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Keeping Memories Alive and Living Again An Evaluation on Nurdağı Open Air Earthquake Museum

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Abstract   One of the most important areas where the dimensions of natural disasters are kept alive and concretised in the memory of the place is disaster-themed museums. Visits to these museums are part of sadness tourism and contribute to raising awareness against natural disasters and keeping public consciousness alive. The aim of this study was to convey the perception of the idea of creating Nurdağı open-air Nurdağı earthquake museum through the eyes of the main actors. In this context, the museum experiences of those who visited the museum and those within the comments on the subject in the electronic environment, the motives that pushed them to this experience, their satisfaction, types of emotions, and their approaches to the opening of an earthquake-themed museum were examined. Semi-structured interviews with 15 people who visited the museum and 113 electronic comments about the museum on social media channels and internet news were analysed. The findings obtained were subjected to content analysis and inductive coding was performed. The MAXQDA 2024 programme was used for content analysis and data coding. In the study, a main theme as "Nurdağı Open Air Earthquake Museum" and six basic categories under this theme were put forward. The points where the perception of the museum differed negatively and positively between the museum visitors and the internet comments and the points where they were in common were determined. In this context, data were analysed and theories were proposed. Accordingly, it was emphasised by the visitors that disaster-themed museums are an important tool in preserving social memory, whereas in social media, it was underlined that it may prevent the long-term preservation of social memory. In this context, it is important that such museums reach a wider audience quantitatively and qualitatively, that they are supported with rich content so that visitors can interact emotionally and intellectually and that they are integrated into educational institutions to raise disaster awareness among students.

Keywords   Earthquake · Nurdağı · Open Air Earthquake Museum · Sadness Tourism.

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Introduction

Events such as wars, natural disasters, epidemics, etc., which have left deep traces in history for societies, are tangibly reflected in places such as monuments and museums and constitute the focus of cultural visits. These visits have an extremely important effect on the transfer of social memory to future generations (Alili, 2017). At this point, an earthquake, which is an important reality for Türkiye, is a disaster that cause great material and moral destruction and create fear. Recently, on February 6, 2023, two earthquakes of magnitude 7.7 and 7.6, the epicentre of which was Kahramanmaraş, occurred in the country and caused great loss of life and damage in 11 surrounding provinces. As with every earthquake, this earthquake caused significant economic and social problems. Considering past and possible future earthquakes in Türkiye, it is thought that studies and spaces that examine earthquakes and their effects are important to raise awareness (Çetinkaya, 2023). Based on this framework, natural disaster-themed museums can be considered prominent places. Visits to such museums are also considered an important part of sadness tourism. The disappearance of the visuals accustomed in daily life and the fact of mortality in the existence of human beings take their place in tourism practices (Biran & Hyde, 2013).

The concepts of sadness tourism and social memory transfer are among the important dynamics that shape the present-day experiences of individuals and social memory. While sadness tourism defines visits to areas where collective or individual deaths have occurred and monumental places, these places also function as places of social memory (Güzel & Atabeyoğlu, 2021). In this context, the relationship between grief tourism and social memory can be addressed by examining how the space shapes social memory and the psychogeographical interactions that individuals establish with these spaces. Spaces are not only physical spaces but also important areas where collective memories, emotions, and identities are embodied (Levent, 2023).

From the perspective of human geography, the concept of *"place"* should be considered as a dynamic context in which social memory, cultural meaning production and collective identity construction processes come together. The elevation of places to the status of "place" deepens the impact of these places on social memory and reinforces individuals' sense of spatial belonging (Parmaksız, 2019; Dinç, 2024). Museums within the scope of sadness tourism support the processes of remembering and mourning by intensifying the experiential interactions of visitors with the place. By emphasising the experiential dimension of space, these museums contribute to social mourning processes and strengthen spatial memory (Güzel & Atabeyoğlu, 2021). Concepts such as spatial memory, the intertwining of social traumas with space and *"affective geographies"* offer an important theoretical framework in this field. Spatial memory refers to the meaning and emotional burden that certain places carry in their social and individual memory. This concept means that places remind us of important events, traumas, or social experiences in the past and that these events leave a permanent trace in memory by integrating with the place. For example, battlefields, regions where natural disasters occur, or places where social tragedies occur become the spatial memory of those events (Deniz et al., 2019; Akbulut & Ekin, 2022). Where places bear the traces of the events experienced, these traces shape the identity and meaning of places over time (Yasak et al., 2021; Sungur, 2023). The intertwining of social traumas with space expresses how the spaces where these traumas are experienced play a role in the memory of these traumas. Major events such as war, natural disasters, and genocides leave deep effects not only on individuals but also on the places where they occur (Akbulut & Ekin, 2022). Therefore, these places, while bearing the traces of trauma, become the symbols of trauma over time. Museums, monuments, and other structures, which are called memory spaces, are critical for the preservation and transmission of social memory (Deniz et al., 2019). Such places play an important role in the formation of social identities and collective memory (Parmaksız, 2019; Akbulut & Ekin, 2022). The concept of affective geographies, on the other hand, refers to the emotional relationships that spaces establish with people and the emotional experiences in these spaces. Spaces have not only physical but also emotional dimensions; a space can be peaceful, frightening, or relaxing for a person (Lefebvre, 2014; Bozdoğan & Benek, 2021; Sungur, 2023). Social traumas and collective memories create an emotional bond with places and form the emotional structure of these geographies. In this context, the emotional effects of places are intertwined with individuals' life experiences and social memories (Gürleyen, 2020; Sungur, 2023). Whereas places shape the memories and emotions of individuals, they also become a part of social memory (Abdula & Aygen, 2022; Kolsal & Ulusoy, 2022). While spaces allow individuals to confront their past traumas, they also reveal the effects of these traumas on social memory (Levent, 2023). This framework helps people confront past trauma and understand the relationship between these traumas and space. Therefore, certain spaces carry emotional burdens and play an important role in social memory. This theoretical framework allows us to analyse not only the physical but also the emotional and social dimensions of spaces.

Sadness tourism is a form of alternative tourism that emerges as a result of the reflection of the wishes and demands of people who want to visit such locations in an organised way and is evaluated within the scope of special interest and cultural tourism (Trauer, 2006; Niemela, 2010; Kılıç & Akyurt, 2011; Bozok et al., 2014; Hartmann, 2014; Yıldız et al., 2015; Alili, 2017, Aylan & Kaya, 2021). Sadness tourism empathises with the pain experienced and to keep social memory alive without making material profit. At the same time, the motive of wanting to see the tragic events such as Anıtkabir, Çanakkale, Hiroshima, Chernobyl, Pompeii, and Malazgirt on site (Alili, 2017) shedding light on the past and the present, revealing humanitarian feelings, and determining and visiting the places where such perceptions of traumatic events will be provided. It is described as a type of travel to see areas that have witnessed wars, genocides, political structure of countries, all kinds of disasters in their past, natural disasters, poverty, technological disasters, torture, or deaths of celebrities that have affected societies and world history. With the increasing power of the media, this type of tourism has further developed and shaped people's curiosity to travel to the regions (Kozak & Kama, 2015: 3-6).

By visiting such places, sadness tourism allows individuals to create meaning maps based on their psychogeographical interactions. These maps of meaning are critical for understanding how space mediates collective mechanisms of remembering and remembering (Güzel & Atabeyoğlu, 2021). Therefore, when analysing the relationship between sadness tourism and social memory, concepts such as "social mourning," "place of remembrance" and "spatial meaning attribution" need to be integrated. The process of visiting a place and establishing a psychological interaction with that place requires that these concepts be considered together. Social mourning refers to the collective experience of loss and trauma; place of remembrance refers to the places where these losses and pains are remembered; and spatial meaning attribution refers to how these places are associated with emotional and cultural meanings in people's memories. The integration of these three concepts reveals ways in which a society makes sense of and confronts its past.

Sadness tourism has many components in essence. One such component is the tourism of disaster areas (Eren, 2019). In this context, one of the most important areas where disaster areas can be concretised in space is natural disaster-themed museums. By creating emotional landscapes crystallised in space, such museums offer a *"place"* image for the construction of individual and social identity and play an important role in the construction of social memory. Therefore, the place turns into a *"space of experience"* where

the emotional effects of past events or social memories are felt and should be remembered (Eyrek & Çetin, 2022). There are many museums around the world that are subject to sadness tourism. In Türkiye, the number of museums and places in this category is increasing daily. Such places allow visual memory to remain permanent, not to atrophy, and to be revitalised. The transfer of social destruction to the space is important to make it permanent. Societies do not only consist of positive facts, wars, natural disasters, deaths, but also experiences that form social identity. For this reason, preserving the reflections of such phenomena in space and transferring them to the next generations is an important issue in order to exist. At the same time, it is important for local governments to create an area where the memory of space and events is revitalised.

Within the scope of disaster tourism, which is accepted as a part of tourism, it aims to create awareness against natural disasters and to contribute to keeping public awareness alive by emphasising the existence of Gaziantep-Nurdağı open air museum. Nurdağı open air museum, which is the study area, is located in Nurdağı district of Gaziantep province. To build earthquake-resistant structures and not forget the damage left by the earthquake, a 10,000 square metres area, which is considered to be heavily damaged in a part of Nurdağı district, was surrounded by wire fences and turned into an open-air museum. In this study, it has been accepted as an important criterion to draw a framework for the tourism potential of such museums in cities with earthquake risk, especially in the regions affected by the Kahramanmaraş earthquakes on February 6, 2023. In this context, the study measures the perception towards the opening of an earthquake-themed museum. Accordingly, the study begins with the Introduction section where the general introduction and purpose of the subject is explained. In the next section, the collection and analysis process of the relevant dataset is described. The next section presents the analysis of the findings. The study concludes with a conclusion section.

Material And Method

In this study, qualitative research methods were used to evaluate the perception of Nurdağı open air earthquake museum. In this context, within the perspectives of the interviewees and electronic comments from the museum, findings on the subject were sought to be revealed. Data on Gaziantep-Nurdağı open air earthquake museum were obtained from the Gaziantep Metropolitan Municipality. The domestic and foreign literature on the subject has been discussed.

In this study, museum visitors, who are thought to have sufficient experience and knowledge on the subject, and

social media comments in the news about the museum in the electronic environment were examined, and the positive or negative opinions of the interviewees about the opening of such a museum and raising awareness were investigated. To achieve this, semi-structured interviews were conducted with 15 participants. Semi-structured interviews were preferred because they are more open to exploration than structured interviews and easier to control than unstructured interviews (Merriam & Tisdell, 2016: 110; Baş & Akturan, 2017: 85-91; Brinkmann, 2018). In addition, 113 electronic comments shared on social media channels and internet news related to the museum were analysed. A long period was devoted to ensure data saturation. After a while, the data collection process was terminated, considering that the news and comments on the earthquake museum did not find as much space in the media and were not on the agenda as before.

The data collection process within the scope of the study was carried out between 10.04.2023 and 10.12.2023. The semi-structured interview form used as a data collection tool was prepared by the researchers after analysing the relevant literature and preliminary interviews. The interview form included questions about the demographic information of the participants, their professional status, their museum experiences, their motivations that pushed them to this experience, their satisfaction, their types of emotions, their thoughts, and their approaches to opening an earthquake-themed museum. The interviews with the 15 participants were recorded with a voice recorder. The voice recordings were subjected to transcription using Microsoft 365. No one that was not willing to participate in the research was not included in the sample. Necessary permissions were obtained from the interviewees during the research. Interviews were conducted, and ethics committee permission was obtained for the field study. After the solution texts were created, they were proofread by an independent second person. In social media, 113 electronic comments on the subject were analysed and analysed. The obtained data were subjected to coding using the MAXQDA 2024 software (Figure 1).

Table 1

Demographic Information about the Interviewees

Interviewers	Gender	Age	Hometown	Marital Status	Education Status	Profession
G-1	Male	27	Kahramanmaraş	Single	Licence	Security Officer
G-2	Male	53	Gaziantep	Married	High School	Headman
G-3	Woman	21	Gaziantep	Single	Licence	Student
G-4	Woman	22	Gaziantep	Single	Associate degree	Student

Interviewers	Gender	Age	Hometown	Marital Status	Education Status	Profession
G-5	Woman	24	Gaziantep	Single	Licence	Teacher
G-6	Woman	50	Gaziantep	Married	Primary School	Housewife
G-7	Male	20	Gaziantep	Single	Licence	Student
G-8	Woman	26	Gaziantep	Single	Postgraduate	Student
G-9	Male	21	Gaziantep	Single	Licence	Student
G-10	Male	33	İzmir	Single	Postgraduate	Tradesmen-Trade
G-11	Male	24	Adana	Single	Licence	Student
G-12	Male	33	Bursa	Single	Postgraduate	Teacher
G-13	Woman	27	Elazığ	Single	Postgraduate	Student
G-14	Woman	24	Van	Single	Postgraduate	Teacher
G-15	Male	36	Gaziantep	Married	High School	Tradesmen-Trade

Within the scope of the study, the grounded theory approach was used as the research design. Grounded theory presents qualitative research and inductive theory and consists of interrelated assumptions to explain any phenomenon (Mehmetoğlu & Altınay, 2006; Park et al., 2006; İnanır, 2022). The purposive sampling method was preferred for data collection because the participants did not have equal chances of being included in the sample. The data collection process was continued until all concepts and categories were identified. Therefore, data saturation was taken as the basis. For this reason, no limitation was made regarding the number of samples and data sources, and the interviews were terminated when the answers started to repeat each other (Figure 1). In addition, the Miles and Huberman (1994) model was used to ensure the validity and reliability of the study. According to the coding audit that provides internal consistency, consensus between the coders should be at least 80% (Miles & Huberman, 1994). In this context, the relevant data were coded by the researchers using the MAXQDA 2024 programme and the inter-coder agreement value of the coders for the interviews was determined as 96.79% with 211 related codes-7 unrelated codes and 98.04% with 150 related codes-3 unrelated codes for electronic comments. When the inter-coder agreement results were evaluated, it was determined that the inter-coder agreement percentages were at a sufficient level. After these evaluations, analyses were conducted by evaluating the codes, main themes, and subcategories.

In this study, data collection was conducted using on-site observation, interviews, and electronic comments. In the theory development phase, theories related to the subject were developed through systematic data collection and analysis. In this context, analyses were performed

Figure 1
Work Flow Chart of the Study
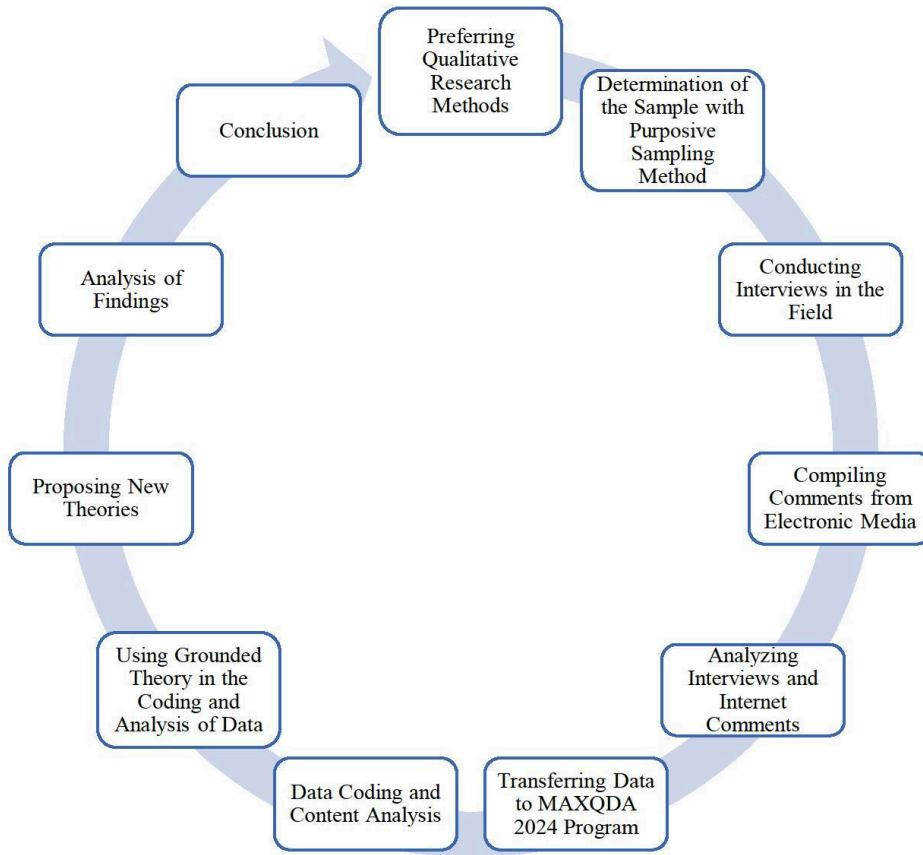
using a method expressed as "constant comparative analysis" (Namkung et al., 2007). In this study, the three-stage coding technique proposed by Strauss and Corbin (1990) was used during data analysis from the grounded theory perspective. This technique was determined as open, axial, or selective coding respectively (Şener, 2019). Because of these codings, the main categories and themes that will cover the subcategories obtained were revealed. Theories and findings were presented according to the results obtained. Based on this framework, the findings obtained were subjected to content analysis and inductive coding. The MAXQDA 2024 programme was used for content analysis of the study findings and data coding. The aim was to conduct geographical analyses on the subject by comprehensively and in-depth examining the obtained data. After the interviews, six categories were put forward under the main theme of "Nurdağı Open Air Earthquake Museum" as "Approaches to the Opening of the Museum", "Travel Motivation", "Emotional State", "Tendency to Return", "Location Selection" and "Suggestion".

Findings And Analysis

Nurdagi Open Air Earthquake Museum

Gaziantep Metropolitan Municipality started to work on an open-air earthquake museum to reflect the devastation caused by the earthquakes centred on Kahramanmaraş on February 6, 2020, not to forget the earthquake and to emphasise the importance of precautions. Nurdağı open air earthquake museum was established in an area of 10,000 square metres in the centre of the district that was heavily damaged by the earthquake. The museum includes heavily damaged buildings, materials, and equipment that were recovered after the earthquake. In addition, the museum, which is still under construction, will include an education area, library, research centre, earthquake commemoration and earthquake simulation displays, and on-site experience points (URL-1, 2023).

Before proceeding to the analyses within the scope of the study, a code cloud was created to summarise the general opinion on the findings obtained. It can be seen that the interviewees and internet comments agree on some codes. It is seen that codes such as "keeping the social memory alive, reproaching the authorities, Gaining Consciousness,

Figure 2

Debris in Nurdağı Open Air Earthquake Museum

Figure 3

Code Cloud

Figure 4

Nurdağı Open Air Earthquake Museum Theme Code Matrix Browser-Electronic Media Comments

transferring to new generations, remembering the pain, take lessons from" represent the positive and negative aspects of the perception towards the museum (Figure 3).

Within the scope of semi-structured interviews with 15 museum visitors to reveal the general perception of the museum in the study, a main theme as "Nurdağı Open

Figure 5

Heavily Damaged Houses and Cars in the Museum
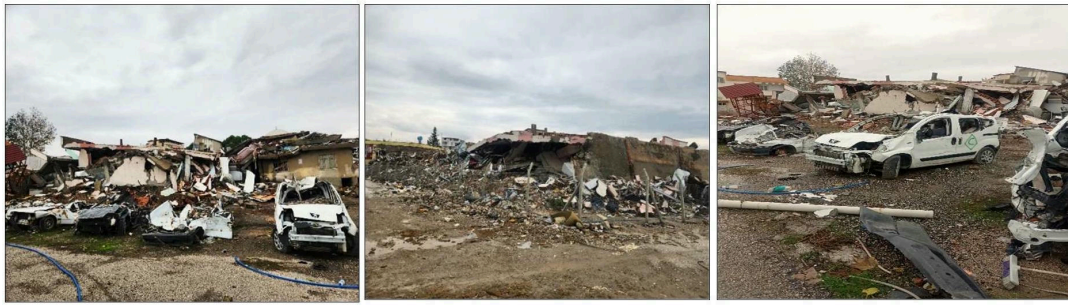
Air Earthquake Museum" and six categories under this theme as "Approaches towards the opening of the museum", "Travel Motivation", "Emotional state", "Tendency to Return", "Site Selection" and "Recommendation " were put forward (Figure 6). In the 113 electronic media comments included in the sample in the study, an evaluation was conducted in parallel with the themes and categories that emerged because of the interviews. At this point, the comments mostly focused on positive or negative approaches to the opening of the museum. According to the code matrix browser, 113 commentators shaped their perceptions predominantly in the category of "Approaches to the Opening of the Museum", "Positive" or "Negative" codes and sub-codes (Figure 4).

Because of the findings, it is revealed that the interviewees and electronic comments are concentrated in some categories and codes. In this context, the predominant categories and codes of the interviewees and comments were analysed one by one according to the code sub-code sections model and the findings were evaluated.

According to the model, the interviewed museum visitors are mostly concentrated in the "Positive" code in the category of "Approaches towards the opening of the museum". In this context, the interviewees perceived the museum's existence as positive. This perception was frequently emphasised with the sub-codes "Keeping the social memory alive", "Take lessons From", "Gaining consciousness", "Gaining empathy". In

addition to this, the sub-codes "Taking precautions, Making the destruction tangible, Transferring to new generations, The idea of real Experience, Reminder of being an earthquake country" were also coded less frequently (Figure 7). At this point, the interviewees frequently emphasised that they welcomed the idea of opening such a museum with the discourse "*How will we transfer this destruction?*".

According to the code sub-code divisions model, it is seen that museum visitors also draw attention to the "Negative" code in the category of approaches towards the opening of the museum, but to a lesser extent. When evaluated in this context, it is seen that they shaped this negative perception with the codes "Reminder of pain", "Priority" and "Destruction of the memory of the place". It is also seen that the interviewees do not prefer "Reproach to the authorities", "No need" and "Not visited", which are frequently coded in electronic internet comments. The reason for this is considered that the perceptions of museum visitors are more positive tendency (Figure 8).

One of the most important categories emphasised in the code sub-code section category was measuring the approaches of the electronic comments towards the opening of the museum. According to the model, 113 electronic commenters mostly focused on the sub-codes "Reproach to the authorities", "Reminding the pain" and "Priority". As a result of the findings obtained, users frequently expressed that they reproached the

Figure 6

Nurdağı Open Air Earthquake Museum Theme Code Matrix Browser-Interviews

Figure 7

Code Sub-Code Sections Model Approaches to the Opening of the Museum Category: Positive Codes-Interviews

Of course, I think seeing it again will make me a little more conscious. It may be much better for people who did not experience the earthquake to see it in terms of raising awareness. (G7!)

It is reflected in its most natural form, it is very good in terms of raising people's awareness. (G5!)

I think it is the right idea. Because we went through very difficult things that day, I think it's a good idea so that at least people who didn't go through it can learn a lesson. (G3!)

It is a very good idea. Very well summarized for people who didn't live to understand what happened that night. (G5!)

Definitely, what we have experienced is not something that can be forgotten quickly, it is useful to keep it in memory and learn lessons. (G1!)

It is very good. Our sense of empathy for the lessons of past calamities and empathy as a person who lived through that moment has increased even more (G2!)

Gaining Consciousness (8)

Take Lessons From (11)

Gaining Empathy (7)

Taking Precautions (5)

Keeping Social Memory Alive (16)

Serious measures should be taken in response to disasters (G12!)

Positive-Interviews (0)

Making Destruction Tangible (5)

Warning (2)

It's definitely an excellent idea. Narrating that night is a great idea for people who didn't experience it to feel it. (G5!)

That's why these kinds of concrete spaces are an important step to transfer these negative experiences. (G8!)

Transmission to New Generations (5)

The Idea of a Real Experience (4)

Reminder of Being an Earthquake Country (2)

Yes, I am satisfied, it is a very good idea for our people to learn a lesson and take an example (G4!)

I think it is a good idea. Otherwise, how will we pass this destruction to the next generation. (G15!)

A beautiful work to tell the next generation live (G8!)

Let them remember that these things have actually been lived and seen by people (G7!)

As a society living in an earthquake geography, we should not forget that earthquake is always in our lives and what it can take away from us. (G12!)
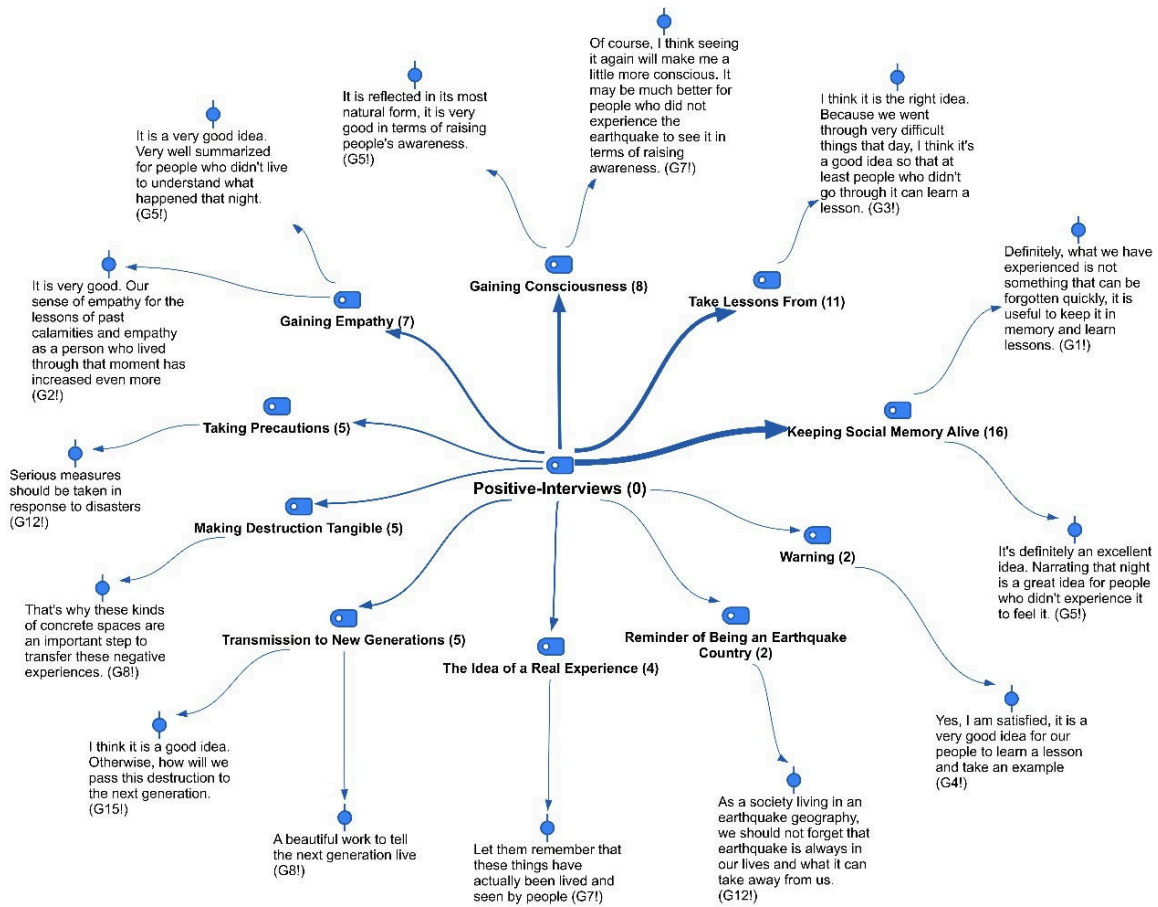
Figure 8

Code Sub-Code Sections Model Approaches to the Opening of the Museum Category- Negative Codes-Interviews

My opinion is that the problems caused by the earthquake should be solved before the earthquake museum (G14!)

I don't welcome it because I don't think it's appropriate for people to be exposed to the pain they have experienced over and over again (G10!)

The idea of opening an earthquake-themed museum as if it has been years since the earthquake, while the effects of the earthquake and the destruction it caused have not yet been resolved and these problems have not been solved, does not seem right to me. Because almost a year after the earthquake disaster, people are living in tents, containers and damaged buildings in the disaster provinces. While the debris and even the bodies of people under the debris are still standing, a museum that will be built years after the earthquake so that people will not forget it and become aware of it does not make sense to me. (G14!)

But we should not forget the fact that it evokes pain again (G12!).

Priority (2)

Remembering the Pain (4)

An earthquake-themed museum will have a negative psychological impact on the individuals who experienced the earthquake themselves during the visit (G13!)

Negative-Interviews (0)

Reproach to Authorities (0)

No Need (0)

The idea of opening an earthquake-themed museum as if it has been years since the earthquake, while the effects of the earthquake and the destruction it caused have not yet been solved and these problems have not been solved, did not seem right to me (G14!)

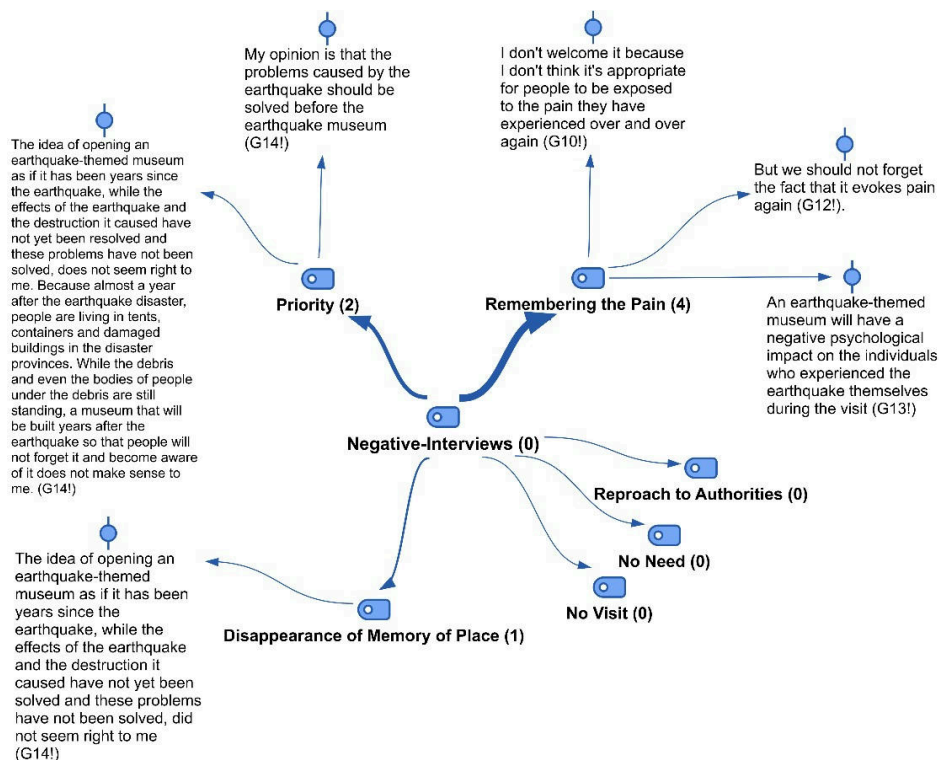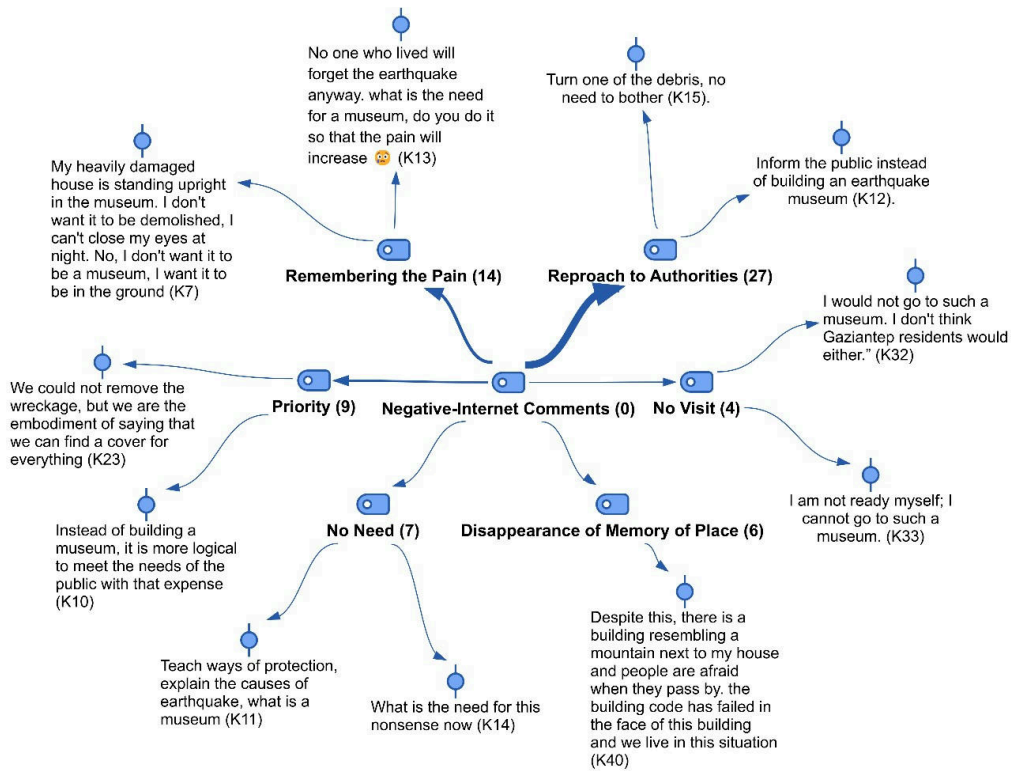**Disappearance of Memory of Place (1)**

No Visit (0)

Figure 9

Nurdağı Open Air Earthquake Museum,

Figure 10

Code Sub-Code Section Model Approaches to the Opening of the Museum Category-Negative Codes-Electronic Comments

authorities for reasons such as the destruction of the memory of the place, the negative spatial effects of the earthquake have not yet been eliminated, this is not the priority at the moment, and the situation of reminding the pain. In this context, it can be seen that there is a predominantly negative approach to the idea of opening an earthquake-themed museum. When the results of the code matrix browser are analysed, the commentators coded the sub-codes "Reproach to the Authorities" 27 times, "Reminding the Pain" 14 times, "Priority" 9 times, "No need" 7 times and "Disappearance of the memory of the place" 6 times (Figure 10).

According to the results of the model, among the electronic comments, a group thought that the opening of the museum was a positive situation. Within the framework of "positive" approaches, the sub-codes "Keeping the social memory alive", "Transmission to new generations", "Take lessons from", "Gaining consciousness", "Warning" were emphasised the most (Figure 11). When the results of the code matrix browser were examined, the sub-code "Keeping the social memory alive" came to the fore with 11 codes in parallel with the museum visitors. In addition, the sub-codes "Take lessons from" 8 times, "Transmission to new generations" 8 times and "Gaining consciousness" 7 times were frequently underlined.

-It can keep the pain fresh for people who have experienced an earthquake, but it is a good project to

Figure 11

Code Sub-Code Sections Model Approaches to the Opening of the Museum Category: Positive Codes-Electronic Comments
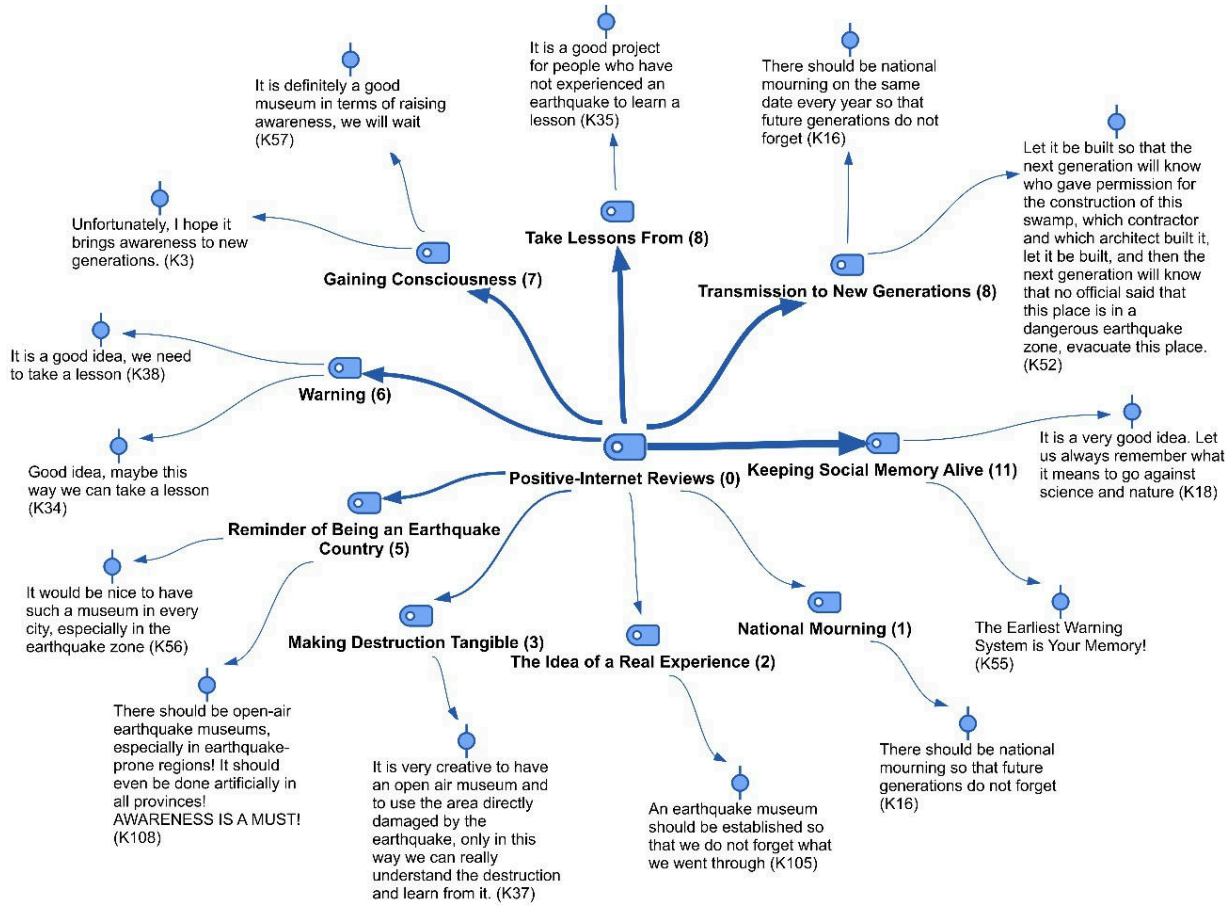
take lessons for people who have not experienced an earthquake (K35)

-A excellent idea 👏 👏 👏 👏 👏 Let's always remember what it is to go against science and nature. (K18)

-The lack of human memory is forgetfulness! (K54).

The "Travel Motivations" category of museum visitors was analysed in the code sub-code section model. In this category, the interviewees expressed the motives that motivated them to visit the museum with the sub-codes "Conscious", "Seeing in Place", "Experience", "Curiosity", "lessoning", "Coincidental" and "Media". At this point, it was revealed that the interviewees made their visits consciously with the desire to see the site (Figure 12).

Another category analysed according to the model was "Emotional State". In this category, museum visitors expressed the emotions they experienced during their visits. As a result of the findings obtained, the interviewees mostly expressed their emotional states with the sub-codes "Sadness", "Unporgetting", "Empathise", "Fear", "Pain" and "Upset" (Figure 13). Among the sub-codes, it is seen that the "Sadness" code is frequently underlined in the discourses of the interviewees.

According to the model, when the tendency of the interviewees to return was evaluated, it was determined that most of them showed a positive tendency (Figure 14). Museum visitors emphasised the existence of the museum positively by expressing their desire to return to the museum often. They also emphasised that their next visit would be with their children, with the idea of raising awareness for the next generation.

In the hierarchical code-subcode model, the category of "Site Selection" was analysed. According to the data obtained from the interviews, perceptions about the idea of creating a new museum in different provinces were first analysed under the sub-code "New Museums". In the second stage, in the "Nurdağı" sub-code, whether the perception about the selection of Nurdağı as an earthquake museum was correct or incorrect was analysed and supported with sub-codes (Figure 15).

According to the code sub-code divisions model, in the "New Museums" sub-code in the "Site Selection" category, the interviewees constantly underlined 11 provinces (Hatay, Malatya, Adıyaman, Kahramanmaraş, Osmaniye, Adana, Şanlıurfa, Elazığ, Diyarbakır, Kilis) affected by the earthquakes

Figure 12

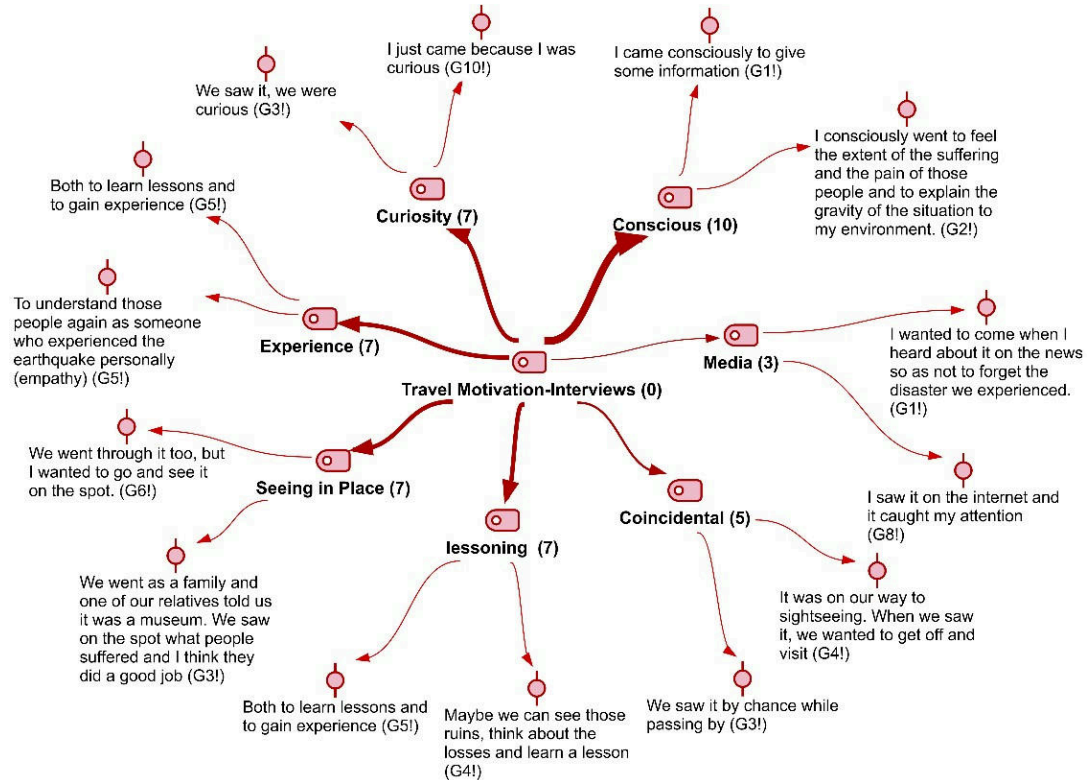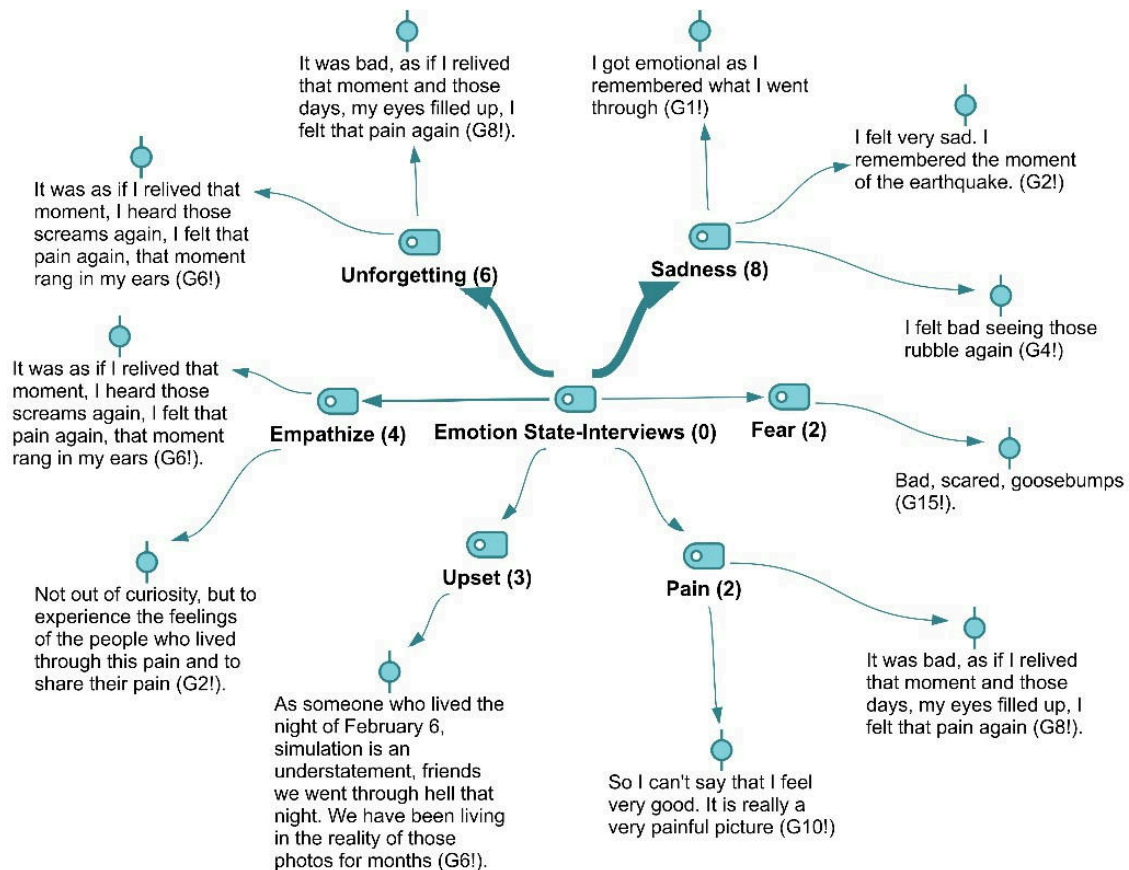*Code Sub-Code Segments Model of Travel Motivation Category-Interviews*

We saw it, we were curious (G3!)

I just came because I was curious (G10!)

I came consciously to give some information (G1!)

I consciously went to feel the extent of the suffering and the pain of those people and to explain the gravity of the situation to my environment. (G2!)

Both to learn lessons and to gain experience (G5!)

Curiosity (7)

Conscious (10)

To understand those people again as someone who experienced the earthquake personally (empathy) (G5!)

Experience (7)

Media (3)

I wanted to come when I heard about it on the news so as not to forget the disaster we experienced. (G1!)

Travel Motivation-Interviews (0)

We went through it too, but I wanted to go and see it on the spot. (G6!)

Seeing in Place (7)

lessoning (7)

Coincidental (5)

I saw it on the internet and it caught my attention (G8!)

We went as a family and one of our relatives told us it was a museum. We saw on the spot what people suffered and I think they did a good job (G3!)

Both to learn lessons and to gain experience (G5!)

Maybe we can see those ruins, think about the losses and learn a lesson (G4!)

We saw it by chance while passing by (G3!)

It was on our way to sightseeing. When we saw it, we wanted to get off and visit (G4!)

Figure 13

Code Sub-Code Sections Model Emotion-State Category Interviews

It was bad, as if I relived that moment and those days, my eyes filled up, I felt that pain again (G8!).

I got emotional as I remembered what I went through (G1!)

I felt very sad. I remembered the moment of the earthquake. (G2!)

It was as if I relived that moment, I heard those screams again, I felt that pain again, that moment rang in my ears (G6!)

Unforgetting (6)

Sadness (8)

I felt bad seeing those rubble again (G4!)

It was as if I relived that moment, I heard those screams again, I felt that pain again, that moment rang in my ears (G6!).

Empathize (4)

Emotion State-Interviews (0)

Fear (2)

Bad, scared, goosebumps (G15!).

Not out of curiosity, but to experience the feelings of the people who lived through this pain and to share their pain (G2!).

Upset (3)

Pain (2)

It was bad, as if I relived that moment and those days, my eyes filled up, I felt that pain again (G8!).

As someone who lived the night of February 6, simulation is an understatement, friends we went through hell that night. We have been living in the reality of those photos for months (G6!).

So I can't say that I feel very good. It is really a very painful picture (G10!)

of February 6. In addition, the interviewees drew attention to the importance of the provinces with earthquake risk in Türkiye and stated that it would be the right choice of location to create a new earthquake museum in order to raise awareness in the provinces of "İstanbul, İzmir, Yalova, Hakkari" (Figure 16).

"Nurdağı" code and sub-codes in the "Site Selection" category were analysed according to the code sub-code section model. In line with the discourses of the participants, the view that Nurdağı is the right place to open an earthquake museum. The interviewees supported this approach with the codes "Heavy Damage Status, Establishment of the Settlement on the Fault Line, and Many Casualties". According to the model, the fact that Nurdağı was a wrong choice of location was expressed

by only G-14 with the codes "Transportation Challenges and Being on the Periphery" (Figure 17).

The last category analysed according to the model was "Recommendation". Based on the idea of an earthquake museum, the interviewees mostly emphasised the codes "Gaining Awareness Technical Trips, Lesson for Contractors, Earthquake Sensitive Construction, Security". In addition, the codes "Revitalise and Earthquake Memorial" were preferred less in the category (Figure 18).

The Code Relations Scanner model was used to determine the relationships between all categories and codes emerging from the interviews. The interviews and electronic comments were both included in the browser. In the analysis phase,
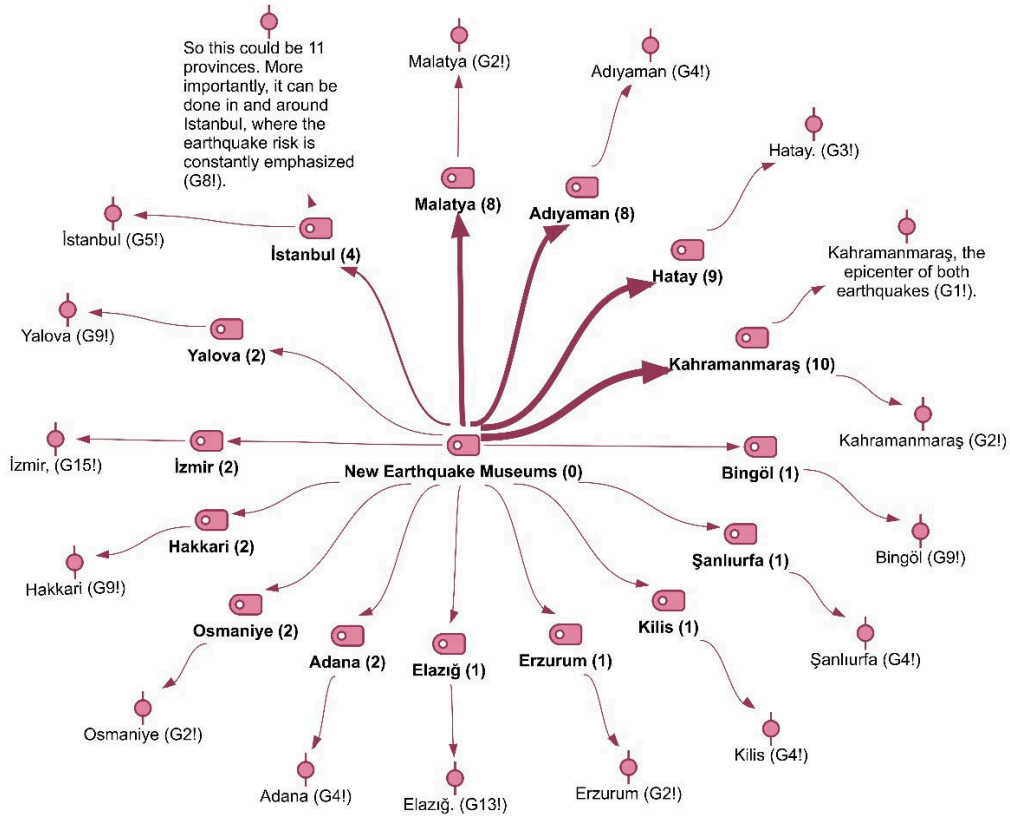
Figure 14

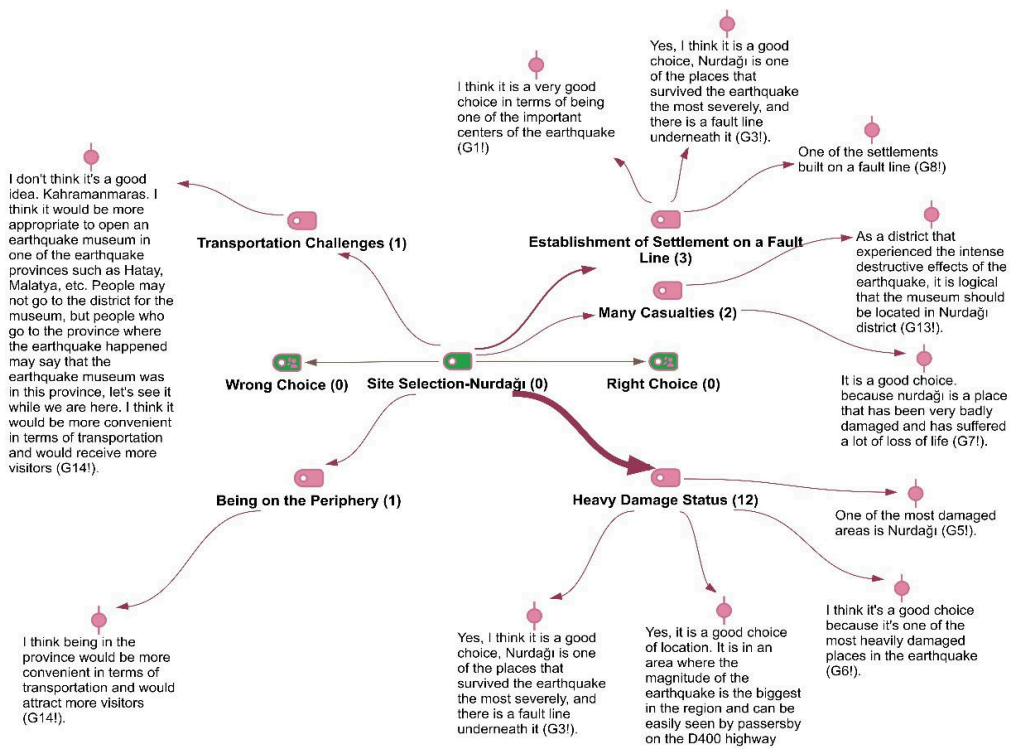*Code Sub-Code Segments Model Tendency to Return Category-Interviews*
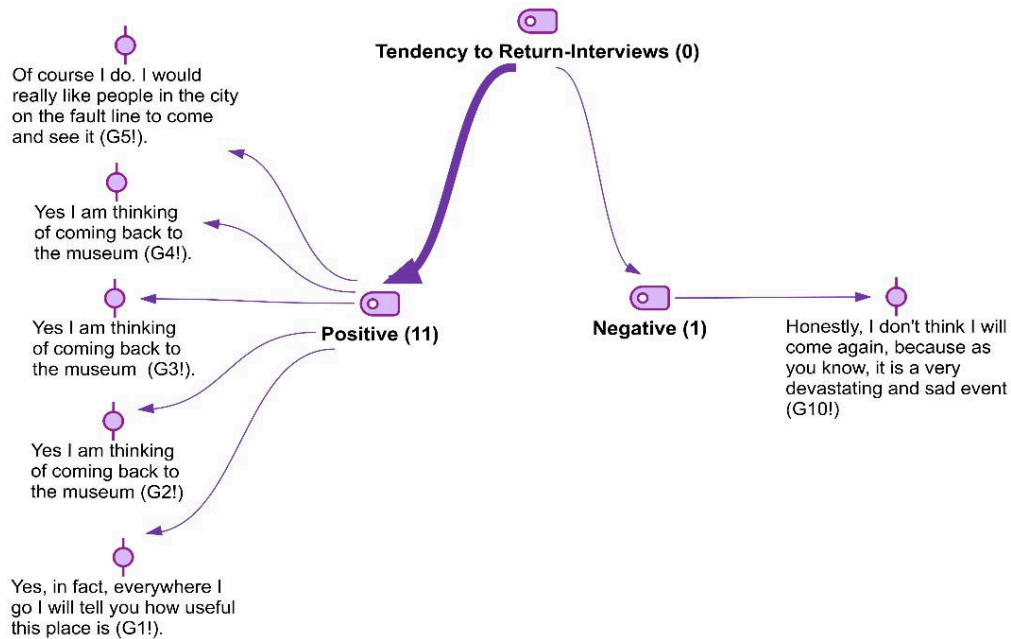
Figure 15

Hierarchical Code-Subcode Model Site Selection Category
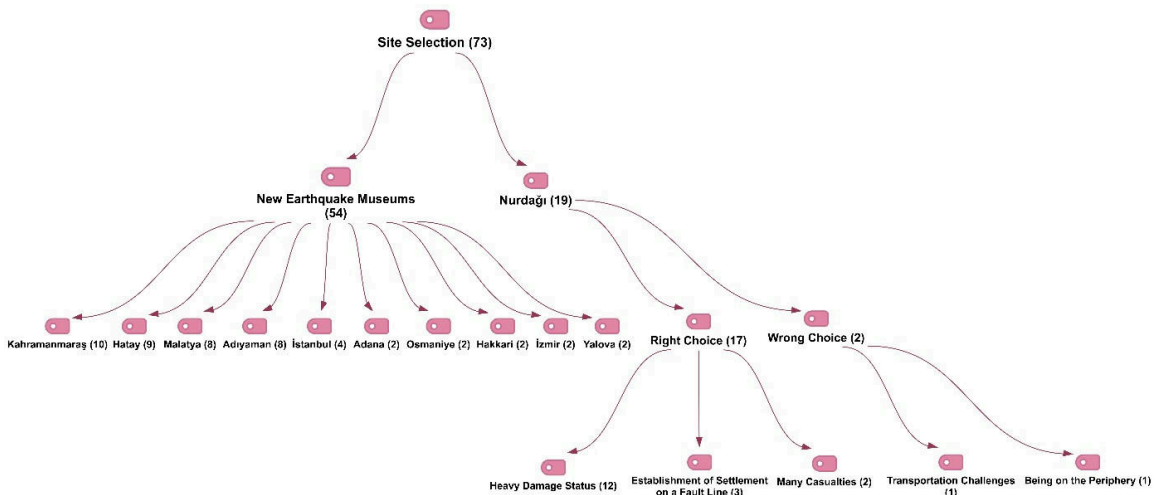
Figure 16

Code Sub-Code Sections Model Site Selection-New Museums Category

Figure 17

Code Sub-Code Sections Model Site Selection-Nurdağı Category

frequency was determined as 1, cluster as 4, and the results were evaluated. Because of the findings obtained, it was concluded that some codes were frequently preferred by the interviewees within the 4 clusters formed. At this point, the first cluster consists of the codes "Keeping the Social Memory Alive, Learning Lessons, Warning, Gaining Empathy, Making

Figure 18

Code Sub-Code Sections Model Suggestion Category

Figure 19

Code Relationship Browser-All Code Intersection (Frequency: 1-Cluster: 4)

Destruction Tangible, Transmission to New Generations, The İdea of a Real Experience". The second cluster includes the codes "Reproach to Authorities, No Need and Priority". In the third cluster, "Pain, Empathising and Sadness" codes formed a relationship. In the fourth cluster, it is seen that the codes "Gaining awareness, Reminder of being an earthquake country, Experience, Technical trips, Gaining consciousness" formed a relational connection (Figure 19).

Discussion And Conclusion

It is of great importance to transfer the negative effects of disasters such as earthquakes, floods, wars, etc., which cause

structural destruction, economic, and social losses in our country as in the whole world, to future generations on behalf of social memory and to raise awareness. The relationship between natural disasters, social memory, and social solidarity is an important topic of discussion in countries with high disaster risk, especially in geographies such as Türkiye. The 6 February 2023 earthquake in Kahramanmaraş left deep traces in social memory and highlighted the necessity of preserving and transmitting these traces to the agenda. In this context, disaster-themed museums such as Nurdağı open-air earthquake museum play a critical role in the transfer of social memory. Such museums allow individuals to face the traumas they have experienced and maintain social memory alive (Abe, 2020; Şener, 2023). In this context, natural disaster-themed museums have become prominent places to make the traces left by natural disasters concrete in spatial memory and within the scope of grief tourism.

This study was conducted to evaluate the Nurdağı open-air earthquake museum, which was created to reveal the effects of the Kahramanmaraş-centred earthquakes of February 6, 2023, which left important traces in Türkiye in the recent period, within the scope of sadness tourism, to raise awareness and to measure perceptions towards the museum. The data collected from museum visitors and electronic comments were analysed from a holistic perspective. During the data collection phase, it was determined that electronic comments and the news in the media were not put on the agenda for a while after the earthquake. It is noteworthy that the earthquake disaster has been replaced by other events before a year has passed. Unfortunately, although such events remain in the memory of the place, they are quickly replaced by other social events in social memory. Events that occupy the agenda of the country may prevent the preservation of natural disasters in social memory. At this point, activating concrete places, such as museums, is one of the most important tasks that can be done in order not to forget these disasters in both social and spatial memory.

The coding during the study revealed some structural findings. Based on these findings, some theories were developed within the scope of the study. The first theory that emerged in this context is that the interviews with museum visitors and electronic comments differ on a perceptual scale. It was revealed that the interviewees' attitudes towards the opening of an earthquake-themed museum showed a more positive trend. In line with the discourses, it is believed that the perceptions of museum visitors are shaped more positively when they find the opportunity to experience on-site in the tourism of sadness. In internet comments, perceptions in social media are shaped negatively depending on how the process is managed. This perception was constantly supported by users with the codes "Reproach to the authorities, Reminder of pain, No need and priority". In addition, it is seen that both museum visitors and those who think positively in electronic comments support these perceptions with the sub-codes "Keeping social memory alive" and "Taking lessons". In this context, important findings have been obtained regarding the shaping of museum visitors' perceptions and experiences within the scope of grief tourism. Visitors exhibit a more positive tendency towards the opening of an earthquake-themed museum, which strengthens the experiential dimension of grief tourism. In addition, negative perceptions shaped by the influence of social media in electronic comments are emphasised in the relevant literature as a factor that prevents the preservation of social memory (Pereira et al., 2022). While disasters leave permanent traces in social memory, it is also important, in terms of social solidarity practices, to embody these traces and preserve social memory in a sustainable manner. While sadness tourism refers to visits to areas where mass deaths occur and monumental places, such places also function as places of social memory (Lin et al., 2021; Pereira et al., 2022). Nurdağı open-air museum, as a concrete reminder of post-earthquake suffering, supports the practices of remembering and mourning by deepening visitors' experiential interactions with space. Such museums are critical for strengthening spatial memory and revealing the intertwining of social trauma with space (Hwang et al., 2022; Pereira et al., 2022).

The second theory obtained in the study concerned the tendency of museum visitors to return. Because of the analyses, it was determined that most museum visitors positively tend to return. The positive returning tendency of museum visitors is an important factor that contributes to keeping social memory alive (Tarifa-Fernández et al., 2022; Adelan et al., 2023). This theory is associated with the category of "travel motivation", which is another important finding of the study. At this point, it is seen that museum visitors act consciously towards the Nurdağı open-air earthquake museum with the instinct of seeing on-site and curiosity, and this situation shapes their tendency to return with discourses such as transferring the quality experience they have experienced to new generations, raising awareness, and taking lessons. At this point, the interviewees often supported the idea by stating that they would bring their children on their next visit. Based on these findings, visitors' desire to return to the museum with the quality of their experiences and curiosity instinct is considered an effective mechanism for the preservation of social memory in the literature (Tarifa-Fernández et al., 2022; Adelan et al., 2023).

Another theory obtained within the scope of the study is that the code "gaining awareness" in the category of suggestions is frequently underlined by drawing attention to the existence of the museum. In this context, it is thought that the next generation should be made aware of measures to be taken to mitigate the effects of disasters such as earthquakes through technical trips and student visits. The role of disaster-themed museums in the transmission of social memory not only helps individuals to confront the past, but also functions as an important tool in raising disaster awareness in future generations by integrating them into the education system (Vázquez, 2018). The existence of Nurdağı open-air earthquake museum is important in terms of concretising this process. The effects of disaster-themed museums on social memory and the effects of preserving this memory on social identity have a wide place in the literature. While disasters leave permanent traces in the construction of social identity, the embodiment and protection of these traces play a fundamental role in strengthening social solidarity and education (Mutlutürk, 2020; Çelik, 2023). The existence of natural disasters, which is the reality of Türkiye, must be integrated into the education system.

Consequently; During the interviews, it was observed that the visitors learned that the visits they made with these studies conducted by the researchers were included in the scope of sadness tourism. Therefore, it is thought that such studies would create awareness among societies about protecting against natural disasters. At this point, the locations and effective attitudes of authorised institutions and organisations are the key to learn lessons from these disasters and the measures to be taken in this direction. Disaster-themed museums play an important function in the concretisation of social memory and in confronting individuals with past traumas. Such museums allow individuals to maintain social memory by facing the pain and losses they have experienced. Especially Nurdağı open-air earthquake museum draws attention as an example that emphasises the place of natural disasters in social memory and the importance of preserving this memory. Disaster-themed museums and sadness tourism ensure the continuity of social memory by supporting individuals' processes of confronting the past. The existence of these places not only contributes to the preservation of social memory but also plays a vital role in ensuring that the sufferings of the past are not forgotten and that lessons are learned from these sufferings. In this context, the impact of disaster-themed museums on social identity and spatial memory is of great importance.

6 February 2023 The study, which examines the role of the Nurdağı open-air earthquake museum, which was established after the Kahramanmaraş-based earthquakes, in strengthening social memory in the context of grief tourism, interviews with museum visitors and electronic comments revealed the importance of earthquake-themed museums in terms of social memory and social solidarity, and emphasised the function of museums in confronting past traumas and keeping social memory alive. Visitors expressed a positive attitude towards the disaster-themed museum and stated that such places are an important tool in preserving social memory. However, negative perceptions shaped in social media have been identified as a factor that may prevent disasters from gaining a long-term place in social memory. Moreover, integrating such museums into the education system is considered a critical step in transferring disaster awareness to future generations. Disaster-themed museums not only concretise social memory but also play an important role in the construction of social identity by enabling individuals to confront the pain of the past. In this context, it is essential that such museums reach a wider audience quantitatively and qualitatively and that they are supported with rich content that visitors can interact with emotionally and intellectually.

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