TERMÓMETROS
VISUAL REGISTRATION OF NATURE AND ITS CHANGES
FUSION AND TECHNICAL VARIATIONS OF THE ESTAMPA FOR THE PRODUCTION OF ARTISTS’ BOOKS
Elba Ireri Topete Camacho

SUMMARY
The following document presents the results of the research-creation project THERMOMETERS, Visual registration of nature and its changes, which consists of exploring various possibilities of fusion and technical variations of engraving and drawing to produce artists’ books, as an alternative to contemporary graphic prints. The project consisted of the creation of three series of artists’ books in concertina, polyptych, and expandable formats. The thematic axis was the visual record of nature and its changes throughout the period covered by the project.

Keywords: Artist’s book, Engraving, Drawing, Thermometers, Climate change

1. INTRODUCTION
During the last few years, the development of my artistic production has focused on the construction of images departing from the hybridisation between drawing and engraving. For this, the development of artistic practice within engraving workshops has been fundamental, since the tools, knowledge, and experimentation that we have developed in them have established a foundation in the construction of this project-creation research, named THERMOMETERS.

This presentation contains the approach and results of the project and the conceptual and technical support on which we worked for a period of three years, from 2019 to 2021. The thematic axis is related to the changes and events of nature occurring as a part of its cycle or because of human action. A careful observation was made of the events that motivated the construction of each visual thermometer artist’s book which makes up each of the series.

In this project, it was important to talk about our time, the historical epoch that we live in; our current focus is on nature and its changes, adding our voice to that of many others. We are convinced that climate change is a reality, and that the times we live in demand of us attention, care, and responsibility for the most valuable common good of humanity: the Earth.

2. APPROACH
An artist’s book explores variants and visual sequences on the themes it develops. In the case of our workshop, diverse solutions of form and content were explored from the images generated by drawings, photographs, and annotations made in each year of work, as a visual record and

Figure 1: Detail of “Thermometer - 0ºC” - MMXIX - Polar Vortex - Ireri Topete
Figure 2: Detail of “Thermometer - 0ºC” - MMXIX - Polar Vortex - Ireri Topete
testimony of the events and changes in nature and the geographical environment inhabited: Puerto Vallarta, Jalisco, located in the Mexican Pacific. At the same time, a record was made of significant changes and events that occurred in other latitudes, which were of interest to us. The proposal was that each artist's book would function as a thermometer composed of 'visual scales' (images that are the result of the process of visual composition, structure, and format in each of the books). This creative proposal translates the information gathered both visually and conceptually into detailed scales or measurements of the events on which the production of each of the books is based. The focus is on the changes in nature that occurred because of natural phenomena or changes caused by the actions of mankind and that happened during the period of work.

Each thermometer is structured by various resources; for example, we use colour as a factor that allows us to establish visual values. On the other hand, we use the saturation of the visual space in the composition of the fragments that are part of each thermometer, depending on the subject and the resources available. In the end, the result became what we called hybrid work.

Finally, it is important to emphasise that the main thread was the histories, experiences, and correspondences that we have with the inhabited place, and its constant changes, ranging from climate change, a global phenomenon that we experience in the Port, to the changes that the environment and the landscape suffer due to the actions of man. Finally, the focus is on how these changes have modified the understanding and emotional relationship with the local and global spaces.

3. GENERAL CONSIDERATIONS

To reach the final product, the production of the artist's books of the project THERMOMETERS: Visual record of nature and its changes, we refer to the following reference areas:

a. The production of the body of work resulting from this project is formally framed within the genre of the artist's book or art book, as a support for the visual content; in this case, understanding the artist's book as a product associated with plastic creation. According to Antón (2009), “the artist's book is a work of art, made mostly or entirely by a plastic artist. It is a form of expression, symbiosis of multiple possible combinations of different languages and communication systems”.

For my artistic production, the artist's book, or book art as a support has been fundamental. My encounter with it began in 2003 thanks to a workshop given by Dr Daniel Manzano at Artes Gráficas “La Raya” workshop, at the Cuale Cultural Centre in Puerto Vallarta. In the context of that space, the possibilities offered by the artist's book were revealed. This is not a new topic, as Crespo and Figueras (2012, p. 15) mention below:
“The Book-Art or Artist's Book as an aesthetic object already has, in the 21st century, an illustrious tradition; during the past 20th century it emerged as one of the dominant modes of creation in all artistic movements, becoming an object of highly personal expression.”

This possibility that the artist's book gives us to work in an intimate language, having diverse possibilities of formats, materials, and techniques, is what caught our interest since our first encounter with this genre. In this support, we found an open field of possibilities to build the premise of the project and generate visual thermometers that are an interpretation of the changes in nature witnessed in real time, along with their construction.

I sympathise with Martínez's (2008, p.99) conception of this support: “The artist's book, as a new product associated with plastic creation, has adopted two general versions: on the one hand, for the more conceptual artists it becomes a support of mainly documentary content.” In this case, he speaks of the action of recording experiences that in our opinion and our practice, in particular for this project, we have referred to the construction of the book thermometers as receivers of all the information gathered from the events that occurred during the period of the project and that in themselves the conceptual interpretations that were made of the changes observed in nature. On the other hand, he mentions that “the artist's book is used as a field of experimentation from the assumption of multimedia integration, since it is a support of great symbolic load for our western culture”. Because of all these attributes and many more that we would not be able to mention, our artistic work has focused its attention on the production of artists' books.

b. Regarding the context, it is delimited within the concept of the THERMOMETER, as an instrument that measures the temperature of a system in a quantitative way. According to the objective conception of this laboratory instrument, in the project, the thermometers will be a “visual measuring tool” of the constant changes that happen in nature, as an object of study in general, and the references to the visual environment of the local space and global space.

- In this section, we worked on a digital logbook of the project to determine the scales in the form of images, which allowed us to delimit and give values from numbers, colours, and saturation of the images to obtain the visual interpretation of the observed events that are reflected in the work as “visual thermometers”, understanding also other measuring instruments, either real or imaginary.

c. Regarding the technical approach, in the practice and investigation of the possibilities offered by the fusion of techniques of engraving and drawing, various solutions were sought to reach the qualities and technical qualities of the artistic object in question. This binomial of drawing and engraving has been of particular interest; there are
already years of learning, practice, and research that have given us routes and technical solutions. It is important to mention the support and collaboration of master printer Sergio Gutiérrez, known as El Tocayo, with whom we have worked in complicity for many years. The joint work that has been developed has resulted in the development of a technical methodology to obtain the desired results and quality in the finished work. We also received feedback from Master Nunik Sauret, whom we consider our mentor.

- Drawing and printing merged with experimentation by superimposing layers of printing on drawings based on Chinese ink, watercolour, graphite, and charcoal. On the other hand, the language of colour as related to images and thermometers is fundamental, so the construction of a particular colour palette for each book was one of the main challenges.

d. The work proposal and the edition of the artist's books are framed within an alternative of contemporary graphics; in that sense, we find that one of the keys that determine engraving in contemporary art has as a choice the unique work versus multiple works. This is paradoxical, as mentioned by Martínez (2008), as in the designated by Walter Benjamin epoch of the technical reproducibility of the work of art, the engraving, as a genuine "work of reproduction", has not found its place yet. The game of contraposition of Benjamin's approach made him doubt himself, but the technical reproducibility of the work acquired such importance that the works before, which were ephemeral, moveable, and inaccessible, became popular, because their graphic documentation obeyed the photographic, videographic, or infographic record, and so on. Thus, the products derived from are culturally more transcendent than the artistic object itself.

Therefore, we were interested in using the resources of engraving and printing as a means of producing a single work. The process of image construction obeys the moment and the intuitive impulse that is exerted in the creative process, so there is no intention to reproduce the same image. Given the experience in each work, it could be said that it would be impossible unless digital means were used to record it, which in this case would mean to turn it around and return to the premise of contemporaneity raised by Benjamin. This is not the case for this project.

- In our journey through the graphic work, and recognising its virtues of being reproducible, we have found other alternatives for the fascination of reproducibility, that is, we have found in the edition of atypical print runs and variations of the images from the use of the same matrices a great field of action that led us to investigate multiple and varied plastic and technical solutions for each book, focusing our interest on the unique work produced from techniques that could be reproducible, but that is not used with that intention.

e. His project refers directly to observing and recording the current
weather, and these last three years have been particularly punctual in manifesting forceful changes related to climate change, an undeniable reality that has marked us in a forceful way our epoch has lit red lights. We are witnessing moments of devastation of a planet exhausted by the overexploitation and damage derived from human activity.

On this subject, we can say that the COP21 summit defines climate change as follows:

“Climate change is the global variation of the Earth’s climate. This variation is due to natural causes as well as the action of man, and occurs on all climatic parameters: temperature, precipitation, cloudiness, etc., at very different time scales. There is now a scientific consensus, almost generalised, around the idea that our mode of energy production and consumption is generating a global climate change, which will, in turn, have serious impacts on both land and socio-economic systems.” (https://www.miteco.gob.es/es/cambio-climatico/)

4. RESULTS

Three series of artist’s books were made, one for each year of work. Each has the following characteristics:

Serie I - año MMXIX - TERMÓMETROS, escalas visuales sobre sobre la Naturaleza en los tiempos del cambio… Registro visual de los cambios registrados durante el año, o eventos significativos relacionados con el clima y fenómenos naturales, en lo local y global.

1st series: year MMXIX – THERMOMETERS, Visual Scales on Nature in Times of Change. Visual record of changes recorded during the year, or significant events related to the climate and natural phenomena, locally and globally.

• CONCERTINAS: MMXIX. The year 2019 turned out to be particularly significant globally: natural phenomena skyrocketed in intensity, frequency, and impact on the natural environment and human settlements. It was truly alarming how in a single year Earth manifested itself with extreme temperatures both in cold and heat, altered temperatures that caused polar vortices such as water tornadoes or landslides, at the same time as hurricanes and fires throughout the planet.

2nd series: year MMXX – THERMOMETERS, Visual Scales on Changes in the Physiognomy of the Natural Environment. These are visual records of changes caused by human activities in the natural environment and urban environment at the local and global levels. In this section, we were especially interested in observing the changes in the physiognomy of the place where we live and the transformation of the natural landscape, and the devastation that man cause in nature in their immediate environment and in general in other places.
• POLYPTYCHS: MMXX The year 2020 was without precedent in the contemporary history of the 21st century. Humanity has evolved in so many aspects, it has been master and lord on this planet, but we have not yet understood how vulnerable we are and how we have altered the balance and harmony of the environment. Nature has pointed us the way, however, man has not stopped the predation and destruction of our planet for the sake of their “welfare and progress”. Only this time, humanity had to stop at once, as the pandemic has changed our lives. The period of work corresponding to the second year of our project was framed by the most serious health crisis of our lifetime. SARS-CoV-2/COVID-19 is the virus responsible for the current pandemic.

• On the other hand, this period focuses on a problem that is experienced globally, the change in land use, considering that human beings have always altered the landscape, nature, and the resources it provides in order to satisfy their need for housing. The big cities have experienced an exponential growth; they are invading land that had no vocation to be intervened with vertical housing (in most cases), and in this way, the natural space is being filled with concrete.

Series III: year MMXXI – THERMOMETERS, Visual Scales on Experiences and Emotions Experienced, Related to Changes in Daily Life and How They Modify the Feeling, Quality of Life, and Interaction with the Natural Environment and its Changes. This section has to do with the feelings that provoke the times of the change of the longed-for place, as it is transformed in a dramatic way, a measurement of the emotional perception (the experience, the memory, and the nostalgia) of the Port that goes away and becomes an alien place, the immediate space that is a global feeling in relation to other places that undergo the same dramatic changes.

EXPANDABLE: MMXXI In the year 2021, the pandemic is still active. The reflection focuses on how to understand the world today without being overcome by nostalgia. We continue to see the sea of our grandparents; we want to know for sure that the water abounds and that the rain brings the germination of the seeds, not the destruction of the sowing. At the same time, we are talking about drought and floods; the balance has been lost. It is not nostalgia for an imaginary or a metaphor. Poetry is diluted and reconstructed, nostalgia overwhelms us, and there is a great need to rediscover beauty and harmony despite the disaster. We have learned to familiarise ourselves with the aesthetics of disaster despite ourselves. Inside, we did not let our guard down; we went ahead to rebuild the feeling, and from there in this third year of work we built a series of Nostalgíómetros (thermometers made with nostalgia), which leave us a testimony of specific themes: the nostalgia of the urban environment for clean and healthy seawater and the reflection of the drought crisis that various regions of our country and the world are already facing.
5. CONCLUSIONS

The times that we are living in are overwhelming, the signs of climate change and its consequences are everywhere, and you cannot be indifferent. “The artist is a social seismograph”, said Juan Eduardo Cirlot, art historian, and art is simply the best testimony and reflection of the history of humanity, leaving evidence of what happens at the time it is created, so this project claims to leave a testimony of the changes of nature in real time.

In this project, we set out to find various solutions and readings for these “THERMOMETERS”, on the one hand, conceptually, which has to do with the contents that gave us the experience of observing and recording the natural changes that caught our attention. This period has allowed us to confirm what is already known, but what is a global reality is experiencing dizzying changes, and the times of climate change are upon us. This project leaves a testimony of this historic moment, speaks of our time, and asks for attention.

6. BIBLIOGRAPHY


Figure 3: "Thermometer - 0ºC" - MMXIX - Polar Vortex - Ireri Topete
Figure 4: "Volcanic traffic lights" - MMXIX - Popocatépetl - Ireri Topete
Figure 5: “Water and wind” ... - MMXIX - Hurricane Season - Ireri Topete
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