurrence of a gap along its entire length;
- detachments, exfoliations and gaps of the painted layer;
- separations of the chromolithographs printed on paper support.



Fig. 5.

Radiant light visualization highlighting the crack (left) and the type of finishing (right).

Radiant light also allows the observation of some technical details, the layers of the fladern type background, of different thicknesses, being visible (Fig. 5).

Visualization in UV light

Using UV light, technical details and possible repainting interventions observed through the phenomenon of fluorescence can be highlighted (repaintings appear as dark colored spots on a background of yellow varnish, resins give off fluorescent yellow and cellulose - whitish, violet) (Timar 2022). In the case of the painted object, no such interventions were observed (Fig. 6). However, this type of investigation is important for extra attention, especially in the case of cleaning operations performed on the painted surface, when the original film and the repaints added later may react differently.

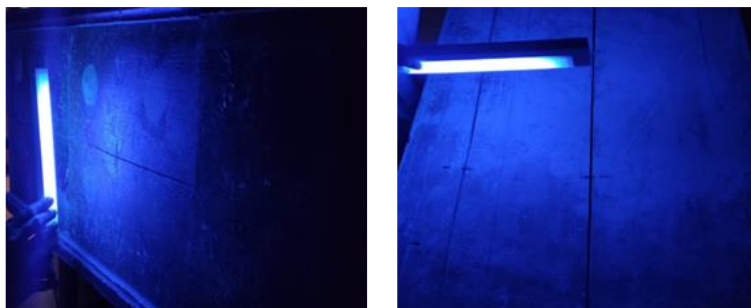


Fig. 6.

Viewing in UV light on vertical (left) and horizontal surfaces (right).

THE RESTORATION PROCESS

Dedusting and cleaning unpainted wood

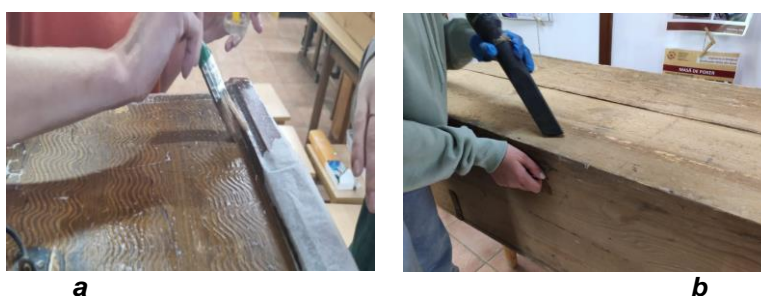


Fig.7.

Professional consolidation of pictorial layer (a) and suction of plain wood areas (b).

Prior to handling the piece, the areas with active separations of the painting layer were prophylactically consolidated with the Japanese paper fixed with a glue solution 3%, by brushing (Fig. 7a).

The cleaning of the wooden support was carried out in two stages - by the mechanical, dry method, using a vacuum cleaner for coarse removal (Fig.7b) and by the chemical method - wet cleaning of the unpainted surfaces with Standard solution (water, ethyl alcohol, ammonia, non-ionic detergent). Areas with heavy deposits of dirt were soaked more with solution, being cleaned later mechanically.

Detaching elements

The lid was detached from the dowry chest for an easier handling and the nails were extracted from the lid, with the help of pliers, this being considered an inappropriate subsequent intervention on the object (Fig.3a). The sideboards were also removed, in order to be able to glue the cover elements (the 3 planks) with a 30% bone glue solution and fix them with wooden dowels in clamps until completely dry (Fig. 8b). At the end, the reinforced and completed lateral rods were attached, with the help of metal weights, as they were fixed initially (Fig 8 c,d,e).

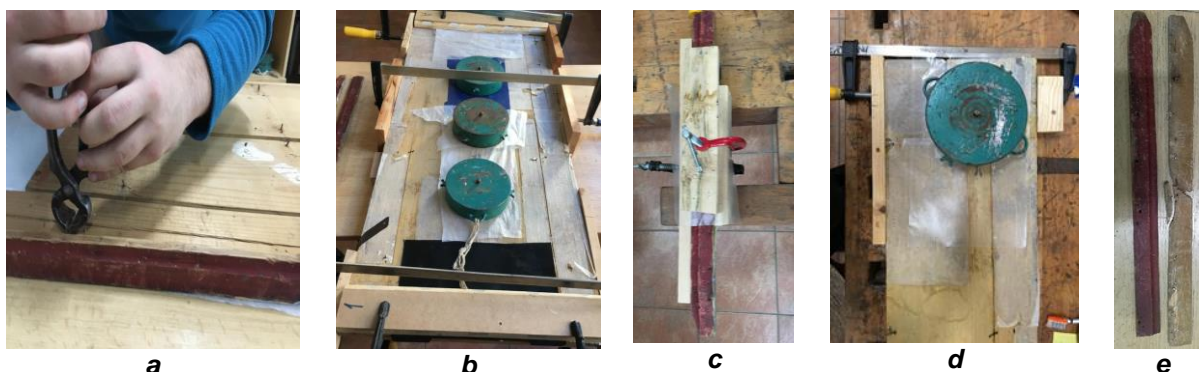


Fig. 8.

a – Removing nails and detaching cover slats b, c, d - gluing elements, e – lateral slats cleaned and prepared for structural consolidation.

Disinsection in areas with visible insect attack, especially in the boards at the bottom of the object, was employed by repeated injection and brushing with Decis solution followed by strengthening the fragile wood with Paraloid B72 (Prună et al, 2001-2005).

Structural consolidation of the pictorial layer was done with a fish glue solution of more than 5-7% and Japanese foil, with alternating hot press - cold press (sandbags) over Melinex foil (Fig. 9 a). Taking into account the aging of the original binder, the pictorial layer was reinforced on the entire surface of the cover and front side, to ensure its integrity, because, it already had a powdery appearance in places, disappearing at the simple touch. After consolidating by pressing and the complete drying of the pictorial layer, the supporting Japanese sheet was removed with cotton wool, slightly soaked in warm water.

In a similar way, but on very small working areas, consolidation with Japanese paper followed by drying with the thermocautery was performed in the case of detachments of the paper support of the chromolithographies (Fig. 9b).

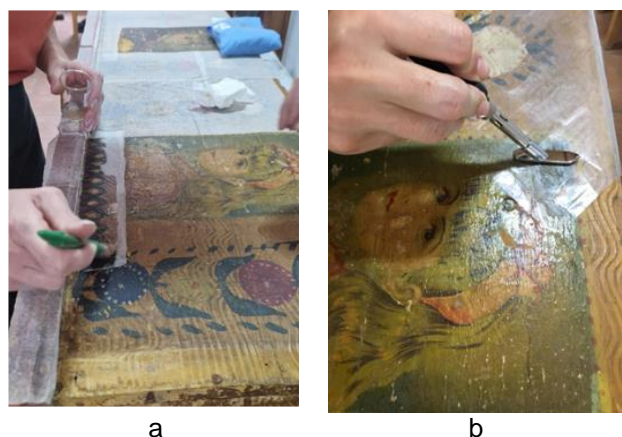


Fig. 9.
Consolidation of pictorial layer.

To clean the pictorial layer and thin the layer of browned varnish, tests were carried out with Russian solutions (known as numbers 1-6) based on ethyl alcohol and turpentine and 1:4 egg yolk emulsion and water. After these, they were used for cleaning, in particular, the yolk emulsion and Russian solution 4 (Fig. 10). The operation was carried out gradually, constantly checking the efficiency and the effect on the original painting, the goal being to obtain a uniform appearance of the piece as a whole.

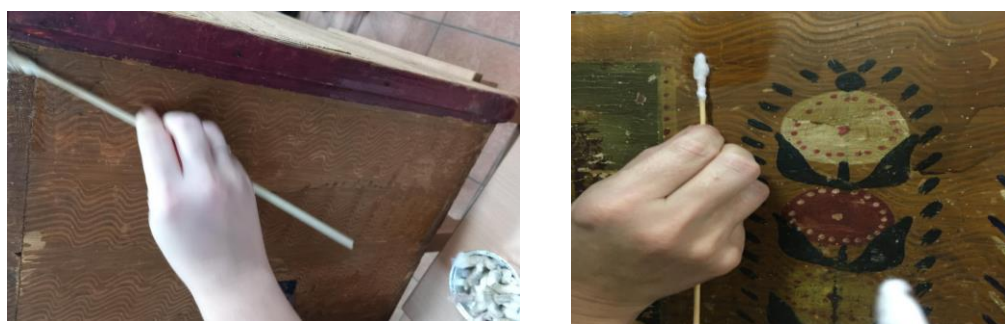


Fig. 10.
Cleaning the pictorial layer and thinning the stained varnish.

Completing and grouting gaps in wooden material and painting layer

The areas with gaps in the wooden layer were grouted with a grout with 7% glue solution, sawdust and chalk dust, and the holes left after the extraction of the nails were closed with natural fibres moistened in a solution of 7% glue (Fig. 11).

After completing the wooden support, the holes in the painted layer were then filled. In the first phase, a preliminary gluing was carried out with a fish glue solution of more than 3% over which putty was applied (glue solution 7%, chalk dust and ochre pigment), similar to the one in the original technique. The grouted areas were finally sanded with a cork stopper, soaked in a solution of egg yolk and water (1:10) at the level of the original layer.



Fig. 11.
a - filling gaps with natural fibres, b – grouting.

Chromatic integration of the lacunar areas was achieved in accordance with the original using water-based colours with egg yolk emulsion by the point technique (Fig. 12 a).

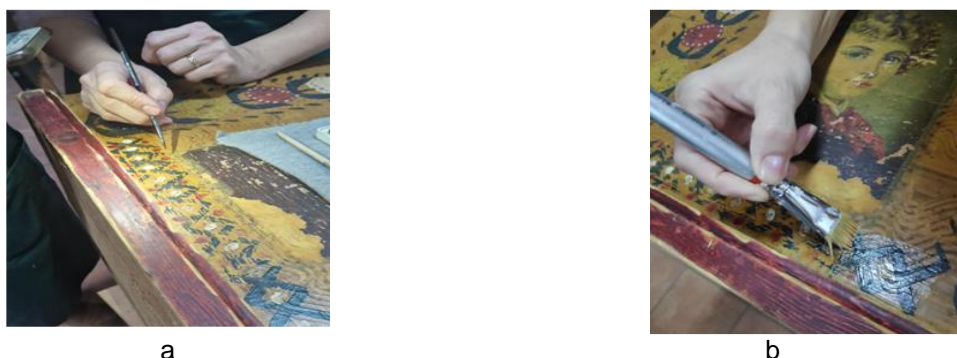


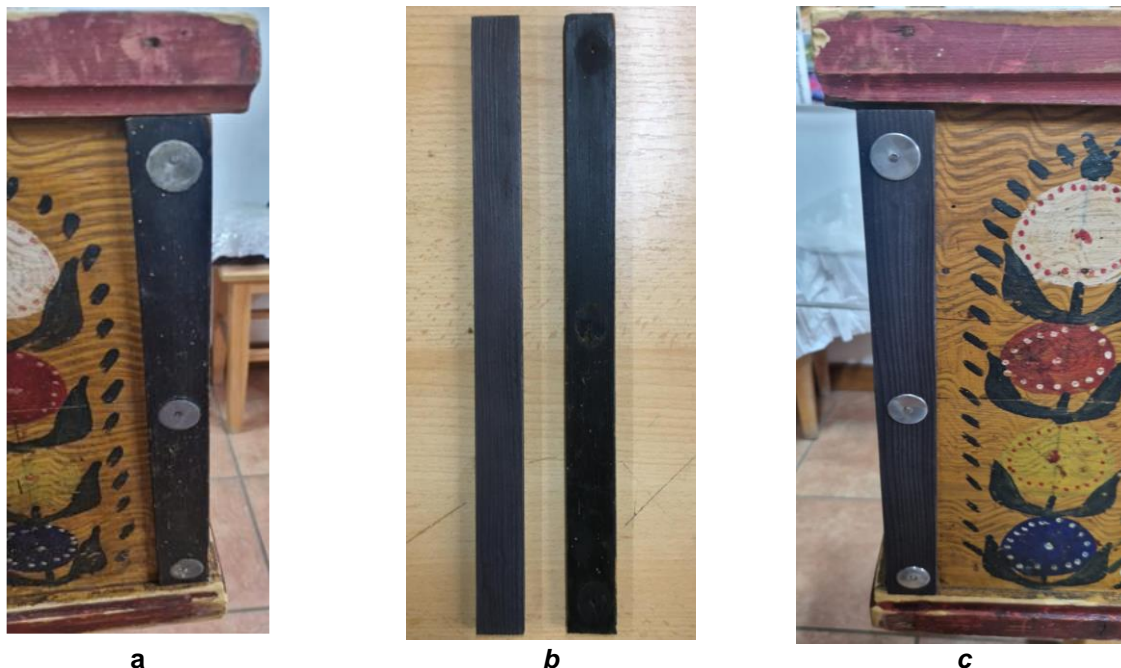
Fig.12.
a - chromatic integration, b - final varnishing.

The metal elements were cleaned with 10% oxalic acid solution by immersion for 10 min and then mechanical removing of corrosion products (Fig. 13). Later, the metal elements were treated with successive layers of tannin-based solution.



Fig. 13.
Metal elements before (a) and after cleaning (b).

The missing elements were made according to the model of the original ones: 3 decorative round metal elements and a frontal wand for the left side of the crate (Fig. 14). The original rod on the right side was cleaned with standard solution and solution of egg yolk and water (1:4)



a

b

c

Fig. 14.

The original baguette (a) and the one recreated according to the model (b) and then fixed on the object (c).

Final protective coating

After the chromatic integration of the gaps in the painting layer, in order to protect it as well as the original painting, the final protective finishing varnish, based on Damar resin 10% in turpentine, was applied by brushing (Fig. 12b). The object reveals his beauty at the end of restoration process (Fig 15).



Fig. 15.

The dowry chest after restoration.

CONCLUSIONS

The painted dowry chest represents an important part of the Romanian heritage, widely distributed throughout the country, and the presented case study is living proof of an ethically correct approach, respecting the principles of restoration. The restored object will return to Feldioara and will be exhibited in the Feldioara Citadel, in the future museum, under appropriate conservation conditions, thus making its own contribution to the story of a community that preserves its traditions and values its heritage.

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