

# In memory of absence: The resilience created from disappearances in Mexico.

Carrasco Morales, Diana

2024-05

---

<https://hdl.handle.net/20.500.11777/6050>

<http://repositorio.iberopuebla.mx/licencia.pdf>

# In Memory of Absence: The resilience created from disappearances in Mexico.

Diana Carrasco M.

Universidad Iberoamericana Puebla  
Blvd. del Niño Poblano No. 2901  
Colonia Reserva Territorial  
Atlixcáyotl, San Andrés Cholula,  
Puebla.

diana.carrasco@iberopuebla.mx  
(co-author)

Arturo García Muñóz

Universidad Iberoamericana Puebla  
Blvd. del Niño Poblano No. 2901  
Colonia Reserva Territorial  
Atlixcáyotl, San Andrés Cholula,  
Puebla

arturo.garcia3@iberopuebla.mx

Santiago Bonilla B.

Universidad Iberoamericana Puebla  
Blvd. del Niño Poblano No. 2901  
Colonia Reserva Territorial  
Atlixcáyotl, San Andrés Cholula,  
Puebla.

santiago.bonilla@iberopuebla.mx  
(co-author)

María Fernanda Rivera Carrillo

Universidad Iberoamericana Puebla  
Blvd. del Niño Poblano No. 2901  
Colonia Reserva Territorial Atlixcáyotl,  
San Andrés Cholula, Puebla.

mariafernanda.rivera.carrillo@iberopuebla.mx

Gerardo A. Ceja R.

Universidad Iberoamericana Puebla  
Blvd. del Niño Poblano No. 2901  
Colonia Reserva Territorial  
Atlixcáyotl, San Andrés Cholula,  
Puebla.

gerardo.ceja@iberopuebla.mx

## SUMMARY

Understanding the challenges that search collectives face on a daily basis led to the search for a way to raise public awareness and show respect for the efforts of these groups in the search for their loved ones. Given the sensitivity of the issue of enforced disappearance, several comprehensive methods were employed to ensure responsible handling of information and to support the project. Initially, extensive research was conducted to gain a thorough understanding of the issue. Subsequently, the information was synthesized to visualize what was learned and identify the issues surrounding this topic. It was at this point that it was decided to address the lack of visibility of the search collectives, such as the search mothers, and the stigmatization they face in their struggle against a government that ignores them. After defining the focus of the project, we proceeded to develop a first prototype of an interactive memorial. To enrich this idea, experts in information design, interaction design, museography and in various fields related to disappearance, such as legal, psychological and research, were consulted.

Following these consultations, the project underwent several adjustments, moving from focusing specifically on search collectives of searching mothers to addressing the broader issue of disappearance and search collectives in general. In this way, it evolved from being a memorial to becoming an interactive tour, as presented in this document.

The interactive tour addresses the issue of disappearance and search groups through its 10 activities. In these, the user has the opportunity to receive information, reflect personally, observe the clear example of resilience and strength that are the searchers and that their work goes beyond just investigating, the user who visits the tour is invited to change their way of seeing and addressing this situation that exists in Mexico.

The media fidelity prototype was developed in Unity and is accessed through a computer. It allows users to

explore a three-dimensional space and interact with the 10 activities designed. A total of 10 tests were carried out: 5 with the first prototype and another 5 after implementing changes based on the comments received during the tests and the observations of the experts consulted.

## KEY WORDS

Enforced disappearance, human rights, war against drug trafficking, searching mothers, impunity, humanitarian crisis, awareness, visibility of the problem, state violence, resistance, social conscience, justice, truth, challenges, solidarity, cultural impact, memory, resilience, social transformation, institutional support.

## 1. PROBLEM DESCRIPTION

Understanding the challenges that search collectives face on a daily basis led to the search for a way to raise public awareness and show respect for the efforts of these groups in the search for their loved ones. Given the sensitivity of the issue of enforced disappearance, several comprehensive methods were employed to ensure responsible handling of information and to support the project. Initially, extensive research was conducted to gain a thorough understanding of the issue. Subsequently, the information was synthesized to visualize what was learned and identify the issues surrounding this topic. It was at this point that it was decided to address the lack of visibility of the search collectives, such as the search mothers, and the stigmatization they face in their struggle against a government that ignores them.

After defining the focus of the project, we proceeded to develop a first prototype of an interactive memorial. To enrich this idea, experts in information design, interaction design, museography and in various fields related to disappearance, such as legal, psychological and research, were consulted.

Following these consultations, the project underwent several adjustments, moving from focusing specifically on search collectives of searching mothers to addressing the broader issue of disappearance and search collectives in general. In this way, it evolved from being a memorial to becoming an interactive tour, as presented in this document.

The interactive tour addresses the issue of disappearance and search groups through its 10 activities. In these, the user has the opportunity to receive information, reflect personally, observe the clear example of resilience and strength that are the searchers and that their work goes beyond just investigating, the user who visits the tour is invited to change their way of seeing and addressing this situation that exists in Mexico.

The media fidelity prototype was developed in Unity and is accessed through a computer. It allows users to explore a three-dimensional space and interact with the 10 designed activities. A total of 10 tests were carried out: 5 with the first prototype and another 5 after implementing changes based on the feedback received during the tests and the observations of the experts consulted.

## 1.1 Context

The Mexican context of enforced disappearances goes back decades, with significant events such as the "dirty war", the "Ciudad Juarez femicides" and the current "war on drugs". These periods have been marked by state violence and impunity, exacerbating the crisis of disappearances in the country. Despite some progress in the identification and reporting of cases, challenges such as lack of resources and violence against those searching for their loved ones persist.

The Dirty War in Guerrero and the femicides in Ciudad Juarez are clear examples of the seriousness of the problem, evidencing the fragility of the rule of law and the impunity that prevails in Mexico. The situation worsened during the War on Drug Trafficking, led by President Felipe Calderón Hinojosa, exacerbating violence and impunity throughout the country.

According to the report of the National Search Commission in January 2019, 40,180 missing persons were registered. However, this figure does not reflect the total number of cases due to the fact that many people did not report disappearances out of fear and distrust of the authorities (Spigno, I. 2020).

In this scenario of injustice and state abandonment, the search collectives have emerged as a beacon of hope in the midst of darkness. Defying indifference and impunity, they have become tireless voices demanding justice and truth on behalf of their missing loved ones. Their tireless struggle not only challenges the government to assume its responsibility, but also inspires all of society to unite in solidarity and support for those who have been victimized by the state's failure to protect its citizens.

## 1.2 Justification

Although the UN has established guiding principles for the search for missing persons, government institutions represent the main obstacle to these searches. Searching mothers face obstacles and resistance from authorities, highlighting the urgency of recognizing the magnitude of the problem of disappearances in Mexico and the valuable work of search collectives in this context.

The relationship between the searching mothers and the Mexican government has been marked by doubt and fear, with little state participation in the search for missing persons. A clear example of this was the case of the disappeared in Tierra Blanca, Veracruz, where, although a public apology was issued to the families of the missing youths, adequate support was not provided to these families. In addition, there have been reported cases of elimination of hundreds of missing persons from official records, which has generated concern and legal action on the part of the collectives of searching mothers.

The media has played a variable role in the visibility of searching mothers, sometimes sensationalizing their stories or limiting their visibility. Despite the challenges, some searching mothers have managed to influence the public agenda and raise awareness about the seriousness of disappearances.

The positive impact of the Searching Mothers collective on Mexican society has been significant, not only in the active search for missing persons, but also in raising awareness of the humanitarian crisis facing the country. Their community involvement has generated changes in society.

The search collectives create support spaces where they share experiences and strengthen their support networks, offering accompaniment and listening to those who need it. They also organize activities and celebrations, such as *posadas* in December and birthdays, redefining the forms of celebration. In addition, they carry out projects such as "Embroidering for peace and memory, one victim, one handkerchief", which has expanded to different collectives throughout the country.

These initiatives have inspired the development of a project that seeks to make search collectives more visible and raise awareness of their reality among a wider public. This project consists of an interactive tour where visitors have the opportunity to participate in activities designed to understand what the search collectives are, their concerns and needs, as well as to understand the phenomenon of disappearance in Mexico.

The main objective is to show respect and support for the searchers, whose actions are a response to the government's lack of attention to its own citizens.

## 3. THEORETICAL FRAMEWORK

According to Article 2 of the United Nations (UN) Convention against Enforced Disappearance, this refers to arrest, detention, abduction or any other form of deprivation of liberty by agents of the State, or by persons or groups of persons acting with the authorization, support or acquiescence of the State, followed by a refusal to acknowledge the deprivation of liberty or by concealment of the fate or whereabouts of the person.

disappeared, removing it from the protection of the law (Secretaría de Gobernación, 2016).

Enforced disappearance is not a phenomenon exclusive to Mexico; in fact, in the country it was incorporated as a method to spread terror in society in recent decades, approximately 80 years ago. However, by then the deprivation of liberty was already common in the Latin American region, where forced disappearances were intended as a control strategy, where groups considered as subversive were detained and even eliminated (Rodríguez, O. 2017).

In Mexico, the forced disappearance of persons has been a persistent human rights violation, particularly during the so-called "war on drugs". In the absence of action by the authorities, "searching mothers" have emerged as a courageous group that defies dangers and obstacles in their search for missing loved ones, fighting tirelessly for truth and justice. This study delves into the phenomenon of searching mothers, detailing their motivations, strategies, challenges and impact on the visibility of the problem and the creation of support networks.

### **3.1 Research on the search for missing persons in Mexico.**

In response to the environment marked by increasing violence, murders, femicides and disappearances in Sonora, Mothers in search of their children and loved ones have joined forces since 2019 to create a collective that has become known throughout Mexico, leading to the emergence of many others across the country (Alcántara, E. 2021).

The role of the searching mothers is fundamental in this struggle, representing a courageous voice in the search for truth and justice for their missing loved ones. Despite facing significant challenges such as lack of institutional support and violence, these women persist in their search, inspiring others to join their cause and raising awareness of the humanitarian crisis in Mexico.

However, the activism of the searching mothers is not without risk, as some have been victims of disappearance and murder due to their tireless search for justice. Despite the dangers, these women continue their struggle, facing adversity with courage and hope.

There is a need to create safe and supportive spaces for searching mothers, as well as the importance of raising awareness of the magnitude of the problem of enforced disappearances in Mexico. Through their activism, these women not only seek justice for their loved ones, but also aspire to transform reality and find peace in the midst of tragedy.

The search for missing persons is a highly variable and situational process, requiring individualized approaches to each case. Although there are proposed methodologies, these are applicable only to similar situations. However, there is a generalized route to initiate the search, which can be guided by tools such as SocorroBot, a WhatsApp chatbot designed to provide information and support to those reporting a missing person in Mexico.

SocorroBot is a citizen initiative created by the organizations Quinto Elemento Lab, Codeando Mexico and Técnicas Rudas, which aims to help people to face the

emergency of the disappearance of family members or friends, and prevent them from wasting valuable time to start their search. The Bot guides you through the most proven route in the direction of the investigation (Ñuno, A. 2022).

Searching mothers play a crucial role in the search for their loved ones, sharing experiences, discoveries and knowledge acquired during their investigations. Their ability to gather information and their determination have surpassed the institutions, being fundamental in the identification of missing persons.

### **3.2 Internal dynamics of the collectives of searching mothers in Mexico.**

The Searching Mothers collectives are created by indirect victims of the impunity of disappearances in Mexico that, in general, are not investigated. This causes the family to continue living with pain, and to look for adverse alternatives that allow them to feel peace knowing that someone is searching for their loved ones, because there is always the hope of finding a clue of them (Centro Prodh. 2020. p. 14).

In addition to demanding justice, the Search Mothers raise awareness through initiatives such as planting trees in memory of the missing persons. Their struggle is a testimony of resilience and determination in the face of adversity.

In a country where violence and impunity are persistent challenges, these women seek to transform reality and find peace in the companionship and mutual support within their communities.

Families of missing persons face a number of challenges that affect all family members, especially children, who often feel alienated and alone in the midst of the situation. In many cases, children take on caring roles towards adults, while parents, especially men, tend to withdraw emotionally due to the economic pressure and helplessness they experience.

However, there is a noticeable shift in parental involvement in the search, with some parents taking active roles and seeking justice for their missing children. Despite economic and social challenges, more and more parents are joining marches and search movements, defying gender expectations and finding solace in the solidarity of other searching parents.

For the Searching Mothers, finding safe and supportive spaces becomes crucial in the midst of the hostility they face. These spaces provide them with a sense of community and mutual understanding, strengthening their determination to move forward in their search for truth and justice. Although institutional backing remains insufficient, the Searching Mothers find comfort and support both within and outside their communities, allowing them to face their pain with courage and hope.

### **3.3 Impact on daily dynamics after the disappearance of a loved one**

The phenomenon of enforced disappearance involves an overwhelming emotional burden due to the uncertainty about the whereabouts and status of the missing person. Searching mothers face additional challenges, such as the loss of employment and the need to assume dual responsibility in the

home. This process generates significant psychosocial impacts, including a sense of constant vulnerability, fear and helplessness, as well as self-defeating effects such as isolation and lack of motivation.

The work life of searching mothers is affected due to the need to dedicate time and resources to the search, which often leads to job loss and economic precariousness. This is compounded by the lack of institutional support and the insecurity generated by threats from criminal groups. Many mothers also experience a deterioration in their physical and mental health due to stress and distress.

Psychology describes the forced disappearance as an experience of traumatic character, which severely impacts the individual psyche of family members and their performance in multiple areas that make up their daily lives based on feelings of fear, vulnerability, anger and distrust (Moscoso Urzúa. V. 2012).

In addition, searching mothers face the risk of forced displacement due to the threats and violence associated with their search. This displacement not only increases their vulnerability, but also makes the search process and obtaining justice even more difficult.

Tragically, some searching mothers have been victims of disappearance and murder as a result of their activism. Despite the risks, these brave women continue to fight to find their loved ones and demand justice.

Through stories like that of Cecilia Patricia Flores Armenta, it is possible to see the profound and lasting impact that enforced disappearance has on the lives of affected families. Despite the challenges, these women persevere in their search for truth and justice, inspiring others to join their cause and raise awareness about this serious problem in Mexico and around the world.

## 4. DESIGN PROCESS

### 4.1 Research and ideation phase

During the development of the project, there were several changes in the original objectives, influenced by the extensive research conducted and the different approaches explored. When it was decided that the central theme would be forced disappearance, a sense of uncertainty and concern arose among the team. Subsequently, it was proposed to investigate the collectives of searching mothers, which led to a meeting with Alexia Martinez, who recommended a thorough investigation due to the team's lack of preparation to interview and approach these collectives in the short term.

These observations led to an atypical process, as the complexity of the issue required the team to be sensitized and recognize existing prejudices, many of which were influenced by stigmatization. This step proved fundamental to advancing the project, as it allowed for a deeper understanding of the real issues and the generation of practical proposals.

Once the first research findings were reached and after consultations with Alexia Martinez, an initial proposal crystallized. It was recognized that the search collectives were not limited exclusively to the investigation and active search for missing persons, but that they also generated spaces for

dialogue, educated police and other actors about their struggle and the processes they carried out, developed tools and established places to honor the memory of their missing loved ones. With this understanding, the focus of the project shifted from focusing solely on the searching mothers to include the IBERO Puebla Human Rights Institute and the IBERO Puebla community. The proposal consisted of the creation of an interactive memorial aimed at fostering an empathetic and reflective environment about searching mothers and missing persons.

### 4.2 Relationship map

In order to understand the complexity of the issue, a map of relationships was drawn up to graphically represent the interactions and connections between the actors involved in the problem, showing that private non-governmental institutions maintain a positive relationship and are key allies of the search collectives. In contrast, governmental agencies related to security and investigation show a posture of indifference or ignorance towards them.

Likewise, cases of collusion between authorities and organized crime that hinder the search for missing persons were exposed. With these findings, it is possible to delimit the role of IBERO Puebla, which through its Human Rights Department acts as a close contact with searching mothers to provide, within its limitations, the relevant support...



Figure 1. Relationship map

As a result of this discovery, interviews with experts in the field were planned.

### 4.3 First phase of interviews

The purpose of the interviews was to determine the central theme of the memorial as well as the activities that would be addressed within it, the importance of this process lies in having a professional approach that allows to properly conduct the interviews and extract data that will be meaningful in the final product.

The interviews were conducted in two phases. In the first stage, they focused on the approval and review of the proposal, considering both technical and empathic aspects to ensure the feasibility of the project and address various perspectives for its proper implementation.

Initially, Manuel Siordia was interviewed to discuss the project proposal, learn about his expectations and obtain information about the spaces available for its realization. In addition, his advice was sought to establish contact with experts in information architecture and contemporary art.

In a second phase, Roberto Rosete, a lawyer belonging to the Human Rights Institute of the Universidad Iberoamericana Puebla, and Raquel Moroño, a psychologist close to searching mothers and forced disappearances, were consulted to address legal aspects related to the handling of information from searching mothers. The objective was to identify what information would be appropriate considering both technical and empathic aspects to guarantee the respect and integrity of the stories shared.

From this first phase, extremely valuable findings were obtained that gave a new important turn to the proposal, since it was mentioned to us that even though there is public information about the searching mothers, it is quite necessary to ask for their approval directly from them, since there may be a possibility that at this moment they do not agree with this public information.

Because of this, it was decided to change the focus from a memorial dedicated to the searching mothers to a memorial dedicated to the disappearance and the search collectives.

## 4.4 Design challenge

Design challenges or How Might We are questions that allow us to explore the direction of our project. To put together a HMW it is necessary to unite our area of opportunity and points of view; in this way we create questions that are broad enough to generate multiple solutions and closed enough to allow a logical and achievable scope.

In accordance with the proposal to carry out the realization of a memorial, the HMWs were developed.

### 4.4.1 Area of opportunity

Develop an empathetic environment, with the purpose of cultivating memorable interactive experiences based on collaboration and co-creation.

### 4.4.2 How might we selected

The How Might We that stood out most prominently was the one called *go after adjectives* from which the following question was generated

How can we design a tool that promotes an empathetic and co-creative approach to developing memorable interactive experiences?

Consequently, this was the fundamental starting point during the ideation process. The prioritization of this approach is based on its ability to address both the need to generate empathy and the desire to foster collaboration in the creation of meaningful interactive experiences.

## 4.5 Idea generator

The importance of considering a variety of options during a selection process to maximize the potential for choice is highlighted. It then highlights innovative ideas that emerged after exploring various possibilities, including the incorporation of a gamification component. This component offers challenges and interactive activities related to responsive narratives to increase audience participation and engagement. In summary, these improvements resulted in the creation of an interactive space that disseminates responsive narratives, promotes empathy and awareness of relevant issues, integrates social networks to share stories, and encourages meaningful discussions, leveraging gamification to increase audience participation and engagement. The next step is to describe the proposal in general terms.

## 4.6 Conceptual proposal

### 4.6.1 General Description

Development of a physical space for a face-to-face exhibition with a memorial format focused on the memory and dignity of disappearances, where empathy can be generated through relevant graphic material such as videos, images and sound, as well as interactive activities where visitors feel immersed and participate.

### 4.6.2 Appearance and Ambience

Appearance: Enclosed space with walls on each of its four sides, with dimmable cold light and a wall in the center still. The walls will be decorated with the memorial activities. Starting from an elegant style with a palette of white, brown and grayish colors.

Ambience: Lighting will be dim, there will be no ambient sounds in activities that do not include sound. All the ambience will be designed to give a sense of respect, reflection, and solemnity.

### 4.6.3 Project Objective

Dignify and provide a space of memory for the searching mothers and their missing loved ones respectively.

### 4.6.4 User

Direct: Department of Human Rights of Ibero Puebla. who consider that there is little empathy and sensitivity from governmental institutions and the Department of Interaction Design of Ibero Puebla and the general public, which does not sympathize and is indifferent to the problem.

Indirect: Searching mothers and collectives of searching mothers who feel the insensitivity of the institutions and government agencies, in the face of the disappearance of their loved one.

### 4.6.5 Methodology

Design Thinking.

### 4.6.6 Platform

Physical space within the university with projection equipment and material included.

#### **4.7 People, situations and scenarios**

Analyzing people, situations and environments in the design of a memorial provides insight into the context of potential users and helps identify the emotional events they will experience before, during and after the visit. This opens up opportunities to enhance the experience. In addition, by understanding the needs and preferences of visitors, solutions can be developed, such as interactive technology, art installations or educational activities, that engage visitors more actively. This ensures that the memorial is meaningful, inclusive and relevant to a wide audience.

Three profiles of potential visitors to the memorial were developed. The first profile corresponds to an outsider who tends to express negative comments when faced with statements related to the search collectives. The second profile describes someone who, although aware of the issue, prefers to remain aloof and fearful of getting involved. Finally, the third profile represents a person well informed about the issue, able to recognize and understand the activities presented in the memorial.

#### **4.8 Frame of reference for the realization of the memorial**

The frame of reference is an essential tool for examining the development of projects related to the proposal. Its objective is to analyze the successes, failures and innovative ideas present in these projects. In the specific case of this proposal, both the activities carried out by the searching mothers and the memorials created by other organizations will be studied. In this way, a broad view of the opportunities that have already been considered to improve the proposed memorial will be obtained.

Among the memorials analyzed are the Recetario para la Memoria, the Memorial at the Museo Centro Cultural Universitario Tlatelolco and the Memorial de desapariciones migrantes en México.

After the analysis of the different memorials and identification of pros and cons, it was concluded that the memorial resulting from the research will promote solidarity and empathy towards the issue of disappearances in Mexico. This will be achieved through the use of art and interactivity to convey powerful and thoughtful messages. Activities will be designed to encourage the active participation of all visitors and will maintain a consistent message throughout the project. In addition, measures will be implemented to promote the participation of the general public and encourage awareness and action.

#### **4.9 Proposed activities**

Based on the findings obtained from the research and interviews, activities have been developed that fulfill four fundamental aspects. The main goal of the memorial is to promote reflection on disappearances in Mexico, addressing their complexity and the social implications they entail. In addition, it seeks to generate empathy towards the victims, particularly the searching mothers, in order to sensitize visitors to their experiences. The space is conceived

as a site of memory and reflection, which pays homage to the victims and motivates social action for justice and truth. Consideration will be given to the inclusion of rest areas for visitors after participating in intense activities.

##### *4.9.1 Activities for the start of the tour*

Three possible options were created for the beginning of the tour, the first are pamphlets about the problems of the tour that visitors can take with them, the second are pamphlets or announcements that publicize the problems and the existence of the memorial and finally a collaborative mural where visitors can write a note about their personal experience of anguish and loneliness.

##### *4.9.2 Rest areas*

They refer to activities in which the visitor can take time to reflect and reaffirm their knowledge acquired during the memorial, such as placing notes on a cardboard or real tree, writing on a blackboard a right from a list presented on a tablet or displays with information about the collectives that allow visitors to learn more about the search engines.

##### *4.9.3 Half a route*

These activities were designed to generate a significant impact on the visitor, whether positive, serious or emotional. Among the planned activities is a telephone that answers when you pick it up, giving you information about the last call that people can make before disappearing, the reproduction of a movie or short film, an auditory experience in which visitors have to walk through a dark corridor where speakers are placed that reproduce phrases that often revictimize the searching mothers.

##### *4.9.4 End of tour*

As a final activity of the tour, it was proposed to place a Qr code to direct support campaigns to the groups, allowing them to keep in touch and participate.

### **5. SECOND PHASE OF INTERVIEWS**

Once the activities were established, an interview was scheduled with Luis Gabarrón, who served as coordinator of the Interaction Design and Animation degree program. Based on the feedback gathered during the interview, three different tours were designed, each with a beginning and an end, using an experiential moodboard to explore elements such as moods, color palettes and the overall direction of the memorial. Of these three tours, one was selected based on the emotions it generated and the narrative it offered.



**Figure 2. Route diagram**

With the list of activities present, we proceeded to generate the narrative that would unite all the activities, so that through a narrative scheme we could visualize and provide a clearer idea of how to arrange the list of activities.

The main objective of creating this scheme is to provide a detailed and coherent guide and where it is easy to describe how the user experience will unfold at each stage of the journey. In addition, it seeks to ensure that the desired emotions, such as empathy, awareness and reflection, are reflected in each interaction and activity proposed.

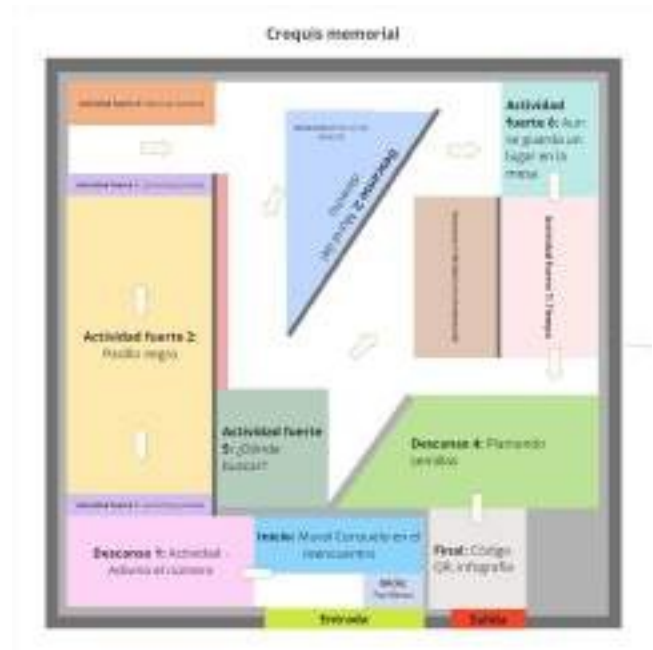
In this way, it is intended to provide a clear and accurate representation of the user experience, highlighting key moments, emotional transitions and the overall cohesion of the tour. Ensuring that the design of the tour fulfills its objective of generating a significant impact on those who visit it, inviting them to reflect on the issue of disappearances and to take actions that contribute to addressing it.

Initially, the need was identified to counteract the overwhelming effect of high-impact information at the beginning of the tour, which could generate feelings of hopelessness or discouragement in visitors. As a result, spaces for reflection and relaxation were introduced, allowing for a more appropriate emotional balance throughout the visit.

Although the order of the activities was already established previously, the elaboration of the narrative allowed to detect and correct possible inconsistencies, as well as to enrich the understanding of the emotions that the users will experience during their interaction with the tour.

## 6. CROQUIS

Once the order of the activities had been finalized, it was necessary to capture it in a physical space that could be represented in three dimensions. IBERO Puebla University's IDIT 2.0 offers a space dedicated to the presentation of exhibitions. Therefore, it was considered that this place would provide the appropriate environment to ensure the order and continuity of the interactive tour.



**Figure 4. Sketch**

## 7. CONTINUUM OF INTERACTION

Once crucial aspects such as the narrative, the flowchart and the final sketch with the activities have been completed, it becomes essential to carry out the interaction continuum. This essential component allows us to understand in depth the user's participation in each of the proposed activities, which facilitates adjustments and improvements to optimize the visitor's experience.

It is important to note that as the level of interaction increases, so does the level of user involvement. This aspect acquires significant relevance in the context of empathy, since greater interaction can enhance the visitor's emotional connection with the theme of the tour. In this sense, the interaction continuum becomes a tool for designing experiences that generate a lasting impact on visitors, thus fostering greater understanding and awareness of the issues addressed.

In addition, moments of empathy will be considered, which correspond to the spaces destined to intense activities within the tour. According to the hypothesis proposed, it is expected that these activities will be the ones with the highest level of interaction, which will allow a more precise evaluation of the emotional and cognitive impact of each activity on the visitor.





Figure 5. Interaction Continuum

Improvement opportunities arose to edit the activities and obtain better results.

## 8. JOURNEY MAPS

The use of Journey Maps provides a valuable tool to immerse yourself in the users' perspective, allowing you to analyze and understand the experience they would have when interacting with a product or service. To achieve this, a series of key questions are asked: What actions does the user perform, what thoughts arise during the process, what emotions does the user experience, what visual aspects does the user perceive?

These questions guide in the creation of a detailed map that represents the different stages and activities that the user carries out, allowing not only to identify the concrete actions, but also to understand the emotions experienced and their intensity throughout the experience. On this occasion it was decided to use 3 journey maps for the 3 users mentioned in the section on people, situations and scenarios to review which activities could be best addressed in the prototyping, while at the same time allowing to contemplate the differences between each user to create a rewarding experience for all visitors.

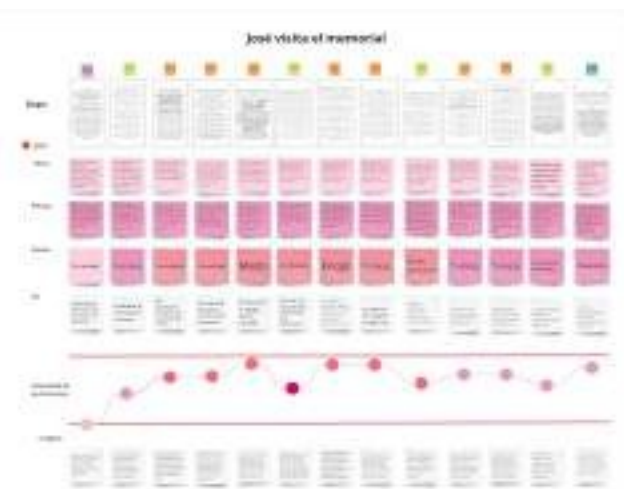


Figure 6. Journey map

After conducting Journey Maps for the three user profiles, a deep understanding has been gained of how the memorial arouses a wide range of emotions, some comforting while others can be uncomfortable. See

identified activities that offer moments of reflection and others that can generate discomfort, but at the same time can generate empathy towards the searching mothers and the issue of enforced disappearance. The importance of maintaining a balance between these moments through the system of activities and rest periods is recognized, allowing the user to be guided effectively towards the objective.

While it is understood that you will be dealing with a diversity of users with different personalities and experiences, it is noted that many of the activities have the potential to impact the way people think, feel and perceive the subject matter. This provides confidence in the ability to create a meaningful and moving experience that resonates with a wide range of audiences.

## 9. LOW-FIDELITY PROTOTYPE

To carry out the materialization of the previously mentioned prototype, Unity was used, a videogame engine that facilitated the creation of the three-dimensional environment in which the activities were developed. This allowed users to preview what the physical version of the memorial would look like.



Figure 7. Memorial entrance

### 9.1 List of activities

1. "Advertisements" or "pamphlets" that publicize the issues and the existence of the memorial.
2. **Anguish and loneliness:** Collaborative mural where in a note you write how you have experienced anguish and loneliness and next to that some story or related phrases of the searching mothers.
3. **Guess the number:** Put a glass object with x amount of rice grains on it and put "a tablet that says How many grains of rice are in this container" and then put, there are N, which is 1 tenth of the number of missing persons in Mexico since 2019.
4. Through the space of the memorial, **make a distinction between what is generally known about the disappearances, the existing stigmatization, and another space where the "truth" can be found.** This distinction could be by a line on the ground, or a curtain in the center. The intention is to communicate that we are seeing only a small part of the problem and that we need to get out of this "bubble" to empathize.
5. **Aisle of judging glances:** An audio experience where they pass through a dark and closed corridor where they hear each other.

phrases "Why would you keep looking?", "They are just wasting their time" "Why would you have the right to celebrate Christmas? You should be looking", "Yes ma'am, we will file a report when we know something we will let you know? M: It's been two years, where is my son? O: We still have no clues, we are busy" and at the end of the tour a looped text appears on a screen that says: When someone disappears it is a perpetual torture for the families, who wonder where they do not know if he has eaten, if he is cold, if he is well. Where is he?

6. **Mirror with "wanted" signs around it**, with the objective of making visitors think "how would my family be dealing with my disappearance", seeking to make them empathize with the problem and pointing out that it can happen to anyone.

7. **Phone**. An old phone, where when they pick up the phone to answer it, a phrase is played: In many occasions, the last contact you have with the person is when they call their loved ones to tell them that they are going to be longer than expected, but that they will see them soon, and after that they never see them again.

8. A blackboard where people can write on a chalkboard one of the selected laws, as they choose them they are erased, for this there will be a tablet that says "Which of these laws would you like to write on the mural?", the person clicks and the tablet shows "write it with one of the chalk and click when you finish" after that the person writes, clicks and the initial screen is displayed again. You can keep a count of which laws are written the most to know which are the most understood or understandable for people.

9. **Signs in the sand**: A box full of sand where you can find things that may have belonged to other people who have disappeared: shoelaces, pieces of cloth, belts, old and dirty wallets, fake INE credentials.

10. **My journal at the memorial**: 3 books with a pen attached with a pen where visitors can write down what makes them feel about this topic. Each sheet contains the following two questions: How are you feeling? Post a nice memory you have with someone you care about.

11. **Still keeping its place at the table**: A table set for a dinner or lunch with two places and a candle in one of the two. People can interact with things on the table, but there are some items that look like tears on the table.

12. **Past and present**: Put a big screen, touch where there is only 1 image, this will be 1 artistic piece that shows a happy dinner and full of people, animated with motion graphics with engraving style (example Dessiderio Hernandez, and when the person slides another artistic piece is shown; that represents the present: it will show the family sitting without having fun and an empty chair, next to objects of the symbolic missing or a photo. In this second image only one candle will be animated in the center of the table, and it will be the only color shown, the yellow of the fire.

13. **Tree of memories**: In the center place a cardboard or real tree in which people can write messages, reflections, messages of hope on its branches.

## 9.2 First user tests

The first version of the interactive memorial consisted of 13 activities. A total of 5 tests were carried out with this first prototype, during which comments were received on the intensity of some activities and their appearance. In order to obtain more complete feedback, the prototype was presented to Alma Cardoso, Coordinator of the Contemporary Art Degree at IBERO Puebla, and to Alexia Martinez, responsible for the observatory of missing persons at IBERO Puebla.

Thanks to the feedback received both during the tests and the consultations with the experts, significant modifications were made:

- Remove the name memorial for interactive tour.
- Codification of 4 activities.
- Restructuring of spaces, eliminating bottlenecks.
- Correction of misused terminology.
- Changes in the presentation of information in infographics.
- Reduce the number of activities.

## 10. MEDIUM FIDELITY PROTOTYPE

After reviewing the corrections made, the prototype was modified and the questions about the project were redefined. As a result, the number of activities was reduced from 13 to 10.

### 10.1 List of final activities

Upon entering, a pamphlet with information about the interactive tour and some important facts is offered, after which the activities begin.

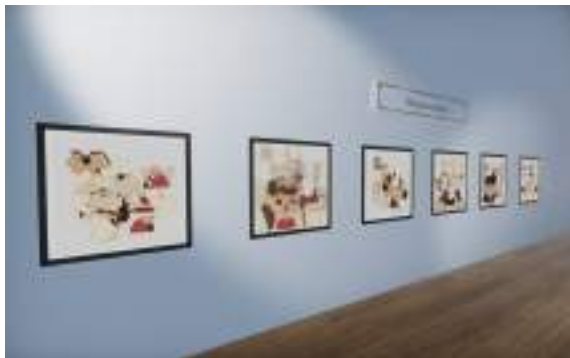
1. **Mural "Solace in Reunion"**: Upon entering the tour, the first thing visitors encounter is a pamphlet explaining the tour. Afterwards, they encounter the mural of consolation, where users are asked to leave a reflective message about how the search and reunion can offer comfort and peace to the families and friends of missing persons.



Figure 8. Mural "Consuelo en el Reencuentro".

2. **Guess the number**: The next activity is to guess the number, and ask visitors to guess the amount of rice grains in the container. Once they do, a message will appear explaining that this amount is a quarter of the missing people in Mexico alone since 2019, and that in reality, these grains are people.

3. The bubble: In this activity, visitors pass through a dark room where they hear voices criticizing searchers. At the same time, videos appear on the sides with text explaining one of the biggest problems they face: Stigmatization.
4. Resilient Butterfly: Its objective is to show how families, when faced with a disappearance, are able to transform themselves into lawyers, professional investigators, activists, forensic experts, database managers and emotional support for other family members. This is done through the assembly of puzzles, with 6 available so that several users can participate simultaneously. As the puzzle is put together, the description of why families adopt these roles emerges.



**Figure 9. Activity "Resilient Butterfly".**

5. Mural of the law: In this activity visitors have to write with a chalk on a blackboard the law they have chosen on a tablet that will be next to the blackboard. You can keep a tally of which laws they write the most to know which ones are the most understood or understandable to people.
6. A series of videos appears here showing the different ways in which search collectives perform these searches with equal importance and representation. In addition, it provides more detailed information on why these places are searched and probes into the process, making it more informative and maintaining interactivity by allowing the user to choose what to read.



**Figure 10. "Where to Search?" activity.**

7. My diary at the memorial: This activity consists of 3 books with a pen tied to a pencil with a pen in it where the

visitors can write down how this topic makes them feel. Each sheet contains the following two questions: How do you feel? and Post a nice memory you have with someone you care about.



**Figure 11. Activity "My diary in the memorial".**

8. Still keeping your place at the table: In this activity there is a table set up for a dinner or meal with two places and a candle in one of the two places. People can interact with the things on the table, but there are some items that look like tears on the table.
9. Time: The activity consists of a large screen, touch where there is only 1 image, this will be 1 artistic piece that shows a happy dinner and full of people, animated with motion graphics with engraving style (example Dessiderio Hernandez) and that when the person slides another artistic piece is shown; that represents the present: it will show the family sitting without having fun and an empty chair, next to objects of the missing symbolic objects such as a shovel and in a third image a phrase "What if I find it? what?" will be placed.



**Figure 12. Activity "Time".**

10. Planting seeds: To conclude, this activity invites users to support the families of missing persons with whatever they can. The QR activity was made more visible by redirecting to an infographic on how to support, placing it directly on the memorial for all to see. In addition, the QR includes access to the blog with secondary research so that users can be informed from a single source, concentrating relevant information of utmost importance to understand the issue.



Figure 13. Activity "Planting Seeds".

## 10. SURVIVAL DESIGN KIT FOR CREATING INTERACTIVE TOURS THAT LEAD TO EMPATHY

Designing empathetic paths in contexts surrounded by stigma poses significant challenges. Overcoming the barrier of culturally ingrained thinking is crucial to achieve user empathy. This is why specific tools have been selected to lead a discourse that promotes empathy and fosters an inclusive approach.

The Survival Kit is a guide for the construction of interactive tours. It is a linear process that offers steps to follow, recommendations, examples and details, conceived by designers for designers. This kit provides a fundamental support to foster diverse narratives and promote different approaches to address them.

Due to the needs of the project, it was decided to complement the interactive tour with another type of interactive or project. Initially, it was proposed to develop a platform for the creation of interactive tours, based on the process used to develop the interactive tour "In Memory of Absence". To explore this idea, Roberto Razo, former coordinator of the Bachelor's Degree in Interaction Design and Animation and currently in charge of the forensic architecture laboratory project, was consulted.

Thanks to their comments, the proposal was restructured. Although the interactive tour showed the skills as interaction designers, it was decided to create a guide based on the design thinking methodology and the process used in this project.

## 11. CONCLUSIONS

Reflecting on issues such as forced disappearance can generate fear and uncertainty, sometimes diverting us from the reality in which we live. However, it is crucial to address these issues one by one, as they are matters of utmost importance that should concern the whole society.

The main objective of the project is to make the work of the search groups visible, recognize their strengths and raise awareness in society. The aim is that, in this way, we can grow and advance as a society, working together to prevent such painful situations from continuing to affect our communities.

In understanding the stories of missing persons and their families, we are confronted with the reality of a phenomenon that we cannot ignore. Concrete steps must be taken to ensure justice and the protection of the human rights of all people, especially those in vulnerable situations.

Throughout this project, we have learned the importance of empathy and collective action. Each step we take forward brings us one step closer to building a more just and compassionate world. We sincerely thank all those who have supported us on this journey and look forward to taking this project to another level in the future, expanding its reach and impact on society.

## 5. REFERENCES

1. Secretaría de Gobernación. (2016, 22 December). what is enforced disappearance? gob.mx. <https://www.gob.mx/segob/articulos/que-es-la-desaparicion-forzada?idiom=en>
2. Rodríguez, O. (2017). History of disappearance in Mexico: profiles, modus and motivations. *Derecho y Ciencias Sociales*. October 2017. No 17. Pgs 247-271 ISSN 1852-2971. Institute of Legal Culture and Master in Legal Sociology. FCJ and S. UNLP
3. Alcántara, E. (2021). A feminist look at the disappearance of persons: Reflections from the experience of search. A where go the disappeared go. Retrieved from: <https://adondevanlosdesaparecidos.org/2021/11/11/una-mirada-feminista-a-la-desaparicion-de-personas-reflexiones-desde-la-experiencia-de-busqueda/>
4. Ñuno, A. (2022). who can best help a family that is beginning to search or does not know where to start. Where the missing go. Retrieved from: <https://adondevanlosdesaparecidos.org/2022/08/30/que-n-can-better-help-a-family-that-is-starting-to-find-or-doesn-t-know-where-to-start/>
5. Centro Prodh (2020). *Las locas de las palas*. First edition. México.
6. Moscoso Urzúa, V. (2012). Between uncertainty and pain: psychosocial impacts of forced disappearance. *Informe Del Centro Nacional De Memoria Histórica*.
7. Centro Prodh (2020). *Las locas de las palas*. First edition. México.
8. Spigno, I. (2020). Evolution of the forced disappearance of persons in Mexico. Analysis in light of the jurisprudence of the Inter-American Court of Human Rights.