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.











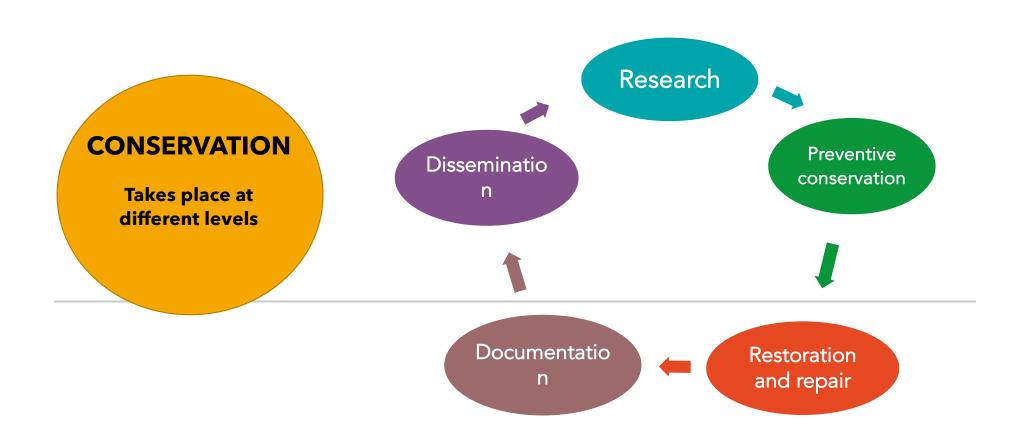






Regardless of the nature and origin of these objects, they all share something in common: **they have values** that have driven us to collect and preserve them over time.

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.



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.

Centro Nacional de Investigación, Documentación e Información Musical "Carlos Chávez" (CRUIDM - INBA) Enero 2016 – Mayo 2017

MUSICAL INSTRUMENT COLLECTION

TECHNICAL DATASHEET



NAME: Raweri

TYPE: Stringed (violin type)

DIMENSIONS: 46 x 11 cms

INVENTORY NUMBER: 92-009; CCIMC-02-146

PROVENANCE (place and approximate year of manufacture): Huichol (ca. 1940)

GENERAL DESCRIPTION: Stringed musical instrument made of wood. The case tends to be <u>oxal</u> and the "F" holes are only insinuated. The talipiece has a cut in the middle and is fastened with a strip of leather. It has a straight horsehair bow.

MATERIAL STATE OF CONSERVATION: No effects of deterioration.

SOUND CONSERVATION STATUS (SOUND CONDITION): Sounds.

LOCATION IN THE COLLECTION: Shelf 5; level 3

CONSERVATOR IN CHARGE: Jimena Palacios Uribe

CONSERVATION RECOMMENDATIONS: Display in a dry and artificially aerated place, with humidity and temperature levels of 55% and 25C. Do not place it in front of natural light and expose it with directed artificial light between 50-100 lus.

Centro Nacional de Investigación, Documentación e Información Musical "Carlos Chávez" (Свизма - INBA) Enero 2015 – Маую 2017

MUSICAL INSTRUMENT COLLECTION

TECHNICAL DATASHEET



NAME: Flauta pame

TYPE: Recorder

DIMENSIONS: 51.2 cms x 2 cms

INVENTORY NUMBER: 92-12; CCIMA-03-13

PROVENANCE (place and approximate year of manufacture): Santa María Acapulco, San <u>Juis</u> Potosí, México (Grupo étnico; page)

GENERAL DESCRIPTION: Tubular aerophone made of reed, bird feather and wax. It has four holes of obturation. The edge is external, the tubular chamber has a spider web membrane that vibrates by sympathy (mirliton). The pre-Hispanic ceramic flutes of the Nahua culture have a device to place the membrane, so it is very likely that the Zanga reed flute is a pre-Hispanic heritage.

MATERIAL STATE OF CONSERVATION: The spider web membrane is lost

SOUND CONSERVATION STATUS (SOUND CONDITION): Doesn't sound

LOCATION IN THE COLLECTION: Shelf 3; level 2

CONSERVATOR IN CHARGE: Jimena Palacios Uribe

CONSERVATION RECOMMENDATIONS: Display in a dry and artificially aerated place, with humidity and temperature levels of \$5% and 25C. Do not place it in front of natural light and expose it with directed artificial light between 50-100 lus.

Centro Nacional de Investigación, Documentación e Información Musical "Carlos Chávez" (CRIDBM - INBA) Enero 2016 - Febrero 2018

MUSICAL INSTRUMENT COLLECTION

TECHNICAL DATASHEET





NAME: Ondes Martenot

TYPE: Electric keyboard

DIMENSIONS: Main Cabinet: 93 X 97 X 30 cms; Main speaker: 35 X 26 cms; Gong speaker: 50 X 52 cms.

INVENTORY NUMBER: 92-12; CCIME-01-01

PROVENANCE: France. Patent of Maurice Martenot (1928).

GENERAL DESCRIPTION: Electronic instrument invented by the French engineer and cellist Maurice Martenot in 1928. It consists of a five-octave keyboard, a main speaker and a gong-type speaker. Inside a wooden box are the elements that produce the sound, and a bipod base that supports the box. The fabric serial number is 246 (of approx. 370)

MATERIAL STATE OF CONSERVATION: Electrical elements do not work; power cables show active corrosion and the keypad ribbon is missing.

SOUND CONSERVATION STATUS (SOUND CONDITION): Doesn't sound

LOCATION IN THE COLLECTION: Hall

CONSERVATOR IN CHARGE: Jimena Palacios Uribe

CONSERVATION RECOMMENDATIONS: Display in a dry and artificially aerated place, with humidity and temperature levels of \$5% and 25C. 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

				Closed orifices				OBS
No.	Lenght	Diametre	Tune	1	2	3	4	
1	15.5	1.5	Si	Do#	Re	Mi	Fa	
2	16.7	1.5	La	Si	Do#	Re#	Mi	
3	17.7	1.3	La	Do#	Re	Mi	Fa	
4	17.5	1.5						Boca demasiado abierta. No afina
5	19	1.5	Sol	La	Si	Do	Do#	
6	19	1.3	Sol	La	Si	Do	Re	
7	19.5	1.5	Fa#	Sol#	La#	Do	Do#	
8	20	1.5	Sol	La	Si	Do	Do#	
9	20	1.5	Sol	La	Si	Do	Re	
10	20	1.5	Sol	La	Si	Do	Re	
11	20.5	1.5	Fa#	Sol#	La#	Si	Do#	
12	20.2	1.7	Fa#	Sol#	La#	Si	Do#	
13	20.5	1.5	Fa	Sol#	La#	Si	Do#	
14	20.5	1.6	Fa#	La	Si	Do	Do#	
15	21	1.5						Pieza fisurada. La boca tiene un corte pronunciado
16	21.2	1.5	Mi	Sol	La	Si	Do	
17	21.5	1.2						No suena
18	21.2	1.5	Fa	Sol	La	Si	Do	
19	21.5	1.6	Fa	Sol#	La#	Si	Do#	
20	21.5	1.5	Fa#	Sol#	La	La#	Do	
21	22	1.5	Fa	Sol	La	Si	Do	
22	22	1.5	Fa#	Sol#	La#	Do	Re	
23	21.6	1.6	Fa	Sol	La			Entrada de canal con fisuras
24	21	1.9	Fa	Sol	La	La#	Si	
25	21.2	1.7	Fa	Sol#	La	Si	Do	
26	21.5	1.8	Fa	Sol	Sol#	La	Si	
27	21	1.7	Mi	Sol	La	La#	Si	
28	22.3	2	Fa	Sol	La	Si	Do	
29	22.5	1.7	Fa	Sol	La	Si	Do	
30	22.7	2	Fa	Sol	La	La#	Si	
31	23.4	1.5	Fa	Fa#	Sol#	La	Si	
32	23.5	2	Mi	Fa#	Sol	Sol#	La#	
33	23.4	1.7	Mi	Fa#	Sol#	La	Si	
34	24.5	2	Re#	Fa	Fa#	Sol#	La	
35	25	1.9	Re	Mi	Fa#	Sol	Sol#	
36	25.3	1.6	Re	Fa	Sol	La	La#	
37	25.5	1.5	Re	Fa	Sol	La	La#	
38	27	1.8						No suena por defecto de construcción en el orificio de soplido o en la ventana









Centro Nacional de Investigación, Documentación e Información Musical "Carlos Chávez" (CENIDIM - INBA) Enero 2016 – Mayo 2017

COLECCIÓN DE INSTRUMENTOS MUSICALES

FICHA TÉCNICA



NOMBRE: Guitarra panzona

DIMENSIONES: 97 X 34 cms

No. de instrumento en la colección: 92-46

PROCEDENCIA: Paracho, Michoacán, México

TECNOLOGÍA: Cordófono de seis cuerdas de fibra (prosiblemente 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





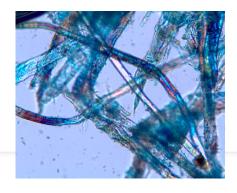




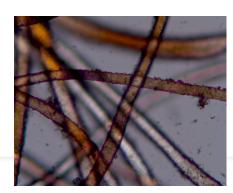






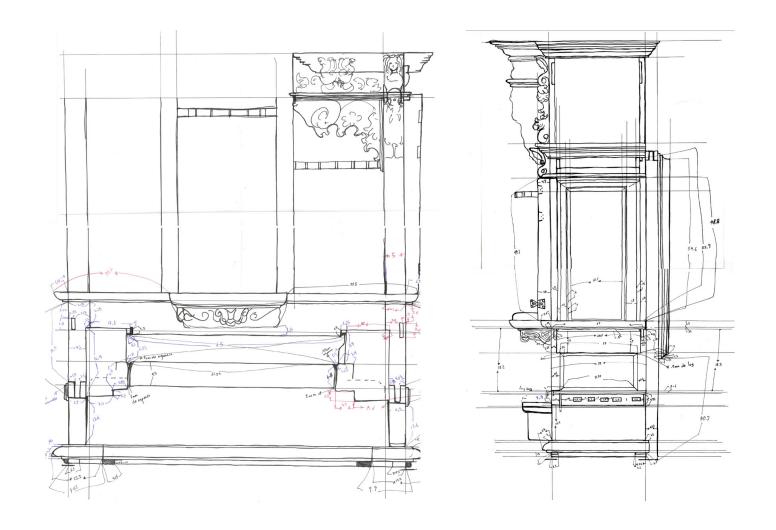


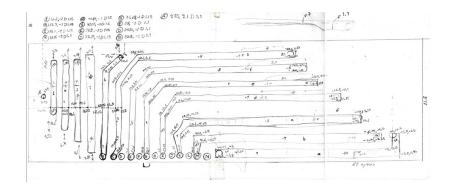


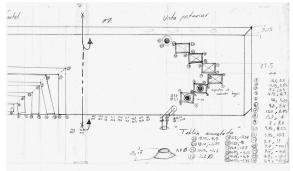


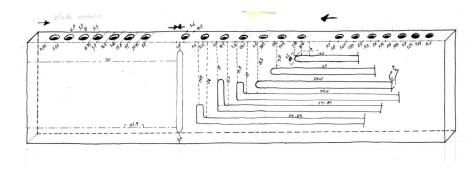




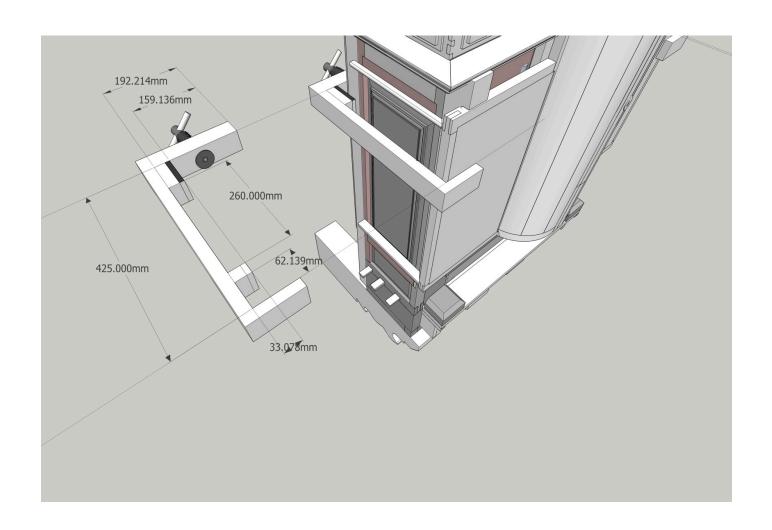


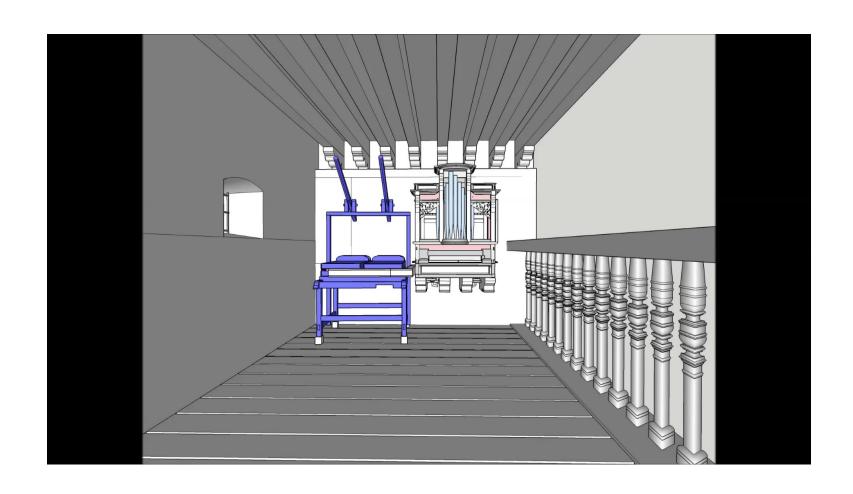


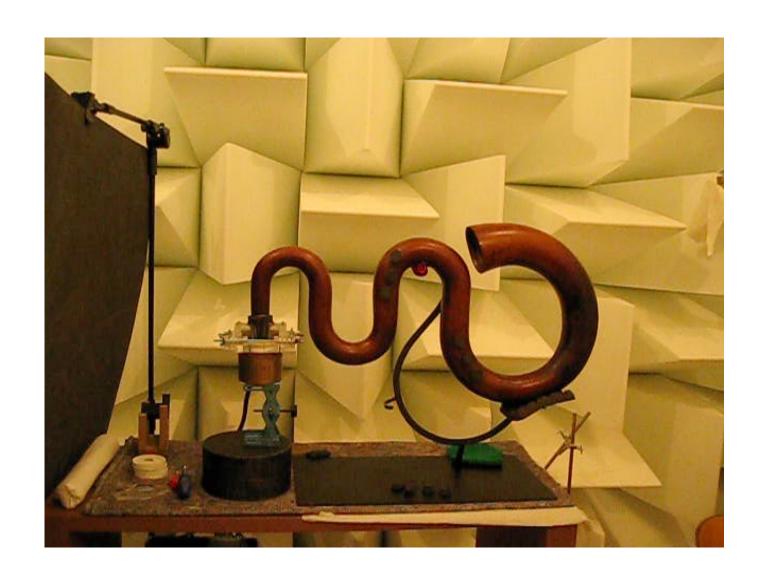


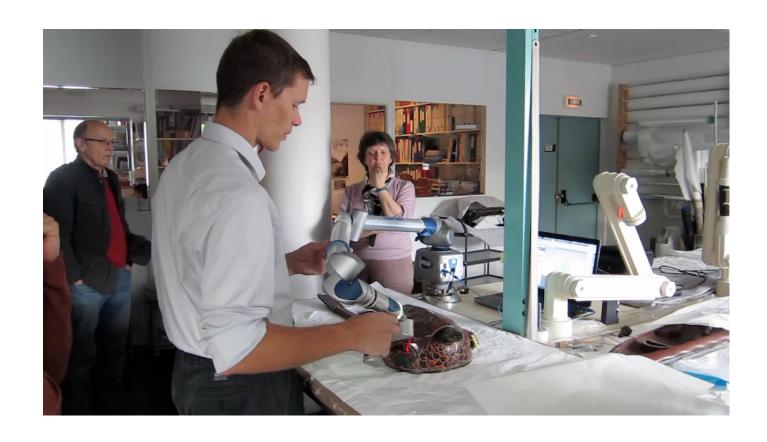












Natural aging and preventive conservation

MATERIALS OF THE MUSICAL INSTRUMENTS

LIGHT

TEMPERATURE AND RELATIVE HUMIDITY

BIOLOGICAL "AGENTS"



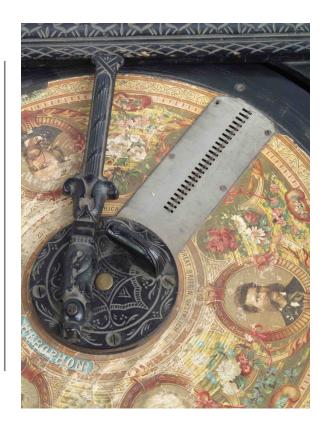


















Water and temperature are an inseparable couple, since well controlled they are their best ally, but poorly controlled they can be their worst enemy.

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

Tlapanhuéhuetl de Malinalco
National Museum of Anthropology

Tlapanhuéhuetl de Carlos Chávez

National Center of Research, Documentation and Dissemination of Music













PERCUSION ARCS























LUDERS





















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/