This dissertation offers a conceptual tour on representation by infrared thermography, through the artistic practice. Through this new function given to infrared thermography it is possible to reproduce the world from the aesthetics of heat, providing a new tool to express feelings and ideas, to establish new dialogs and to obtain knowledge.

The infrared thermography gives us knowledge, shows a side of reality, something, an event that is happening, related with space and time. It makes visible the heat of our environment, showing its appearance and how we interact with it.

In the development of the research all processes used have been taken into consideration; Starting by the conception of the thermic work, the technique requirements and the conditions for the image that enables the circumstances to manifest, expose or transmit a message, to the reactions that can arouse in the spectator when watching the image.

The exploration to know the means, the reference to artistic signs and the analysis made are the keys to define how this new language is configured and to find guidelines that can be considered patterns in the representation.

The thermographic technique has been studied, together with the range of possibilities that it offers regarding representation, in order to understand and comprehend the behavior of the infrared radiation and that of the thermic camera and thereby make the most of the images. Knowing how heat works provides details for planning the "thermographic sessions".

The visual expression also verifies the existence of graphic elements in the images and its changes compared with the visible, pointing the most common and the most striking. The results from the observation of the new vision of the environment, the time and place and the possibility of expressing, communicating and transmit life and emotion are shown. Additionally, the human representation highlights the attributes that enables the mimesis, the expression of the people, their inner being.

The discoveries, findings and conclusions derived are multiple. Some of them are personal; others refer to the work and representation, and we think, that all of them provide the foundations of this artistic resource.