



Embassy of Us:

Finding and delivering relevance

Master Thesis - Cesar Lucho Lingan



Embassy of us: Finding and delivering relevance

26th of February 2020, Delft, the Netherlands

Faculty of Industrial Design Engineering - MSc. Design for Interaction MuseumFutures Lab Delft University of Technology

by Cesar Lucho Lingan In collaboration with:

The Embassy of Peru in the Netherlands The National museum of Ethnology - Museum Volkenkunde Instituto Cervantes de Utrecht (Cervantes Institute in Utrecht)

Supervisory team Dr. Ir. Arnold Vermeeren (Chair) PhD. Candidate Meng Li (Mentor)











## Acknowledgements

This project was made for collaboration between different people, teams, institutions and entities to discover the elements that connect us in our contemporary globalised society. To achieve this goal, different people, teams and institutions appeared during the project. Without them, this project could not be developed. I am very thankful to each one of them. Their support, patience and encouragement towards me and my crazy idea lead me to the culmination of my master studies.

First of all, I would like to thank the Peruvian Diplomatic mission in the Netherlands, especially to the ambassador of Peru in the Netherlands, His Excellency Mr Carlos Herrera, who allowed the first meeting at the Peruvian embassy that started the project. I want to thank Lucas Otero, former first secretary in the Diplomatic Service who helped me during the first months of the project and Galo Garcés, current first secretary of the Diplomatic Service, who helped me across the project as the contact with the embassy.

Next, I would like to thank the people from the other institutions that collaborated with the project. From the Museum Volkenkunde, I have to thank Martin Berger, curator of the Central and South American collection and Eijda Tervoort, exhibition developer and project manager; both were kind by helping me with their time and knowledge during the development of the project. Their perspectives and experiences were determinant at the moment of conceptualising, testing and reflecting about the project.

From the Cervantes Institute in Utrecht, the contribution of the entire team during the different meetings was amazing; their curiosity and excitement towards the project was something pivotal for me to keep believing in the project. From this institution, the presence of Itziar Muñoz and Jose Luis Padilla was pivotal, and without them and their team, the project would not be the same.

Across the Atlantic, Deborah Ubilluz, a cultural manager in Peru gave me many insights about the different challenges and opportunities that this project would face during and after these 5 months, always making me reflecting about how to proceed. Also, I'm very thankful with Ulla Holmquist and her team at the Museo Larco in Lima, to show interest towards this project.

I want to thank my supervisory team; Dr.Ir. Arnold Vermeeren (Chair) and PhD. Candidate Meng Li (Mentor), the first two people who decide to give to this idea an opportunity to grow and become to what it is now. Their expertise, patience, constant feedback, encouragement and wise words allowed me to analyse, re-analyse, elaborate, and orientate my steps during the project, making me a better designer and researcher in the process. Thanks for your coaching and openness during these two years.

A special shout out goes to my friends who have supported and helped me. I thank the participants and everyone willing to talk with me during the project and gave me its opinions. You don't know how much these conversations helped me out. A especial shout out to Fabiana Tomassini, without her skills as a session leader, I would not discover an important component for the project. Another especial shout out to Alberto Magni, Maira Ribelles, Samira Miccolis, Jenniger Rocha, Carlos Precioso and Dario Sapienza for helping me during the project and to be really amazing friends.

And of course, I have to thank my most important supporters and guides in life: Ida and Rubén. Look, here it is!

Por Ida y Rubén, mis dos pilares.



Embassy of Us:

Finding and delivering relevance

### **Executive summary**

The existing graduation project has the goal of elaborate and present a method for the development of relevant exhibition experiences. This method aims to help people and institutions involved in exhibitions development in cultural institutions (e.g. museums or governmental institutions) to conceptualize relevant experiences towards their audiences where elements from a different culture (foreign culture) are exhibit. To achieve this, the identification and relation of elements that are involved in these experience were analyzed and arranged as a series of steps to allow the exhibition development teams to see said relations.

#### Setting the Scene

It was necessary to identify potential institutions that are involved in the exhibition development that involved foreign cultures and were able to collaborate with the project. During this stage it was also necessary to identify what was the current situation around the institutions, the visitors, the idea of a foreign culture and how, based on these factors, elaborate a plan to continue in the project.

#### Research

The first part of the project development was dedicated to the research around different ideas, situations and entities that were involved in the context of exhibition development. Ideas behind relevance, relevant experiences, how people addressed something as relevant, and how the context can be label as local. Also, a set of meetings were conduct across teams from different institutions. In the process of seeing a possible connection between the visitors and the foreign culture exhibited, it was proposed the use of universal themes. Additionally, the inclusion of immersive technologies arises as a complementary approach to said connection to have a beneficial outcome for the method's users.

Once the significant findings were collected from this research, it was necessary to integrate them in a logical way for potential users. By using the concepts around visitors, institutions and immersive technologies, the idea of creating a method was proposed and developed.

#### Iterative process

An iterative process was conducted to reach the final concept of the method. Four iterative cycles were conducted with the institutions to get constant feedback about the prototypes. During the iteration, the method, known as the Cross-Relevance Diamond (C-RD), was integrated with the Relevance by Play framework to ensure that it could be addressed as relevant by the developers.

#### The Cross-Relevance Diamond (C-RD)

Thanks to this integration, it was decided to present the method as a tabletop game. With that approach, a set of steps, present in the map and the cards was elaborated. By using the method, the users will be able to identify the foreign and local expressions and activities that are connected through a universal theme and the merging of the activities present in both contexts.

The merging of the activities into a new one could inspire new concepts for exhibition experiences. These experiences are going to be new for local visitors while having moments that are familiar for them. For the final process, it is possible to adjust the potential ideas of the exhibition by considerate what are the potential motivations that visitors could have to attend the exhibition.

#### Validation

The validation of the C-RD was adapted to the needs, goals and procedures for each one of them. The final version of the method, together with the tabletop design triggers excitement towards the method. Users were not only able to understand the method directly, but also they were inspired to re-adapt the method to their specific needs. The method inspires the redesign of collections based on topics; to identify different perspectives while developing exhibitions; going deeper into the understanding of different sociocultural phenomena like languages and be recognized as a valuable tool for existing protocols at the moment of proposing exhibitions around the world.

Different institutions acknowledge the method's novelty factor. The decision of having the method as a game helps the users to be more open to it, without losing the purpose of the method.

A set of future actions based on future projects involving the method are introduced.

## Table of contents

1. Setting the scene	4	4. Cycle 3_ Using the method: A diamond in the field.	70
1.1 Introduction: An opportunity transformed into a brief.	5	4.1. The constant: The Local context.	71
1.2 Initial scope: Who are the actors in this scenario?	6	4.2. Final approach: Versatility for each institution.	72
1.3 Realities, challenges and opportunities.	10	4.2.1. Session setup for the Cervantes Institute.	
1.3.1. People as visitors: How the ideas connect with the visitors?		4.2.1.1. Session development with the Cervantes Institute	
1.3.2. Main research question and specific research questions.		4.2.2. Session setup with the Larco Museum and cultural managers	
1.3.3. Project approach and cycles.		4.2.2.1. Session development with the Larco Museum and	
5 11 5		cultural managers	
2. Cycle 1_ Research cycle	14	4.2.3. Peruvian embassy presentation.	
2.1. Visitors realm: Relevance and expressions among multicultural beings.	16	4.2.3.1. Presentation's outcome.	
2.1.1. What does it mean when something is relevant?	-	4.3. Understanding the processes and insights from the sessions.	86
2.1.2. Why certain expressions are relevant?			00
2.1.3. What does it mean to be local for visitors and expressions tod	av?	5. Project Conclusions.	87
2.2. Exploring the Institution realm: Roles, collaborations, exhibitions,	-	5.1 The tool in the context, the method in the field. Answering old	
organization.	22	questions.	89
2.2.1. Understanding the reasons behind an exhibition.		5.2 Recommendations for the future.	91
2.2.2. Collaborators across realms: How institutions interact with oth	ers?	5.3 Beyond the Project.	92
2.2.3. Understanding across institutions: The value of a terminology.		5.4 Celebrating the similarities of the differences: Reflexions from the	
2.3. Between visitors, relevance, exhibitions and institutions.	27	project.	93
2.3.1. People visiting cultural institutions: Uncovering motivations.	27	p. 0)000	
2.4. (Re) Orienting the research and proposal.	29	6. References.	94
2.5. An (un)expected ally: Technology.	30	7. Appendixes.	97
2.5.1. Technology in the project's context.			
2.6. Immersive technologies and their terminologies: The third realm.	33		
2.6.1. About immersion in technology: Senses, memories and activit	ies.		
2.6.2. The immersion cycle of experiences and activities.			
2.7 The spark of a concept.	39		
2.7.1. What they share: Between themes and activities.	07		
2.7.2. Elements across the foreign and the local.			
2.7.3. Visitors as the centre of the model: the basis of a Diamond.			
3. Cycle 2_ Development of the Cross-Relevance Diamond tool (C-RD)	45		
3.1. Making the relevance tool relevant: About the relevance by play	45		
framework.	49		
3.2. The Cross-Relevance Diamond tool.	<b>F</b> 4		
3.2.1 Across the diamond: The method among the map.	51		
3.2.2. The steps across the moments in the diamond.			
3.3. Map and Cards: symbols.	66		
3.4 Representation of the generalizations and visitors.	68		

# 1. Setting the Scene



1.2. Initial scope

1.3. Realities, challenges and opportunities

### 1.1 Introduction

#### An opportunity transformed into a brief

In a globalized world, people from different parts of the world are now able to interact with people from other parts of the world. These interactions are not only with people but also with different objects, traditions and lifestyles. These could happen in different ways: by meeting people, interacting with certain artefacts, media feed or experiences exchanges like travelling. While this is happening, there are two types of institutions that support and boost these interactions: Cultural institutions and embassies.

Museums are the most representative type of a cultural institution. These are defined as the places that "work in active partnership with and for diverse communities to collect, preserve, research, interpret, exhibit, and enhance understandings of the world, aiming to contribute to human dignity and social justice, global equality and planetary wellbeing" [1]. Embassies, on the other hand, have different functions due to its diplomatic and political purpose. However, one of these functions is to "promote friendly relations between the sending State and the receiving State and developing their economic, cultural and scientific relations" [2].

There is an alignment between the goals of these two institutions. Thanks to this, they organize, coordinate and prepare exhibitions that could create opportunities for cultural exchange and strengthen the current relations between countries.

However, sometimes it is not easy to reach a mutual agreement and understanding between institutions. This affects the content that is going to be exhibited, how is going to be experienced by visitors, and how the content's importance through the experiences can be presented. These difficulties can (and will) affect the relationship between people that are going to attend the cultural institution to experience the exhibition and its content. Consequently, this will impact how the visitors will consider the content of the exhibition relevant to them [3].

Relevance could be considered as part of the acknowledgement process of something as important by people. For this case, in particular, a connection has to be established between the visitors and the content that is exhibited. Different factors affect this connection, like the context, topics, visitors' interests, interactions and current technology in the visitor's context.

People establish connections with different elements that they are acquainted with, mostly due to the socio-cultural familiarity between both. However, what happens when the elements are not part of the socio-cultural scope of the visitors?

With this question, the idea of developing a method that could help to identify how potential deeper connections can be established between the visitors and the content appears as an exciting opportunity as the project's goal.



### 1.2 Initial Scope

With the current collaboration between embassies and cultural institutions, the development of deeper connections between visitors and the exhibition's content is also an opportunity for them. Since the moment an exhibition is proposed, the establishing of deeper connections evolves into the development of meaningful experiences. By setting the idea of a meaningful experience, the positive impact on the visitor's perspective increases. Concepts like exoticism, curiosity, thrill and wonder, which initially appear while encountering something new, can lead to the acknowledgement of the new as relevant (and therefore valuable) by the visitors.

With that being said, the use of the visitors' process to acknowledge something as relevant when they are in experiences related to different cultures (and realities) allows a window for the use of a Human-centred design approach.

### Who are the actors in this scenario?

In the process of looking for potential collaborators that represents both embassies and cultural institutions, the Peruvian Embassy in the Netherlands was interested in the project since the beginning. By working in the promotion of the idea of "What is Peruvian culture?" the embassy establishes several relations with different institutions across the Netherlands [4]. Also, the interests of the Peruvian governments encourage the collaboration between Peruvian ministries with embassies around the world. Thanks to these ideas, the embassy was able to provide access to its institutional network. From this network, two cultural institutions as collaborators for the project appeared: The National Museum of Ethnology in Leiden (Museum Volkenkunde) and the Cervantes Institute in Utrecht.

Both of them are interesting in terms of their goals and their processes to achieve them. In one hand, while the Museum Volkenkunde can be label as a "traditional museum", the people working there are open to the idea of exploring new interactive approaches towards exhibitions, adapting to new ways of developing exhibitions and how to reach new visitors with new technologies. Its mission as an institution goes: "To showcase the different manifestations of human culture around the world" [5]. As a result, the Volkenkunde museum is part of the Wereldculturen organization, a collective that comprises four museums in the Netherlands: The Tropen Museum, the Afrika Museum, the Wereld Museum and the Volkenkunde Museum [6]. The goal of this collective is to present different exhibitions across the country and allow visitors more comfortable access to said exhibitions.

On the other hand, the Cervantes Institute is not a museum, but a cultural institution which promotes Spanish as a language and different cultural manifestations of Spanish culture and Hispano-American culture [7]. One of the advantages that this institution has around the world is the presence of spaces that can be used as exhibition galleries in the countries where they have a presence. Thanks to this, and the goals previously mentioned, this institution is in constant communication and collaboration with embassies from Hispano-America and other institutions and artists from that region and Spain. Although this institution is not necessarily focused in exhibitions as a museum, its relationship with embassies and other institutions (and how the institute deals with them) presents a good source of insights for the project (Image 2).

These two institutions share one statement: To present different manifestations (or expressions) made by people from other socio-cultural contexts, in some cases from different parts of the world and periods, to people here in the local context.





## 1.3. Realities, challenges and opportunities



Understanding of the foreign culture from institutions



Understanding of the foreign culture from visitors

It is necessary to acknowledge the current situation where this project is going to be happening. From the information acquired by reflecting about the goal, talking to the collaborators and the people that work and attend at the institutions, four specific situations were addressed (Image 3).

First, there is existing cooperation between the different types of institutions. Second, the current understanding among institutions towards the content that is going to be exhibit coming from a different culture: The foreign culture. Third, the possible connection that could occur between the people that possibly (and currently) visit the cultural institutions and be in contact with foreign culture's content. Finally, the idea of relevance that could be triggered by visitors at the moment of experience the exhibition of the foreign culture, which constitutes the desired positive outcome from the project.

The collaboration and understanding between institutions are related to the institutions' intentions while presenting and developing an exhibition. How they interact with each other and how they can reach a common goal.

The understanding of the foreign culture by institutions is being triggered by the necessity from the development teams to acknowledge the ideas, motivations, purposes, techniques and processes that are behind the elements that are going to be exhibited.

The exhibition's visitors will be those who are going to be interacting with the content of the exhibition. At the exhibition, they are going to elaborate on their own opinions towards the content of the exhibition. Furthermore, these opinions are not only to be based on the interactions during the exhibition but before and after it. Expectations before the exhibition and reflections based on it are going to affect the final opinion that the visitor will be elaborating.

In the following chapters, these situations were explored.



# Visitors Realm



# Institutional Realm

# 1.3.1. People as visitors: How the ideas behind the project connect with visitors?

The possibility of using a Human-Centred design approach can provide a good starting point for the project. This approach also helps us with the use of the addressed situation while elaborating the research question for the project.

An important aspect that has to be considered is that visitors are going to see the results of the cultural institutions and the embassy's cooperation. They are the ones who are going to perceive how these two types of institutions reached the same understanding of the content that it is going to be exhibit. They are going to elaborate on the connection with what they are experiencing during the exhibition. Finally, they are the ones who are going to establish the relevance between the exhibition's content and themselves.

By putting the situations together with the visitors, it is possible to elaborate initial questions around these considerations:

1. How are institutions currently cooperating within each other?

2. How can institutions agree and address the importance of what is going to be exhibit?3. How are visitors going to experience what is going to be an exhibit to be able to establish connections with themselves?

4. How will visitors be able to develop relevance towards the exhibition's content?

Due to these questions, two significant groups or realms were created (Image 4).

The first realm focused on visitors. Here, visitors, are defined as the people that will interact with exhibitions to achieve an experience that can satisfy their needs and motivations to visit the institutions. That experience will allow them to establish connections with the content of the exhibition, triggering the generation of relevance.

The second realm focus on institutions, both cultural institutions and the embassies. In this realm, the ideas of cooperation and understanding will be explored in detail within the collaborators. These entities will ultimately be responsible for the conceptualization, development and execution of exhibitions.



How, by identifying the elements that could help to develop exhibition experiences, foreign socio-cultural expressions can be considered "relevant" to the people visiting exhibitions about these?



How can visitors establish relevant connections and identify these while visiting and experiencing an exhibition about a culture different than their own?



How can institutions align the elements of an exhibition with relevant experiences to the visitors?

# 1.3.2. Main research question and specific research questions.

With the goal, the initial questions and the realms defined, it is possible to state the main research question that will lead the entire project. Moreover, two specific research questions, based on the previous ones, were proposed to each one of the two realms. The purpose of these specific research questions is to support the main research question. As it was previously mentioned, the visitors were pivotal across the different initial questions; therefore, the specific research questions will consider the visitors as part of the questions (Image 5).

Main Research question:

How, by identifying the elements that could help to develop exhibition experiences, foreign socio-cultural expressions can be considered "relevant" to the people visiting exhibitions about these?

Specific research questions:

#### Visitors realm:

How can visitors establish relevant connections and identify these while visiting and experiencing an exhibition about a culture different than their own?

#### Institutions realm:

How can institutions align the elements of an exhibition with relevant experiences to the visitors?

### 1.3.3. Project approach and cycles

To answering the research questions presented and to fulfil the goal, the project was divided into three significant cycles (Image 6). The first cycle focus in the research on each realm based on the research questions and how these can become a design proposal. The second cycle focus on the development and the iterations of the proposal theorized during the first cycle. The third cycle focus on the test and applications of the proposal in possible future exhibitions across institutions as a validation process.



# 2. Cycle 1\_ Research cycle

2.1. Visitors realm: Relevance and expressions among multicultural beings.

2.2. Exploring the Institution realm: Roles, collaborations, exhibitions, organization

2.3. Between visitors, relevance, exhibitions and institutions.

2.4. (Re) Orienting the research and proposal.

2.5. An (un)expected ally: Technology.

2.6. Immersive technologies and their terminologies: The third realm.

2.7. The spark of a concept.

# 2. Cycle 1\_ Research cycle

As mentioned, the first cycle is focused on the research process to understand the project's realms. During the research process, the relationship between each realm will be analysed.

The Visitors realm will focus on analysing the process of relevance developed by the exhibition's visitors, how the idea of culture affects this phenomenon generated by the visitors in general, how the exhibition experience can trigger this phenomenon and how this realm connects with the other two.

The institution realm will focus on understanding the existing relation between the embassies and the cultural institutions, with a focus on the relationship between the Peruvian embassy and the cultural institutions. During this process, the potential alignment of the goals and meanings of exhibitions with the idea of relevant experiences will be presented, analysed and discussed.

The research about the two realms was in parallel, establishing their relations and how they interconnect within them.

# 2.1. Visitors realm: Relevance and expressions among multicultural beings.

### 2.1.1. What does it mean when something is relevant?

The project is around one idea: Relevance. However, what is it? According to Simon "Relevance is a key that unlocks meaning" [3]. To achieve relevance is necessary to establish connections between the visitors and the exhibition. Nevertheless, to achieve relevance is not about making more connections between these two, but to evaluate the nature of the existing ones to see how these can have an "added value" at the moment of reaching relevance (a process known as mattering).

As mentioned, relevance exists to unlock the meaning while experiencing something. The meaning for an exhibition relies on existing (or new) meanings given to the elements that are exhibited and consequently, the overall exhibition's experience. However, in the project's scenario, the meanings that already exists in an exhibition experience are two. The first one is related to the meaning that the foreign community has been given to the elements in their contexts (what is local for them), and the second one is around the possible meaning that visitors are going to give to the elements based on their contexts (again, what is local for them).

With this approach about relevance, the idea of presenting something "new" to visitors that can achieve the "meaningful" status has to rely in part on the known expressions that are already considered "meaningful" to the visitors in their local contexts. Hence, it is possible to say that elements and experiences are always going to be labelled as meaningful from a contextual perspective; thus, the socio-cultural background is essential in the process of mattering.

#### 2.1.2. Why certain expressions are relevant?



When an element -known as expression- is considered relevant, is not because the expressions existed as an isolated entity; instead, the relevance occurs in conjunction with other expressions and factors that are around the same context. This group of expressions and factors are involved at the moment of the interaction between people and the context: weather, time, location, emotions, other people, to name a few. These generate the overall experience that will trigger people to address something as relevant to them because it leads the people to be able to elaborate a meaning around it (Image 7). By understanding this, the "added value" mentioned previously, relates not only to the expression alone but to some of the other elements and factor that are involved in the experience.

According to Psotka, to replicate an experience is not necessary to have a detailed simulated environment with all the elements that conform to the first experience [8]. Furthermore, if the simulated experience is well focused on some particular elements of the original experience, it has the potential to serve as an excellent deliverer of the original experience. Meaning that exhibitions can replicate experiences if these simulate elements from the original context/ environment.

Nevertheless, no matter how accurate is the simulated experience, if the visitor is not able to establish a connection with it, the relevance will not achieve it. That happens because "relevance is in the eyes of the audience" [9]. Therefore, relevance fits between the meaning of an experience and the connection established between an exhibition and the visitors (Image 8) as part of a more significant process: How something can be considered "important". The connections are capable of triggering "possible cognitive effects" -the people's ability to link what is currently is happening around them with their memories that have a positive nature- according to Sperber and Wilson [10]. According to Sperber and Wilson, the relation between positive cognitive effects and the mattering process for relevance is related to peoples' effort (the understanding of a situation) at the moment of processing experiences. The lowest effort is required by people to process experiences; the easiest is going to be for them to acknowledge the relevance factor of said experiences [10].

Addressing this is essential for the project. When some experiences require a lower effort to process for people, it can be related to everyday or ordinary events in people's lives. On the contrary, when some experiences require a higher effort to process, these can be related to extraordinary events (Image 10). The difference between the ordinary and extraordinary relates to the positive cognitive effects. The positive cognitive effects that are triggered by the first category are not so strong as those who are triggered by the second category. In other words, the more familiar is the experience to the people then less effort is employed by them to understand the experience. This sentence resonates with the "Skills, Rules and Knowledge" model proposed by Rasmussen [11]. However, while Rasmussen's SRK model is focusing on task conditions, this project focus on the experience that people can live during their lifetime.



Going back to the context of the project, where an exhibition is about a different culture, it could be helpful to define the ordinary, and extraordinary aspects are around the exhibition and the foreign culture according to the people from that culture. Additionally, by allowing visitors to the possibility of acknowledging exhibited expressions as relevant, helps them to connect the information that they gathered (the exhibition per se) with the information that matters to them (related to what they already know from their context).

With this idea, it is possible to state the following: By establishing a connection between familiar experiences (as the ordinary) in visitor's life and the exhibition experience (as the extraordinary), the gap between the visitor and the exhibition's content can be reduced. This statement leads to focusing on ease the effort required by visitors at the moment of acknowledging the exhibition's content as relevant.

However, it is necessary to take in consideration the following insight from Simon: Relevance cannot be achieved at a universal level for everybody because it is relative. Consequently, the relativity is related to the following statement: "To who is it relevant to?" The sooner we start focusing on becoming relevant to the people we most care about... When they feel connected to the experience, is when they believe it matters" [3]. To understand the answers to these is necessary to understand the people as visitors, but also as local visitors.



provided by user kjpargeter, via freepik.com.



# 2.1.3. What does it mean to be local for visitors and expressions today?

So far, the relation between visitors with the concept of relevance has been presented. However, in the project's scenario, for expressions to labelled as "foreign", there has to be something labelled as "local". In the project, expressions exhibited are representatives of the "foreign", and the visitors (and their contexts) are the representatives of the "local". It is essential to define what does it mean to be "local" in the current time where phenomena like globalisation, worldwide companies and internet are developing on a global scale and simultaneously.

When something has as "local" attribute, it means that it is from and exists in a specific geographical region or area. Based on this, human groups existing in specific spatial areas categorised as neighbourhoods, cities, countries, to name some examples. By doing this, it is possible to trace the origins of not only communities with similar characteristics but also how to identify and trace expressions that are common in a determined geographical space.

There was a time when different communities around the world produced their sociocultural expressions without interference from other groups. However, this has changed. Phenomena like colonialism -a few centuries ago-, and globalisation -currently- affect in a high measure the production and perception of socio-cultural expressions. Nowadays, we are experiencing a particular situation that has never happened before in history: People can interact with contemporary socio-cultural expressions that are from different origins without difficulties in a scale never seen before.

This situation is happening because socio-cultural expressions are produced in a global system/ context. This system is run in some cases by companies with a worldwide presence. Consequently, these companies are not only related to one country or specific demographic culture. This phenomenon is explored by Du Gay et al. since 1990. To showcase this scenario, Du Gay et al. use Sony as an example of a company which englobes forms of cultural artefacts in software and hardware across the world [12]. As an example, one product of this company, the Sony Walkman, was widely used by millions of people around the world. This product reached a high level of popularity during the 1980's decade up to the point that it was considered as part of the contemporary culture of that time [13].

According to Du Gay et al., there are five aspects (or processes) that can be analysed to understand how this happens with socio-cultural expressions. First, how is presented to a society; second, what are the social identities between the expression and the human group (what people can recognise from the expression as their own); third and fourth, how is produced, consumed; and fifth, which are the mechanisms to regulate its distribution and consumption [12]. These five aspects apply to socio-cultural expressions regardless of the period or localisation without exception.



Traditional definition of "Local"



Project's approach to "Local" (Based on Du Gay et al, 2013)

Going back to the Sony Walkman example, that product was able to integrate into the socio-cultural contexts of its users and become a socio-cultural expression of those contexts, becoming "readable" for its users. When people can "read" an expression (understand it) and be able to categorize it as a socio-cultural expression, is because the people were able to construct meaning around it. This construction is proof that said expression has some cultural properties for the people. Giving a meaning to expressions serves as bridges between the physical world (what is around us) and the symbolic world (what is inside us). The symbolic world -where languages, communications methods and ways of thinking exist- help people to define their culture. These symbols are the result of a societal approach, which are aligned to common meanings, values and norms developed by human groups expressed in several different ways.

Nowadays, the consumption of cultural goods from different parts of the world is an everyday activity, leading to viewing contemporary technology and culture as the basis of daily-day activities. This view generates new meanings to the artefacts that people use in their contemporary societies. Thus, technology, culture and the meaning generation through general practices set the basis of life experiences, becoming what is known as the current local culture.

It is important to remark that due to the easiness that is to produce and consume contemporary cultural goods affects the uniqueness and authenticity attributes of "local" socio-cultural expressions, which replace them with ephemeral and reproducibility attributes. The meanings given to the expression are going to change, affecting even its original purpose. For example, expressions related to the artistic views of a society can be used as political symbols. This also affects people sense-perception towards its society, its expressions and the presence of culture in daily-day activities.

Thanks to these findings, when visitors are referred to as locals during this project, it does not only mean to depict a geographical region or area. It also refers to visitors who share the same type of expressions from our current contemporary culture: Elements with the similar level of technology, rituals and social practices that are ordinary no matter the peoples' origins (Image 10).

With this, the perspective from the institution realm was necessary to start finding how difficult it was going to be to integrate these findings of relevance, visitors, foreign and local socio-cultural expressions with the current institutional knowledge.

2.2. Exploring the Institution realm: Roles, collaborations, exhibitions, organization



Since the beginning of the project, the importance of visiting the cultural institutions was acknowledged. Several visits happened to talk with the people that work across the institutions. The expertise, involvement and ideas from people in the institutions about the topics related to the Institution realm were crucial for the progress of the project. Besides, the inclusion of other entities was important for additional findings (Image 11). In "Appendix 1: More than interviews" details about each conversation with the people can be found.

Image 11. Institutions and teams interviewed. From top to bottom: Peruvian Embassy team, Instituto Cervantes team, Museum Volkenkunde team, Medhak Group from TU Delft, Peruvian Ministry of Culture.

### 2.2.1. Understanding the reasons behind an exhibition

"Show the stories that are being told around these cultures."

"Show how historical links can be used as a track of basic human needs "

"To show how people from other places preserve and evolve their culture."

"Shared humanity: We all have the same questions, but we answer in different ways. This bring the Universal themes as a concept". There are different roles that people had to perform in cultural institutions. In museums, a curator has an exciting approach in the process of developing an exhibition about different cultures. The curator is considered an expert on specific regions, societies, cultures and its expressions. Moreover, the curator provides the academic knowledge that is going to be used by exhibition designers and exhibition makers at the moment of elaborating an exhibition.

For the Volkenkunde Museum, as part of their cooperation with different institutions, one of its goals is to provide to the people from the Dutch culture (which is possible to consider as local culture) the tools to understand how people from other places preserve and evolve their culture. In this process, it is possible to see how these cultures are prevalent across time while facing phenomena like colonialism – in past times- and globalization –nowadays.

The purpose of this is to show the stories that these cultures tell. However, if the story will not connect with the people that are going to interact with, it will be challenging to establish relevance. To deal with this situation, the Volkenkunde museum uses historical links as a track of basic human needs (or a fundamental human question) across cultures. The answers to these needs/ questions can have a possible use to establish potential connections. With this, different socio-cultural expressions across the world can be understood while preserving their different perspectives. This understanding, to some extent, is related to what is presented by Du Gay et al.: Artefacts do not have a single fixed, unchanged meaning [12]. This process also relates to what is explored by McCarthy and Wright about the cultural factor in expressions: The socio-cultural expressions can obtain a cultural factor and meaning due to interacting with people, changing the nature of the expressions in the process [14]. This change happens due to the socio-cultural background of people, a factor that is inherent in all humans that live in communities.

The concept of shared humanity reinforces this idea: We all have the same questions, but we answer in different ways. This concept becomes the foundation of what is known as Universal Themes [15]: Ideas that applies to every society regardless of the cultural, geographical or temporal contexts. This helps to understand the ideas of the human condition, human nature and concerns. This concept complements what have been explored in the section about the idea of categorized as local today (Image 12).



Image 12. Universal themes are ideas that apply to every society regardless of the cultural, geographical or temporal contexts. This helps to understand the views of the human condition, human nature and concerns. Example: The hero's journey, present in "The Odyssey" (Ancient Greece, around 8th century B.C.), The Journey to the West (China, 16th century), The Lord of the Rings (the United Kingdom, 1937) and Star Wars (the USA, 1977).

# 2.2.2. Collaborators across realms: How institutions interact with others ?

During the development of an exhibition, the idea of working with "sources communities" (SC) is essential. SC represents the human groups with the knowledge that can complement the information about the elements that are going to be exhibited. The reason for this is because the SC is going to be represented directly or indirectly through the elements exhibited (because it is their current culture or by cultural heritage). By contacting the SC, the people from different cultural institutions can reach an agreement about how the elements are going to be exhibited. By contacting them, the institution can avoid losing the community's perspective (ideas, concerns, or way of thinking) towards particular topics.

For cases where the SC are challenging to reach, the embassies are asked to help the cultural institutions. In other cases, the embassies want to present specific communities or expressions through cultural institutions. In both cases, embassies have a representative function for the SC. The importance of being able to contact SC or embassies and develop a network is fundamental for this case of exhibitions. This contact also affects practical aspects (yet important) for the exhibition development like funding and transportation of elements or people across countries.

In every collaboration between institutions, there is a negotiation factor. Political interests, the presentation of the expressions and how the stories around these are going to be told, surpass the possible "comfort zone" that can be present in one or more of the negotiators (like the lack of interest in developing an exhibition). Situations like dealing with topics, procedures or methods that not align with those that neither institutions or SC/ embassies are acquainted, affecting this negotiation.

"The embassies want to present certain communities or expressions through cultural institutions."

"In every collaboration between institutions, there is a negotiation factor."

"While developing an exhibition, is necessary to work with Source Communities (SC), in some cases, represented by the embassies. The reason for this is because the SC are those who are going to be represented directly or indirectly through the elements exhibited (because it's their current culture or by cultural heritage)."



# 2.2.3. Understanding across institutions: The value of a terminology

In the process of understanding the interaction between institutions, it is necessary to understand the following: People make institutions. In other words, we are talking about people as the cornerstone of all of the institutions. Because of this, everyone involved in the exhibition-making process has to be at the same level. This level is related to power dynamics (or the negotiation that previously mentioned) and assertively between the people. The power dynamics, in this case, are being affected by the existing knowledge that each institution team has around the elements that are going to be an exhibit and the methods they will apply to define and reach their goal. Another factor that affects the power dynamics is that each institution team is an expert in their field. Because of it, each group of people has its terms and concepts related to different aspects of the exhibition development process.

In some cases, as presented by the Medhak group in its project with the collaboration of the ONG Mare Memoria Viva (see Appendix 1), the use of metaphors is a powerful ally at the moment of understanding other people and teams. Nevertheless, to be able to use metaphors properly is necessary that every person involves being able to set aside its prejudices and preconceptions that come with their existing knowledge and methodologies to ensure the same level of equality in power dynamics.

# 2.3. Between visitors, relevance, exhibitions and institutions.



As mentioned, the cornerstone from institutions is their people. Curators, exhibition makers, designers, people working in cultural institutions or organizations, diplomatic missions representing a foreign country are in this negotiation process every time an exhibition is proposed.

Nevertheless, these negotiations should happen while considering that the visitors are going to be responsible for the value of the exhibition. The institutional teams must be able to understand the visitor's perspective towards the exhibition. The visitors' perspectives are comprising of their terms, ideas and life experiences that help to build their knowledge and expectations towards the new experience.

Linking the previous idea with what was presented in the sections about visitors and relevance, we can view relevance as an exercise of empathy: Understanding what is relevant to the audience. By perceiving relevance as an exercise of empathy, is also possible to view it as a process of empathy, and not an event that appears and disappears. An analogy of this is like opening the door to go inside a room. People must be able to see the door and provide them with the key to open it. Establishing a connection is equal to open a door; inserting the key into the door's lock is similar as addressing an expression as relevant, and opening the door to enter in a room is like giving a meaning to the expression. In this process, inserting the key into the lock and the opening of the door has to be easy. The project's goal can fit in this part of the analogy. Both institutional teams and visitors are in need to be able to see the same room, door, lock and key to understand how visitors are going to open the door.

Furthermore, there are two types of visitors around exhibition experiences: insiders (those who are inside the room) and outsiders (those who are outside the room) [3]. Insiders already acknowledge the importance of the exhibition experience. The process of finding and delivery relevance is for new people. However, outsiders do not want the room rearranged at their image, but they do want to see reflections, expansions and distortions of their experiences in ways that allow them to see the connections with what they know.



# 2.3.1. People visiting cultural institutions: Uncovering motivations

One interesting aspect that has to consider into account is the fact that people decide to visit museums or cultural institutions by themselves. During the visits is that the relevance process develops based on what they are going to experience over these places. In that regard, marketing areas and activity promotion personnel from the institutions are responsible for mapping the visitors. This mapping categorizes and transforms the characteristics of their visitors into data that can be used by the rest of the teams. This data becomes demographic depictions of the visitors like age, origin or ethnicity.

The main limitation of this categorization is the narrowed perception of the visitors as average. However, visitors, are individuals, with different backgrounds and experiences in life that will make them experience the exhibition and the expression in their terms from one to another. In this context, John Falk proposes an exciting approach to surpass this limitation.

Falk proposes an alternative for the categorization. Instead of looking for visitors with a traditional demographic filter, he proposes to categorize visitors by understanding the motive and reasons why the visitors decide to go to the cultural institution. By addressing the motivations, a realization occurs: the visitor experience is ephemeral and dynamic. This approach also affects not only the experience during the visit but also the experience after the visit. The moments that remained in the visitor's memory are going to justify the reasons for the visit.

Regarding how was perceived the exhibition experience by the visitors, they will be doing a self-reflection and self-interpretation based on it. These two processes combined with the motivations will generate what is named by Falk as the visitor's perceived identity [16], ultimately affecting the categories of the visitors based on motivations.

As a result, seven types of visitors had been proposed: Explorers, facilitators, professional/ hobbyists, experience seekers, rechargers, respectful pilgrims and affinity seekers [17] (Image 13). What is interesting about these categories, and that represents an essential difference with the demographic categorization is that these are not permanent: They are dynamic. A visitor can go to an exhibition in one opportunity for a particular motive, and another opportunity could be doing for another motive.

## 2.4. (Re)Orienting the research and proposal



The possibility of elaborate a tool that could help the people involved in exhibition development by allowing them to see what they are going to exhibit and how they will do it while considering the visitors' perspective and motivations becomes an interesting starting point. In that sense, the use of universal themes presents a solid foundation to elaborate on possible connections with what they know (Image 14).

However, just by knowing what they are going to exhibit and what are the visitor's perspective and motivation is not enough. The design proposal could also guide the development teams towards potential exhibitions' concepts that consider what had been previously mentioned.

The challenge at this point is to discover how possible connection using Universal Themes can become insights at the moment of using the design proposal. With this, the design proposal for the project will serve as a tool.

## 2.5. An (un)expected ally: Technology



There is something in common between the people in the two realms: they use technology as part of their every-day activities, or for professional-related activities.

Technology, as explained previously, is used by people as part of their cultural expressions. This use happens since the beginning of societies: Every socio-cultural expression involves a certain level of technology: As in the expressions themselves, the techniques and craftsmanship employed for the making of these, as examples. Technology, as a concept has always been a part of the expressions, the only difference between each society is the type of technology used. However, today a considerable percentage of the people in the world shares the same type of technological expressions (as smartphones, transportation methods, use of mass-media elements, to name a few).

With the presence of technology as part of the expressions and experiences that around every people nowadays, it is possible to observe how technology shift from a concept into a practical element in people's life. Therefore, this observation could be part of the process of determining how the intangible connections discovered through the Universal themes can lead into practical insights by applying the same process in which technology shift from a concept into a practical element.

What is interesting is how technology is going to be applied for the project: Instead of using it with a straight forward practical use, is going to be oriented into a theoretical approach. This approach also relates to one of the points presented during the institution realm chapter: The terminology. It is possible to provide to the institutional teams with terms that can be common to the parts involved during the use of the tool.

#### 2.5.1. Technology in the project's context

First of all, it is crucial to understand how technology is being applied currently by cultural institutions.

Technology, in case of exhibitions, is used to enhance its interactivity value. One manifestation of this is immersive technology: Augmented reality, virtual reality and mixed reality (Image 15). However, the use of these technologies is often limited to attract more visitors as part of the entire exhibition (as a single installation experience in some cases) instead of making the exhibition relevant and meaningful to the visitors. The potential in these technologies is often not taken in the use of this type of technology considering that each one of these has different advantages (and limitations) in terms of interactivity and immersion in different contexts [18] [19].

With this in mind, the opportunity of exploring immersive technologies and how can help exhibitions, developers, cultural institutions and embassies by enhancing the interactivity value of a potential exhibition in the process arises.

Image 15. Examples of immersive technologies in exhibitions. Left: Use of Microsoft's HoloLens technology to recreate the look of the "La Belle" expedition ship, based on the recovered remains at the Bullock Texas State History Museum; right: Virtual Reality exhibition about calligraphy and paitings at the Taipei's National Palace Museum (top). "Visual Magic: Dali's Masterworks in AR" augmented reality exhibition at the Dali Museum, Florida (bottom).

EXIT

8

故宮書法VR

100

新

2822 A 281
# 2.6. Immersive technologies and their terminologies: The third realm



Due to the realization of the importance that immersive technology could have for the project, and because it is necessary to understand the concepts around it to obtain insights, a third realm was created: The Technology realm.

The three realms exist with organic interactions. These interactions occur by the people and elements that are between each realm. If we start with the visitors, they use technology on a daily-day basis as part of their socio-cultural context. At the same time, technology connects with visitors. The visitors connect to the institutions, and the institutions are linked with technology through the contemporary socio-cultural context.

As the third realm, a specific research question focused on the technology realm to orient the research that is going to be made (Image 16).

Technology realm:

How can immersive technologies be used to address relevant experiences in visitors while experiencing an exhibition of foreign socio-cultural expressions?



How can immersive technologies be used to address relevant experiences in visitors while experiencing an exhibition of foreign socio-cultural expressions?



## 2.6.1. About immersion in technology: From senses to activities

One of the most popular forms of immersive technology today is Virtual Reality (VR), which is study since the year 1990. The idea behind VR is to generate different environments that can "surround" the user. However, this is not the only type of immersive technology that exists today. Alongside with VR, there is a combination of real-life environments with computer-generated perceptual information, resulting in what is known as Augmented Reality (AR) [20]. In recent years, by experimenting with the different types of perceptual and sensorial cues that can are used to enhance the desired interaction, the concept of mixed reality (MR) arises. In mixed reality, the relation between the "computer-generated elements" (like 3d model elements, for example) and "real-life elements" is symbiotic to understand the experience fully. For example, a real-life element can provide with the idea of weight and texture of an object. In contrast, a computer-generated element can be placed over the real-life element to give the idea to the user of with what they are interacting.

Nevertheless, researchers and developers have been exploring the application of these three types of immersive technologies in different fields, being the most prominent and widespread entertainment and educational training.

In the case of entertainment, videogames are the representative example of this. The immersion capabilities of virtual environments allow users to focus on the experience, enhancing the overall gameplay experience. [21] [22] [23] [24] [25]. Although some of the video games that use the immersive technologies are not able to recreate detail environments, the current technology gap between these and video games that relies on traditional rendering process (like computer's graphic cards or dedicated devices) is being reduced.

In the case of educational training, one compelling case is operational training. While traditional computer-generated training software allows a general overview of the experience aided by haptic devices to achieve a sense of realism; immersive realities use iconic and echoic stimuli to simulate experiences that can affect not only the objective-focus reasoning of users but also their emotional and mood reasoning [20] [26] [27] [28]. This approach sets the basis of the idea of "being there", something that was explored a few decades ago by Psotka, complemented later by Bowman and McMahan and Slater [8] [29] [30].



Bowman and McMahan describe the idea of immersion successfully concept achieved by VR due to its characteristics. However, they, alongside with Psotka, state that "full immersive environments" are not necessary to achieve an immersive experience [8] [29], as it was described on the Visitors realm section. Furthermore, they agree that a great help at the moment of reaching immersion is by taking advantage of the users' senses (or visitors' senses in the project's context) and, as an extension, sensorial memory. In that sense, Ermi and Mäyrä state that the sensorial stimuli lead to sensorial immersion [31]. The sensorial immersion is, at the same time, based on the research of Buchanan and Csikszentmihalyi about the "Flow state" of experience [32]. The "Flow state" is a holistic sensation that people feel when they act with total involvement, requiring both mental and physical skills to achieve it and that could lead to the users to be aware of their presence during the experience [30] [33].

With this information, according to Bowman and McMahan and Ermi and Mäyrä, by understanding the sensorial stimuli, and subsequently sensorial immersion, it is possible to match the flow states of the simulated immersive experiences with their real-world experiences counterpart. This match is important for the project because the foreign context is not going to be recreated in full detail and accuracy during the exhibition. However, and as presented previously, it is possible to recreate certain aspects of it that could help the visitors to understand the foreign experience and consequently, trigger the relevance process.

To identify the mental and physical skills required by the people to experience and be immersed in an activity, the work of Pine and Gilmore is significant for the research and the project in general.

Pine and Gilmore propose to divide experiences into two dimensions: Participation and connection. By doing this, it is possible to determine if the actions of the people during the experience are affecting the elements that are part of the experience itself -active participation or passive participation-. In the same line, it can determine if the presence of the people is just symbolic (only in mind) or requires to be physically (or at least virtually) around the experience itself -absorptive connectivity or immersive connectivity- [34]. These two actions combined is what known as the "nature of the experience", a concept that will be used later in the project (Image 18). It is important to remark that the nature of the experience is not a static one; but a dynamic one, depending on the elements that compose the experience.



### Nature of Experience

## 2.6.2. From concepts into a cycle: The immersion cycle of experiences and activities

Based on the previous research, a series of steps that follows the process of immersion is necessary to understand what is required by people to immerse while interacting with full contextual experiences. A full contextual experience is an activity that requires a physical and mental amount of effort from people to be experienced. From now on, full contextual experiences will also be addressed as activities.

The role of memory is divided between the cognitive type (explained in the Visitors realm section) and the sensorial type. These two types of memories are going to link the new experiences that visitors are facing with the experiences that they faced before. The activity, as explained, requires from people an amount of effort in their physical and mental skills.

The activity itself comprises experiences that are focused on the interaction between the people and the elements that are present in the activity. Additionally, the activity also comprises the dynamics that the people have to perform during the activity. An easy example of this could be ordering a coffee in a store: People will have to interact with the money, the coffee cup, the people at the bar, for example. (More oriented to tangible elements). At the same time, the dynamics could be, for example, waiting in a line for ordering the coffee (more ritual oriented).

Thanks to the link between the previous experiences and the experiences during the activity, people can experience one possible combination of the "nature of the experience". As mentioned, because the activity involves different experiences, the overall nature of the activity can shift from one combination to another. This shifting between natures is what is known as the "Flow state", setting the level of involvement that people will experience during the activity.

The level of involvement triggers the immersion in people, that will lead to people to start to be aware of their presence during the experience. That awareness will trigger the idea of "being there" to the people, making the overall experience immersive. Finally, the overall experiences during the activity will shift into new memories that will be categorized as cognitive memories or sensorial memories, completing the cycle and allowing to start a new one.

The cycle is not happening only once during the activity. The cycle will happen at different times and velocities as long the user is being exposed to different experiences across activities. By using a cyclical approach, the process starts and finish with the people (Image 19). During this entire process, there is a human quality that helps to ensure immersion among people: Imagination, which performs a pivotal role during the cycle. Imagination is continually receiving and delivering information before, during and after the different moment of the cycle, transcending not only during the interactive parts between the user and the experience. Hence, imagination alongside with memory will help the visitor to "make sense" of the elements that build the experience and consequently enable the possibility of developing a meaning towards the elements. With this, it is possible to say that the relevance process occurs while this cycle is happening; therefore, this cycle can complement the connections elaborate with the universal themes' approach.



### 2.7. The spark of a concept



The research conducted across the three realms provided valuable findings that set the foundations for the tool desired to develop. At this point in the project, the idea of starting ideating how to start with the design proposal, the tool, is possible.

### 2.7.1. What they share: Between themes and activities



Among the connections that exist between the people that are part of each realm, there are two elements during the research that arise as the most potent and relevant for the project: Universal themes and activities.

Universal Themes are the first link between all the realms. Universal themes are shared by people around the world, shaped by their communities. In the process of addressing these, the societies develop their expressions, with a technological factor that is common of any human civilization. The expressions are going to be hosted by the cultural institutions to be shown to the visitors that are from contemporary societies. The hosting is done at different places than the expression's origin.

The activities, on the other hand, have a different approach: First, they are being developed by the societies, as part of what identifies them as a society. The activities can be ordinary (common) or extraordinary (not common). The activities' topics are related to universal themes, involving the expressions developed by societies. Finally, the activities, alongside with the expressions, are being presented to the visitors on the institutions.

If the universal themes are shared across different human groups around the world no matter the period, this means that in theory, two expressions with their origin on different societies can share the same theme. This also means that by knowing the common topic and by understanding the activity in which each expression is involved, the possibility of establishing a connection can be made (Image 20).

With this, the proposed tool can use the concepts of activities/expressions, universal themes alongside with the type of visitors - those who share the same type of local cultural elements, regarding the technical aspects of contemporary culture- to establish the possible connections.

#### 2.7.2. Elements across the foreign and the local

Giaccardi and Palen state that cultural objects have different features that help to develop the meaning of heritage among communities and societies. Technology, as one of the features, can be used with the goal of present and promote this cultural heritage factor of the objects. Leading into what is stated by Giaccardi and Palen as cross-media interaction [35].

Cross-media interaction comprises three moments: Data catching -what is going to be shown? -, data description -which aspects of what is shown will be presented and exalted? - and data interpretation -how visitors will interact with what is shown? -. These three moments link the experience, memory and imagination in the process of heritage interpretation and construction. Giaccardi and Palen address this as a socio-technical infrastructure [35]. What is interesting here is that the three moments are part of what it has to be done by the exhibition developers. Data catching is the identification of foreign expressions and activities; data description relates to the understanding of foreign activities, and data interpretation is related to the nature of the activity.

Furthermore, this is complemented by the idea supported by Benedetti: Cultural artefacts presents exhibitions as virtual artefacts [36]. With this, Benedetti deconstructs the idea around of expression with three significant capabilities: The physical capability -what is tangible/ what we can see-, the virtual capability - the meaning- and the interpretative capability - the cultural attribute given by people (no matter the precedence). The physical capability can be attributed to the exhibition experience; the virtual capability, to the possible relevance and meaning triggered by the exhibition and the interpretative with the outcome of acknowledging of the exhibition's content as important by the visitors.

Thanks to this information and the presence of two major actors related to the project's goal: The visitors from the local context and the expressions from a foreign contextual background, combined with the connection through a universal theme, the following statement can be elaborate:

If a foreign society has an expression and activity that is related to a particular Universal theme, there could be an expression and activities that somehow is related to the same theme in the local context. This expression/ activity is known to the local people -the visitors- as part of their local cultural background. By acknowledging the same universal theme(s) in both expressions, a first link appears: Their role in both contexts base on the meaning given by people. Additionally, the activities, each one with a possible different nature, can be merged into one unique exhibition experience. This exhibition experience is constituted by the characteristics of both activities, becoming the second link: the experience with the capability of triggering relevance. This triggering occurs by shifting between the local and foreign activities' nature to ensure a constant connection between what is new and what is known for the people (Image 21).



## 2.7.3. Visitors as the centre of the model: the basis of a Diamond

From the previous statement, it is essential to keep visitors as the most critical element in the tool. The research about visitors supports this decision: They are going to label the foreign expressions as relevant based on the possible connections during, and after their visit. By adding the link between the local and the foreign expression/activities, visitors are going to be able to interact with three of four elements in a direct way: During the exhibition, visitors will experience the foreign expression as part of activity proposed. This activity collects elements from the foreign activity, where the expression is involved, and the local activity and expressions known to the visitors. The element that is interacting in a sort kind of indirect way is the universal theme. Universal themes are going to be explored by the institutional teams; however, this does not mean that the visitors are not able to make that relation on their own.

By placing the visitors on the centre, surrounded by the four elements, and knowing how the other elements relate between each other, a diamond shape emerged (Image22). This shape will be the basis of what is going to be known as the Cross-Relevance Diamond, the visualization tool for the proposed method.



# 3. Cycle 2\_ Development of the Cross-Relevance Diamond tool (C-RD)

3.1. Making the relevance tool relevant: About the relevance by play framework

3.2. The Cross-Relevance Diamond tool

3.3. Map and cards: symbols

3.4. Representation of the generalizations and visitors

# 3. Cycle 2\_ Development of the Cross-Relevance Diamond tool (C-RD)

Cycle 2 focus on the iterative process that the tool went through to be completed. The iterative process performed to obtain feedback from colleagues, and people from the institutional teams showed that the tool has to comprise two major parts: The process across the tool - known as the method - and the visualization of the method on the tool - known as the diamond map.

This division is important because it will allow showcasing the development that both the process and the map had to go through this cycle. The changes made to the process will affect the map, affecting how the steps that user have to undergo through the process can be presented clearly and efficiently (Images 23a-23b).

The aspects of the tool are described in this part of the report. For more detail information about each one of the iterations made to the tool, check "Appendix 2: Iterative process of the C-RD tool".







# 3.1. Making the relevance tool relevant: About the relevance by play framework.



Image 24. Top: Relation between the C-RD and the institutional teams through the "Relevance by Play" Framework. Bottom: Placement of the C-RD's outcome in the "Relevance by Play" framework for the development of exhibitions.

During the iterative process, an interesting approach was provided by Vermeeren and Calvi with the "Relevance by Play framework" [37]. This framework is oriented "to provide sensitising concepts for use in further research on designing for relevance, as well as in design-related activities such as crafting requirements for new museum experiences, analysing existing museum experiences and developing new museum experiences" [37]. In this framework, four phases organise the experience to achieve relevance: Trigger, engage, consolidate and relate

These four phases can be reinterpreted and used with the tool in two different ways. The first one consists in changing the target of this framework. Instead of the original four phases leading to a relevant experience for the visitors, the phases will face towards the people who are going to use the tool -the teams in charge of the exhibition development. The idea with this change is to make the tool appealing and useful to the teams. The teams have to be able to see the value of the tool while using it and see the potential that the method, visualised across the map, is capable of helping them at the moment of mapping elements for relevance in visitors (Image 24).

The second reinterpretation is related to the overall development of the exhibition experience (Image 24). If the four phases are the process of the development of an exhibition, the tool would fit in the first stage of the framework with the possibility of reaching the second stage. This placement aligns with the main research question and the identified elements in the previous sections.

The decision of the integration between the phases and the tool relies on what is elaborated by Apter, and addressed by Vermeeren and Calvi: "...people can be in a "telic" (serious) motivational state, or a "paratelic" (more playful) motivational state. Those who are in a telic motivational state are motivated by results, goals and ends, whilst people who are in a paratelic state are motivated by enjoying the process in the moment itself." [37] [38]. The tool has to be valuable for its users and at the same time, enjoyable. The shift from a telic state to a paratelic state is necessary for the tool's users. For this reason, the map is going to be similar as if its users were interacting with a game. In this game map, it is desired that users will shift from a telic state into a paratelic state.

By using the analogy of a game -a tabletop game to be specific-, the idea of steps across the tool resonates with the different stages during a game. The decision of the tabletop game allows the development of a physical version of the tool. With the physicality of the tool proposed, the institutional teams stated that by having a physical object to work allows the team members to be more involved in the process. Besides, the use of this approach allows elaborating a goal for the tool as if it was a game. The goal, in this case, is aligned again with the main research question: To identify the elements that can be used to elaborate a proposal that could trigger relevance in visitors (Image 25).



### 3.2. The Cross-Relevance Diamond tool

#### 3.2.1. Across the diamond: The method among the map

With the research conducted during the previous cycle and the goal defined, the development of a set of steps to ensure that the users will achieve the goal with the method was necessary. Six moments during the process were identified (Image 26). These moments are going to conduct the steps during the use of the method. The moments are:

1. Analyse the foreign expression(s) that is planned to be exhibited and in which activity(s) it is involved and how.

2. Identify and state the potential universal theme that the foreign expression(s) with the activity(s) is addressing.

3. Identify a potential local expression and activity that somehow relates to the universal theme.

4. Analyse both the foreign and local activities and identify their type of nature to identify potential connections.

5. Ideate an exhibition concept by combining elements of both local and foreign activities to obtain an exhibition experience that integrates what is known by the visitors (the local) with what is going to be new to them (the foreign).

6. Identify which type of visitors based on motivations will be more inclined to go across the experience and subsequently, be able to address the foreign with a potentially relevant factor based on the connections made.



## Moment #1: Analyse and define foreign expressions and their activities.

The first moment in the tool is about the foreign. It is necessary to define the type of foreign expression and activity that the exhibition is going to be. Moreover, it is important if the expression itself is tangible or intangible. This acknowledgement is because expressions are present in different aspects of societies: from more tangible artistic fields like painting or craftsmanship to more abstract fields like gastronomy or dances. The current classification system of socio-cultural expressions is based on the work by UNESCO alongside the ICOMOS International Cultural Tourism committee [39] [40].

What is important to remark is the presence of expressions that can be categorised as one of the two types while containing some aspects of the other type. For example, a painting is a tangible expression. If the painting is depicting a festivity, an intangible expression, then it is up to the users of the tool to define which direction they are going to focus: either the paint as the tangible expression or the festivity depicted as the intangible expression. The formulations made by Giaccardi and Palen, Benedetti and the interests of the institutions involved can help the users to define what are they looking for.

By defining the expression, the following action is to analyse what the expression is describing, and the activity in which the expression is involved. In cases where the expressions itself is an activity, then this could serve to explore in a more profound way what the activity is describing.



## Moment #2: Understanding the foreign activity and reaching the universal theme.

One thing is to identify socio-cultural expressions, their characteristics, the activity in the foreign context where expressions are involved, and another thing is to dive deep at the reasons why this expression and activity exists. It is necessary to identify the purpose, motivation and reasons for why these elements are important for the foreign society. That is the reason for the second moment.

With the purpose and the importance identified, it is possible to see if these also appeared in other societies. Thus, the nature of these and their meanings are universal. A proper way to understanding how these characteristics can lead to a universal theme is by using the generalization concepts based on the work of Curry and Samara for the Texas Association for Gifted and Talented [15] (Image 27). These generalizations are abstract concepts that trigger the tool's users to elaborate statements. Concepts like order, conflict or relationships combined with the purposes, reasons and topics in the activities and expressions can help to propose a theme shared by different cultures.

### trigger the tool's users to elaborate statements. Co combined with the purposes, reasons and topics to propose a theme shared by different cultures.

#2



### Generalizations for Universal themes



Moment #3: A Local answer to a universal theme.

The third moment follows the next premise: if socio-cultural expressions and activities are addressing a universal theme that is common among different societies, this means that in the local context there should be expressions and activities that address the same theme up to some extent. As mentioned, the idea of "local" does not only means about the geographical characteristics of a society, but also the contemporary expressions and activities that shared among people no matter geographical, linguistics or belief system that is entitled to specific regions.

The following action is to find the activity and expressions related to the theme in the local context. The expressions can be similar to some extent to their foreign counterpart. In some cases, the contemporary factor of the desired expression can be relegated to find a closer similarity. Nevertheless, this decision has to be corroborated with the contemporary closer similarity. Nevertheless, this decision has to be corroborated with the contemporary society if the people that are part of the local society understand, remember, or are aware of the existence of either the activities or the expressions proposed. By corroborating, the idea of what is known by the visitors (which are local people) to secure a proper connection between local and foreign elements further in the method. between local and foreign elements further in the method.

#≺

## Moment #4: Discovering connections between local and foreign activities.

The fourth moment consists in the understanding of both activities. To achieve this, the concepts that were described during the "Technology realm" sections are applied. During this moment, a particular focus on the nature of experience matrix proposed by Pine and Gilmore is going to be pivotal for the use of the method.

The first thing to do is identify the activities' characteristics and what people in each context have todo do in each one (foreign and local) respectively. Based on the immersive cycle's elements, it is necessary to acknowledge what people in both contexts remember or known about the activities and how the expressions are involved. This gathering of memories focuses on the cognitive and sensorial levels of memory. Information about what people in the contexts heard, saw, touched, smelled and tasted will be asked at the same time of addressing the dynamics, processes and interactions between people and their surroundings. With the information, the institutional team will be able to understand the overall people's experience in both contexts.

With the information about the activity, the nature of the activity can be addressed. Both foreign and local activities are categorized in one of the four possible combinations from the Pine and Gilmore's matrix. The reasons for using the matrix rely on the idea of establishing a connection between both natures of activities in a more natural process. For example, if both activities are active and immersive, the shifting between the different characteristics of these would be easier to understand by the visitors; thus, the effort required from them is going to be less. If, however, the activities have entirely different natures (like a passive/ absorptive nature against an active/immersive nature), the effort required from the visitors could be higher than the previous case. Nevertheless, if the shifting can be developed in a creative way by the institutional teams, then the effort can justify the visitor's experience.

As it was explained during the Immersion cycle section, the relations between what people remember and what they are experiencing can lead to the concepts of involvement, immersion and the idea of "being there". The understanding of this order allows to make a connection between the two different contexts, not only in an objective level but also in a subjective: For example, by understanding how involved are the people.



Moment #5: Elaborating a statement towards a concept.

The elaboration of a statement is the fifth moment. It is the last link between the local and foreign expressions/ activities. The idea behind is to orient the previous information and elements into an exhibition concept that can be developed by the institutional teams and experienced by the visitors. This conceptualization is possible by integrating the characteristics of both activities. This process is addressed by Simon as "dumb it down" [3]: the effect of reducing the quality and quantity of information from individual elements and the exhibition in general, to allow a more natural understanding of it by the visitors. It is important to keep in mind that if this process is pushing too far the "dumb it down" it could have adverse effects on the overall experience. The foreign expression/activity, which represents the values, beliefs, traditions and ideas from the foreign society, can be felted as if the element (and the foreign society) is treated without respect.

Elements like immersive technologies (AR, VR or MR), combined with a coherent narrative of the exhibition, can present characteristics of both the expression and activities from both contexts in favour of a positive and relevant experience to the visitors. Alongside with the experience, different effects can be achieved while experiencing an exhibition. To identify the most common and remarkable effects, a session with people that fits the category of potential local visitors was conducted during this cycle (Appendix 3: Meaningful exhibitions session).

The statement, as a guideline for possible concepts, can be readjusted by the institutional teams if needed. The primary reason for this change is related to the following moment: The visitors.



### Moment #6: Motivations in people: Effects and the potential relevance.

The sixth and last moment is a direct follow up from the previous one. The readjustment of the statement aims to bring a possible alignment between the potential exhibition ideas with what the visitors would experience. To do what it was previously mentioned, a check of the visitors' type based on motivations was proposed. As described, the visitors are being categorized based on their demographic characteristics. However, motivations go beyond these characteristics. By aligning the motivations with the statement, the proposals can be adapted not only to a certain average of people (this average is an outcome of a demographical classification of people) but to everybody that has a motive to attend the exhibition.

By understanding the different characteristics of the visitors' types based on motivations, positive effects can be triggered. These effects will enhance the overall experience, helping in the process of connection between the exhibition and the visitors. This process will ultimately affect the exhibited elements to are label as relevant by the visitors.

A session focussed in understanding the connections between elements that are considered meaningful (already relevant) for people can lead to positive effects in the context of an exhibition was proposed and executed during the iterative process (Image 28). For more detail information about the creative session check "Appendix 3: Meaningful exhibitions session".

8 different effects were categorized as positive in an exhibition context. The effects were: Accessible, memorable, emotional, authentic, unexpected, personal, impactful and participatory/ shareable. These results are shared in part with the History Relevance Initiative organization, as part of their "Six qualities of a Relevant History Experience" [9]. It is essential to say that it is difficult (and not necessary) to try to cover all of the effects in just one exhibition experience. Nevertheless, an exhibition experience can focus on a particular effect based on a type of visitors while other exhibitions can focus on different effects and visitors' types. The combination of the different exhibitions (and their experiences) can present a window of different opportunities for institutions at the moment of reaching visitors.





#### 3.2.2. The steps across the moments in the diamond

The steps followed the moments and were elaborated to fulfil the goal of each one of them (Image 29). As mentioned during the previous chapter, the tool itself comprises of two major parts: The method and the diamond map (Image 30). The map contains the visual representation of the moments and steps. Nevertheless, the changes applied to the tool during the iterative process had a direct repercussion on the visual aspect of the map. This changes can be seen in more detail on appendix 2.

Because the amount of information that is necessary to provide to the users, each step had its card with information on it. In addition to the step cards, and to prevent users not to be overwhelmed by the amount of information in each step, it was decided to divide the information into three types of cards that will go over the map: Steps, Hints and Tips.

Steps cards are the actions that are required by each step to continue with the moments across the method (Image 31). In total, there are 12 steps and 14 steps cards (steps cards #9 and #10 are duplicated). To support some of the steps, Hint cards were developed. These cards provide extra information about steps that require it. For example, to define the nature of the activity users must know the concepts behind Pine and Gilmore's matrix -connectivity and participation-.

For this reason, alongside the step card for that moment, the users will find hint cards that help them to define said concepts. Finally, Tips cards offer information about the method in general and present critical ideas that the users are going to face across the map (Image 32). Ideas like Immersion and absorption, expressions and activities, the "dumb it down" effect and the presence of technology are presented to help the users to reflect about the method and the possibilities of having the different elements identified (foreign and local elements, a universal theme, the nature of activities and the visitors' types) by using the tool.









Image 32. Hint and Tip cards.

### 3.3. Map and Cards: symbols



Another aspect necessary for the tool was to highlight the route that users are going to take through the map. This becomes important if the user is new to the tool. Besides enumerating each one of the steps and their respective cards, the map presents three significant guidelines: One from step 1 to step 7 (from moment 1 to 3); and two from step 1-9-10-11 and step 8 towards 11 (moment 4 to 5). The users need to be able to identify the steps that help them to state the five primary elements that are required by the method: The foreign and local elements/activities, the universal theme, the nature of the activities that lead to the statement and the visitors' types. 5 symbols were developed to ensure easy identification of the steps on the map and their cards, (Image 33).

Additionally, a colour gradient transition was included across the steps and their respective cards: In the steps represented over the map, there is a diamond with the gradient. On the steps cards, the same gradient is present as the card's outline, allowing a relation between the cards and the steps (Image 34). The Hint cards that are related to specifics steps share the same gradient with the steps cards. The Tips cards do not have a gradient, due to its role on the method.



# 3.4. Representation of the generalizations and visitors

To help users to define a universal theme, and understand the visitors' types; additional cards were elaborated. For the case of the Universal themes, generalization concepts are represented together with some statements related each one. The same principle goes to the visitor's type (Image 35). The idea behind the combination between the representation and the statement/explanation allows users the possibility of relating the symbolic representation with the information present in the card: By repetition and constant use of the tool, the users are going to be able to remember both the meanings, symbols and most importantly, the method. This idea will also be affected by the user's ability to remember the steps and concepts behind the method; something explained in the following chapter: The use of the method in the field.


Image 35. Generalization cards and visitor types cards.

### 4. Cycle 3\_ Using the method: A diamond in the field

4.1. The constant: The diversity between institutions.

4.2. Final approach: Versatility for each institution.

4.3. Understanding the processes and insights from the sessions.

### 4.1. The constant: The diversity between institutions



### Museo Larco



Another thing to remark is the diversity of each institution and their teams. Each institution, as explained previously, have their own goals and topics; hence, it is theorised that they will use the tool accordingly to their own needs and projects. Each team has a different number of people, with different backgrounds and perspectives towards the institutions they are part of. Furthermore, this diversity in teams and institutions allows to think and reflect about the processes they already know. That being said, the teams that presented in the following sections across this chapter are small (around 3 to 4 people per team), but with the knowledge and experience necessary to elaborate and propose exhibitions and, for this project, to understand, analyse and use the C-RD.







## 4.2. Final approach: Versatility for each institution

The final sessions present some different approaches to the use of the tool depending on the institution. These approaches represent a good point for the overall project because each institution represents a different cultural institution that develops exhibition related to foreign cultures with different levels of knowledge towards local contemporary culture (Image 37).

For the Cervantes Institute, a session with the C-RD for two different exhibitions was proposed. The exhibitions' topics were presented and analysed with the method. One of them was an idea they had around coffee consumption, while the other one was about an upcoming exhibition based on Johannes Torrentius and Luis Ventós.

For the Larco Museum, the tool was introduced to the early stage of conceptualisation for a temporary exhibition about women in ancient Peru and modern Peru for the International Women's day. In addition to this, a Cultural Manager from the Peruvian Ministry of Culture analysed the tool and elaborated a potential list between public and private museums interested in integrating the tool into their current practices.

Finally, a presentation for the Peruvian Embassy in the Netherlands and the members of the Pacific Alliance group was proposed to integrate the tool with their current policies and practices.





#### 4.2.1. Session setup for the Cervantes Institute\_

Due that the Cervantes Institute is a cultural institution and not a museum, different topics set its exhibitions' tone. The institute does not possess a collection of artefacts; however, the collaboration with different entities, artists and organizations allows the institute to host different exhibitions and also elaborate, propose and develop their exhibitions and events.

The session consisted of two parts. The first part focused on the use of the C-RD with an idea proposed by the Cervantes' team members. The second part was related to an upcoming exhibition (Image 38).

The first idea was elaborated based on their experiences as "Spanish people living in the Netherlands" and with the cultural shock that is the consumption of coffee for a different purpose than their own "leisure time".

The upcoming exhibition was around the series of paintings made by Catalan artist Luis Ventós inspired by the painting "Still life with Bridle" made by Dutch painter Johannes Torrentius (Image 39). The C-RD tool was adapted to the two scenarios: For the first part, the use of the C-RD focused on reaching a potential exhibition concept based on coffee consumption, with an emphasis in how is consume in Spain and the Netherlands. The second part focused on the use of the tool to understand the existing connections between the exhibition's potential visitors and the exhibition's content.

After having using the tool, the members from the Cervantes team were asked to fill a questionnaire (show in appendix 4). The questionnaire's goal was to collect the participant's perception towards some aspects related to the tool and its use at the moment of using the tool. At the same time, the questionnaire was going to show how the use is compared with their current way of conceptualizing new exhibitions. The aspects that were asked in the questionnaire were:

The method's efficiency. The applicability of the method's outcome in their context. The tool's clearness, with emphasis on the map. The understanding of the tool's goals.

Once the members filled the questionnaire, a conversation with the Cervantes team occurred to talk about their opinions toward the tool and the method.



#### 4.2.1.1. Session development with the Cervantes Institute.

The Cervantes team did the session without significant difficulties. During the first part of the session, one of the participants knew the tool and method, as he participated during the iterative process. The other two persons were new to the method. The tool presented as a tabletop game triggered the curiosity of the participants; they receive a brief introduction about the tool and how to use it. The presence of a member with experience with the tool was positive, as he was able to explain the tool with his own words to the other participants. During the session, participants were very active in analysing the cards and the map. Something important to remark is that they had some difficulties at the beginning at the moment of assembly the map, which was divided into four parts for mobility purposes. Aside from that early complication, the session went without other difficulties.

During the first part, participants were enthusiast at the moment of describing their experiences about coffee consumption in the Netherlands, how different it is from their experiences in Spain and other parts of the world. After reflecting about their different experiences in other countries, they conclude that they wanted to use "change" and "community" as generalisations words for their universal theme: How different communities change their consumption based on their habits. They proceed to elaborate on the concept of an exhibition based on a coffeehouse experience. In that regard, they ideate the idea of using elements from a typical coffeehouse combined with how the coffee preparation in other parts of the world. Also, due to the scope of countries that collaborate with the Cervantes Institute, they saw the possibility of contact Colombian representatives due to their country's history with coffee. With the concept defined, they considered that the types of visitors that were going to enjoy this concept would be the professional/hobbyist, explorers and affinity seekers. The first ones have a background with coffee-related professions, the second ones are those who would discover new experiences related to coffee, and the third ones are those who could relate to a specific way of consuming coffee as part of their cultural identity.

For the second part, the participants, now with experience with the tool, decided to use it in an upcoming exhibition. The Spanish painter Luis Ventós elaborate a series of paintings inspired by the paint "Still life with Bridle" by the Dutch painter Johannes Torrentius (Image 39). For this case, the team did not want it to use to elaborate a concept about the exhibition but to discover which type of visitors would be more interested in the exhibition and why. For this case, the tool was used not for the relation between the local and foreign cultures, but instead used to focus on the relation between the visitors and the elements that the exhibition was presenting.





That being said, the use of the tool started by mapping the different elements that are known: the paintings. The team explored two points of view based on their perspectives towards the exhibitions. The first one being the curiosity that some members of the Cervantes team had about the original painter rather than the paint itself. The historical records about Johannes Torrentius trigger this curiosity by depicting him as a polemic and transgressive figure. The other approach was from the reason that the Spanish painter had towards the Dutch painter: Admiration. Based on these two approaches, the definition of visitors based on their motivations was done by the team. The professional/ hobbyist could relate towards both artists' work; the explorer, related to the visitors looking for the polemic and transgressive figure and the respectful pilgrim who goes to the exhibition to admire Johannes Torrentius as Luis Ventós did.

A representation of the two uses of the C-RD are represented in images 40a-40b.





### 4.2.2. Session setup with the Larco Museum and cultural managers\_

The Larco Museum is a private museum located in Lima, Peru (Image 41). It focuses on pre-Columbian civilizations, covering around 5000 years of Peruvian pre-Columbian history [41]. The museum is among the most important museums in Latin America with a presence in different exhibitions around the world. With a collection of 45,000 pieces in their catalogue, they have a permanent collection and temporary exhibitions.

With the international women's day (march 8th) identified as an important day for the museum, a temporary exhibition about the connection that could exist between ancient roles performed by women in ancient Peru with women in contemporary professions was proposed. To show this connection a selection of 13 pieces from the collection were given to 13 Peruvian women with different professional backgrounds (i.e. an artist, an anthropologist, an obstetrician, and engineer, to name a few). Each woman was asked to elaborate a reflection about the possible connection between their profession and her assigned piece (Image 42). In this scenario, the role of the C-RD is to identify possible connections that the Larco team could suggest and how these connections could help the team to identify connections across other pieces in the collection.

In addition to this approach with the Larco Museum, an interview with a cultural manager from the Peruvian Ministry of culture was held to present the C-RD tool and method. Based on this interview, the potential integration of the tool with current practices in other Peruvian museums was proposed.

To present the tool in Peru and other parts of the world, a digital version of the tool was made. This version has the purpose of presenting the map, the steps and the other cards, alongside with an explanation about the tool's use (Image 43). The digital version can be accessed through the following link: https://nagnil.wixsite.com/c-rd (only visible through desktop computers at the moment of making this report).



### 4.2.2.1. Session development with the Larco Museum and the cultural manager.

As it was explained, a digital version of the C-RD tool was elaborated to overcome the distance problem. A video call with the team was held to explain the method's concepts and guide them through the session. For the proposed exhibition, the selected pieces from ancient Peru fulfil the role of foreign elements. Following this, the Larco team was able to acknowledge that each piece would be related to a different activity; however, by using the method, the process would be the same. At the moment of reaching possible universal themes for the pieces and activities, the team was able to make a personal reflection based on one simple fact: they all are women. By understanding the meaning of being local in a contemporary context, and intending to connect women across time through the exhibition, they felt identified with the pieces and the idea of a contemporary professional woman. With this, different keywords like strength, power, admiration, self-discovery and curiosity were collected and transformed into ideas that the team integrate with the following actions they were going to take further.

The team decided to deliver the pieces with some of the words to the collaborators to orient the exhibition's goal. The collaborators will have to reflect on their professional backgrounds while considering the ideas/ words that arose from the team. Next, the collaborators will have to make a second reflection about their activity as professionals while considering the activity described by the pieces. By doing this, the two types of connections between the foreign context and the local context arise. The first connection by the identified words; the second by the reflection based on the activities that women were performing in ancient Peru and what are being performed currently in contemporary Peru (Image 44)

What is interesting in this process are the topics transformed into personal approaches shared by a group of people with similar characteristics (professional women). In addition to this, the team stated that this tool could not only be used by themselves, but also their museum guides can benefit from understanding this method. With this idea in mind, it is necessary to develop a manual and to consider the reality of different languages.

With the cultural manager, the method was presented and explained. Details about the research conducted during the previous cycles were discussed. Thanks to her experience, two significant scenarios where the tool could be applied were identified in public and private museums.

Image 42. Examples of pieces given to the participants. Top: Jug depicting a female figure as a priestess (200 b.c.- 600 a.c.). Bottom: Jug depicting a woman giving birth and aided by another woman (200 b.c. - 600 a.c.). Source: Larco museum - Online collection. https://www.museolarco.org/catalogo/index.php (in Spanish).





#### Cultural manager - Ministry of Culture



The first scenario is related to museums that possess a high number of pieces in their collections (similar to Larco Museum). In this scenario, the presence of the method and tool is not necessary to conduct or lead the development of exhibitions, but instead can be used to organize and establish a classification that could be helpful for future developments of exhibitions, becoming a tool guide for classification and data. The second scenario is related to small museums or collections, where the tool could work as the centre of exhibition development. In both scenarios, the method is perceived as helpful in terms of organization and execution (Image 45). By acknowledging these two scenarios, four museums across Peru were identified: The Chavin National Museum, the Sicán National Museum, the Museum of the Royal Tombs of Sipán and the Caral-Supe Archaeological Project (Image 46).





#### 4.2.3. Peruvian Embassy and Pacific Alliance Presentation\_

For the Peruvian embassy, the validation is different. Due to the similar nature of the previous two, the use of the tool can be understood by using it through the development of an exhibition. However, the nature of an embassy is different, affecting how they will use the tool. As it was mentioned, for the embassy's diplomatic team the development of an exhibition relies on the negotiation with other organizations alongside collaborate with Peruvian ministries.

As part of the Peruvian government's agenda, during the years 2020-2021, governmental and private organizations are preparing different activities to commemorate the bicentenary of the Peruvian independence [42]. This also includes Peruvian embassies around the world. The integration of the tool as part of the collaboration between different cultural institutions with the Peruvian embassy becomes a possibility not only in the Netherlands but also with other Peruvian embassies with their respective host countries.

The validation, in this case, relies on the desirability of the tool and how its versatility allows the diplomatic team to integrate it with the plans that they have for the bicentenary. Furthermore, the Peruvian diplomatic team foresaw that they could not also be benefited by the tool in the local context, but also other diplomatic teams. Reaching embassies from different countries can also validate the desirability and versatility of the tool.

Thanks to this idea, an official meeting at the Peruvian embassy with other diplomatic teams is planned to present the tool. Due to practical reasons like language and current relations with the Peruvian government, the meeting is going to be with the diplomatic teams from the embassies of Chile, Colombia and Mexico. These countries, together with Peru, constitute the Pacific Alliance, an economic, political and commercial integration initiative in Latin America between.

## 4.3. Understanding the processes and insights from the sessions.

With the sessions focusing on the use of the tool as part of the conceptualization processes in upcoming exhibitions and potential ideas for exhibitions, many insights were obtained.

The versatility of the tool was one of the best qualities that the method has. This versatility allows the method to adapt accordingly to the different needs and concerns that each team had. The tool also proved that this versatility allows it to fulfil different roles. As a concept generator and as a tool to understand visitors in the Cervantes case; as a tool to discover new perspectives for an exhibition with the Larco team; or as a method that can be part of museums' practices and procedures in international cooperation, based on the analysis by the Peruvian Ministry of Culture and the Peruvian Embassy.

Second, the introduction of Universal themes as an element to consider while addressing these diverse roles was something very appreciated by the different teams among institutions. The idea of putting a theme that is generated by understanding the foreign or local elements was something considered novel by the different teams even during the iterative process on cycle 2. The presence of the universal themes is positive because allows the exhibition's content to connect with the visitors. This connection is done by using topics that are given by the pieces based on studies done by research teams and not just by the pieces' physical characteristics.

Another point that the tool shows to the teams was related to the relation between universal themes and contemporary contexts. Societies change, and in the process, many different elements that are part of the contextual experiences like technology, objects, the weather, languages, and rituals, to name a few, also change. However, the purposes behind the expressions' existence are timeless. It is possible to say, based on the research in Cycle 1 and the sessions' results, that while the identity of societies can be different, the topics around these identities not. Moreover, while topics are visible or hidden depending on the foreign and local societies, the tool helps to present and not lose them during the process.

Furthermore, the tool also allows curators to do not become biased by their own experiences with the expressions/ activities. Curators, due to their constant interactions with the pieces, tend to develop a connection with these and, by looking the process presented in image 8, they develop their own attribution of relevance and meanings towards the pieces. However, in reallity this is not actually towards the pieces, but rather to the experience. For curators interacting with the pieces, the relevance and meaning sections of the process are not necessarily related to the original activity in which the pieces were involved. Instead, it is related to the curational activity context. That is the difference with Larco Team's session: They were looking at the themes (words) by using their knowledge of the activities where the pieces were involved, in their original context.

Same as the universal themes, the teams much appreciated the introduction of visitors based on motivations as part of the method. By having this new type of classification, the different teams saw an opportunity to expand their perspectives towards exhibitions, but also how the pieces and the museum content, in general, is understood by visitors. With this, the team felt more connected with the visitors, but also with their contemporary culture.

It is essential to mention that with the introduction of this method and tool into these different institutions, new challenges are going to arise. One of them is related to language. By having a potential tool that can be used by different museums around the world, considering the use of local languages is essential for speeding up the method's learning process, even though that the members of each team were able to understand English. That resonates with the idea of developing a manual with more detail information about the use of the method.

Another challenge is related to the physical tool. During the test with the Cervantes team, the assembly was somehow confusing at the beginning. A way to guide the assembly process could involve the shape of the pieces. Of course, this can be improved alongside the information delivery to the tool's users.

Finally, with the idea of developing relevant exhibition experiences leads to a new question: "How we can measure the relevance factor during the exhibition?" The cultural manager addressed this question. That opens a new entire research chapter for the project in the future. Due to the reality that every institution, with their own needs and concerns, will end up having different exhibition experiences, the measure of relevance would be different according to that the type of visitor they are addressing in the process.

With all that being said, the sessions were entertained and useful for the different teams and their projects. The tool and method triggered curiosity at the beginning of each session, and its purpose was easy to be understood. The resultant concept after the use of the method was not only applicable for exhibition development, but also as a trigger and inspiration for future exhibitions and organizational methods across the institutions.

# 5. Project Conclusions

5.1. The tool in the context, the method in the field. Answering old questions.

5.2. Recommendations for the future.

5.3. Beyond the project.

5.4. Celebrating the similarities of the differences: Reflexions from the project.

# 5. Project Conclusions

The following chapter will present the conclusions from the project. First, an approach to the research questions formulated at the beggining of the project would be answerer, follow it by the recommendations for the future steps with the tool. Additionally, insights about the tool that goes beyond the project will be presented. Finally, a personal reflection will be made about the project.

## 5.1. The tool in the context, the method in the field. Answering old questions.

One main research question supported by three different research question for each of the realms were proposed at the first steps of this project. These questions define the steps for this project. After five months of a research process across different fields, an iterative process in the context and the use of a physical and digital tool in project across the institutions, it is possible to go back to these questions and answer them.

The first question answered is the one from the Visitors realm. This question was related to the establishment of relevant connections in the context of exhibitions about different socio-cultural contexts. Relevant connections are phenomena that occur as a two-step process. The first step is related to the familiarity of the experience in the exhibition. This familiarity is going to be triggered by the elements that visitors can recognize as elements of their local experiences. Using this as an opportunity, the elements and activities that are going to be exhibit across different institutions can merge with this familiar experiences. The second step is about the relevance attributed to the exhibition experience by the visitors and the possible meaning that they are going to give it to it. That cannot be controlled by the institutions, because this process is exclusive for the visitors. Nevertheless, institutions can perform some series of actions to ensure that visitors will be able to connect with the foreign elements through the familiarity factor (what they know). This lead to the second question's answer.

The second question, related to institutions, was oriented to the possible alignment between the exhibition's content and relevant experiences. As mentioned, the familiarity is pivotal to achieve relevance. However, how familiarity can exist in an exhibition about unknown elements from a different society? This question was answered through the discovery of two phenomena: Universal themes and activities.

As it was discovered during the first cycle and later confirmed by institutions during the following cycles, the presence of universal themes represented an inflexion point for the project. The universality of specific topics across space and time represents the first link to establish the desired connections. That is something perceived during the Larco session: Even when the geographical factor was the same (Peru), the difference between periods was decisive for the exhibition. Themes connect societies, and their presence is essential for looking back into different socio-cultural contexts.

The activities in each context can be understood through two perspectives, from a memory perspective, related to people's cognition and senses; or from an objective perspective, where their actions and presence are intrinsically related to their context's environment. That relates directly to the technology realm's question. The question, in particular, refers to immersive technologies and their use across relevant experiences.



How, by identifying the elements that could help to develop exhibition experiences, foreign socio-cultural expressions can be considered "relevant" to the people visiting exhibitions about these?



How can visitors establish relevant connections and identify these while visiting and experiencing an exhibition about a culture different than their own?



How can institutions align the elements of an exhibition with relevant experiences to the visitors?

How can immersive technologies be used to address relevant experiences in visitors while experiencing an exhibition of foreign socio-cultural expressions? It was necessary to see immersion as a process to understand it. By expanding the research done through the first cycle, a cyclical process that people go through every time they were in an immersive experience appeared. This immersive cycle allows people to feel that they were part of the immersive experience. In this process, the identification of the nature of these experiences was significant due to its practical use in exhibition experiences: By performing this identification in foreign and local activities, the exhibition experience can shift between the different natures of these. Thanks to this action, the exhibition experience, and a completely new experience in other moments. This phenomenon represented the second link for the desired connection.

An interesting aspect concluded from this approach is that the use of immersive technologies, for this project, was not for practical purposes. The project was not looking to develop relevant exhibitions in institutions, but rather, allow curators and cultural institutions teams to acknowledge the different elements that are involved in relevant exhibition experiences. For this reason, the use of immersive technologies was through their theoretical foundations. The different institutions that were in contact with the method during the final sessions supported this approach. With each institution having different use of immersive technology. Following this logic, there could be a possible situation where the exhibition will not necessarily employ any different type of immersive technology as we know them nowadays. However, this does not mean that the exhibition could not be immersive. There are examples of low-tech situations where people can feel immersed in an experience, like reading a book. Consequently, the exhibition's narrative becomes an essential factor for both the exhibition developers and the visitors that are going to experience it.

Finally, looking back to the main research question, the identification of these different elements, alongside the visitor's motivations, allow exhibition developers and cultural institutions to understand the following: Expressions, no matter their origin, can change because what connects us, as individuals and as members of different societies across time and space, are the search for answers to the questions that define us as humans. Both questions and answers are formulated and shaped by our environments, realities, involving our hopes and fears as individuals and communities in the process. We cannot see the use of artefacts from 2000 years ago in our contemporary context, but we can understand how these artefacts were involved in topics like love, fear, connect with the divine, express power, understand weather phenomena back then. This understanding is because we are dealing with these topics today, the same topics our ancestors were dealing back in their time, and very possibly the same topics future generations will have to deal.

#### 5.2. Recommendations for the future.

The tool and method still have an exciting journey ahead, and based on the feedback collected, new opportunities appear for the future.

The resultant tool can still be improved. There is space to develop a more transparent tool, but without losing its identity as a tabletop game. This transparency relates to the use and concepts from the tool and method are going to reach its users. That also applies practical aspects, such as the tool's assembly and graphical elements present in it.

The presence of a digital version of the tool, which was initially conceived as an experiment for introducing the method to potential users, turns out to be a vital element during the project. In the near future, it is possible to start enhancing the original version of the digital platform, in order to be more interactive, engaging and useful to its user. The opportunity that the digital version brings is also related to accessibility. A multi-language interactive platform can be proposed based on the possibility of collaborating not only with Dutch, English, Spanish speaker's teams but also with other institutions from other parts of the world.

Finally, is the idea of measure relevance. As it was hinted during the sessions, the idea of starting to develop "relevant exhibition experiences" lead to the question of "How we can measure the relevance in an exhibition?". As explained, different factors are present at the moment of trying to measure this. These different factors are required to be understood in advance to be able to reach a measuring method. This opportunity represents an entirely new chapter for the idea of relevance exhibition experiences, that could be interesting to pursue in the future.

These points become more critical by looking the reach of the project: In the upcoming months, there are different meetings with the collaborating institutions to keep developing concepts, exhibitions and presentations around the opportunities they saw with the tool.

In Leiden, the introduction of the universal themes was considered novel for the team. The idea of using it as a classification system for their current permanent collection felt that they could bring a more valuable understanding of the artefacts in the collection. That also presents new ways of showing the artefacts to the visitors. In that regard, the possibility of reclassifying around 35,000 pieces from their central and south American collection brings an excellent opportunity to explore the boundaries of the tool.

That resonates with the idea that was conceived by the Larco team during its session. By acknowledging themes for specific exhibitions, the team will be able to start relating different pieces by their topics. That action will give the Larco Museum data about the topics unveiled by the curators and the visitors based on its collection. This would led them to ideate new exhibitions and projects related to their 45,000 pieces in their collection.

At Cervantes Institute, the team is eager to use the tool in different exhibitions, proved during its session. For this reason, some important dates have been map for the use of the tool, is the next project the one related to the Spanish Language Day (Día del Idioma español) on April 23rd.

In Peru, during the upcoming months, the tool will be presented, study, and adapted to the identified museums during the session with the cultural manager. In the same line, the tool application as part of the Bicentenary project is an opportunity not only for the method improvement but also for the development of guidelines and practices for embassies around the world.

### 5.3. Beyond the project.

During the second and third cycles, the tool and the method were in the field and being in contact with people with different backgrounds. During the interactions with the tool, the people saw the tool not only as a way to elaborate on exhibitions experiences but also for other potential applications. Additionally, the tool could be used in design-related practices.

A curious idea came up from a Spanish professor at the Cervantes institute: "By using the connection between the foreign and the local contexts with the idea of teaching Spanish to Dutch speakers, I can understand how both languages addressed certain topics. With that, easing the process of explaining the similarities and the differences between the two languages can be achieved". Of course, this approach would need to readapt to tool to be adequate to the idea of linguistics, but the fact that people can see how they can use it means that they can own the method.

The idea around the tool's versatility represents an excellent opportunity to understand the possible uses that the tool has. Furthermore, by combining this opportunity with the idea of measuring an exhibition's relevance factor, the project could become more prominent. By developing a system around relevance which covers not only the development of an exhibition but also has the possibility of gathering useful data for future exhibition experiences, the system could help developers and curators to interact with situations that go beyond exhibitions.

The process that the method employs could not only be used for situations related to cultural institutions. The original premise of the method is to establish a connection among different societies, no matter space and time between them. In the sessions, the cultural institutions were establishing connections between contemporary societies with other contemporary societies or before. Is possible to say that, with the tool, users were looking around them or looking back. However, the method can be used to look forward into the future. By using the same principles in the method, speculation about future expressions made by future societies can be achieved. Of course, that opens another research challenge to understanding the tool limits with this use.

## 5.4. Celebrating the similarities of the differences: Reflexions from the project.



Embassy of Us:

Finding and delivering relevance

At the beginning of the project, I was very ambitious with my ideas around the project. It was necessary to narrow this ambition so the project could be manageable to do it in five months. During these months, the research, interviews, feedback and the results during the iterative process and the sessions reignited the ambition. However, this time was different. In the beginning, I was thinking about the possible outcome of the project. It did not expect to embark in a project which involved different teams, interact with different people across two continents and thinking about future steps of my ongoing professional life as a designer and researcher.

Working with different institutions was a challenging experience. Various factors affected meetings and decisions from the institutions' side and mine. In these situations, I learned (and confirm) the necessity of elaborate different plans for any unexpected situation. I had to act fast, create opportunity windows and establish connections to not lose momentum. I feel proud of this journey because thanks to all mentioned, I become more confident about what I am capable to do when I really believe in something.

I can summarize the project with the following phrase: "Celebrating the similarities of the differences". As mentioned, what defines us as humans is this search and understanding of what is around us, subjectively and objectively. The expressions that we create across time and space are the proof that we were, we are and we will, in this constant process of search and understanding; therefore, these are what represents us. Nevertheless, nowadays, we focus more on the expressions that we forgot these are part of a bigger answer formulated by our societies. I think the method can help us to reflect about us beyond the expressions. To go beyond our expressions (differences) and understand why these exist (the similarities).

This way of thinking could be the reason why this project is called "Embassy of Us" because the project aims to represent each other' realities across different contexts. In the end, there is plenty of work to do in this field, and the project's outcome showcase this. We will find many more universal themes, and even more activities were different expressions are part of. However, that is okay, because that it is an example of one quality of people: Adaptability, just as the Cross-Relevance Diamond.

# 6. References



#### 6. References

[1] Museum Definition. (n.d.). Retrieved from https://icom.museum/en/activities/standards-guidelines/museum-definition/.
[2] Vienna Convention on Diplomatic Relations. United Nations, Treaty Series , vol. 500, p. 95.

[3] Simon, N. (2016). The art of relevance. Museum 2.0.

[4] ABOUT. (n.d.). Retrieved from https://www.embassyofperu.nl/about.

[5] Mission. (n.d.). Retrieved from https://www.volkenkunde.nl/en/about-volkenkunde/mission.

[6] NMVW. (n.d.). Retrieved from https://collectie.wereldculturen.nl/#/query/020748ff-e064-4782-a619-32561a70c35d.

[7] Cervantes, I. (n.d.). Het Instituto Cervantes in de wereld. Retrieved from https://utrecht.cervantes.es/nl/wie\_zijn\_wij\_spaans.htm.

[8] Psotka, J. (1995). Immersive training systems: Virtual reality and education and training. Instructional Science, 23(5-6), 405-431.

[9] History Relevance Initiative. Six Qualities of a Relevant history experience - Draft. 2019.

[10] Sperber, D., & Wilson, D. (1987). Précis of relevance: Communication and cognition. Behavioural and brain sciences, 10(4), 697-710.

[11] Rasmussen, J. (1983). Skills, rules, and knowledge; signals, signs, and symbols, and other distinctions in human performance models. IEEE transactions on systems, man, and cybernetics, (3), 257-266.

[12] Du Gay, P., Hall, S., Janes, L., Madsen, A. K., Mackay, H., & Negus, K. (2013). Doing cultural studies: The story of the Sony Walkman. Sage.

[13] Haire, M. (2009, July 1). The Walkman. Retrieved from http://content.time.com/time/nation/article/0,8599,1907884,00.html.

[14] McCarthy, J., & Wright, P. (2007). Technology as experience. MIT press.

[15] Project CORE. (n.d.). Retrieved from https://go.sdsu.edu/education/projectcore/files/03252-6\_Universal\_Themes.pdf.

[16] Falk, J. H., & Dierking, L. D. (2016). The museum experience revisited. Routledge.

[17] Falk, J. H. (2006). The impact of visit motivation on learning: Using identity as a construct to understand the visitor experience. Curator, 49(2), 151-166.

[18] Ternier, S., Klemke, R., Kalz, M., Van Ulzen, P., & Specht, M. (2012). ARLearn: Augmented Reality Meets Augmented Virtuality. J. UCS, 18(15), 2143-2164.

[19] Slater, M., & Wilbur, S. (1997). A framework for immersive virtual environments (FIVE): Speculations on the role of presence in virtual environments. Presence: Teleoperators & Virtual Environments, 6(6), 603-616.

[20] Azuma, R. T. (1997). A survey of augmented reality. Presence: Teleoperators & Virtual Environments, 6(4), 355-385.

[21] Nacke, L., & Lindley, C. A. (2008). Flow and immersion in first-person shooters. Proceedings of the 2008 Conference on Future Play Research, Play, Share - Future Play 08.

[22] Tran Duy, H. (2017). Designing a Virtual Reality Psychological Game.

[23] Catalano, G. (2011). Virtual Reality In Interactive Environments: A Comparative Analysis Of Spatial Audio Engines. SAE Institute Oxford.

[24] Paavilainen, J., Korhonen, H., Alha, K., Stenros, J., Koskinen, E., & Mayra, F. (2017). The Pokémon GO experience: A location-based augmented reality mobile game goes mainstream. In Proceedings of the 2017 CHI conference on human factors in computing systems (pp. 2493-2498). ACM.

[25] Althoff, T., White, R. W., & Horvitz, E. (2016). Influence of Pokémon Go on physical activity: study and implications. Journal of medical Internet research, 18(12), e315.

[26] Ahmed, S., Zhang, J., & Demirel, O. (2018). Assessment of Types of Prototyping in Human-Centered Product Design. In International Conference on Digital Human Modeling and Applications in Health, Safety, Ergonomics and Risk Management (pp. 3-18). Springer, Cham.

[27] Halabi, O., & Halwani, Y. (2018). Design and implementation of haptic virtual fixtures for preoperative surgical planning. Displays, 54, 9-19.

[28] Huber, T., Paschold, M., Hansen, C., Lang, H., & Kneist, W. (2018). Artificial Versus Video-Based Immersive Virtual Surroundings: Analysis of Performance and User's Preference. Surgical Innovation, 25(3), 280-285.

[29] Bowman, D. A., & McMahan, R. P. (2007). Virtual reality: how much immersion is enough? Computer, 40(7), 36-43.

[30] Slater, M. (2003). A note on presence terminology. Presence connect, 3(3), 1-5.

[31] Ermi, L., & Mäyrä, F. (2005). Fundamental components of the gameplay experience: Analysing immersion. Worlds in play: International perspectives on digital games research, 37(2), 37-53.

[32] Buchanan, R., & Csikszentmihalyi, M. (1991). Flow: The Psychology of Optimal Experience. Design Issues, 8(1), 80.

[33] Csikszentmihalyi, M. (2000). Beyond boredom and anxiety. Jossey-Bass.

[34] Pine, J. and Gilmore, J. (1998). Welcome to The Experience Economy. Harvard Business Review, pp.97-105.

[35] Giaccardi, E., & Palen, L. (2008). The social production of heritage through cross-media interaction: making place for place-making. International Journal of Heritage Studies, 14(3), 281-297.

[36] Benedetti, B. (2002). Virtuality and reality in enterprise's museum, art museum, archeological sites. Quaderni della Fondazione Piaggio, Nuova Serie: Cultura Europea e Musei, 6(1), 42-73.

[37] Vermeeren, A., & Calvi, L. (2019). Relevance by play: an integrated framework for designing museum experiences. Paper presented at CHI '19 - 2019 CHI Conference on Human Factors in Computing Systems, Glasgow, United Kingdom.

[38] Michael J. Apter. 1989. Reversal theory: a new approach to motivation, emotion and personality. Anuario de psicologia/The UB Journal of psychology, 42: 17-30.

[39] UNESCO World Heritage Classification.

[40] ICOMOS, International Cultural Tourism Charter. Principles and Guidelines for Managing Tourism at Places of Cultural and Heritage Significance. ICOMOS International Cultural Tourism Committee. 2002.

[41] Museo Larco. (n.d.). The Experience. Retrieved from https://www.museolarco.org/en/the-experience/

[42] Sobre el Bicentenario. (2019, November 23). Retrieved from https://bicentenariodelperu.pe/sobre/ (In Spanish).

# 7. Appendixes

(Continue with the Appendixes document)



