CONSERVATION OF MUSICAL INSTRUMENT COLLECTIONS

Jimena Palacios Uribe
There are different types of collections in which we can find musical instruments:

- Diverse objects, related or not to musical practices,
- Instruments of one type (such as pianos, harps, guitars, stringed instruments);
- Represent many regions of the world (ethnographic instruments)
- A combination of any these types.
Regardless of the nature and origin of these objects, they all share something in common: they have values that have driven us to collect and preserve them over time.

These values have determined their current state, their use and their place in the collection. It is essential to recognize these values to draw up a conservation plan.
CONSERVATION
Takes place at different levels

Research
Preventive conservation
Dissemination
Documentation
Restoration and repair

CONSERVATION Takes place at different levels.
Registration and documentation

The most important thing concerning the conservation of a collection is to know what objects are in it, how many there are and their characteristics.

Then it is essential to know what kind of tools I have to register them and how I can improve them.

Documenting can be as detailed as I want, depending on my interests and goals with certain instrument or the entire collection.
TECHNICAL DATA SHEET

Name:

Type:

Maximum dimensions: total length, total width and depth.

Inventory number (or any number that identifies the instrument in the collection)

Photograph (general and some details)

General description

Provenance (place and approximate year of manufacture)

Material state of conservation

Sound condition.

Location in the collection

Person in charge of the collection or the care of the pieces.
**MUSICAL INSTRUMENT COLLECTION**

**TECHNICAL DATASET**

**Nacional:** National

**Type:** Stringed (violin type)

**Dimensions:** 44 x 11 cm

**Inventory Number:** 52-012; COMA-02-14

**Provenience:** (place and approximate year of manufacture): Huelva (ca. 1920)

**General Description:** Stringed musical instrument made of wood. The case tends to be dark and the "F" holes are only outlined. The tailpiece has a cut in the middle and is fastened with a strip of leather. It has a straight narrow neck.

**Material State of Conservation:** No defects of deterioration.

**Sound Conservation Status (Sound Condition):** Sounds.

**Location in the Collection:** Shelf 2, level 1

**CONSERVATION RECOMMENDATION:** Display in a dry and artificially saturated place, with humidity and temperature levels of 65% and 45°C. Do not place it in front of natural light and expose it with directed artificial light between 50-100 lux.

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**Nacional:** National

**Type:** Recorder

**Dimensions:** 112 x 79 x 2 cm

**Inventory Number:** 52-12; COMA-02-13

**Provenience:** (place and approximate year of manufacture): Santa Maria de Azcuénaga, San Isidro Puros, Huesca (1930-1940)

**General Description:** Tabular reedphone made of reed, wood, leather and wax. It has five holes of different sizes. The reed is external, the circular structure is a mouthpiece with a reed that vibrates by blowing through it. The four reed wooden flutes of the native cultures have a dance to play the instrument, so it is very likely that this instrument is a pre-Hispanic heritage.

**Material State of Conservation:** The player needs a membrane to be used.

**Sound Conservation Status (Sound Condition):** Doesn't sound.

**Location in the Collection:** Shelf 2, level 1

**CONSERVATION RECOMMENDATION:** Service Pulmonary Tube

**CONSERVATION RECOMMENDATION:** Display in a dry and artificially saturated place, with humidity and temperature levels of 60% and 45°C. Do not place it in front of natural light and expose it with directed artificial light between 50-100 lux.

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**Nacional:** National

**Type:** Electric keyboard

**Dimensions:** Main Cabinet: 33 x 57.5 x 30 cm, Main speaker: 35 x 20 cm, Main speaker: 50 x 32 cm.

**Inventory Number:** 52-12; COMA-02-01

**Provenience:** France. Patent of Maurice Mantenon (1920).

**General Description:** Electronic instrument invented by the French engineer and cellist Maurice Mantenon in 1920. It consists of a five-action keyboard, a main speaker and a gramophone speaker. Inside a wooden box are the elements that produce the sound, and a liquid base that supports the box. The serial number is 144 (of a total of 370).

**Material State of Conservation:** Electrical elements do not work, power cables show active corrosion and the keyboard is missing.

**Sound Conservation Status (Sound Condition):** Doesn't sound.

**Location in the Collection:** Hall

**CONSERVATION RECOMMENDATION:** Service Pulmonary Tube

**CONSERVATION RECOMMENDATION:** Display in a dry and artificially saturated place, with humidity and temperature levels of 60% and 45°C. Do not place it in front of natural light and expose it with directed artificial light between 50-100 lux.
Carrizo recorders with four holes

<table>
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<th>No.</th>
<th>Length (cm)</th>
<th>Diameter (mm)</th>
<th>Tune</th>
<th>Closed orifices</th>
<th>Observation</th>
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<td>Si</td>
<td>Do# Re Mi Fa</td>
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<tr>
<td>2</td>
<td>16.7</td>
<td>1.5</td>
<td>La</td>
<td>Si Do# Re# Mi</td>
<td></td>
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<tr>
<td>3</td>
<td>17.7</td>
<td>1.3</td>
<td>La</td>
<td>Do# Re Mi Fa</td>
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<td>____</td>
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<tr>
<td>5</td>
<td>19</td>
<td>1.5</td>
<td>Sol</td>
<td>La Si Do Do#</td>
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<td>19</td>
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<td>Sol</td>
<td>La Si Do Re</td>
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<td>____ ____ ____</td>
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<td>Mi</td>
<td>Sol La Si Do</td>
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<td>1.2</td>
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<td>____ ____ ____</td>
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<td>Mi</td>
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<td>Re</td>
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</table>
| 38  | 27          | 1.8           | ____ | ____ ____ ____   | No suena por defecto de construcción en el orificio de soplo o en la ventana.
COLECCIÓN DE INSTRUMENTOS MUSICALES

FICHA TÉCNICA

NOMBRE: Guitarra paracuya

DIMENSIONES: 97 X 34 cms

Nº. DE INSTRUMENTO EN LA COLECCIÓN: 92-46

PROCEDECENCIA: Paracho, Michoacán, México

TECNOLÓGIA: Cordófono de seis cuerdas de fibra (posiblemente yute). La caja de resonancia está elaborada con madera ayacahuite tallada y pulida. Era utilizada en la tradición musical calentana de Michoacán, Guerrero y Estado de México.

ESTADO DE CONSERVACIÓN: Buen estado

ESTADO FUNCIONAL: Suena
Natural aging and preventive conservation

MATERIALS OF THE MUSICAL INSTRUMENTS

LIGHT

TEMPERATURE AND RELATIVE HUMIDITY

BIOLOGICAL “AGENTS”
Water and temperature are an inseparable couple, since well controlled they are their best ally, but poorly controlled they can be their worst enemy.

The most damaging humidity and temperature ranges are the extreme measures (too low or too high), (very low or very high), but above all, the most damaging are abrupt and constant changes.

**Temperature**: Celsius (°C) or Fahrenheit (F°); **relative humidity** in percentages (%). The ideal ranges suitable for musical instruments made of organic or inorganic materials vary from 15° C to 25° C (59 F° to 77 F°) and 40% to 70% of relative humidity; the important thing is that the variations are slow and never extreme.
Carlos Chávez collection of musical instruments
**Tlapanhuéhuelt de Malinalco**
National Museum of Anthropology

**Tlapanhuéhuelt de Carlos Chávez**
National Center of Research, Documentation and Dissemination of Music
PERCUSSION ARCS
DRUMS
MARACAS AND RATTLES
ABOUT SOUND

Do they have to sound?
If they don’t, are they valuable?
What about my role on deciding if I restore them to recover their musical function?
International institutions related to the conservation and management of musical instrument collections

ICOM
(International Council of Museums)

CIMCIM
(International Committee of Museums and Collections of Instruments and Music)
https://cimcim.mini.icom.museum/

AMIS
(American Musical Instrument Society)
https://www.amis.org/