

Reliq



*Bridging Museum Curators and Visitors:
Dynamic Media for Personalised Museum Experience*

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ABSTRACT

Curatorial knowledge often remains hidden behind museum walls. Traditional mediums — catalogs — are not the most effective and sustainable way of communicating it to audiences.

Crafted from collaboration with curators and research on cultural engagement, *Reliq* aims to redefine traditional museums' methods of knowledge transfer and communication to audiences by applying state-of-the-art technologies. Integrated into key moments within the curatorial process, *Reliq* brings the knowledge to life by making studies readily accessible and navigable for visitors.

Rooted in research on visitors' intrinsic motivation and behaviors, *Reliq* facilitates a personal dialogue between visitors and art, allowing each individual to interpret and engage with the art in their own way.

KEY WORDS

Museum Experience, Curatorial Practices, Visitor Engagement, Personalization, Audience Segmentation, Cultural Engagement, Dynamic Media, Informal Learning Environment, Free-choice Learning, Knowledge Transfer, Museum Storytelling, AI and Art Engagement.

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Julian Jaynes provided perhaps the best analogy when, describing consciousness, he suggested that what we are aware of is like a flashlight in a dark room. “We can only see what is illuminated at any given instant; nothing else exists. Three people standing in a dark room, each with his own light focused on the same object, will illuminate the object differently because of the differing nature of their beams, the angle from which they cast their light, and the variable benefits of shared light. Similarly, three people standing in front of an exhibit will each have a different experience.” (Falk, 1992, p. 4).

RATIONALE & CONTEXT

Museums and galleries have come a long way in shifting their role among cultural institutions from elitist heritage preservation entities to establishing social relationships and actively engaging in informal learning processes. They are now active participants in public dialogue and leading informal learning sites for society. At the same time, the goal of learning, as researched by Falk (1992), prevails among the main reasons people decide to visit museums.

The increased digitalization allowed to involve public in more meaningful ways. This includes enhancing engagement during visits, extending experiences beyond the museum, and involving the public in crowdsourcing practices such as content generation and collection stewardship (Vermeeren, Calvi, & Sabiescu, 2018). However, existing projects show that the scope of these phenomena is often insufficient to create long-lasting or significant impacts. Research suggests that crowd involvement and its outcomes are frequently confined to a small number of enthusiastic or dedicated participants (Eveleigh et al. 2014).

These initiatives are frequently brief because they overlook essential aspects of the museum visit within the galleries. Full integration of changes into the gallery spaces is still often considered taboo (Vermeeren, Calvi, & Sabiescu, 2018) The solution should extend into the gallery and to the experience spot, which is why many solutions either do not impact the real experience area at all or remain quite limited within it.

Audience engagement involves communicating with and designing for diverse visitor profiles. Curators, along with educators and other museum professionals, play a crucial role in developing these strategies. However, it is not uncommon for museum professionals to focus too narrowly on the objects and lose sight of what less-invested visitors might know, think, or want. The expectations, background knowledge, intrinsic motivation, and curiosity in art are unique for every visitor, as are their motivations (Vermeeren, Calvi, & Sabiescu, 2018).

Traditional channels for communicating with visitors, such as brochures, wall texts, audioguides, and other media, are quite static. This is why visitor profile analysis methods available to museum experts are majorly retrospective and can only be applied retrospectively.

Art museum professionals face the challenging task of engaging the audience with static objects (artworks) using static media (brochures or wall texts). As a result, curators and educators limit the amount of information they communicate and make it more generic to accommodate diverse visitors (Vermeeren, Calvi, & Sabiescu, 2018).

Here comes another challenge: when more solutions classified as “hands-on” learning are implemented in art galleries, these experiences are not directly attached to an object (not done to the object) due to the museum’s task of preserving the objects. Physical engagement with the outside world, where a visitor must build something, handle objects, and engage in other interactions with “stuff,” can result in scenarios that present various options and call the student to think. However, the “activity” these theories refer to is mental activity, which may or may not be stimulated by physical activity; the two are not the same. “Minds-on” is mandatory for “hands-on” engagement to produce any kind of learning outcome (Hein, 2002).

How do the museum professionals find the right balance between seeing the crowd as an undifferentiated mass and taking into account a multitude of influential factors and a number of unknowns, especially with respect to the tastes, wants, needs, and interests of a diverse audience, while developing interactions with a static object? (Vermeeren, Calvi, & Sabiescu, 2018). What is an available tool for museum professionals to communicate their knowledge and vision in a way that fits their visitors and encourages more “mind-on” engagement?

A struggle lies within museums balancing their duty as repositories of real things and “facts” with their role as places for exceptional experiences. What is the balance between dull historical data and a lively voice? Is it possible to include both sides in the narrative: the expert-curator and the potential visitor? How should the mediation between them be handled to shorten the gap? (Vermeeren, Calvi, & Sabiescu, 2018).

Though applicable to the majority of museum types, the current research focuses on the case of art museums and galleries.

PROBLEM STATEMENT

In this chapter, the core challenges addressed by the current research are described concisely. Each problem is represented further in details in the separate chapters.

Audience perspective

Lack of tailored content communication strategies for diverse audiences

One of the core challenges is personalization of existing knowledge and research for diverse visitor profiles and their interests. While about half

of art museum audiences are novice visitors, museums still struggle to break down their elitist image and fully integrate themselves into broader society. As mentioned before, retrospective analysis methods and static media are core problems for more personalized communication. This causes insufficient adaptation and communication of the museum’s knowledge to diverse audience segments.

Lack of Depth and Context in Experiences

A fulfilling experience of exploring art requires depth, time, and context. To craft the perception, interpret art the piece based on their personal agenda, and, most profoundly, seek unison with the work’s intent and essence, a visitor should have an opportunity and mental space to delve into the painting (not just catch a glimpse).

Often, to form a connection with the artwork, in addition to visual representation, an artwork has to be placed in context. While museums offer foundational information such as dates, creators, and origins, this alone does not suffice to fully contextualize the artwork. Plaques with brief descriptions may offer some insight, but they often lack the depth and nuance required for a comprehensive understanding.

Curatorial & Museum Professionals perspective

Relevance

Nina Simon, a pioneer in audience-centered museum design, describes how relevance may determine engagement success in her book “The Art of Relevance” (Simon, 2016). Relevance is key to understanding and responding on what is important to the audience a museum targets.

Curatorial Knowledge being Hidden behind the walls

Facing the challenge of understanding a piece, museum visitors resort to online searches and reading information on external websites about the presented artwork. Arguably, most museums possess extensive research and data on the collections they own and present.

This highlights another significant challenge: creating effective ways to communicate the nuanced visions of curators to diverse audiences. A great amount of curatorial and educational departments’ work stays “behind the wall,” represented in gallery spaces in the form of catalogs. While these are great for leisure activities, they are not an effective means of knowledge dissemination and narration in the museum setting.

The reliance on external data and the lack of access to crafted curatorial and educational knowledge are at the core of a fundamental issue within

museums.

Traditional Static Communication Media

Traditional means of knowledge transfer in museum practices are ineffective in satisfying the curiosities and background knowledge of both novice and expert visitors.

Audioguides provide a step further by offering pre-recorded segments about specific artworks or artists' lives, yet they still may not capture the full breadth of context surrounding the piece. More importantly, they are not in-depth, dynamic, or responsive to visitors' curiosities, providing pieces of information that are only a small predefined part of the context.

HYPOTHESIS

Integrating the curatorial process directly with visitors engagement has a potential of engaging more diverse audiences and providing more informed visitor experience.

Dynamic media, that can enable curatorial and professional knowledge through various entry points and individually connect it to a visitor, can serve as a bridge, reducing the gap between museum professionals and their audience.

This approach can transform static museum experiences into enriched, dialogical interactions, meeting the needs of both novice and expert visitors and making the museum's extensive research and more accessible and visit more relevant to individuals.

By that, the museum experience can become more democratic and less elitist, resonating with a wider audience.

An experience, crafted and based by museum professionals, that follows and responds to visitors' intrinsic motivation can create personal experiences based on natural curiosity and interest in art.

RESEARCH OBJECTIVES

This research seeks to transform two aspects.

Firstly, it aims to deepen diverse visitors' engagement and comprehension of art, for more meaningful personal explorations. Secondly, it aims to provide curators with a tool for effectively communicating their vision and expertise to diverse audiences, thereby expanding the boundaries of traditional curatorial practices.

How might curators and educators bridge the gap between their vision and knowledge with diverse museum audience segments facilitation?

How can a tool box be designed and integrated into the curatorial process for effective and intuitive knowledge transfer? Specifically, how can this tool assist curators and educators in designing content tailored to diverse user engagements and user journeys while providing access to their rich knowledge?

In what ways can personalized and flexible user engagements for knowledge exploration, perception, and interpretation be provided to museum visitors, leveraging technologies such as AI?

The goal of this work is to design a toolbox that helps curators facilitate diverse user journeys and engagements in museums, fostering broader public engagement with art. This approach is aiming to encourage curiosity and active exploration over passive observation, creating meaning through dialogue. By leveraging available knowledge and state-of-the-art technologies, it aims to motivate visitors to view art from new perspectives.

Integrating the curatorial process into the design framework is a key aspect of this goal.

THEORETICAL FRAMEWORK

The theoretical framework integrates theories impacting diverse aspects of designing museum experience. The key theories are the theory of learning, visitor motivation, narrative construction, and technological enhancement to create a comprehensive understanding of modern museum practices. The theoretical foundation is structured around four core concepts: *Free-Choice Learning, Narration, Flow and Mindful Looking, and Thematic Integration*.

Free-Choice Learning (Falk, 1992)

Museums are increasingly seen as environments for free-choice learning, where visitors engage in self-directed, informal education (Hein, 2002).

John H. Falk (1992) offered the concept, where visitors construct their own meaning from cultural encounters. This concept is supported by their work and development of the "Interactive Experience Model". This

model suggests that a museum visit is a timeline composed of three overlapping contexts: personal, social, and physical. Each context influences the visitor's experience and learning outcomes, emphasizing the need for museums to cater to diverse motivations and expectations (Falk, 1992).

“Personal Context” involves visitors' interests, motivations, and prior knowledge, shaping their unique Personal Agenda. Social Context includes the dynamics of group interactions, whether visitors come alone, with family, or in school groups. “Physical Context” encompasses the museum's environment, from architecture to exhibit design, impacting the visitor's engagement and perception.

The concept that visitors derive their own significance from cultural encounters (acknowledging George Hein (2002) and John Falk (1992)).

Narration

Museum education has shifted from static, object-focused displays to dynamic, narrative-driven experiences. Lisa C. Roberts (1997) highlights the importance of narrative in creating meaning within museums. Roberts (1997) emphasizes that knowledge is socially constructed and shaped by interactions between visitors and exhibits. Bruner's distinction between “paradigmatic” and “narrative” knowledge underscores the role of storytelling in conveying meaning and engaging visitors.

According to Roberts (1997), incorporating narrative techniques such as presupposition and subjectification enhances interpretability, encouraging visitors to actively engage with and reinterpret the content. Museums are now seen as spaces where multiple narratives coexist, allowing visitors to create personal connections and meanings.

Flow and Mindful Looking

The concept of *flow*, introduced by Mihaly Csikszentmihalyi (2009), is crucial in designing engaging museum experiences. Flow is a state of deep focus and immersion, achieved when there is a balance between challenge and skill (Csikszentmihalyi, 2009). Vermeeren, Calvi, and Sabiescu (2018) suggest that minimal guidance can enhance visitor engagement, while occasional facilitation can promote social interactions and serendipity.

Mindful looking further enhances the appreciation of art. By slowing down and focusing deeply on artworks, visitors can form more meaningful connections. This practice, championed by experts like Karly Allen (2019), involves guiding visitors through detailed observations, enhancing their engagement and connection to the artwork.

Slow Art Day promotes this concept by encouraging prolonged en-

gagement with a few artworks, fostering deeper understanding and appreciation (Reed, 2017). This movement highlights the importance of quality over quantity in museum visits, aligning with the principles of flow and mindful looking.

Constructivism

Constructivism posits that learning is an active, constructive process where learners build new understandings based on their experiences and prior knowledge (Hein, 2002). In the context of museum experiences, constructivist theory suggests that visitors are not passive recipients of information but active participants who interpret and make sense of exhibits through personal and social contexts.

Constructivist learning theory, as described by Hein (2002), advocates for:

- Multiple Entry Points: Providing various ways for visitors to engage with exhibits, catering to different interests and levels of prior knowledge.

- Active Learning: Encouraging visitors to actively engage with exhibits, promoting inquiry, experimentation, and personal interpretation.

- Validation of Diverse Interpretations: Recognizing that visitors bring unique perspectives and experiences, which influence their understanding and interpretation of exhibits.

Constructivist museum experiences are designed to facilitate personal knowledge construction, allowing visitors to draw their own connections and conclusions. This approach aligns with the principles of free-choice learning, emphasizing the importance of visitor agency and personalized learning pathways.

Synthesis and Practical Implementation

Combining these theoretical perspectives, the thesis proposes a holistic approach to museum experience design that:

- Embraces Free-Choice Learning: Catering to diverse visitor motivations and providing opportunities for self-directed learning.

- Incorporates Narrative Techniques: Using storytelling to create meaningful connections and multiple interpretations.

- Facilitates Flow and Mindful Looking: Designing experiences that promote deep engagement and focused appreciation of art.

- Ensures Thematic Coherence: Creating clear, interconnected

themes that guide visitors through collections and exhibits.

— Applies Constructivist Principles: Designing interactive, personalized experiences that validate diverse visitor interpretations and encourage active learning.

By integrating these elements, museums can transform from static repositories of objects to dynamic spaces of interactive learning and personal engagement. This theoretical framework provides a foundation for designing museum experiences that are educational, immersive, and meaningful, catering to the diverse needs and motivations of modern visitors.

STRUCTURAL OVERVIEW

The thesis is structured into twelve chapters, each addressing key aspects of the museum visitor experience and curatorial practice through the lens of design principles.

Starting with an introduction that outlines the background, problem statement, and research objectives, the thesis progresses into a contextual foundation, exploring topics such as , democratization of cultural experiences and key components of museum experience in Chapter 1, *Museum Experience Architecture*.

Chapter 2, *Cultural Engagement Typology*, observes visitor motivations, behaviors, and other factors impacting their museum experience. Drawing upon theoretical frameworks and empirical research, this chapter structures the complex play of social dynamics, individual preferences, with other contexts shaping visitor engagements.

Chapter 3, *Museums As Informal Learning Sites*, explores how museums overcame their role as repositories of artifacts and became important centers of informal learning. This chapter explores relevant educational theories for museum experiences, focusing on the potential of constructivist pedagogies in fostering deep comprehension and lifelong learning.

The subsequent Chapter 4, *Art of curation*, studies curatorial practice and curation strategies through the sequence of case study and expert interviews with curators. Through in-depth interviews and case studies, this chapter defines the stages of curatorial process and identifies where changes might be applied.

Chapter 5, *From Knowledge To Narration*, focuses on the intersection of curatorship and storytelling, exploring the art of narrative construction. This chapter details the process of transforming curatorial knowledge into engaging narratives.

In the pursuit of meaningful engagement, the concept of flow emerges as a guiding principle. It is closely discussed in Chapter 6, *The Flow*. Through research and reflective analyses, this chapter examines the pathways to facilitating mindful art appreciation.

Grounded in semi-structured and in depth interviews, Chapter 7, *Thoughts On Technology*, offers a new look at how state-of-the-art technologies are applied in creative fields and what factors should be considered when designing with such technologies.

Fieldwork and design research methodologies are explored in chapter 8, *Fieldwork: Walks In Museums*. Grounded in empirical observations, personal reflections, and on-site interviews, this chapter examines visitor behaviors and engagement dynamics within different museum settings.

Chapter 9, *Synthesis*, synthesizes the threads and concepts from previous chapters, defining the conceptual framework for a shift in the museum experience paradigm.

The collaboration process with the curator of “Augusto Giacometti: Freiheit | Auftrag” exhibition, Michael Egli, that served as a basis for artifact development is described in chapter 10, *Collaboration*.

Chapter 11, *Design Exploration* presents the process of designing and implementing the proposed framework as practical solutions within museum settings. It navigates through the ideation process, feasibility considerations, and potential impact on museum practices. The Chapter introduces practical work and the process of implementing findings into the practical work.

Chapter 12, *Artifact*, presents the final artifact designed as a result of the current research.

Finally, the last chapter, *Conclusion*, summaries the thesis with reflections on the interpretation of findings, implications for museum practices, contributions to interaction design, and challenges encountered, accompanied by illustrations and a bibliography.

This order ensures a logical flow from theoretical foundations through practical applications, culminating in a conclusion that ties everything together.

1.1 FROM MUSEUM-LED INTERPRETATION TO TWO-WAY CONVERSATIONS

According to Vermeeren, Calvi, and Sabiescu (2018), in their book *Future Museum Experience Design: Crowds, Ecosystems and Novel Technologies*, in recent years, the focus of museums has been shifting from primarily being on collections to a visitor-centered approach. This transformation entailed a change in mission from solely preserving objects and providing access to them to emphasizing the delivery of meaningful interactions with collections and facilitating enriching learning experiences for the public. One of the primary parts is a focus on the visitor and the connections between the visitor, even their everyday personal experiences and collections' items.

The key aspects of this shift include promoting dialogical engagement with the public, diversifying audiences, and leveraging novel technologies. Most impactful likely was the integration of interactive and digital media into museum settings (Vermeeren, Calvi, & Sabiescu, 2018).

One of the noticeable changes is the transition from museum-led interpretation (under the authority of curators) to two-way conversations around heritage and towards a conversational learning approach (Vermeeren, Calvi, & Sabiescu, 2018).

The turn towards conversational learning and ongoing dialogical engagement appears to be an organic progression of engagement with knowledge. Throughout history, we find evidence of timeless discussions preserved in various forms, such as chronicles or memorials, which captured the endless dialogues among notable figures like the Greek philosophers. These ancient dialogues serve as a testament to humanity's innate desire to engage in meaningful conversation and exchange of ideas. In contemporary times, the development of artificial intelligence further facilitates this mode of learning by providing tools that enable dynamic and interactive conversations. Thus, the continuum of conversational learning reflects a fundamental aspect of human interaction and intellectual growth, bridging the past with the present and shaping the trajectory of future learning paradigms.

From experiencing "the encounter with an object" to experiencing "interactive exhibits," and now beyond that to developing platforms that facilitate two-way conversations and social learning practices (Vermeeren, Calvi, & Sabiescu, 2018).

Interactivity has been shown to be a significant component of visitor satisfaction, enabling multisensory dialogue, exploration/discovery, cultural connections, empowerment, uniqueness, and construction of meaning.

1.2 WHAT DO VISITORS WANT?

In their seminal work on visitor-centered practices in museums, Peter Samis and Mimi Michaelson (2017) highlighted findings from a 1987 focus group study conducted by the Art Institute of Chicago. The study revealed that visitors expressed a desire for more contextual information, particularly seeking to understand why certain artworks were valuable and significant to the museum.

Another important factor in visitors' motivation is acquiring meaningful and memorable experiences. The more personal an experience may be, the more it will resonate in the visitor's memory. This encapsulates the goal of museums to make items "closer" to their visitors, as the item acquires a meaning the closer it gets to the viewer.

Another motivating aspect for visitors is establishing social relationships and being actively engaged in informal learning processes (Vermeeren, Calvi, & Sabiescu, 2018).

1.3 DEMOCRATIC CULTURAL EXPERIENCE: EXPERT AND NOVICE VISITOR

As proved by many research and pioneer fieldwork in the field, especially Falk (1992), the audience of every museum can be divided into two primary groups: "Expert visitors" and "Novice visitors". Belonging to different groups highly impacts the motivation and expectation of the museum visit.

Designing museum experiences involves finding a balance between viewing the crowd as one entity and considering diverse factors and unknowns, especially regarding the preferences and interests of various audiences. Understanding and segmenting the crowd ensures that experiences, from digital interactions to crowdsourced initiatives, are meaningful for all (Vermeeren, Calvi, & Sabiescu, 2018).

Expert visitors are individuals who possess background or specialized knowledge, expertise, or a deep interest in specific subjects related to the museum's collections, exhibitions, or themes, that provide a frame of reference to understand and value museums' items. These visitors often have a background in academia, research, or professional fields relevant to the museum's focus areas

Novice visitors in museums seems to be individuals who are new to the presented topics, they have limited knowledge or experience in the subject matter or themes presented within the museum's collections. Novice visitors are not experienced in *reading* the museum's collections (Vermeeren, Calvi,

& Sabiescu, 2018).

Generally, most user studies conclude, that it is novice visitors who showcased the lack of engagement with the museum's content. The initial expectations on the visit of these visitors are not high, assuming that deep comprehension of the presented collections is 'just not for them'.

According to the observations of novice visitors, described by Bollo and Dal Pozzolo (2005), the new to the content visitors do not know why certain objects on display are important at all.

Visitors who are more knowledgeable in a certain area, ask more complex questions and start to comprehend items in relation to a greater system of interaction. Conversely, inexperienced museum guests often perceive exhibits as standalone objects for study, lacking the ability to contextualize them or relate them to societal progress. Consequently, visitors may overlook crucial details and features of the exhibits. Expertise facilitates intelligence, fasters pace of absorbing and comprehending information, and enables a deeper understanding of the significance of presented pieces. Such knowledgeable visitors find the museum experience more engaging being able to identify what is more interesting for them (Vermeeren, Calvi, & Sabiescu, 2018).

To make cultural experiences available to a wider audience, this research aims to find a solution for visitors with diverse expectations and background knowledge, and for different mechanisms of knowledge transfer. Novice visitors need knowledge to refer to to make sense of what they see. The museums should aim to change novices' attitudes towards the subject, and hence, their expectations before they enter the exhibition.

1.4 DESIGNING MUSEUM EXPERIENCE

Vermeeren, Calvi, and Sabiescu (2018), in their book *Future Museum Experience Design: Crowds, Ecosystems, and Novel Technologies*, analyse and present the framework for designing a museum experience that was developed during a workshop at the CHI 2016 conference. This framework offers the following categories for consideration related to changes in museum experience design and the most influential factors.

Type of Museum

The first point of consideration, by the CHI framework, is the type of museum. Generally, the museums could be divided into the following categories: general museums, natural history and natural science museums, science and technology museums, and art museums. The type of museum plays a crucial role. Unlike for Science museums, for Art museums, it seems to be

harder to create an engagement with a viewer by letting them “experiment” with collections and create a participatory experience (CHI 2016, n.d.).

Relevance

Nina Simon’s (2016) concept of relevance, likened to a key unlocking memorable experiences within museums, underscores the importance of connecting with visitors through meaningful content. Relevance, as highlighted by both Simon (2016) and the research of Falk (1992), is pivotal in shaping visitors’ motivations, expectations, and ultimately their learning experiences. Anecdotal evidence further emphasizes the necessity of aligning museum content with visitors’ interests and beliefs to enhance engagement, participation, and learning outcomes. Collaboration and guidance emerge as vital elements in fostering improved social interactions and learning experiences within museum settings, as suggested by professionals in the field (CHI 2016, n.d.).

Cultural Experience

In crafting a cultural experience, various paradigms or metaphors could serve as rhetorical narratives to guide the visitor’s journey. These could include wunderkammer, game, collage, portrait, diary, and time machine, each offering a different lens through which to explore museum content. Additionally, narrative approaches such as hypertextual, episodic, linear, open, didascallic, ludic, ironic, and poetic can shape the storytelling within the museum environment. Interaction modalities, including multimedia, tangible, natural, bodily, and performative, further enhance visitor engagement. Resulting experience realms, categorized as escapist, aesthetic, playful, and educational, offer diverse avenues for connecting with museum content.

Engagement Objectives

Following objectives represent the desired outcomes pursued by each museum, taking into account its content:

- Establishing links between the museum’s contents and external elements, including local landscapes, daily activities, information in broader contexts, contemporary societal trends, and educational objectives within academic settings.
- Connecting diverse audiences, with museums’ items, promoting transcultural and intercultural comprehension, scalability from local communities to broader contexts, and integrating audiences into situated museum experiences.
- Cultivating a museum ecosystem that intertwines cultural institutions, involving trajectories of cultural engagement across a network. For

example, visitors may follow trajectories of cultural experiences through different museums within the network, encountering diverse perspectives and themes that complement and enrich each other.

Defining a “Crowd”

Designing meaningful experiences requires addressing unnamed and unknown audiences with unilateral messages and experiences: audiences that could encompass non-specialists, younger audiences, art enthusiasts, or various target groups simultaneously; stakeholders such as schools, care institutes, municipalities, heritage houses, maker spaces, and design agencies. Additionally, engaging with other museums is crucial, including those within the same museum category, related museum categories, and diverse museum categories.

Forms of Engagement

Forms of engagement can be categorized into three subdivisions, as delineated by Simon (2010), pertaining to participatory endeavors. These activities serve distinct purposes:

- Contributory projects focus on accumulating and maintaining collections.
- Co-creative projects involve utilizing collections, including leveraging artworks for inspiration and employing art for communication.
- Collaborative projects aim to foster dialogical engagement with crowds, wherein the audience participates in curation and determines the arrangement of contents.

Type of Learning

The type of learning performed through digital mediation encompasses various facets. Creative Learning involves fostering innovation, imagination, and originality through digital platforms. Contemplative learning, another facet, promotes introspection and deep thinking, facilitated by the array of digital tools and resources available. Observational Learning, on the other hand, centers on acquiring knowledge and skills by observing and imitating behaviors, phenomena, and processes presented digitally.

It is also important to evaluate the designed experience through the lenses of three main aspects of dialogical engagement with museum collections - *sociality, creation, and sharing*.

1.5 INTENTION

By adopting the museum experience HCI framework, this research aims to study the most significant aspects affecting museum experience design today, focusing on the intersection of technology, cultural narratives, and visitor engagement.

The core of this investigation revolves around the transformation from traditional approaches to more interactive, visitor-centric experiences. This shift not only enhances engagement but aims to democratize the cultural learning process, allowing for a more inclusive range of visitor experiences. By exploring the different types of curating, teaching, engagement objectives, and learning models, the research aims to provide a comprehensive understanding of how museums can evolve to meet the diverse needs of their audiences.

Furthermore, this framework has guided the analysis of how museums can create meaningful interactions that resonate with visitors on a personal level.

2.1 THEORETICAL FRAMEWORK: THE INTERACTIVE EXPERIENCE MODEL

The cultural sector of the audience was not benefiting from off-the-shelf demographics-based systems, as Morris Hargreaves McIntyre realized in 2010. Attendance at the art museums is highly arbitrary and is determined more by our humanity than by our place of residence or level of income.

In this context, within this research was developed “Cultural Engagement Typology” of museum visitors, based on the theoretical research and field observations within museum settings, as well as relevant theories and audience segmentation data (McIntyre, 2023). Central to understanding the museum’s audience are several key questions:

1. *What different kinds of visitors does the audience consist of?*
2. *What are their motivations?*
3. *How do they interact with the museum space and the exhibited objects?*
4. *What are their expectations for their museum experience?*

These questions can be grouped into two main aspects: understanding *who* the visitors are and *what* they aim to achieve from their visit.

Within this research and practical work on Cultural Engagement Typology, reliance has been placed on Cultural Segments by Morris Hargreaves McIntyre (2023). (Culture Segments is a psychographics-based approach that is both universal and individualised since it speaks to individual human needs by drawing on shared human values. (McIntyre, 2023))

Another theoretical framework of the research on audience segmentation is the research conducted by Dr. John H. Falk, Sea Grant Professor of Free-Choice Learning at Oregon State University. Dr. Falk’s expertise in free-choice learning—the kind of learning that occurs in settings such as museums, parks, and online—has been essential in shaping the understanding of how visitors engage with museum exhibits based on their unique “museum visitor identities” or personas. The specific framework of “visitor experience” described in this chapter is based on “The Interactive Experience Model” by Falk (1992).

The museum experience includes many different facets and is non-linear (Falk, 1992). There is a need to look at it holistically, taking into account factors that may impact the visitor’s experience. To obtain the right perspective on their total experience, it needs to be broken down into the

elements it consists of.

To design a tailored approach to knowledge communication and dissemination to diverse audiences, audience segmentation might need a clear set of variables and factors that impact the segmentation.

As a foundational basis for further research, the theoretical framework “The Interactive Experience Model”, developed by Falk (1992) and described in his book “The Museum Experience”, will be used. The model serves as a lens for further research on museum audiences and holistic visitor experience, which will be applied further in the research.

The framework suggests seeing the museum visit as a timeline, starting from *before*, *during*, and *after* the visit.

Naturally, visitors manifest distinct patterns of behavior, which depend on several variables (Falk, 1992). The Interactive Experience Model draws a coherent picture of the visitor’s total museum experience, including common strands and the unique complexities of the museum experience, similarities and differences among the visitors, and types of museums. The model views the museum visit as a continuous interaction between three contexts: the personal context, the social context, and the physical context. Every visit to the museum can be viewed through these contexts, and every visit consists of these three contexts, but the proportion of its impact may vary at different points in the timeline.

Personal Context

The Personal Context is always unique and incorporates a variety of experiences and knowledge, including visitor’s interests, motivations, and concerns. All these characteristics morph into a *Personal Agenda* — a unique set of expectations and desired outcomes from the visit. A personal Agenda will serve as a basis for the Visitor’s Profile development. Differences in personal contexts directly impact differences in learning and visitors’ behaviors (Falk, 1992).

Social Context

The Social Context is an embedded context of the museum settings. It may vary depending on whether the museum is crowded or not, how do museum staff interacts with visitors, and most importantly, if a visitor’s experience is solo or shared with a group of friends, family, or a school class (Falk, 1992).

Physical Context

The Physical Context naturally is what visitors experience while be-

ing in the museum, starting from the architecture of the building, going to the display of objects, and in my opinion most impactful element, experiencing the ambiance of the museum (Falk, 1992).

All three contexts are continuously constructed by the visitor, and their continuous interaction forms the visitor’s museum experience. Falk (1992) calls it a “*constructed reality*”. This constructed reality is *always* unique for each individual.

“Julian Jaynes has described that what we are aware of is like a flashing light in a dark room, and we can see what is illuminated at any given instant, at this moment, nothing else exists. Different people illuminating the same object with their own lights will illuminate the object differently because of the different nature of their beams (personal context), the angle from which they cast their light (physical context), and the variable benefits of shared light (social context). Consequently, all people will have their own unique experience.” (Falk, 1992, p.4)

The *constructed* experience of a visitor is their immediate context; it is filtered by their personal context, mediated by their social environment, and ingrained in their physical surroundings. As Falk noted: “Looking at the experience through the lens of constructed contexts helps to understand the connection between visitors’ choices and the differences between a *potential* museum experience and the *actual* one.” (Falk, 1992, p.3)

The proportion of three contexts may vary and are not the same at different moments of experience. Looking at a timeline of a museum visit, one can see that the relative importance of the contexts is constantly changing, and have different impacts on a visitor at different points of the timeline. (Falk, 1992)

“The visitor’s experience can be seen as a continuing shifting interaction among personal, social and physical contexts” (Falk, 1992, p.4)

The Interactive Experience Model forms an overview of the experience by looking at the series of critical intersections of three contexts. Although, the concepts may be seen separately, they function as one.

2.2 BEFORE THE VISIT: MUSEUM VISITORS’ MOTIVATIONS

To understand the visitors’ agenda we will need to ask questions about *why* and *who* visits museums.

Why?

One of the first things that should be analyzed to understand the

museum audience is expectations. This aspect relies mostly on personal and physical contexts. Some obvious variables such as price, proximity, etc., fall outside the scope of this thesis, which is focused instead on the in-museum experience.

Generally, museum visitors' motivations can be categorized into three main groups: Social-Recreational Reasons, Educational Reasons and Reverential Reasons (Falk, 1992).

1. *Social-Recreational Reasons*: Expectedly, social and recreational reasons prevail among other reasons for visiting museums.

2. *Educational Reasons*: As it is mentioned by Falk (1992), if the learning definition is broadened and includes the results of curiosity and our natural need to explore, then, learning becomes one of the major motivations for visitors attending museums.

3. *Reverential Reasons*: Some visitors seek a sense of connection or reverence within the museum's ambiance, which may evoke feelings of peace and fantasy, offering them a break from everyday routines. And it is one of the motivations most present for frequent museum visitors.

However, understanding the in-depth motivation behind museum visits begins with examining leisure-time orientation. Falk (1992) brings another categorisation of visitors' leisure-time orientation:

1. *Cultural or Intellectual*: This group typically consists of frequent museum-goers.

2. *Organization or a club*: Not regular museum-goers.

3. *Participation*: Those who engage in leisure activities that do not prioritize museums.

Falk (1992) mentions Marilyn Hood's research, that draws the key factors influencing the leisure-time decisions of three distinct visitor categories — frequent museum-goers, non-visitors, and occasional visitors:

1. *Social Interaction*: Many visitors value the opportunity to be with others.

2. *Pursuit of Worthwhile Activities*: They seek activities that feel meaningful.

3. *Comfort and Ease*: Feeling at ease in the environment is important.

4. *Novel Experiences*: They appreciate the challenge of encountering new things.

5. *Learning Opportunities*: Visitors are attracted to the chance to acquire new knowledge.

6. *Active Participation*: Some visitors seek opportunities for hands-on engagement.

In the selection of their leisure-time activity, visitors across these categories make their choices based on distinct considerations, but usually, they look for a combination of those criteria.

Research conducted at the Toledo Art Museum offers further insights into visitor behavior:

1. *Frequent Museum-Goers*: This group, comprising around 10-15% of the adult population, values all six aspects mentioned above and finds museums to be places that fulfill these criteria. They prioritize meaningful activities, learning opportunities, and novel experiences. Typically, frequent museum-goers visit alone or with another person and makeup nearly half of all museum visitors. This group intersects with Gudykunst's "Cultural or Intellectual" category.

2. *Non-Visitors*: Representing up to 46% of the adult population, non-visitors prioritize active participation, comfort, and social interaction when considering leisure activities. They perceive museums as formal and forbidding environments that do not align with their priorities, as they prefer feeling at ease and active participation. This group correlates with Gudykunst's "Participation" category. Interestingly, this group found the three highest ranked criteria by the Frequent Museum-Goers to be the least important.

3. *Occasional Visitors*: Comprising approximately 40% of the population, occasional visitors account for half of all museum visits. They also prioritize active participation, comfort, and social interaction but feel that museums can partially meet their needs. Occasional visitors tend to visit museums for special exhibitions, events, or family outings, viewing leisure as relaxation rather than a pursuit of intellectual engagement, where social aspect plays for them a major role. This group had closer leisure time preferences with Non-Visitors group (Falk, 1992).

The ideals and preferences of museum staff naturally overlap with those of the "frequent" visitor group in the following ways: museums constantly highlight the features that appeal most to regular visitors and the least to infrequent or non-visiting groups (Falk, 1992). This might provide an explanation for why the majority of people think museums are "elitist".

It is reasonable to conclude that museums that present themselves as welcoming spaces for people to explore, enjoy, and engage with one another might more likely to draw a variety of visitors.

Who?

The majority of museum visitors come in groups, being it family, a

school class, or a friend's group. Depending on museum context one or another type of group prevails. For example, at natural science museums, family groups can make up to 80% of visitors, whereas at art museums less than 10%.

Yet, the majority of visitors attend as a part of a social group of one or another type. Adults among them make from 30-90% depending on the museum context.

In his book, Falk (1992) defines education as one of the most important determinants for museum-going, rather than income, socio-economic status, and hobbies. It should be emphasized that this is mentioned in the current thesis to draw a general picture. It is believed that museums should be democratic and interest-based. And of course, every museum has its own audience, depending on its content and context.

After different research materials are compared, it is supposed that generalizations about museum visitors based on age, sex, education, etc. can be misleading, as even in different times of the year a museum can attract different audiences more than others (Summertime usually attracts occasional visitors, while frequent museum-goers and residents would rather prefer winter). Additionally, it is found to be ethically improper to define what a visitor should see. The model, where visitors can choose the most fitting *entry point* seems to be safer and provides visitors with freedom of choice.

2.3 VISITOR AGENDA

Personal context, by Falk (1992), is the best predictor of museum attendance. It can also help to inform on the expectations and interests of the visitor. Arriving visiting the museum, visitors bring their own set of expectations for exploration. Their expectations are predicated on their prior knowledge, perspective, experiences, and ideas. A personal agenda is produced by this confluence of circumstances, which is the essence of the visitors' museum experiences.

Experience

As noted above, expectations may depend on many factors, seasons included. Museum-going behavior is more dependent upon who the visitor is (demographically) and what they are looking for regarding leisure time at a particular moment. In my opinion, the satisfaction of leisure preferences and social concerns are the most crucial factors for visitors.

Experienced visitors tend to have highly specific expectations based on their refined frequent visits. They can become highly critical because they are well-informed, and their expectations are based on direct experience. It is

also safe to assume that they know what they would like to experience and look for during each visit.

Occasional visitors also have their own expectations, but, in contrast, they are not based on direct experience and are often misleading (Falk, 1992).

Influencing Expectations

The interaction between a visitor's ideal experience and real experience massively affects the outcome. Manipulating these expectations or agendas before the visit can affect the overall museum experience (Falk, 1992). A museum can have an influence on people's experience by providing clarity on what can be expected and by guiding the way they look at their exhibitions. For example, by telling visitors to look for something "unexpected" they already enter the exhibition with the impression that the museum will be inspiring. So it is not only about what visitors can actually experience in the new museum, but also and perhaps more about what they expect to experience there (Falk, 1992).

For an important part, visitor behaviour is determined by expectations prior to a visit. Novice visitors do not get enough out of their visit and are often unsatisfied with the exhibitions because they have no idea what to expect. So in order to engage these visitors, the focus should be on the expectations before a visit instead of the experience during a visit (Falk, 1992).

So before going to details "stage" the knowledge, putting people in the right mindset for engaging with their exhibitions (Vermeeren, A., Calvi, L., & Sabiescu, A., 2018).

The Design Museum in London exemplifies this approach by articulating objectives and messages regarding the value of design. These objectives, outlined by Newson in 2015, revolve around four core principles: "Design is everywhere," "Design is about technological change," "Design is a process," and "Design is happening now." By emphasizing these pillars, the museum aims to cultivate a mindset that recognizes the ubiquity and dynamism of design. Moreover, by involving the public and portraying users as experts, the Design Museum demonstrates empathy towards a broad audience, effectively bridging the gap between design enthusiasts and the general public (Vermeeren, A., Calvi, L., & Sabiescu, A., 2018).

In the example above, the story of design involved the user's experiences rather than only providing background information about the designers, the design process, the materialisation, and the production of a product.

A study which gives a good insight on manipulating visitors agendas was conducted by John Falk (1992) with children's field trip to the National Zoo. The final test measured learning concepts, knowledge of the setting,

observation skills, and attitudes. The group that received no orientation had the lowest learning results. Notably, children who received two of the three types of orientations showed significantly higher learning than others. The children-centered orientations, which accommodated to children's agendas, resulted in the most significant increase in learning.

The researchers explained these counter-intuitive findings by children's ability to begin the trip with their personal agenda. The child-centered orientation put them at ease and made them more attentive to the content. Those children who had not been briefed on this particular trip to the zoo were restless. Such conduct is evident when guests arrive with the intention of "must-seeing." No matter how amazing the rest of the visit is, people feel that it will remain unfulfilled if they fail to meet their expectations of seeing a specific piece or collection.

Within museum settings, orientations can be tailored to either the museum's agenda or the visitors' agenda. Museum agenda-oriented orientations may involve meeting museum experts and learning about its offerings, while visitor agenda-oriented orientations may focus on learning, relaxation, practical aspects of the visit, and what visitors might see, among other things, guiding them through the museum visit.

Cognitive orientation emphasizes concepts and what visitors might learn, offering a content-focused orientation. Processing skills orientation teaches how to observe, employing strategies for observation, aligning with the museum expert's agenda and how experts would behave.

Furthermore, museums serve as highly reinforcing environments for concept learning. Pre-visit expectations and post-visit outcomes are strongly correlated. The structure of visitors' agendas largely determines the overall museum experience. Informed expectations lead to a close fit between the visitors, the museum agenda, and the actual museum experience (Falk, 1992).

The single biggest factor influencing a visitor's experience at a museum is probably their personal context, and their visitor's agenda is arguably the most significant manifestation of this. Professionals working in museums should be aware of the importance of visitors' agendas and how the museum might influence them. This is essential to the museum's capacity to offer visitors a fulfilling museum experience (Falk, 1992).

Frame of Reference

Museum visitors come to learn about these topics, and in order to make sense of what they see, they naturally rely on their conceptual frameworks, knowledge, and experience. People examine labels in order to verify their own conceptual framework (e.g., "Oh, a lion is a cat!") or, in the event

that their own conceptual framework is found wanting, to choose a suitable one. The primary distinction between them is that, whereas occasional visitors' frames of reference can differ greatly, frequent visitors' frames of reference—which are shaped by their education, interests, and reading—are more likely to resemble those of museum employees.

Observing visitors as they read information in exhibits reveals that they frequently make a very frantic attempt to connect what they are seeing to their personal experiences.

The arrangement of many displays may make sense to museum experts, but it may not make sense to the general audience. The typical visitor may find it challenging to comprehend the intended messages.

Experience museum visitors are able to perceive more artifacts on a display compared to novice visitors, due to their ability to group information into "chunks". This cognitive ability to chunk information is based on a previous experience and is a key difference between experts and novices, which allows experienced visitors to understand and engage with exhibits more comprehensively. As a result, experienced and inexperienced visitors have diverse perspectives on the exhibits: because they may chunk the information of a display into higher-order categories, experienced visitors can absorb far more of the content than can less experienced visitors.

Two key types of experience influence a visitor's interaction with exhibits: knowledge of the exhibit content and museum literacy. Visitors familiar with the subject matter or who understand how to navigate and interpret museum cues can more effectively assimilate and organize information. Frequent visitors typically have both content knowledge and museum literacy, unlike novice visitors who may lack in both areas (Falk, 1992).

2.4 DURING THE VISIT: UNDERSTANDING MUSEUM VISITORS' BEHAVIOUR

Social Experience - Looking for a Shared Meaning

As it was said before, social interaction is one of the most significant factors of museum visit. It includes the questions and discussions generated by looking at exhibits and reading labels as well as conversation glances. For example, for families conversations are essential to find shared meaning in the exhibit (Falk, 1992). It is obvious that label texts in such conversations served as a mediation. Visitor groups tend to discuss the labels and texts they're supposed to, but they rarely read everything because first and foremost people are concerned with enjoying and maintaining social relationships with their

companions.

Modeling

Regarding to Falk (1992), modelling serves as one of the most important learning techniques within museum settings modelling happens when people are visitors, learn by observing others and repeat the actions of other visitors.

It is evident that highly structured visits result in greater cognitive learning, but more importantly, less structured visits produce more positive attitudes. The factor of orientation in the space also plays crucial role as the novelty of an informal learning situation significantly impacts the perception of the content (Falk, 1992).

Cooperative learning experiences, and an opportunity to share insights are enhancing learning mechanisms. Additionally, one of the main aspects that visitors recollect after Timepass are usually social interaction of the visit.

The visitor's physical context, the paths they take within the museum, and the exhibits and objects they view are all greatly influenced by the social setting (Falk, 1992).

Strategies & Problems of Museum Exploration

The type and scale of a museum is also defining a visitors's depth of attention to individual pieces. Frequent visitors, or experts, having a lot of previous experience and knowing how to navigate and "look" in the museum setting spend their time more meaningfully, going in-depth with individual pieces and building their insights on a knowledge framework they have built in the past. (Falk, 1992)

There are also some general patterns. Large-scale museums force visitors to spend less time in each exhibit as they attempt to see everything that is on display. Novice visitors specifically fall int this trap (Falk, 1992). Regular visitors enter the museum already aware of this; first-time visitors discover this information the hard way. The majority of infrequent visitors start their visit by examining each item and reading each label.

The novelty of the learning environment, which can occasionally cause people to spend a lot of time adjusting and figuring out what exactly they want to do and see, is another significant component that affects our museum experience and leads to mindless exploitation (Falk, 1992).

Physical context plays a crucial role in the decisions that visitors make regarding what they see. Such common things like exhibited content closer to exist is the most reviewed and pieces in the end receive much less

attention. And often, even if visitors notice an interesting piece in the end of the gallery, they most likely are already experiencing museum fatigue and just cruising through the exhibition, without enough motivation left to pay close attention.

Phases of the Visit

First-time and occasional museum visitors typically experience their visit in four phases: orientation, intensive looking, cruising, and leave-taking. Initially, they may not select exhibits based on personal interest but tend to start at the beginning and aim to view everything systematically (Falk, 1992). However, this focused attention is short-lived. They soon enter the cruising phase, which occupies most of their visit, where they browse more casually. This shift often occurs as they realize viewing exhibits in detail may hinder their ability to see the entire museum, which many consider an essential part of their visit (Falk, 1992).

Selective Nature of Visitor Experience

Visitors' experience is self-constructed, and selective by nature. This nature is a key component of their activity. Visitors select what to focus on, sometimes seemingly at random. Every visitor's experience is unique.

Exhibitions often aim for visitors to view materials in a sequential manner, such as chronologically or hierarchically, to facilitate understanding. Despite designers' intentions, it's common for visitors not to follow the suggested order, and they might not view displays sequentially even if they start as directed. This adherence to sequence usually occurs only when guided by museum staff. For example, a group might start with the first display, skip a few, focus on an isolated exhibit, then move on to entirely different sections, each group creating their own unique path through the museum. (Falk, 1992)

Experiencing Objects

Most museum visitors, regardless of age, deal with exhibits on a concrete level rather than abstract, focusing on tangible objects over the abstract ideas they may represent. This tendency towards the tangible is not unique to museums but is a general human characteristic. Visitors are more likely to discuss objects that they see, but only sometimes do they discuss the more abstract ideas presented, attracting their attention only when they meet immediate informational needs.

However, despite this preference for the concrete, many museum exhibits aim to communicate abstract ideas, often through detailed labels that may not align with the visitor's preference for tangible information. For more effective communication, it's suggested that museums present concrete infor-

mation before delving into abstract concepts, ensuring clarity in all conveyed messages.

2.5 PROFILES & CULTURAL SEGMENTS

Persona

Based on research on what visitors recalled about their experiences visiting museums and what they took away from them, Falk (2016) released *Identity and the Museum Visitor Experience*. One of the most important conclusions to come out of his research is that the reasons why each individual went to the museum in the first place, and thus the things they did there, influenced what they learnt or remembered from their visit(s). He also found that an individual's experience—that is, what they recall and absorb—at the same museum might vary from visit to visit. Put differently, on various days, one individual may be two or more clearly distinct categories of visitors, because their motivation for visiting the museum changes (Abrams, 2020).

A deeper, more synthetic explanation seems to be necessary to get a more comprehensive response to the issues of why people attend museums or not, what they do there, and what learning or meaning they take away from the experience.

The very nature of museum visits seems to be intimate and based on a strong connection to an individual's sense of self. As mentioned before, there is a strong consistency with which a person's entrance story corresponds to their post-visit narrative.

Identity-related motives have a direct impact on essential outcomes in a museum context, including visitor behaviour and interaction with the environment, as well as—most importantly—how visitors interpret their experience after leaving (Falk, 1992).

Such approach allows to create visitor experience that would be based on their personal motivations. The one-size-fits-all approach that has traditionally characterised our interactions with museum visitors is considerably different from this. Such approach do not work equally well for all visitors all the time. The content may be just right for some, and totally miss the point for others.

It is thought that this strategy opens up new and inventive ways to draw in audiences who don't typically visit museums. This is because people who visit museums do not exclusively fall into these five fundamental kinds of identity-related demands (Falk, 2016).

Diversity of museum personas indicates taht a “one size fits all” ap-

proach in the design of museum exhibits and the museum flow (layout) will not work. It therefore becomes important for a museum to understand what attracts the personas that frequent their museum, or the ones they want to draw in. Some examples include:

There are many different lenses through which visitors can be grouped. For example, Dean simplifies this diverse tapestry into three distinct categories: Casual visitors, who breeze through galleries without delving deeply into the exhibits; Cursory visitors, who show a genuine interest in the museum's offerings; and Study visitors, a minority who meticulously scrutinize exhibitions, absorbing every detail and annotation (Dean, 1994).

The classification given by Veron and Levasseur, drawing inspiration from animal behaviors, identifies four distinct visiting styles: The diligent Ant visitor, meticulously observing every exhibit; the swift Fish visitor, gliding through empty spaces with fleeting stops at exhibits; the selective Grasshopper visitor, focusing only on exhibits of personal interest; and the whimsical Butterfly visitor, fluttering between exhibits with varying degrees of attention (Veron, 1991).

Umiker-Sebeok delves into the interpretation of exhibition spaces, categorizing visitors into four archetypes: The Pragmatic, viewing exhibitions as classrooms or workshops; The Critical, appreciating the aesthetics and structure of displays; The Utopian, seeking social interaction akin to an encounter session; and The Diversionsary, treating exhibitions as amusement parks, prioritizing fun over intellectual engagement (Umiker-Sebeok, 1994).

Insight is offered into visitors' learning styles by McCarthy: the Imaginative, who thrive on social interaction and storytelling; the Analytical, who prefer factual information and logical sequences; the Common sense, who enjoy hands-on exploration and discovery; and the Experiential, who learn through trial and error, fueled by imagination (McCarthy, 2006).

While the audience segmentation designed by Falk focuses on identifying visitor types based on their motivations, behaviors, and expectations when engaging with cultural institutions, the classification provided by Cultural Segments by Morris Hargreaves McIntyre applies a psychographics-based approach that is both universal and individualized since it speaks to individual human needs by drawing on shared human values.

In 2010, MHM (Morris Hargreaves McIntyre) described Culture Segments as “a powerful psychographic segmentation tool that helps arts organisations to better understand and engage with audiences”. Their algorithms identify eight distinct audience types, and they asked us to create a stunning image to capture each.

After analysis of existing classifications and conducting field obser-

variations in museums, an attempt was made to unify the two systems described above, to streamline the approach to designing museum experiences while still addressing the diverse needs and expectations of diverse audiences.

In the *Figure 1*, type, description, needs & expectations, and motivations for choosing exhibits for each segment are defined. The lack of any demographical data is intentional, as the aim is to use an approach based on personal deeper values and motivations.

2.6 DESIGNING FOR DIFFERENT PERSONAS

Based on the consolidated view on the diverse needs and motivations of different audience segments, practical implications for designing museum experiences for each of those groups have been defined in the *Figure 2*.

Of course, each museum has to define their primary and secondary target segments in order to build sustainable, meaningful relationships. Creating genuine diversity in the audience is a long-term strategy. It's not just about attracting new audiences but building relationships that are lasting and mutually beneficial. Again, however, psychographics can be incredibly valuable: it allows for the understanding and delivery of an experience that truly reflects what audiences are seeking on a deeper level.

2.7 CONCLUSION

Though visitor profiles are a useful tool for designing relevant experiences, it does not mean that one person equals one profile. People have dynamic motivations and dynamic needs, and visitor profiles help develop diverse experiences that can cover these fluid needs.

For example, novice visitors often hesitate with questions like "Where to start the visit?" and "What to see?", and understanding such mechanics is helpful for designers of museum experiences to connect these visitors with museum content more quickly. The approach of "assigning" paths and entryways to visitors seems to have too many risks. A better approach is to create a choice out of well-designed entryways.

Regarding the method of segmentation, audience segmentation using psychographics is supported as opposed to demographics or profession. To put it simply, our thoughts and feelings regarding culture are not influenced by our demography. Not every young person wants the same thing, and not all economists have the same views.

The offer of the museums needs to be relevant. All visitors person-

alize the museum's message to conform to their own understanding. It is clear that representation is key: if the stories the museum is telling or the voices being platformed are largely from one perspective, it's going to be harder for a diverse audience to believe that the offer is aimed at them.

Additionally, it is important to make museums feel like a comfortable environment for exploring, enjoying, and interacting with others. Naturally, museum professionals' values and preferences intersect with those of the "frequent" visitor group. Consequently, museums consistently emphasize qualities that are the most appealing for frequent museum-goers and the least appealing for occasional or non-visiting populations. This can explain why museums are perceived as "elitist" in the minds of the majority.

Cultural Engagemet Typology

<i>Visitor Profile</i>	<i>Description</i>	<i>Needs & Expectations</i>	<i>How they select exhibitions</i>
Stimulation (Explorer)	Curiosity-driven, independent-minded individuals who are not experts but have a natural affinity for the subject matter, seeking novelty.	They seek unique museum experiences that feel special and unconventional encouraging return visits.	They are focused on finding items that capture their attention, regardless of group dynamics. They enjoy discovering new objects and exhibits, sharing their discoveries with others and appreciate marketing that sparks their curiosity.
Expression (Facilitator)	Socially motivated visitors who prioritize enabling the experiences and learning of others in their group, often sacrificing their own interests.	Facilitators aim to ensure that their companions find the visit interesting and fulfilling, often letting others direct the visit and focusing on their engagement. Communal experience, sharing with others.	They look for an inclusive and community-focused approach. Grassroots experiences and are less swayed by traditional marketing tactics.
Professional/Hobbyists	Visitors with a deep connection to the museum's content due to their professional interests or hobbies. They seek specific information to support their personal or professional projects.	Expect the museum to provide detailed information and answers that are not readily available elsewhere. They appreciate recognition of their expertise and prefer targeted learning opportunities like special lectures.	Their visits are typically motivated by a desire to satisfy a specific content-related objective.
— Perspective (Professional/Hobbyists)	Self-sufficient individuals pursuing personal interests and agendas, personal fulfillment.	For them, cultural engagement is a personal and individual experience. They are looking for Intellectual growth, autonomy, and relevance. They value experiences that deepen understanding of their chosen subjects.	They are focused on a limited number of pursuits that they find personally fulfilling and rewarding. Seek environments that offer personal stimulation and cater to their individual passions, and areas of expertise.

Figure 2.1 Visitor Profile Segmentation

Cultural Engagemet Typology

<i>Visitor Profile</i>	<i>Description</i>	<i>Needs & Expectations</i>	<i>How they select exhibitions</i>
— Affirmation (Professional/Hobbyists)	Self-improvement-oriented individuals seeking meaningful experiences.	They seek self-improvement, dignity, value, and assurance of quality. They need endorsement and supporting evidence	Look for activities that offer meaningful benefits. Drawn to cultural activities that offer context, information, and opportunities for insight and knowledge.
— Enrichment (Professional/Hobbyists)	History-loving individuals valuing tradition and heritage.	They seek enrichment through history, finding pleasure in learning and escapism.	They prefer single expert voices or curators who can provide definitive interpretations and thorough analysis. Preferring experiences that align with their established tastes and interests. Cautious of gimmicks.
— Essence (Professional/Hobbyists)	Discerning, confident individuals with a strong appreciation for culture.	They seek deep contemplation, emotional and intellectual engagement, quality and new perspectives.	Selective in their attendance, gravitating toward experiences that align with their interests and values. They prioritize quality over popularity, often basing their cultural choices on the credentials of the creative or curatorial teams, independent in their cultural pursuit.
Experience Seekers	Visitors motivated by the museum's status as a notable destination. Their satisfaction comes from the experience of visiting.	They desire enjoyable visits and want to see the highlights of the museum. They value acknowledgment of their needs, especially foreign tourists, and appreciate efforts to enhance their overall experience.	Mainstream-oriented individuals prioritizing fun and socialization. Their satisfaction primarily derives from the mere fact of having 'been there and done that.
Rechargers	Visitors looking for a peaceful or inspiring experience, viewing the museum as a place of contemplation and restoration.	Focus on the overall ambiance of the museum day, seeking quiet, relaxing, and spiritually enriching experiences that provide a break from daily life.	Drawn to popular and accessible cultural offerings that require minimal effort to participate in. They are seeking escape and relaxation.

Cultural Engagemenet Typology

<i>Visitor Profile</i>	<i>Practical Implications</i>
Stimulation (Explorer)	<ul style="list-style-type: none"> – Tools and technology so an Explorer can learn all they want to know. – Unique experience every time they visit – Something that fuel their learning – “Out of ordinary” – Fresh perspective or a new angle on the familiar – Innovative marketing, avoidance of impersonality.
Expression (Facilitator)	<ul style="list-style-type: none"> – “Thank you for attending” – Enabling the experiences/learnings of others – Multiple access points – Sharing their discoveries with others – Experiences that are accessible to all
Professional/Hobbyists	<ul style="list-style-type: none"> – New insights on specific topics – Targeted learning opportunities – Provide information/answers that are not readily available elsewhere – Specific information
– Perspective (Professional/Hobbyists)	<ul style="list-style-type: none"> – Personalized, focused experiences – Autonomy – Personal relevance – Targeted learning opportunities – Convenience – Limited number of pursuits – Personal stimulation and cater to their individual interests. – Value experiences that deepen their understanding of their chosen subjects
– Affirmation (Professional/Hobbyists)	<ul style="list-style-type: none"> – Offer context, information – Opportunities for insight and knowledge – Well-organized experiences – Assurance of quality
– Enrichment (Professional/Hobbyists)	<ul style="list-style-type: none"> – Comfort, relevance – Assurance of quality – Single expert voices or curators who can provide definitive interpretations and thorough analysis – Established experiences that feel substantive and meaningful – Expert opinions – Demonstrating personal relevance
– Essence (Professional/Hobbyists)	<ul style="list-style-type: none"> – Cultural choices on the credentials of the creative or curatorial teams – Challenges to their perceptions and offers new insights into the human experience
Experience Seekers	<ul style="list-style-type: none"> – Highlights of the museum – Mainstream, popular events
Rechargers	<ul style="list-style-type: none"> – Simplicity – Transparency in their offerings – Convenience, ease of access – Time-saving measures

Figure 2.2 Visitor Profiles: Practical Implementation

Free-Choice Learning — Learning that is voluntary, self-paced, and guided by the learner’s interests, often occurring outside formal education settings.

Orchestrated Knowledge — A structured learning approach where various resources, activities, and interaction strategies are intentionally coordinated to achieve specific educational outcomes.

3.1 LEARNING IN THE MUSEUM

Naturally, the question of the essence of learning emerges: what is learning and how can it be said that the museum experience is a learning experience?

Learning is mistakenly seen purely as the acquisition of new concepts or facts. When in reality we learn through consolidation and gradual expansion of preexisting concepts and knowledge. Such beliefs serves as a foundation of questioning to seeing museums as learning environments (Hein, 2002).

Hein (2002) suggests, that affective (attitudes, beliefs, and feelings), psychomotor (instrument usage), and cognitive (facts and concepts) are the three layers of knowledge that make up learning, while most theorists, however, solely pay attention to cognitive information. Our past experiences and emotions, in addition to relevant visual and tactile information, have a big influence on our learning. Learning is rarely so pure as not to combine all three components.

Ordinary encounters that don’t stretch and enthrall us could not be learning opportunities, that is why museums possess a unique ability to transform us (Hein, 2002).

There is a visible trend in museums all over the world to become more interactive, and more “hands-on”, with a goal of deepening visitors’ experiences and hence, creating a memorable visit. But in order to be educative, museums should not only widen the range of “hands-on”, but also develop “minds-on” experiences (Hein, 2002). Also, experiences must be structured

to be instructive in addition to being “lively, vivid, and interesting.” (Hein, 2002)

3.2 FORMAL AND INFORMAL EDUCATION

Hein (2002) noticed, that, though museums served to demonstrate government wealth and power in the past, they gradually took on educational roles as part of public service responsibilities.

The democratization of knowledge in the eighteenth and nineteenth centuries caused the development of museums as institutions for public education. Gradually, due to advancements in industrialization, the initial role of museums as a display of governmental wealth and power shifted towards being part of public education systems. Despite this shift, museums struggled with balancing their educational goals and maintaining an elitist tradition, often limiting public access and engagement. (Hein, 2002)

Another role of museums that only increased with time is the cultural interpretation role (Hein, 2002).

These social functions of museums involve the traditional roles museums have always played - collection, preservation, documentation, research, and education - they particularly acknowledge and require the educational activities of museums. The important choices are what goes into the museum and what interpretations should be placed on its exhibits. Through these exercises, the importance of object interpretation and public use—that is, museum education—is brought to light (i.e. the work of museum education) (Hein, 2002).

This historical context underlines the present challenge for museums to fulfill their educational potential, making it crucial for modern museums to bridge the gap between their collections and diverse audiences, ensuring accessible and engaging learning experiences that align with democratic principles of equality and inclusivity.

Education that takes place in the museums is usually referred to as “informal” and sometimes self-directed learning, in contrast to “didactic” methods of other educational institutions (Hein, 2002).

“Informal” learning is further referred as a description of setting without formal curriculum. Museums can facilitate learning through providing opportunities to learn that are based on the visitor’s interests, active discovery and construction of meaning, and providing responsibilities for one’s own “curriculum” (Hein, 2002).

Education in the field of museums

Education, entertainment, and preservation. These are some of the main functions society assigns to museums nowadays. As the preservation function of museums does not fall in the scope of the thesis it will not be discussed in much detail (Hein, 2002).

According to American Association of Museums (1984: 1), the museums’ mission includes two aspects: the advancement and diffusion of knowledge, and the enhancement of that awareness which affords pleasure and delight (Hein, 2002).

Museums’ shape and goals went through numerous changes, from being education-focused institutions in the nineteenth century to being collection-accumulation-focused.

For entertaining goals, requirements of “lively, vivid, and ‘interesting’,” combined with accessibility and plenty of amenities, would be sufficient. But they are not adequate for educational purposes. The challenge for most museums lies in the transformation of the obvious enthusiasm of visitors into connected, engaging, integrated activities that lead to growth (Hein, 2002).

We must have enough understanding of these experiences to be able to mold them so that visitors can develop and learn from their visits to the museum. We must comprehend the significance that visitors ascribe to their experiences at museums.

To achieve these goals museums should provide equal opportunities for learning and understanding its content. In the case of art museums, it is specifically hard, as their environment is designed closer to the world of its experts. The interest in museums and their educational role has always been a part of a continuous effort to make all educational institutions relevant for the entire population (Hein, 2002).

Educational Theories

Regardless of the visitor’s or the museum staff’s goals, museum experiences—which are nearly always rich and frequently involve novelty for the visitor—always carry the potential to be instructional (Hein, 2002).

A theory of knowledge and a theory of learning are essential components of any education theory, and they can be combined to create, in theory, four distinct types of educational theories.

A theory of knowledge is necessary for a theory of education. What is knowledge, in our opinion, and how is it acquired? Exhibitions in museums: do they portray the world “as it really is,” do they illustrate practical social norms, or do they offer phenomena for viewers to make their own interpreta-

tions of? (Hein, 2002)

A theory of learning is another crucial component. Do we view learning as an active process that transforms the learner's mind, or do we think of learning as the gradual insertion of discrete "bits" of knowledge into the mind? (Hein, 2002)

Museums, being part of the public education system and generators of informal learning environments are unavoidably educators, who take some position about what the "it" is that people learn (Hein, 2002).

Paulo Freire (1921-1997) was a leading Brazilian educator and philosopher who advocated critical pedagogy. He introduced the concept of conscientização, or critical consciousness, which embraces the idea that knowledge involves an active learner, is an illustration of an epistemological stance in education that involves the learner in defining the meaning of what is learned. Critical consciousness is integrated with reality, representing objects and facts in their causal and circumstantial relationships as they exist experimentally (Hein, 2002).

The following paragraph, introduces the juxtaposition of the two continua, which results in four domains, suggested and described by George Hein in his book "Learning in the Museum" (Hein, 2002).

Didactic, expository education

This traditional approach involves hierarchical, structured lessons based on the subject's structure. The educator is responsible for presenting the pieces of knowledge or skills in the right sequence and not proceeding to the next one before the previous is mastered.

In a museum setting, this might manifest in:

- Sequential exhibitions with clear beginnings and ends, intended order;
- Hierarchical subject arrangement from simple to complex;
- Didactic components (labels, panels describing specific learning objectives).

Such exhibitions claim to present the "true" structure of knowledge, it is unlikely that they would have panels suggesting that this is just one interpretation of the historical event and that there may be others; they also won't point the visitor in the direction of a different explanation or imply that this arrangement is arbitrary and will be replaced by a different intellectual scheme at a later date or in a different gallery within the museum (Hein, 2002).

Stimulus-response education

This education position shares learning theory with the didactic, expository approach, without making claims about the objective truth of the content. As it is rooted in behaviorist psychology, this method focuses on training through specific stimuli and expected responses.

Museums adopting this approach might use:

- Didactic components (labels, panels describing specific learning objectives);
- Sequential exhibitions with clear beginnings and ends, intended order;
- Reinforcing components like interactive quizzes or games to impress information on visitors and reward appropriate responses without necessarily presenting it as the definitive truth.

Discovery Learning

There is substantial evidence from observing educational settings that individual learners make discoveries even in highly didactic, expository instructional circumstances. Whatever the teaching approach, students experience epiphanies—they grasp a topic or idea for the first time. On the other hand, under circumstances designed to support active learning, the student can still react by copying the instructions completely, just repeating the scenario later, or not taking part at all.

According to Hein (2002), learning is more than just storing ideas and information in the mind's storage facility. Physical activity linked to learning is frequently seen as active learning, thus the common reference to "hands-on" learning. Physical engagement with the outside world, where the student must build something, handle objects, and other interactions with the "stuff" can result in scenarios that present a variety of options and call for the student to think. However, the "activity" that these theories speak about is *mental activity*, which may or may not be stimulated by physical activity; the two are not the same thing. Repetitive physical activity that is monotonous or "mindless" is not very helpful for the mental shifts linked to this type of learning, and "minds-on" is mandatory for "hands-on" engagement to produce any kind of learning outcome.

Often, to know what is relevant requires that the learner already have the knowledge the situation is intending to impart!

Hein (2002) outlines the characteristics of the exhibitions that adopt the discovery learning approach:

- Encourage visitors to explore and potentially even flip between exhibit components;

- Offer a variety of active learning modes;
- Have didactic elements (labels, panels) that pose questions and encourage visitors to make their own discoveries;
- Present a way for visitors to compare their own interpretation of the exhibition to the “correct” interpretation of the exhibition;
- Construct activities meant to lead visitors to accepted conclusions;
- Organize workshops for adults that provide expert testimony and other forms of evidence for reflection and consideration.

Allowing participants to comprehend the true meaning of the material are all features of museums organized along discovery learning lines.

A gallery built on discovery lines may or may not include exhibits arranged linearly. The arrangement of exhibit elements may offer advice if the goal of the overall show is to guide the viewer to the right conclusions. There would be no need for a designated route through the exhibition if the findings made at each site were essentially autonomous.

3.3 REALIST & CONSTRUCTIVIST EPISTEMOLOGY

Like John Dewey (1929/1988) before him, Paulo Freire (1921/1997) believed that knowledge could not be isolated from its context or action, which sequentially led him to support the active-mind position on learning theory. However, the aforementioned quotes discuss knowledge’s ontological status rather than its acquisition.

Any philosophy of museum education must take into account epistemological stances, whether stated or implied, as they influence its curatorial decisions and presentation methods. Is the museum’s mission to spread truth regardless of the individual visitors’ backgrounds, cultures, and personalities?

Does the museum adopt the stance that information is situational, shaped by culture, and requires explanation and interpretation based on its intended use and context? If they are consistent, museums that adopt a more realist stance, holding that information exists apart from the learner, would center their exhibition policy around the subject’s structure. Many of the world’s older science museums, for instance, are organized by science subjects, such as chemistry, physics, biology, geology, etc., in an attempt to depict the “true” structure of science. As a result, they are intended to explain both the wonders of science and “correct” explanations of the laws of the universe. (Hein, 2002)

The focus of the debate should not be if a certain exhibition— be

in the fields of science, history, anthropology, or art—is accurately portraying the real world, but rather on if the exhibit aims to portray “truth.” (Hein, 2002).

In art museums, displaying visuals chronologically or grouping stylistically similar pictures together with the suggestion that they “naturally” belong together is a common organizational approach. Once more, the realist viewpoint would contend that these arrangements—impressionists in one chamber, paintings from the Italian Renaissance in another—reflect some unchanging aspects of the field’s structure rather than just being a practical choice.

Organizing subjects from fundamental to advanced concepts based on their logical structure, a practice that initially was influenced by positivist knowledge views, soon got mirrored in museum exhibitions (Hein, 2002). This type of organization, inherent to the subject, may vary in interpretation, depending on the curator’s perspective, but always determined by the subject’s properties, not the viewer response to the material.

In a realist epistemology, the focus of the museum content is guided by the material being displayed, by the nature of the subject, the focus is not on the viewer’s interest, or the meaning the viewer might make from the material (Hein, 2002). On the contrary, the idealist curator holds that an object’s significance—or the meaning of an exhibition as a whole—comes from the interpretation that the audience or the curator gives it, not from any outside reality. As a result, a curator who adheres to an epistemology on the right side of the continuum is more likely to think about presenting a variety of viewpoints or setting up an exhibition so that viewers are free to form their own opinions about it after interacting with it.

3.4 OVERCOMING LINEAR EXPLORATION: CONSTRUCTIVISM

The constructivist learning approach describes learning as an active engagement of the learner are not just passive recipients of information but actively engage in both the process of applying their minds and interpret the content based on their own experiences and perspectives (Hein, 2002).

In constructivist learning theory, knowledge is not fixed, but is constructed by individuals through interaction with their environment. Conclusions reached by learners are not defined by their match to some external standard of truth, but whether or not they “make sense” inside the learner’s constructed world. There is no “objective truth” existing in the vacuum (Hein, 2002). Instead, the concepts’ usefulness in inspiring action (usage) and their

coherence with one another are what give rise to validity. Therefore, constructivist educators will only discuss naïve, private, or personal concepts, whereas conventional educators would discuss learners' misunderstandings.

The constructivist exhibition would be designed to provide multiple entry points and perspectives, encouraging visitors to explore, and reach different conclusions, and ways for learners to engage not only physically, but mindfully (Hein, 2002). These exhibitions validate diverse interpretations of visitors, acknowledging that each individual's understanding is shaped by their unique background knowledge and experiences.

Constructivism undermines conventional ideas of objective truth in museums rather than promoting a more diverse and dynamic learning environment where many points of view are offered and personal knowledge construction is facilitated (Hein, 2002).

To put it briefly, if we believe that individuals may create their own personal knowledge, then we must acknowledge that this will inevitably happen despite our best attempts to prevent it. Museums witness countless examples when visitors interpret exhibitions in totally different way from what designers and curators planned (Hein, 2002).

According to Hein (2002), the main characteristic of a constructivist exhibition is offering its audience the opportunity to construct knowledge. Furthermore, it will offer a means of verifying visitors' diverse perspectives, independent of whether they align with the curatorial staff's planned interpretations. Consequently, a constructivist display has certain common characteristics such as:

- Variety of active learning modes;
- Multiple entry points;
- Will not have restricted "flow", start and end;
- Present a range of points of view;
- Will enable visitors to experiment, speculate, and draw conclusions;
- Will provide experiences and materials that allow students in school programs to experiment, conjecture, and draw conclusions.

Hein (2002) summarized the outlook on the constructivist exhibition as offering and encouraging visitors to look at objects from different perspectives, validating different ways of interpreting objects and presenting various "truths" about the material presented.

3.5 THEORIES OF TEACHING

Presenting experiences and explanations to help individuals grasp the conventional view isn't enough, they will still stick to their views despite "instruction". What's necessary is to uncover the personal knowledge individuals bring with them and build upon that foundation, or allow them to build on it (Hein, 2002).

In the museum field this kind of pedagogy includes descriptions of exhibit content that focus on linear, sequential structuring of exhibit components, defining specific learning objectives and reinforcement models, in which methods dominate without reference to epistemology and are assumed to apply to any subject areas. To consider methods independent of what is to be learned, independent of the context of their application, is to operate in the behaviorist quadrant (Hein, 2002).

For Discovery learning

The epistemological problem lies in structuring the learning environment to lead learners to the desired conclusions while yet allowing for enough openness to allow learners to find something themselves (Hein, 2002).

For Constructivism

Balancing experiences that both stimulative and challenging is a challenge of constructivists pedagogy. To constructivists, it is important to know if a learner has a familiar concept, aspect or idea in a new environment to which he can connect to and engage (Hein, 2002).

An encyclopaedia or catalogue will serve as the museum's instructional resource model rather than a textbook, because in a catalogue visitors will be able to select the topic or even the subtopic they wish to study, thanks to the organising principles.

In constructivism theory, a topic, knowledge cannot be organised in a text-like, linear fashion (Hein, 2002).

The well-known audio tours that are offered in many museums are an example of an exhibition element that may be more or less creatively organised.

3.6 CONCLUSION

As an advocate for free-choice and non-linear learning, the combination of constructivist theory and discovery-learning is seen as the most fitting for the organisation of museum sources.

Additional options for visitors to organise their own sequences in museum tours should come from being aware of their preferences. This freedom from having to follow a preset sequence can only be embraced by constructivist educators. Traditional educators may nevertheless want visitors to be led through an exhibition in a specific order.

Constructivism, it is believed, demands even more involvement from curators and educators to create stimulating and fulfilling learning environments in museums.

When applied in the museum field, discovery learning places an emphasis on active engagement of visitors with materials in order for them to draw conclusions. This might take the form of exhibits that invite inquiry and individual interpretation, non-linear displays that promote discovery, and programmes that lead visitors to accepted conclusions through exploration.

Once, while the Kunsthhaus in Zurich was being visited with a colleague, an interesting art piece was found. It was mentioned by the colleague that they would like to know more about it. As no information was provided, the visitor shifted to their phone trying to find relevant information on the internet. They had to scan the art piece, then browse through the links the application returned, and select one that could provide well-written information about the piece.

In that moment, there was a prevailing thought: “But the museum, the curators, they have this knowledge. There is a reason this piece is here. What is behind it would be liked to know.”

This incident made thoughts about the vast amount of research and knowledge of curators and educators that stays “behind the walls” be had. Indeed, quite limited ways for curators to “translate” their vision and knowledge to their visitors and to connect with them are present.

Additionally, many novice visitors do not have the knowledge of how to “look” or “orient” themselves in art museums or galleries. The realization of this raised curiosity about whether curators would like to have a more direct impact on visitors’ museum experiences, with more ways to interact with their visitors.

4.1 LEARNING THROUGH DIALOGUE: INTERVIEWS WITH CURATORS

A noteworthy development might be the shift from designing short experiences within the museum towards designing long-term dialogical relationships between the museum and its audiences. Such a shift also raises issues regarding how to deal with curation and control, finding the right balance between the needs of the museums and the needs of public audiences.

Curatorial practice has many facets and is not one-size-fits-all. Whether it’s thematic, chronological, or medium-based, curators employ diverse approaches to breathe life into their exhibitions.

Curators don’t just curate; they tell stories. In collaboration with artists, curators weave narratives that transcend individual artworks, creating a collective tale that resonates with the audience.

Curators are not just selectors; they’re architects of experience. Every exhibition is a curated journey, an orchestrated sequence that guides visitors through a carefully constructed narrative. Curators shape the viewer’s perception and emotional connection to the artworks.

Internally, curators have to navigate coordination with educational and financial departments within their institutions, extending their efforts beyond visitor engagement.

It is to say that curatorial practice is a highly nuanced field. General knowledge about the art of curating was built through theoretical research. Nevertheless, exchange with professionals can truly help to understand curatorial practice in greater detail.

This chapter mostly consists of the interviews, as it is intended for the reader to be introduced to the curatorial field through their own voices.

(In the following interview overviews, the core aspects of the interview questions are presented as headlines and the answers and views of the interview partners as text unders)

4.2 INTERVIEW WITH MICHAEL EGLI

Michael Egli is a co-curator, co-project manager, and co-author of the catalog raisonné Augusto Giacometti. Michael is located in Switzerland. He participated in developing the exhibition and facilitated cooperation between the Aargauer Kunsthau and the Swiss Institute for Art Research (SIK-ISEA), alongside Dr. Katharina Ammann, Director of the Aargauer Kunsthau, and Denise Frey, research assistant at SIK-ISEA and co-author of the catalog raisonné Augusto Giacometti alongside Dr. Beat Stutzer, former Director of the Bündner Kunstmuseum in Chur.

Michael played a crucial role for the project research and practical part, providing his insights into the exhibition's developmental process and his key thoughts on it. Here presented his thoughts and reflections on the key aspects of exhibition development process.

Creating the Exhibition

“The artist Augusto Giacometti (1877–1947) was the subject of a four-year research project that resulted in a comprehensive catalogue raisonné, launched by SIK-ISEA supported by the Swiss National Science Foundation and other public and private donors. The research was published both as a book and online at [www.augusto-giacometti.ch]. The decision to create an exhibition on the art of Augusto Giacometti (1877-1947) came during the last two years of the realization of the catalogue raisonné on the artist. The team established two main objectives: (1) presenting new research findings from the publication (960 pages); (2) developing a distinguished exhibition different from previous displays in Bern (2014–2015) and elsewhere. The head of the museum, Katharina Ammann, defined the aim of the exhibition as the transfer of knowledge.

The exhibition was curated around three primary elements: the inclusion of both commissioned works and besides famous also lesser-known free works; the debut of private collection pieces seldom exhibited before; and the dissemination of fresh research through both artworks and archival materials such as sketchbooks and press documents.”

Thematic Approach

“The 13 themes for the exhibition were derived from the three conceptual points mentioned earlier. In Aarau, we sought to thematically explore individual themes (e.g., the history of development, handling of the color surface, etc.) through the arrangement and hanging of the works. However, individual aspects can only be fully illuminated through additional mediation efforts (booklet, guided tours, visualizations using tablets, VR).

The foundation for these themes was the catalogue raisonné. Given



Figure 4.1, Michael Egli

the breadth of themes, we selected those we believed the public would find most engaging. One segment offered a historical journey through the exhibition, showcasing the artist's first and last works. Another segment delved deeper into the life of the artist, whose documentation is quite significant. The process leading to abstraction was particularly crucial for us."

Knowledge Base

"We have spent the past four years working intensively on this catalog, during which we consulted a vast array of books and viewed the majority of Augusto Giacometti's work in public and private collections. This formed the foundation of our work. Typically, the process to organize an exhibition begins with the creation of a thematic concept of the exhibition itself, followed by researching books to develop and support the themes. However, our approach was the opposite. We dedicated four years to research and building a comprehensive database, and from this wealth of data, we crafted the exhibition. This is not the usual method for staging an exhibition, but it provided us with a deeply informed and richly detailed basis from which to curate."

Educational Strategy

"Alongside selecting works, the museum team developed 'educational islands' at the beginning of the exhibition for individual subject areas. Complex scientific results were simplified and prepared in film and sound documents, so they could be effectively communicated to visitors. These serve as entry points to the exhibition, creating a framework of initial knowledge that encourages further exploration. The presentation is balanced to ensure the information is accessible and not overly scientific.

This educational strategy links directly to the research project and is intended to impart detailed knowledge about individual works (including their genesis and dating), provide a differentiated view of artistic freedom and the challenges of commissioned art, and highlight constant elements that characterize the artist's entire oeuvre: color, aspects of abstraction, and non-objectivity."

Mediation Programs

"The exhibition was coordinated by a curatorial team, supported by the mediation team, and featured diverse programs: children's workshops; events designed to deepen individual aspects of the exhibition and expand on the exhibition's themes, such as a panel discussion on commissioned art, expert talks on stained glass, a guided tour with biographical aspects led by Marco Giacometti [biographer and descendant of Augusto Giacometti], and a tour given by a botanist and art historian through the room of flower paintings."

Communication Media

"An exhibition alone would have been less suitable for illustrating and communicating scientific results. Wall diagrams (space for the artist's network), film and sound sequences, as well as simulations (manipulation of the color scheme), were helpful for communicating complex content. Teaching with electronic tools has certainly aroused great interest not only among the younger generation but also attracted interest from the older generation.

A comprehensive exhibition catalogue was deliberately omitted, keeping detailed findings contained in the catalogue raisonné.

A small, informative booklet was designed for the exhibition, which contains important statements on the individual thematic focal points, where each chapter was described in a short text in simple language.

A VR solution was programmed for the sophisticated visualization of the implementation of the designs for Amtshaus I in Zurich.

The "classic" guided tour of the exhibition remains popular. They are usually fully booked. Guided tours enable a dialogue with visitors to the exhibitions. In-depth questions can be addressed to the museum staff.

We limited text in the exhibition rooms to avoid distracting from the artworks, opting for a visually cleaner approach. Additional information was provided in the booklet, allowing more space for the artworks on display."

The Role of Narration

"The work of art must take center stage. It is the goal or starting point of a narrative. The exhibition can be viewed in two directions: Start with the free work or start with the commissioned work. The work of art should be used to illustrate problems.

The sequence of thematic spaces is intended to highlight important points in the artist's work. In terms of artistic development, the works outline a narrative of the sequence of the various phases and problems of artistic creation. Documents on individual topics accompany the narrative (e.g., The Artistic Beginnings). Within the space, the artist's connections to their network are displayed. Visitors can access interactive narratives about individual historical photographs via tablets. Guided tours, a vital component of the exhibition, as an important element of the mediation, are intended to convey a narrative of the artist's life and work."

Engaging Diverse Audiences

"The biggest challenge is to determine the different expectations of the audience. How much prior knowledge can be expected? Who will visit the exhibition? There are mostly methods of retrospective judgment: observation

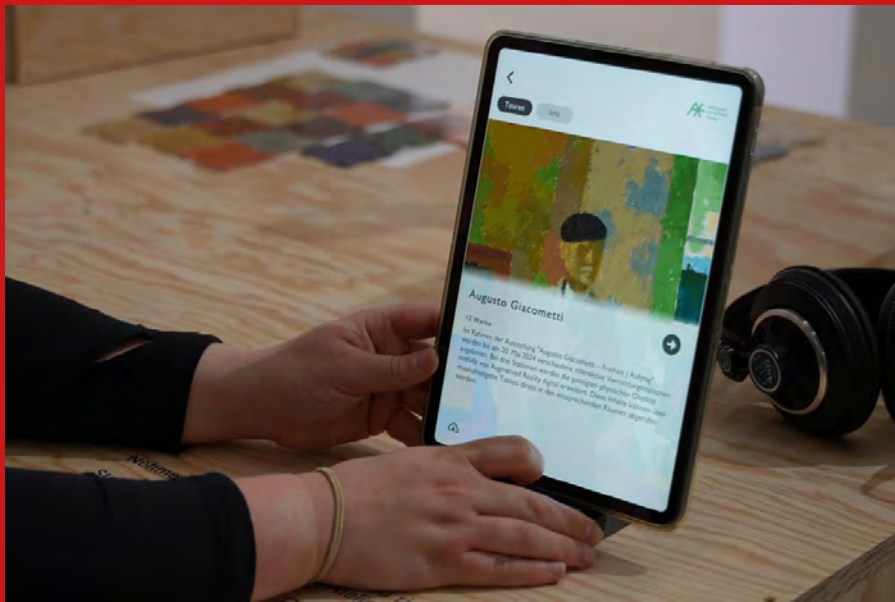
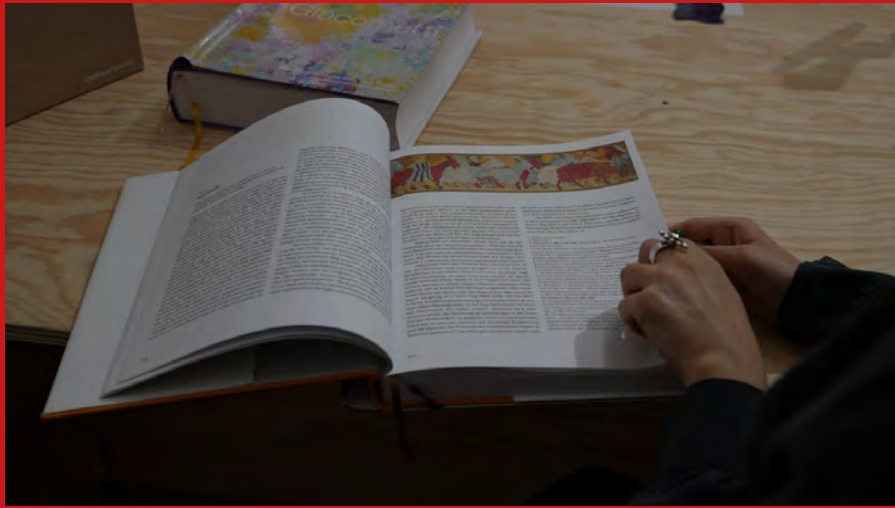


Figure 4.2–3, Exhibition on Augusto Giacometti



Figure 4.4–5, Exhibition on Augusto Giacometti

of the audience, exchanges with people giving guided tours of the exhibition, and questions that provide information about the level of knowledge and expectations.

The audience is usually divided into groups including art history specialists, those interested in history, and those seeking aesthetic pleasure.

The exhibits in the showcases primarily serve to convey in-depth knowledge. The film and audio documents are also intended to provide a low-threshold deepening of knowledge. In the booklet, there is a distinction between simple and more complex content. Otherwise, there is no comprehensive differentiation of the layers of knowledge.

In my opinion, the medium of the audio guide enables a wide range of possibilities to address the different levels of knowledge in various ways. It offers information on a general, informative level and, in addition, in-depth information through optional offers for detailed exploration.”

The Dialogue Between Visitors and Exhibitions

“The intention is to learn more about the subject of the artwork. Many people ask, “What is the context of the genesis of this work? What artworks are similar to this artwork?” Thus, this dialogue is very important for visitors, I believe, to “locate” the artwork in art history. We created an exhibition that doesn’t showcase the traditional Augusto Giacometti. We aim to provoke thoughts on the problems of liberty in art creation. We want to disrupt or slightly alter the traditional image of the artist.”

Challenges of Curators

“Time and budget are major challenges. Exhibition ideas tailored to a diverse audience are sometimes restricted by time and financial constraints. In some cases, complex contexts must be simplified for a broad audience without compromising historical accuracy.”

Using Online Resources in Museums

“It is important to curate the concept of an exhibition and its content must be communicated in a structured way via various channels.”

About Media

“The advantage of audioguides over textual information in museums is that they allow visitors to focus on the artwork rather than reading the text.

However, I believe that more options should be made available for personal mobile devices. Utilizing smartphones is ideal as it saves costs on museum-provided hardware. Using my own smartphone, which I am famil-

iar with, solves many challenges related to using new devices. Implementing such a system would entail significant time and costs but could alleviate financial pressures on museums and galleries.

Additionally, employing tools like smartphones or audioguides can enhance the depth of knowledge shared, deepening connections between artists and adapting to various levels of visitor expertise.”

Satisfaction with Level of Knowledge Communication

“My feeling is that it would be better to transform this knowledge into an interactive tool to provide information to the visitors. When visitors walk through the exhibition, they form their interpretations, but they might miss crucial insights. Prioritizing aesthetics often means sacrificing detailed information about the artist and their work.

And so it would be very helpful to have a tool that provides visitors with information about the biography of the artist, the artwork, the context, and allows them to dive deeper. It would be very important.”

4.3 INTERVIEW WITH DR. KAROLINA JEFTIC

Dr. Karolina Jeftic is currently an independent art consultant. In her career, she was the director of the UBS Art Program for almost fourteen years. From 1998 to 2004, Dr. Jeftic worked in curating, writing, research, and lecturing. Currently, work is being done by Karolina in Switzerland. The highlights of the interview will be outlined, going through the main questions that were asked. The interview was started with the question, “How would Dr. Jeftic define the attraction value of an artwork?” Here, her thoughts and reflections on the key aspects of the exhibition development process are presented.

Attraction Value of Artwork

“The attraction value of artwork encompasses both visual pleasure and the content it depicts, which can vary depending on cultural background and context.”

Comprehension of Artwork

According to the curator, there is no such experience as “full” comprehension. She says, “There are layers or levels of comprehending or enjoying the artwork. Yes, you can enjoy the aesthetic pleasure of it, but if you know more about it, you can learn from the artist and the artwork, if there is a message. Some artworks are about a message, and some are about experiencing. It is all different levels of comprehension.”

Meaning of Artwork

The meaning of an artwork emerges from a dialogue between the viewer and the artwork itself, influenced by the viewer’s perspective, cultural context, and more. “This dialogue creates meaning, and the meaning is very dependent on what a visitor brings. But it is also nice how people from different fields have a deep understanding of the artwork. It is very idiosyncratic; it depends on the person. However, the main focus is the dialogue between the viewer and the artwork.” When asked if she finds it appropriate to interfere in this dialogue, Dr. Jeftic pointed out, “As a curator, you interfere anyway.”

Curatorial Vision

“Curating is about creating a visual argument. You have a particular vision, and you are trying to show it by juxtaposing the artworks, creating visual arguments, and stimulating viewers to ask questions and engage critically.”

Visitor Engagement and Experience

When asked about “defining” visitors’ experience, Dr. Jeftic noted



Figure 4.6, Karolina Jeftic

that she would rather not do that “as it could be a bit arrogant. I want to give a visitor access to the artwork.” She positions the curator’s work as a facilitator of the dialogue between visitors and artworks, allowing each individual to interpret and engage with the art in their own way. Tailoring information and interpretation to the needs of different visitor groups, from novices to experts, involves presenting complex concepts in a comprehensible manner and offering additional details based on the visitor’s level of knowledge. She explains, “With knowledgeable visitors, I would add more details and explain more nuances. It is about sensibility.” Contrasting to my assumptions, she shared that people with background knowledge would ask even more questions. “The more you know, the more you start asking: What is wrong? What is lacking? A good exhibition opens a lot of questions.”

Interaction with Curatorial Knowledge

Dr. Jetic shared that it takes a lot of knowledge to create an exhibition, and the main medium to share it—catalogs—is not the most effective and sustainable way of communicating their knowledge to audiences. “The knowledge of the curators is often behind the wall, and it would be nice to give people access to this knowledge. The catalogs stay unread, and the knowledge is rarely discovered by visitors. It takes a lot of knowledge to create an exhibition, and it would make the whole process more sustainable.” She shared that she would make curatorial research and vision more accessible so this knowledge is available while looking at the artwork in a more interactive way. “No one can give you years of studying, but it could be an offer. People who want to dive deep or stay superficial can choose how deep they want to go.”

Democratic Museum Experience

“Despite the efforts of museums to be more democratic, they do remain quite elitist.” We discussed how making curated knowledge more accessible to visitors, particularly through interactive platforms integrated into the museum experience, can democratize access to curatorial knowledge and enhance the educational value of museums.

Increasing Attraction Value

Discussing strategies to increase the attraction value of an artwork, Dr. Jetic mentioned that, unfortunately, studies show that a visitor spends an incredibly short time with an artwork—it is usually not more than 3-4 seconds. She continued, “It would have a great impact if visitors spent more time with the artwork. However, I believe many exhibitions nowadays are overloaded. I would reduce the number of artworks and emphasize the interaction between the viewer and the artwork. Otherwise, it is going more toward consumption.”

She offered a more selective approach: “You may not need to go deeper with every piece, but if you go deeper with at least some pieces, it would change the overall experience. Maybe we need artificial intelligence to experience art in a new way because we are looking at art in the same way as our ancestors did 200 years ago. But now we live in a completely different world.”

These insights contribute to a deeper understanding of the dynamics between artwork, viewer, and curator within the museum context, highlighting the importance of accessibility, dialogue, and engagement in creating meaningful museum experiences.

4.4 INTERVIEW WITH NADINE BAJEK

Nadine Bajek is an esteemed Art Curator who curates outside traditional museum settings, skillfully merges classic techniques with innovative approaches. Nadine studied in Zurich, Switzerland and currently practice in Germany. Here, her thoughts and reflections on the key aspects of the exhibition development process are presented.

The interview started with discussing Nadine's definition of a successful exhibition and her personal approach to achieving it.

Artwork Selection

When asked about the artwork selection, she shared, "For me, a curator is, first and foremost, a skilled storyteller, and that is my primary focus throughout the curatorial process."

Creating Theme

Nadine shared that during her research on artists, she visits their studios, collects extensive information, engages in discussions, and interviews about their work. She accumulates a lot of material, including catalogs and interviews with the artists. This practice inspires her, enabling her to create a moodboard and find a "red thread" of narrative in the artist's practice. Nadine emphasized that comprehensive research is one of the primary keys to a successful exhibition.

Structure of the Exhibition

"It depends on the architecture, sometimes it does not make sense to have a structure, and sometimes it can be more about flowing freely and absorbing information at your own pace. But sometimes when you have a linear concept you want to show the evolution of the artist. There are two contrasting strategies: predefined path, or free-flowing concept."

Technologies

Discussing the emerging technologies within the museum field, Nadine expressed her wish for applications that could help museums to create the content, but under precise curation of the information on these platforms.

Audience Segmentation

When asked if different visitor groups are considered during exhibition design, the curator explained that they usually define two primary types of visitors: the "artsy type" and the "not artsy type," the latter being the majority.



Figure 4.7, Nadine Bajek

Media and Knowledge Transfer

To give both groups what they need from the exhibition she primarily works with text, in written or verbal form. Nadine points out that the most engaging moment of an exhibition often occurs at the opening. To leverage this peak interest, they organize the opening with layered information presented through various “event” formats. One key feature is the *inauguration speech*, delivered by an art historian, which dives into the deep end of the art’s context yet remains accessible due to its simplicity. This speech is designed to be understandable to all attendees, regardless of their familiarity with art.

Nadine was asked to elaborate on the structure of inauguration speeches at exhibitions. The structure was outlined by her as multi-layered events that begin with a ceremonial opening, acknowledging the artist and contributors. The speech then transitions into providing essential information about the artwork—such as the subject, style, and historical context—catering especially to those less familiar with art history.

This foundational data sets the stage for the more engaging part of the speech, where art historian delves into storytelling. This involves sharing unique insights into the artist’s creative process, the materials and techniques used, and other personal aspects of the artwork that go beyond basic biographical details, offering a deeper and more intimate view of the artist’s world.

Nadine mentioned, that novice visitors usually are more interested in the speech because they access new knowledge on the artist and it helps them to relate to the works. She explains that the complexity of the content has to be build it up gradually, like a musical piece: “Like an Art Historian who captivates the audience, because the audience gets the feeling that they know the artist now, they build an emotional connection, their interest rises and they want to learn more.” She adds, “Novice visitors are usually more excited about the speech, because we can amaze them, and they can learn something new and see something with new eyes. It is harder to impress them with more knowledgeable visitors. But those who did not have any positive expectations usually listened more and got more excited in the end.”

Following the speech, the opening day features smaller art dialogues. These sessions, which accommodate 5-10 people, include artists, curators, and moderators, fostering a more intimate and interactive discussion environment: “Everyone is allowed to ask questions and of course, it requires some background knowledge”.

According to Nadine, invitation files are commonly read by visitors. However, more detailed resources like catalogs or books tend to attract only the most interested individuals, who are willing to invest further in understanding the artwork.

Engaging Visitors in Regular Settings

“If you have a big visitor volume you do not have any direct interaction and you do not have much engagement,” Nadine describes the issue of low visitor engagement during regular visiting hours. When asked how museums gather data on visitor preferences, the curator shared that “...it is usually about demographics. Rarely do they ask about preferences.”

“Artist Safari”

Nadine was asked, “Where do you draw the line between allowing visitors to feel the art and providing them with context?” A common frustration among curators was shared by her: the concept of an “artist safari.” This occurs when museum visitors focus more on reading labels than on engaging with the actual artworks. Exhibits are often rushed through by them, identifying and photographing familiar names without truly observing the art itself, like the Mona Lisa. Overwhelmed by technological and visual stimuli, solace is found by these visitors only when a familiar tag is seen, which suddenly makes the artwork comprehensible and appealing, creating a sense of connection.

Nadine mentioned a fascinating institution in Italy, the “Fondazione Sandretto Re Rebaudengo,” which is unique because visitors can only explore the museum with a guide. Every ticket includes a guided tour, offering a personalized experience without traditional tags. The guides provide all the necessary information and tailor the tour to individual interests, allowing for a more interactive experience where visitors can ask personal questions and shape their own tour.

On Curation

To Nadine, curation transcends mere arrangement—“For me, curation is an art in itself. Sometimes it is a feeling or inspiration that I receive and then it is about creating a storyline. There are hard factors and soft textures about it. I work a lot on the inspirational side.”

Engagement with artwork, the role of interactivity

To Nadine, engagement happens on different personal levels. It’s not solely about urging visitors to actively “do something” or to constantly interact by recreating artworks. True engagement is as much about what people feel and experience. Often, a well-crafted audio guide can enhance this experience more deeply than any interactive activity. This depth of engagement taps into both action and emotional response. “It is more the “feeling” is a layer of engagement that I am missing”.

Vision of Visitor Experience

“I have an image for that: it should be akin to balancing a feather and a rock. I envision hearts lightened like a feather, while minds are weighed down like a rock, enriched and enlightened. This dual experience—a blend of divine enlightenment and substantial knowledge—is essential.”

Moreover, frequent exposure to art enhances creativity, supported by the mirror-neuron theory which suggests that observing artistry can empower one to create, fostering a direct, untaught artistic ability. We concluded with a beautiful vision, that museums can be places that teach you to look deeper, to stop and dive into something, to be there.

4.5 INTERVIEW WITH PROF. MARK OLSEN

Mark Olsen is an Associate Professor in the Department of Art, Art History, and Visual Studies at Duke University, North Carolina, the United States. Professor Olsen is known for his exploration of how technologies impact the understanding of contemporary art collections in museums. During the pandemic, he participated in several virtual exhibitions that allowed visitors to experience museums from home. One of his latest projects involved an AI-curated exhibition that utilized a custom ChatGPT interface to showcase the museum's permanent collection, which gained significant recognition in the art community. In the interview with Professor Olsen, a deeper understanding of the potential role of technology, particularly AI, in museum operations was aimed to be gained. Firstly, Professor Olsen was asked to tell about his project, where AI played the role of curator. Here presented his thoughts and reflections on the key aspects of integration of technologies in curatorial process.

Role of AI in the Project

“We fully integrated AI into the curatorial process. The AI selected objects, and provided reasons for their selection, some of which we included in the exhibition itself as a kind of curatorial frame. It also crafted an overarching description available online and suggested a layout and sequence for the display. Interestingly, the AI made a few errors, such as imagining additional space that does not exist. Despite this, we followed its recommendations for object placement as closely as possible.”

AI Assisting Curators

“AI can indeed assist in various stages of the curatorial process. For instance, one benefit we've observed is its ability to consider all items in a collection simultaneously. This capability led the AI to suggest works that had been overlooked for years or had never been exhibited, bringing unrecognized objects to light. This is particularly useful as humans often gravitate towards familiar objects.

As AI technologies evolve, their capacity to understand scholarly content improves, making them invaluable for translating academic jargon into more accessible language. This capability can significantly streamline the process, helping to bridge the gap between complex curatorial research and public engagement.

Regarding the interface, AI's ability to distill complex information into concise descriptions seems promising. We've used it to convert elaborate texts into simple paragraphs or brief descriptions. However, a challenge with AI is that it tends to produce descriptions that are overly general and non-con-



Figure 4.8, Mark Olsen

troversial, almost like a travelogue. This limitation means that while it can simplify complex topics, the nuances might be lost.”

Role of AI

“Working with AI is not a one-off experience; it’s an ongoing dialogue. This interaction helps us refine its outputs and recognize areas where it may gloss over critical details or simplify too much. My colleagues and I view learning to work with AI as an essential skill, enhancing our ability to perform curatorial duties efficiently. We certainly don’t see AI replacing curators, but rather serving as a tool that aids them in their work.”

Standard Tools of Curators

“Indeed, understanding the tools and systems behind the scenes is crucial for effective museum management and curatorial practice. Our museum employs two primary systems. The first is a common system known as TMS, which is widely used by numerous museums across the United States. Owned by Gallery Systems, TMS allows our staff to track and manage objects in the collection. It can store a vast array of metadata, incorporating past exhibition details and descriptions into a comprehensive dataset. This historical and descriptive data is crucial for informing AI platforms like GPT about our collection’s scope and context.

We also maintain a blend of digital and analog files that encompass various artists in our collection and critical analyses of the artworks. When preparing for an exhibition, our staff engages deeply with these resources to update and refine information based on new scholarship or potential connections with other works globally.

The social network of curators plays a vital role. Curators frequently communicate across different institutions, sharing insights and discussing exciting developments. This collaborative dynamic is fundamental, underscoring the importance of human interaction in the curatorial process. While systems like TMS are integral tools, they complement rather than replace the critical and creative contributions of curators.”

Preserving Curatorial Themes.

“Larger institutions like a National Museum typically have the capacity to support separate specialized departments. This specialization allows for:

—Curatorial Staff

“This team is primarily responsible for the selection of artworks, the curation of exhibitions, and the definition of themes. Their academic expertise

drives these decisions, which are often aligned with university scholarship to enhance educational applications. For instance, they might link an exhibition theme like “chocolate” to our Peruvian collection to intersect with specific academic courses.”

—Regular Meetings and Brainstorming

“The curatorial staff regularly meets with the communications and education departments. These sessions are crucial for brainstorming how to best represent an exhibition’s themes through images, digital media, and narrative techniques. They also discuss what to embrace or avoid in order to align with the broader aesthetic and identity of the university museum.”

—Collaboration with Education and Communications Departments

“The education department, with its strong understanding of the audience, works closely with curators to translate the exhibition themes into engaging stories and activities that resonate with diverse visitors. This includes developing gallery talks, educational programs, and community activities that are related to the exhibition themes. For example, family days might feature music and crafts linked to the current exhibitions.”

—Graphic and Design Consideration

The communications and design teams ensure that the exhibition’s presentation adheres to the museum’s visual identity, including color schemes and design norms. This visual framing helps maintain consistency and enhances the exhibition’s appeal.”

—Public Engagement and Accessibility

“The education team plays a critical role in making the curatorial vision accessible and engaging for a broad audience. They consider various visitor backgrounds, aiming to make the content understandable and appealing to both educated and underrepresented groups. This effort is crucial in ensuring that the museum serves as an inclusive space for all visitors.”

—Ongoing Translation and Adaptation

“The process of translating curatorial content for public consumption is dynamic and involves continuous adaptation based on audience feedback and interaction. It is never a neutral act, as it must consider who the audience is and what their specific needs and contexts are.

In summary, the preservation of researched themes and narratives in exhibitions is a collaborative effort that involves curatorial expertise, educa-

tional insight, and strategic communication. This ensures that the exhibitions not only reflect scholarly research but are also accessible and engaging to the public.”

Effectiveness of Knowledge Transfer in Museums

“I think museums largely do a reasonable job of that translation, but that is a part of where I see technology as really having a lot of possibility. I think there is a significant potential for more advanced tools. I work quite a bit with interactivity, exploring how innovative interfaces can deepen visitors’ connections and understanding of exhibits.

There’s also a need for educating museum staff about the potential of new tools and technologies. At the end of April, I’m conducting an afternoon workshop with my students and museum staff to demonstrate various interactive interfaces. This will help the staff get acquainted with technologies they might not have experienced before, like augmented reality headsets or sensing devices. This workshop will also provide insights into what works and what doesn’t with different visitor groups, such as high school students or very young children.

I am committed to this work because I believe it can have a significant impact and enhance how museums engage with their audiences.”

Fear Regarding AI

“There’s some resistance to adopting AI within museums, especially amid financial constraints and concerns that it might be seen as a replacement for traditional methods. Our museum has hosted many significant exhibits over the years, but it was our AI exhibit that drew notable attention and coverage from major media like The New York Times, which was somewhat controversial.”

Implementing AI into Visitor Interaction

“We considered making our project’s interface more public, allowing museum visitors or website users to curate exhibits around themes like memory. However, due to limited time and resources, we haven’t implemented this. There is significant potential here—there is no reason why curators and the education team should be the only ones using this as an assistant.

I personally have not created such an exhibit. But you’re right about the importance of hands-on and minds-on engagement; they are inseparable. Personifying the AI made the project more enjoyable and forgiving of the AI’s errors. It’s like a five-year-old child who is still learning.”

Challenge of Audience Segmentation

“I believe museum staff may have concerns about flexibility. From my previous work, I know there’s a balance between maintaining scholarly integrity and allowing creative expression. For example, an application that involved light painting on medieval statuary initially required historically accurate colors to avoid characters looking like Santa Claus or a Smurf. However, staff noticed that children engaged more when the rules were relaxed.

Imagine someone wanting to create an exhibit inspired by Taylor Swift’s music eras or a recent Beyoncé song. It’s a fascinating idea. Personally, I favor openness. While some museum staff might be anxious about this level of freedom, adapting the approach based on their feedback could be a valuable aspect of your project. I’d advocate for letting all ideas flow to maximize engagement.”

Balance Between Background & Pure Experience

“Those who are not deeply engaged with the art community may find it insufficient for understanding or even feeling connected to the artwork. It is a significant curatorial and public outreach challenge to bridge the gap between providing no context, which can lead to disinterest or anxiety, and fostering an appreciation that resonates. Most people can experience art on some level, but understanding why they should care is crucial. Museums can play a pivotal role here, encouraging dialogue about why visitors might not engage with certain works. Such discussions can provide valuable insights.

Addressing this challenge in knowledge transfer is crucial because many people still question the relevance and impact of art. For those without a framework, it’s hard to provide answers.”

Museum Assumptions

“While there is often an assumption of baseline knowledge, starting from that assumption excludes many. It’s important to validate personal connections, even if they seem unrelated to the art’s historical or aesthetic context. Embracing this broader approach could help overcome the bias toward baseline literacy and make art more accessible to all.”

4.6 INTERVIEW WITH BARBARA MAGLIOCCO

Barbara Magliocco is an Art Curator and Manager of Cultural Assets. Barbara graduated in Visual Arts, history of art, and specialized in art languages. Experience has been gained by her in museum art education, curatorship, management of cultural organization and events, and research related to contemporary art and art history. Currently, the exhibition located in Milan, Italy, is being curated by Barbara, and her process was shared. Firstly, Barbara was asked about the visitors' background knowledge. Here, Barbara's thoughts on the key interview questions are presented.

Audience Segmentation

"The art for everyone. People should not feel shy or not being able to go to the gallery because they do not have background knowledge."

On Communicating Current Exhibition

Barbara started, "At this moment we have an emerging artist from Milan. I think he is the only artist that I know in my practice who is present in all the exhibitions of his work. He loves to explain to the public, act as a guide, and be present. This is so rare to find because most artists believe that their work ends when the artwork is finished, and the art of communicating is only for the gallery, the curator, or the people who work inside the museums, not for their art. But I don't believe in this. I believe that for art the number one thing is explaining and communicating their work to people.

Some people may not engage with the textual information provided in the exhibition. I like the approach of infusing meaning and teaching into the experience, emphasizing how art can truly embody both education and experience."

Dialogues with Visitors

Next, Barbara was asked how she communicates her vision to the visitors. "While the works or the concept are being explained to the people, my communication style is changed along the way. This is not thought about in advance, because after researching for half a year, everything is already known. But during the dialogue, adaptation to the visitors occurs."

Importance of Guidance

Barbara shared, that: "On the site that I curate now, I see that providing context is crucial for the visitors, especially since the work is deeply abstract. When I explain about the process, the art, and the author, people often express gratitude, saying it changes their perception of the work and the exhibition. I always emphasize that understanding is like a game, where each



Figure 4.9, Barbara Magliocco

person finds their own meaning. I believe art is universal and accessible to all ages and backgrounds. It's our innate expression."

Visitors' Perspective

"I think many people do not like the imposition of the curator's opinion in the museum. As a teenager, art was a big part of my life, but I did not like the idea that the curator would "stop" my experience, that my own feelings would be overshadowed, because I enjoy being by myself, next to the artwork. I like to feel and immerse myself in that moment."

Process of Preparing Exhibition

"When I create an exhibition it takes around six months. During this time, I am immersed in the same work and concepts every day. By the time the opening day arrives, I have been working on it for six months, and it is always on my mind. But hosting an exhibition requires a lot of practice.

I start with getting to know the artist. I particularly enjoy this part. It's always about movement, the artist being a window to the world. The window an artist opens to me, or to the public, is crucial. Without understanding the artist's intentions or thoughts, it is impossible to create a guide. Knowing about the artist and their life, their way of living in the world, and the projects they're involved in, is vital.

This understanding is essential because when my task transitions to the public, it is the artist's vision that matters. It is not just about my personal taste; it is about what is inherent in the art. The space interacts with the art, the artist interacts with the space, and these three elements—the public, the artist, and the space—form an essential dialogue in an exhibition."

Curatorial Brainstorming

"My process begins with my repertoire, essentially my collection of notes and ideas stored in various books and documents. Because when I had the idea, the moment I was to write. I rely on the internet for research, particularly platforms like Instagram, where I discover galleries and artists daily. Additionally, I use a tool that allow me to visualize artworks in real-life settings. This is particularly useful for me as a curator because I can assess how a piece will fit within a space without needing the actual artwork present. Yes, it's mainly for scenography purposes, as curators often use similar tools. As for writing my texts, I rely on Google and LinkedIn for further research and inspiration."

Creating Narratives

"Interpreting and curating exhibitions is also an art form, whether

it is through a philosophical lens or another perspective. I think my approach is always philosophical, as it aligns with my background in visual art and philosophy. For instance, in this exhibition themed "Identity and Difference," inspired by German philosopher Heidegger's exploration of experiencing phenomena, I delve into conceptual narratives that reflect philosophical perspectives on language and truth."

Artistic and Curatorial Interpretation

When asked about the source of narratives in curated exhibition, the curator shared, "It is both. The artists bring their own context into the conversation, but my inclination towards a philosophical approach is deeply ingrained. For example, in this special exhibition, the artist's concept revolves around the conscious repetition of gestures, drawn from their life experiences."

Goal Experience

"The concept and the artist go hand in hand, right? Then there is the audience, the third point, who interprets this fusion and decides if it makes sense to them or not. I cannot control the reactions; some may find the texts on the wall nonsense, while others might think they are wonderful."

She continued, "My aim is not to dictate concepts but to provoke questions and reflections. Leaving visitors with questions is more important to me than providing answers because art does not always offer clear answers. What matters to me is seeing people engaged, but always in conjunction with the art itself, as the pieces are crucial."

Elitist Art

"Sometimes, the art world can feel elitist, with concepts that may seem distant from the viewer's understanding. I experienced a different cultural approach to exhibitions in Brazil, where accessibility and inclusivity were emphasized. Here, in colder or more elitist cultural contexts, there's an opportunity for change. It's our responsibility to make art and its interpreta-

5.1 NARRATION

Museum education is essentially a narrative journey; it involves more than simply visitors learning from museums; it also involves people utilising museums in ways that have personal meaning for them (Roberts, 1997).

This shift raises the possibility that outdated museological models, which prioritised artefacts, should be updated to account for the more dynamic interactions that occur between visitors and the pieces themselves.

Additionally, because objects have expanded the range of meanings they can convey, once highly prized attributes like authenticity, rarity, or provenance have made way for experiential attributes like realism, provocation, or spectacle.

As Lisa C. Roberts (1997) highlighted in her book *From knowledge to narrative: Educators and the Changing Museum. Smithsonian Institution*, museums have undergone a wide shift in the ways they define knowledge. The idea that knowledge is socially constructed and formed by the interests and values of the knower has challenged traditional notions of knowledge as being absolute and objective. Museums are even more about the creation of narratives by anybody with a connection to the collections than they are about disseminating information.

With such a shift, education involves not just interpreting objects but deciphering interpretations, preparing for and navigating the narratives that visitors and museums create together. A shift from knowledge to knowledges, from science to narrative.

According to L.C. Roberts, education is fundamentally about creating meaning through the interaction of the stories museums present and the personal stories visitors bring. As so, it is evolving from being object-focused to experience-focused (Roberts, 1997).

As an educator, Jerome Bruner shifts the stress from the product-based to the context-based approach to understanding human experiences. From the single, curator-scientist-driven mode of knowing to multiple, visitor-driven versions. The first approach, described as “paradigm” by Bruner, focuses on logical and scientific reasoning to create consistent and verifiable descriptions of the world. The second approach, “narrative,” centers on storytelling to convey “meaning” rather than factual truth, using metaphors and connections to explain concepts.

Language concerning “knowledge” has given way to language about “meaning” as a result of the acceptance of many methods of knowing and the recognition of the significance of context in forming understanding. Stated differently, our understanding of an item is shaped more by how it is

perceived and its surroundings than by its inherent qualities. What we know, in other words, is based less on the nature of the object than on the manner and the context in which it is experienced. These factors include the context and nature of visitors' responses.

5.2 VISION

Ultimately, if knowledge is now generated rather than transmitted, why not just let visitors be and interact with collections as they will?

Visitors are "empowered" to know and communicate in ways that are important to them by defining knowledge in connection to the greater social and historical context. They now have a shared sense of accountability and authority over how they define their interactions with the collections with museum staff.

While the visitor's narrative is acknowledged, it is still seen as something personal and incidental, and as such, outside the purview of museum attention and practice. Generally speaking, however, attention to visitors' values, goals, and current knowledge has been largely motivated by interest in improving the transmission of the museum narrative. The museum becomes a place to be avoided for visitors who are either unable to create their own story because they are uncomfortable in the surroundings or who do not comprehend the narrative presented by the museum.

5.3 PRACTICAL IMPLEMENTATION

The narrative construction process can be enhanced by interpretation. Maybe the best way of an audience to receive a text is by composing it?

There are certain linguistic techniques in literary texts that can enhance their interpretability. Techniques like *presupposition*, which implies rather than explicitly states information, and *subjectification*, which shows reality through a character's perspective, add layers of possibility to the text. This "*subjunctivizing*" invites readers to actively interpret and engage with the narrative. Surprising elements further draw readers in by disrupting their expectations and prompting deeper involvement. Bruner suggests that the essence of great storytelling is not just to narrate human conflicts but to present them in a way that encourages readers to use their imagination and emotionally connect with the story, allowing them to "rewrite" the narrative in their minds (Roberts, 1997).

Nevertheless, museums continue to produce narratives that seems to be the last word on a certain topic. If visitors concentrate on the arguments or

the thinking process behind them, they may enter into dialogue and actively consider their own responses (Roberts, 1997).

What happens to the museum narrative when educational objectives are developed to support and accommodate visitors' narratives? They may be seen as providing a version rather than the version.

Firstly, museums could present information in a way that acknowledges it as just one interpretation among many, allowing visitors to consider alternative perspectives, then it does not exclude the possibility of alternative versions held by visitors. This approach creates a shared authority where both visitors and museums can contribute to the creation of meanings.

Second, if a message is presented in a way that allows for an argument, complexity, or multiple perspectives, then it may begin to engage visitors in the process of evaluating it against their own perspectives.

Essentially, museums should continue to convey messages in ways that are respectful of the narratives constructed by visitors and that are conscious of and explicit about the constructive process engaged by museums themselves.



Figure 6.1, *The Fifer* artwork

A story of a visitor exploring Musée d’Orsay, Paris.

“Shifting from one museum room to another, or from one collection to another, the notion of “theme” serves as a mental metaphor for the arc of these places. As a visitor unconsciously assumed that there is a red thread serving as the backbone of the curatorial decision behind it. However, it is not always clear what the theme is. Where does it start? And how does it unite the pieces within one collection or exhibit?”

Exploring the Musée d’Orsay, Paris, the visitor was drawn towards the “*The Fifer*” artwork by French painter Édouard Manet. The painting was accompanied by a label and a short text (*Fig.*).

The label beside the painting—a number of matching audio file—promised an entry into the context of the artwork. The one-two minute content of the audio file revealed some aspects of personal life that led Manet to the painting and the way it was perceived by then public.

The audio guide, for all its factual richness, was lacking many answers. What of Manet himself? What of his inspiration in these times?

The audioguide presented a short beautiful and multifaceted text that described a few key aspects related to the artwork . But out of the context of his other works, and the author, this beautiful piece of information unfortunately was not fulfilling the need and interest of the moment. The issue was that lack of visitor’s predisposition on Manet. Classically, being familiar with some of his most famous pieces, the visitor did possess much knowledge of his personal life and the context of this artwork. Many questions arose related to Manet, “*The Fifer*,” and to the details mentioned in the audio file.

Where to get those answers? The museum, with its curated narratives and scholarly texts, could offer only so much. The true connection, the leap from understanding to appreciation, remained too elusive. So, many of the questions of the day remained beyond reach.

The visitor had aftertaste that a message was ripped away from its place in a larger narrative.

In the overall experience, the first or second piece presented in the room might not be of interest, but starting with the third one and being able to still follow *the bigger narrative* would be desired.

6.1 THE FLOW

In *Museum Experience Design: Crowds, Ecosystems, and Novel Technologies* (1992), a passage highlights how participants who received minimal guidance were more deeply engaged with less obvious aspects of the

exhibitions. They devoted significant attention to understanding more abstract or conceptual designs, often by reading the stories behind the objects.

The authors emphasize that effective museum experience design should harness the principles of intrinsic motivation and flow experience developed by Mihaly Csikszentmihalyi. Moreover, facilitation should be used to occasionally “break the flow” and—slow down the pace and allow for serenity and social interactions to occur; a practice that was found to be beneficial during a case study in a museum (Vermeeren, Calvi, & Sabiescu, 2018).

The flow experience is described by Mihaly Csikszentmihalyi in his seminal work “Flow: The Psychology of Optimal Experience” (1990) and refers to a state of strong focus, deep engagement, and effortless immersion in an activity. When a person experiences flow, they become fully absorbed in what they are doing, losing track of time and feeling a sense of complete involvement and enjoyment.

6.2 APPRECIATION OF ART THROUGH MINDFUL LOOKING

With the speeding up of life and communication, there is a greater proliferation of images that affect how we generally absorb them. There’s some fascinating research on how long people typically spend looking at artworks in museums. One study found that the average time spent looking at a painting was about 27.2 seconds, with a median time of 17 seconds. The longest observed time someone spent looking at a single piece was 3 minutes and 48 seconds, during which they were observing Rembrandt’s **Aristotle with a Bust of Homer** (Kaplan, 2017). This suggests that even though people often report finding museum visits deeply moving, they tend to look at individual artworks for relatively brief periods. Can a visitor truly immerse themselves only within 2-3 seconds, which is the average time the majority of museum visitors spend with a single artwork?

These insights suggest that spending more time with less work might lead to a richer, more memorable experience rather than “rushing” through the exhibit. The same challenge was highlighted in the interview with Nadine Bajek where she called such a process “a museum safari” (see page).

These findings led me to question: How do we sharpen our perception of the artwork? What is the role of the viewer and the subject in the perception of art?

In my opinion, the answer lies in a dialogue and the asking of questions—through people sharing insights and their perspectives.

“How we are looking at things?”- is not such a trivial question, as

“looking” and “mindful looking”(or active) are distinct actions. Many of occasional visitors without much experience in comprehending art would be sort of passive-looking, just wandering around enough and having a glance, but not giving pieces the attention they deserve.

Mindful Looking involves actively directing one’s attention to an artwork, taking an object as a focus of our full attention, allowing for a deeper connection and appreciation. Reflecting on this, a podcast episode titled “Bringing together Art and Mindfulness in Museums” featuring Karly Allen, an expert, specialist in mindful looking, shows the potential of mindfulness practices to enrich the museum experience. Allen’s insights raise a critical question: How can we cultivate greater awareness and appreciation of art through mindful looking? (A. Boyko & J. Harrod (Hosts), Allen, K. (Guest), 2019)

This very informative and inspiring podcast made me think about the question of awareness of our fleeting focus when we are in art museums.

The practice of “mindful looking” can be led by museum professionals, serving as a grounding exercise for visitors as they approach artworks. Karly Allen described this process, stating, “We turn our attention to the artwork itself and lead people through a series of guidance around the form and colour and experience of the painting or the sculpture... Let’s say, the painting in front of us, what we often find is that as we let in the light and we let in the painting, we allow the painting to release its colours and its shapes to us. We can get a greater sense that we are almost seeing it for the first time, to seeing it freshly” (Allen, 2019, as cited in Boyko & Harrod).

Another inspiring outlook on Kelly’s nuanced approach: “...We might then guide people through their looking, people feedback to us is that there is something wonderfully relaxing and reassuring about being guided through one’s looking”, “...being part of a group and being led and guided in your looking can be a very seductive and enjoyable thing. We might start with a very particular part of the painting, we might tentatively move around the edges of the picture, we might look at that edge, that spot where the painting meets the frame, and trace that line around the four sides of the painting, if it has four sides. From there, we might bring our attention to light and dark, perhaps just for ourselves finding where for us, the brightest part of the painting appears to be, and really tuning into the light and dark, perhaps finding one colour resonates with us and spending time counting the colours or moving from one colour to the next. It’s guiding the looking through these different layers that allows us to separate out the experience of looking.” (A. Boyko & J. Harrod (Hosts), Allen, K. (Guest), 2019)

By Allen, by the end of her sessions people feedback that their atti-

tude, or their attachment to the museum itself has changed. The guided practice not only enhances visitors' engagement with art but also cultivates a sense of confidence and belonging within the museum environment. By providing a nurturing environment for mindful looking, museums can transform into contemplative spaces that promote introspection and connection.

6.3 SLOW ART DAY

People are encouraged to slow down and spend more time with specific works of art by a movement called Slow Art Day. The programme proposes that in order to promote a better understanding and connection, one should spend 10 minutes examining a single piece of art. This stands in stark contrast to the overwhelming feeling that many people get while visiting museums, emphasizing the level of participation rather than the amount of artworks shown. (Cascone, 2019).

It originated from the belief that many people rush through art museums, spending only a few seconds on each artwork. Participants then gather, often in a group setting, to share their observations and thoughts, creating a deeper appreciation for art through collective dialogue. The annual event, which usually takes place in April, involves museums and galleries worldwide, with the goal of helping participants discover the joy and inspiration that comes from taking their time to experience art more fully.

6.4 POTENTIAL OF PRACTICAL IMPLEMENTATION

The following quote from Allen made me wonder if it is possible to achieve her vision with state-of-the-art technologies: "...I suppose if I had limitless funds and possibilities, I would make it possible for every visitor or participant to have that experience, like one room, one painting, just for themselves, for an amount of time." (A. Boyko & J. Harrod (Hosts), Allen, K. (Guest), 2019)

Is it possible to create a "feeling of one room, one painting"? This is one of the goals I am trying to achieve in the practical part. In my opinion, incorporating theories of flow, mindful looking, and slow art into museum experience design could help visitors avoid the feeling that all the paintings rush toward them at once. Such guidance can help some visitors avoid feeling intimidated by museums' opulence or by the challenge of certain art forms.

Dynamic interactive tools can guide visitors through the principles of mindful looking and slow art. These digital guides can suggest tips for viewers to perform while observing art pieces, making them spend more time

with each work and providing contextual information that promotes understanding.

I believe that such guidance can give a voice to museum professionals, allowing them to share their expertise and knowledge and involve them in the visitor experience. Curators and museum professionals could use such a tool, accessible to visitors who cannot participate in a guided group, for example, to transform their experiences from passive observation to active engagement.

If museum professionals had a technology that helps in understanding visitors' intrinsic motivation, they would be able to create experiences based on visitors' natural curiosity and interest in art. By aligning museum offerings with visitors' personal interests and motivations, designers can create a relevant experience for each individual, thereby increasing visitor satisfaction and engagement.

Additionally, it could provide visitors with a tool and the confidence to feel they can come back. And they do come back, as this experience is now would be accessible to them. They could facilitate this for themselves and start to see the museum space as a nourishing, contemplative environment. For many people, it is about returning to that quality of attention and practice of contemplation at the heart of the museum, where it may have been lacking for some visitors.

7.1 MICHEL FOUCAULT'S, "LAS MENINAS" AND ARTIFICIAL INTELLIGENCE

Michel Foucault's analysis of Diego Velázquez's "Las Meninas" in his seminal work "The Order of Things" explores representation, observation, and the relationships between the observer, the observed, and the space in between. Foucault dissects the painting to reveal the interplay of gazes, the ambiguity of subject and object, and the shifting perspectives that challenge the viewer's understanding of reality and representation. "Las Meninas" by Foucault marks the merge of the Renaissance understanding of things, which mostly focuses on the representation of things, and the contemporary one that opens the door of men.

According to Foucault, Velázquez makes the viewer to examine these systems and their part in them as viewers, instead of obscuring the mechanisms of visual representation as the paradigm of single-point perspective had.

In the video "Writing Architecture" (House of Coded Objects, 2023), Miro Roman offers an interesting perspective on how Michel Foucault's analysis of Diego Velázquez's "Las Meninas" provides a unique approach to interpretation.

Generally, Roman proposes that each period possesses its own epistemic view—a specific way of thinking that *synchronizes all knowledge of that time*. For example, the Renaissance episteme perceives the world through the resemblance of things, placing them in relation and proportion. The Classical or Baroque episteme views the world through the representation of things. A new, contemporary episteme marks the birth of man.

Miro notes that Foucault introduced a new way of perceiving artwork, where the viewer outside the painting feels like a part of it. As the story is not inherited from the painting but is an external narrative that was put on top, Roman suggests that the painting evolves and fosters a synthetic relationship between its elements. In the video, Roman says, "This is how masterpieces grow. The painting has an object that has the codes for future things." (House of Coded Objects, 2023)

Just as Roman suggests, "Las Meninas" gains more depth from these additional stories. I believe that we can use state-of-the-art technologies to help people engage more deeply with art, "mirroring" Foucault's ideas about multiple viewpoints and the blurry lines between observer and observed.

Technologies have a potential to facilitate experiences that engage viewers in a dialogue with art. Much like Foucault's analysis, technologies can help museum visitors reveal the layers of meaning in artworks with differ-

ent entry points and perspectives. By dynamic exploration of art, technologies can mirror the complexity of the gazes in “Las Meninas,” allowing viewers to shift from being observers to being active participants in the creation of meaning. The right application of technologies can simulate the variety of viewpoints and the depth of interpretation that Foucault identifies in Velázquez’s masterpiece, offering a more nuanced, active experience that goes beyond the surface level of observation.

7.2 THE LENS: ROLE OF AI

Museums possess valuable and unique information that they *want* to share and educate visitors with. However, there are often barriers that prevent easy access or comprehension of this information. In today’s data-driven environment, there is great potential for AI to address these challenges (Technology Trends 2024 | Tech Vision, n.d.).

Artificial Intelligence (AI) technologies are considered to allow the creation of a novel way of experiencing an artwork, where visitors themselves can decide how to reveal layers of content, choose a path to dive deeper, and define the levels of complexity they are interested in. Such an approach would encourage their curiosity and create an environment for visitors to immerse themselves more in the art pieces and engage visitors’ minds more deeply.

To preserve the museum’s ambiance and reverential experience, inspiration is drawn to move away from touch-based and screen-based interactions, focusing on a spatial and seamless experience.

In the current project, AI serves as a perceptive lens and effective navigation tool, which can browse through vast reservoirs of curators’ and educators’ knowledge base align needed information to specific visitors’ needs, and create connections and bridges. This collaboration between human expertise and computational power could lead to a more fluid and intentional process of knowledge transfer and exploration, that was not possible before.

7.3 STATIC AND DYNAMIC MEDIA

Let us imagine a media interface that feels like conversing with a curator, capable of understanding our individual agendas while delivering the high-quality knowledge and vision of museum curators and educators.

Integrating of Artificial Intelligence (AI) into the design solution can reshape rigid, and unresponsive user interaction with communication tools within the museum setting shifting it closer to the dynamic nature of our human communication and informal learning.

Such AI-powered system could personalize the museum experience for each visitor, guiding them through exhibits tailored to their unique interests and providing insightful commentary similar to a curator’s expertise, answering their questions and drifting in the directions that are exiting for each individual. Such media could help visitors feel more engaged and “safe”, knowing that their questions will be answered.

Looking in the future, AI could enhance accessibility by offering multilingual support, audio descriptions for visually impaired visitors, and alternative formats for content consumption. It could also facilitate deeper engagement by encouraging exploration, asking thought-provoking questions, and providing contextual information in real-time.

7.4 LOOK AT HUMANE TECHNOLOGY: WITH AI, NOT ABOUT AI

Creating tools that enhance our human abilities is one of the distinctive characteristics of our species. But what is important thought is to focus on the value the tool is supposed to bring. Some people and institutions are hesitant towards the implementation of technologies into their processes, fearing that technology might overshadow its intended role as an enhancement. Many cultural and creative people fear the entrance of artificial intelligence into the creative field. Sometimes it is the case that the use of AI is not informed by the process or the product. The view of seeing AI as a tool that can enhance the capabilities of our intelligence is presented here.

Human potential is aimed to be optimized, and our technologies should serve a purpose. Contrary to fears, such human technologies are capable of reaching new people and expanding access to knowledge. These technologies are perceived by some as inhuman. But technology is becoming human by design. Though our future will be powered by artificial intelligence, it must be designed for human intelligence.

The visitor’s experience should be enhanced by AI, rather than controlled by it. The aim of implementing technologies in the project is focused on enabling exploration. The collaborative paradigm necessitates a nuanced understanding of the complementary roles played by humans and AI, emphasizing the centrality of human agency and decision-making in guiding AI functionalities.

7.5 QUESTIONS AS A FUTURE MEDIUM

As rigid knowledge is melting, the search-based “librarian” model

Thoughts on Technologies

of human-data interaction is giving way to a new “advisor” model. Rather than running searches to curate results, people are now asking generative AI for answers. *Questions are going to be the new medium for interaction* and the quality of technology will depend on how crafted the answers will be.

The tools that shorten the gap between the user’s intention and the computer output are the most promising in my opinion. In November 2022, OpenAI launched ChatGPT, which experienced unprecedented growth as an application. Unlike previous large language models, ChatGPT excelled in responding conversationally and straightforwardly to queries. This innovation in chatbots, capable of synthesizing extensive information, utilizing diverse data types, retaining previous conversations, and offering suggestions for next questions, is disrupting the digital business landscape heavily influenced by data.

7.6 INTERVIEWS ON DESIGNING AND KNOWLEDGE TRANSFER WITH AI

To gain a deeper understanding of how technologies such as Generative Artificial Intelligence can impact the comprehension of a particular domain, enrich our understanding of objects and the new levels of “perception” and “recycling”, interact within it, and expand it, I interviewed experts who work closely with technologies within the creative field. This was an important aspect for me, as I wanted them to understand the impact technologies have on creative processes.

INTERVIEW WITH MIRO ROMAN

Miro Roman is an architect and a scholar, working at Digital Architectonics Lab of ETH Zurich. His main focus is the overlap of information technologies and architectural articulations. Miro explores, designs, codes, and writes about architecture while playing with a lot; with all the buildings, books, movies, and images; with clouds, avatars, streams, lists, indexes, and pixels. What is this abundance of information about, how to handle it, and how does it shape the way we think about the world? (TEAM — Prof. Hovestadt, n.d.)

The central question of the interview with Miro was:

“*How to enrich staff?*” to answer which is one of the thesis’ objectives. The interview has brought a lot of insights and new perspectives for me.



Figure 7.1, Miro Roman



Figure 7.2, Jorge Orozco



Figure 7.3, Sebastian Löwe



Figure 7.4, Patrik Hübner

Context-rich explorations

The dialogue with Miro Roman offered insights into the landscape of digital literacy, particularly within the context of AI's integration into cultural domains. The potential of AI to redefine our interaction with information was seen, showing how objects can be encoded with a myriad of properties. This process, as suggested by Roman, enables a whole spectrum of responses to any given query, underscoring the probabilistic nature of AI's operational framework and its capacity to extend beyond mere functionality to offer enriched, contextually aware responses. The potential of implementing AI to navigate the vast landscapes of art was seen, providing personalized, context-rich explorations based on the viewer's queries and interactions.

"Query" as the catalyst for exploration

Roman sees the "question" itself as a pivotal structural form in data navigation, proposing that the way we organize and interact with data is inherently question-driven, with the query acting as the catalyst for exploration. The "question" is a novel structural form for navigating through data. The contemporary way is that you organize your data according to your question. "Question" is the trigger. This perspective is crucial for understanding how AI can synthesize context, moving from a critical, external analysis to an opportunistic, embedded approach, where the context—and consequently, the answer—shifts based on the data's organization and the viewer's position within the informational network. To Roman, the organization of data and the viewer's position within the informational network can shift the context and, consequently, the understanding of data. It can be assumed that AI can similarly alter the perception and interpretation of artworks, offering multiple perspectives that enhance comprehension and engagement.

Redefining relationship with knowledge

Roman challenges the idea of "mind-to-network communication" and suggests that our thinking processes are always connected across physical, digital, and augmented realms. He believes that we need to balance our independent and dependent knowledge to adapt to this dynamic. According to him, this shift moves us away from seeking one objective truth and encourages us to embrace various viewpoints, which helps us engage more deeply with digital content. Roman imagines a future where being digitally literate means being able to understand, interpret, and add to a diverse range of information sources, reshaping how we relate to knowledge in a world dominated by digital technology.

"Beyond truth"

Roman notes that the approach to the data changed from critical, where we look at the problem from the outside, to Opportunistic and Synthetic approaches, where we view the problem from the inside. If we change the context then the answers would change too. The answer changes if we move the concept or question from one library to another, depending on the context. This follows a general shift from understanding the "truth". He suggests that there is no objective truth. The concept is "beyond truth" and has more to do with sophistication. *Exposing things from different positions*. Miro creates rich environments to talk about architecture, to "enrich" the dialog about it. There is a great potential to implement such an approach to the dialogue with art.

Synthesizing Context and Flexible Interpretations

The interview highlights the shift from a critical to an opportunistic and synthetic viewpoint, where the context becomes fluid, and interpretations of art are ever-changing. This insight is particularly relevant for AI-driven thematic explorations in museums, where AI can dynamically juxtapose artworks and synthesize diverse contexts, offering visitors a multitude of perspectives and a deeper, more personalized engagement with art.

INTERVIEW WITH JORGE OROZCO

Jorge, who is working at the Digital Architectonics Lab of ETH Zurich, is a senior lecturer and researcher working at the intersection of model and design practices that speak of a digitally connected world, and AI-powered search engines for architectural education and practice. He is an assistant at the chair's design studio METEORA and a developer of its search engines and databases—Panoramas of Cinema, Mark, Paradiso and Panorama App. (TEAM — Prof. Hovestadt, n.d.)

Jorge's work, particularly with METEORA's search engines and databases, are examples of the integration of AI in architectural flow, emphasizing the abundance of data and its potential to articulate architectural projects in dialogue with traditional and contemporary narratives.

The Plenty

This particular point of view of Jorge made me see how technology can aid in extending our creative and intellectual space: "I can access an abundance of concepts, play with them, recycle them, use them to create my own architectural position. I am an architect in love with the Internet. The intelligence of everything. I draw with many of the hands. Building on thousands of years of tradition of thought and imagination. Hyper connection to the world."

His approach involves applying technologies to sift through extensive resources, from books to images, and synthesizing these through AI's lens, always in the backdrop, to generate architectural concepts and visualizations rooted in deep observation: "We approach from the plenty. If we have all the books, images and structures. One click away. The bigger the data is it shows us not the objectivity of the world but "what we want to see". How to play with it? They play with these objects as if they were alive and talking to them and see how they behave. Make beautiful stories. Go beyond analysing and finding the truth."

It keeps open. It grows by relating to other elements. We write with all the books, libraries, philosophers.

Rapid exploration

Jorge's philosophy is about cultivating digital literacy that enables individuals to let technologies, including AI, orbit around their creative and intellectual journeys, enhancing productivity and innovation. His work with platforms like Paradiso and Panoramas of Cinema underscores the potential of AI-powered tools to facilitate rapid exploration, selection, and assembly of ideas and concepts, creating a dynamic environment where architectural students can cross vast thematic landscapes to discuss and visualize ideas.

Communication and abstraction in navigating and linking.

Jorge's reflects on learning skills and emphasizes the significance of understanding the narratives objects convey, transcending disciplinary boundaries to weave rich, interconnected stories that inform architectural projects. This skill, developed through practice, underlines the importance of communication and abstraction in navigating and linking the plethora of data available in the digital age.

Culture of hyper-connectivity

Jorge explores the role of AI in transforming learning techniques, emphasizing the shift towards a landscape where ideas and concepts are continually recycled and reimagined, fostering a culture of hyper-connectivity and interdisciplinarity that challenges traditional notions of architectural virtuosity in favor of a more fluid, intention-driven creative process.

INTERVIEW WITH SEBASTIAN LÖWE

Sebastian Löwe worked as a professor of design management at Berlin-based Mediadesign (MD.H), University of Applied Sciences, and author of the book "Design and Artificial Intelligence" (2022). He teaches,

researches, publishes, and consults on the topics of strategic design and innovation with a focus on machine learning in design processes.

Focus

The interview with Sebastian was focused on understanding and designing interaction with Artificial Intelligence, discussing the importance of intentionality, psychological considerations, and the human-like qualities of AI in creating experiences that can resonate deeply with users.

Dynamic, context-aware interaction

Sebastian's sees the interaction with AI as a symbiotic communication between the user's psychological landscape and the AI's capabilities. He shared, that the interaction is not about the surface-level interface but about how AI can delve deeper into user queries, highlighting and expanding upon answers in a dynamic, context-aware manner. This aligns with the thesis's aim to utilize AI for creating personalized, story-driven art explorations, where AI's generative nature presents varied, non-deterministic responses, enriching the user's engagement with art.

Non-deterministic Outputs

The non-deterministic nature of Generative AI, where each interaction could cause different responses, aligns with the diverse interpretations and experiences that art evokes. In the context of cultural spaces, this characteristic enables AI technology to present a variety of perspectives on an artwork, mirroring different ways individuals perceive and connect with art.

Few-shot Learning

Few-shot learning's ability to quickly adapt and learn from minimal data inputs makes it particularly relevant for personalized art exploration experiences. This AI capability can be leveraged to tailor the AI's responses and recommendations to the unique preferences and historical interactions of each user. For instance, after being exposed to a few examples of a user's favorite art styles or periods, the AI could begin to predict and present artworks or information that aligns with those preferences, enhancing the relevance and immediacy of the art comprehension process.

"Talking to Knowledge, to Data"

The concept of "Talking to knowledge, to Data" and allowing "the data to speak to you" speaks to a more interactive and exploratory approach to engaging with art. This paradigm suggests a shift from passive consumption of information to an active dialogue with the source, where users can ask,

explore, and receive feedback in real time.

Crafting answers

Sebastian discussed how the interaction with AI is not about the interface, but about the way the answers are crafted to the questions. AI, being inherently interactive, fits needs better than generic algorithms.

INTERVIEW WITH PATRIK HÜBNER

Another enriching interview I had with Patrik Hübner, a creative director, creative technologist, expert, lecturer, and keynote speaker on merging communication design, storytelling, and generative design.

In the interview were explored several themes related to the intersection of art, technology, and the different approaches designers can take.

Co-creation and Technology

There is a significant focus on co-creation and co-exploration in art, particularly involving the integration of human and machine contributions. The most prominent question discussed was: “How can Arts be understood and experienced in a new and non-linear way?”. It was discussed how machine learning (ML) can enhance art engagement by enabling non-linear explorations and perspectives, but it was also concluded that technology should not dominate the creative process. As designers, full guidance by machines and full control are not of interest; it is found important to leave space for surprises, combining human and machine strengths. This approach allows for visualizing not just the immediate context of an artwork but also its place within broader historical and future narratives, offering infinite expressions and interpretations. This involves viewing the environment as a narrative medium, where generative design’s rule-based autonomy can draw from the world as a data source, offering infinite possibilities for interpreting and engaging with art.

Personalized Interaction with Art

It was discussed how interpreting art is a very personalized experience. The question brainstormed was “where does AI fit in there, without too much guidance?”. It is a design challenge to integrate AI without overly guiding the user. How to create a balance where both human intuition and machine intelligence contribute to the artistic experience? It was discussed that the most important aspect for the designer is to understand the principles of the field (exhibition), understand what can be automated and set into motion. This made the thesis’s focus even more prominent on creating a balanced

AI system that aids in art comprehension while leaving room for personal interpretation and surprise, fostering a space where human intuition and AI capabilities complement each other.

Systemic way of thinking in the design process

It was discussed how designers can use the environment to narrate, to take its parts and use them as rules, and tell the story with it, unfolding how things will move, behave, etc. The question was then asked: what are the aspects of the museum experience that are important to be translated in such a way?

Purpose of applying technologies

Technology for technology’s sake is meaningless. “Revolutionizing interaction with Art” is one goal - but technology by itself cannot solve it.

Patrik emphasizes the importance of thinking bigger and turning complex technologies into accessible knowledge, highlighting the role of storytelling in making technologies like generative AI more accessible and emotional.

Exploration Over Time

The temporal aspects of art and design were touched upon, suggesting that architecture and museum experiences can be designed to evolve over time, encouraging viewers to engage with art from different physical and conceptual standpoints. In essence, it was delved into how modern technology can be used to revolutionize the way art is created, interpreted, and engaged with, while also highlighting the need for a strong personal approach that goes beyond mere technological capability.

7.7 CONCLUSIONS

The interviews above and the theoretical research conducted made me formulate a few viewpoints on the process of designing with AI, its transformational power, and its impact on knowledge acquisition processes.

AI has a potential to be innovative navigation tool in informational spaces, that can facilitate complex information acquisition.

Dynamic interaction is the core.

Implementing AI technologies can aid in *overcoming the linearity of art exploration* in museum settings by creating a dynamic learning environment. Such technologies enable the creation of interactive and adaptive

learning settings, and novel navigation techniques encouraging free-choice learning.

Another important aspect is that AI can assist in *translating between levels of knowledge* and create branching, considering the multilevel nature of knowledge. Such technologies can provide us with an outlook on meta-levels of knowledge not accessible before, provide the capability to gain a deeper understanding of meta-level concepts and explore their implications across various domains. Interconnecting between things, and creating cross-discipline connections, impossible before. It can connect artworks in novel ways and enable visitors to access the context.

As questions became a new medium, *human-centric manner* of articulation and learning might be through “talking” to knowledge. When machine intelligence can be trained to generate solutions, then the human intellect is challenged to formulate questions.

8.1 METHODOLOGY

To gain insights into the visitor perspective, several design research methods were employed, including interviews, observations, self-observation, creating visitor personas, and mapping visitor journeys.

Close looking. This is one of the more intimate ways to get to know something truly up close. Visiting different museums and galleries, the aim was to unveil visitors' perspective "on-site." From Autumn '23 to Spring '24, various museums and galleries in Paris, Florence, Rome, and Zurich were attended.

Seeking a "raw" perspective of visitors right there on the ground, different interactions with them were involved - from casual conversations in cafeterias to more formal interviews. Another insightful voice to be heard was the voice of museum attendants, perspectives from those who know the space best. And then there was self-observation, a method where observation was turned inward, examining personal motivations, feelings, and thoughts in the context of the museum environment.

Immersing in the environment being designed for allowed for gaining insights into the visitor experience, which in turn informed the design process, but it was not just about collecting data; it was about experiencing the museum through the eyes of its visitors. Walking the halls, observing interactions, and taking note of how people navigated the space, a vision of the comprehensive museum experience began to be constructed.

'Walks' through various museums will be presented in a chronological manner, to recreate the most precise impressions and findings discovered during each of those visits.

8.2 DESIGN ETHNOGRAPHY: VISITORS' BEHAVIOR OBSERVATIONS

Museum Rietberg, Zurich, Switzerland

One of Switzerland's biggest art museums, the Museum Rietberg, the beacon of cultural and artistic diversity, is run by the City of Zurich and focuses on traditional and modern arts and civilizations from Asia, Africa, the Americas, and Oceania. Upon entering the museum, I started a reflective exercise, trying to capture my immediate thoughts and feelings:

One of the first questions was centered around the museum's overarching goal and message. Knowing museum goals helped to form the framework to layer the experience upon. The Rietberg Museum's goal and message

Fieldwork: Walks in Museums

were communicated at the stand at the entrance. Their approach was particularly compelling, reflected in their statement: “*Expanding stories about collections and developing an entirely new point of view,*” realized by the “Pathways of Art” program. The museum’s exploration strategy was based on the themes of collecting, displaying, dealing, and knowing, which evoked critical reflection. Each theme offered an expansion of the traditional approach to curating knowledge on exhibited objects and presented the visitors with questions that are not often discussed in museum settings, such as ways objects get into museum collections, and how these journeys transform the objects themselves.

Inspiration and motivation were drawn from the museum’s approach to unfolding biographies of exhibited items, their narratives, and life trajectories. Upon entering the first room of the museum, filled with Indian and Pakistani artifacts, came a sense of unfamiliarity. With limited knowledge of art and culture from this region, a lack of necessary context was in a way to fully appreciate the objects on display. Despite efforts to absorb information from the brochure and wall stands, there was a struggle to connect with the exhibits beyond their visual value. Each room offered a QR code with online resources, but it felt disruptive to read on the web instead of enjoying the museum ambience and objects. Informational text on the walls felt like a less invasive way to get information, without “interrupting” the room’s atmosphere.

Some rooms had interactive touch tables, exploring the collection from various angles. These means allowed visitors to playfully engage with digital replicas of the artifacts.

During the exploration of the exhibition featuring an extensive display of Chinese art, a catalog (see Fig. 8.2) titled “Wege der Kunst” was come across. As is often the case with museums and their permanent collections, the catalog integrated all the provenance research and information on the objects within the collection.

The museum presented an abundance of objects (see Fig. 8.1) of great value. The mentioned catalog holds broad knowledge and details. But this knowledge seems to stay uncovered by the majority of the visitors. The observation done at Rietberg Museum showcases that the way of communicating the value of such great objects plays a crucial role in visitors’ experience if the museum aims to create a long-lasting connection between the visitor and its collections.



Figure 8.1, Photo of Collection in Rietberg Museum

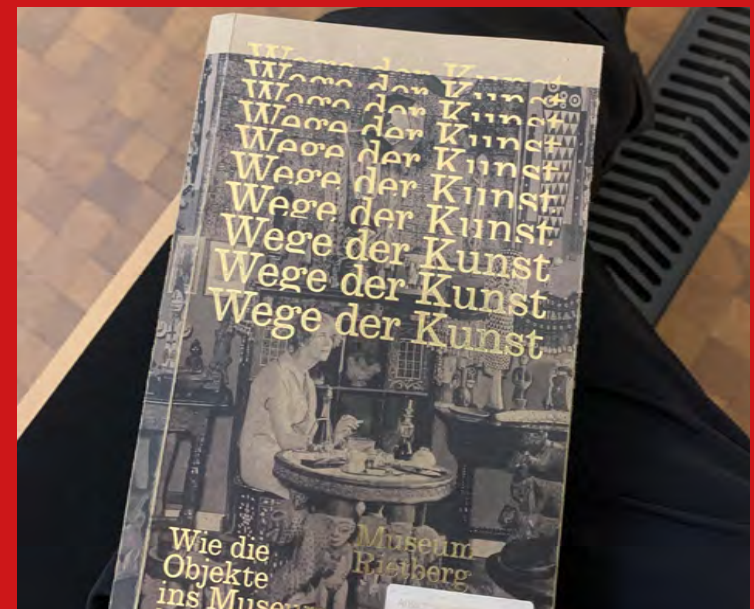


Figure 8.2, Photo of Catalogue “Wege der Kunst”

Kunsthhaus, Zürich, Switzerland

The next few on-site observations took place in Kunsthhaus. After the Interactive Experience Framework was applied, a toolbox of questions and a framework to observe and interact with visitors more intentionally was available, allowing for more precise questions targeting the main factors impacting visitors' experiences and paying attention to specific visitor behavioral patterns. The visitors observed and interviewed had completely diverse levels of familiarity with art.

Observation: Occasional Visitor

Behaviour and interactions of a visitor, unfamiliar with art, was explored in the contemporary art room at Kunsthhaus Zürich. The objective was to observe how a novice visitor would navigate and engage with the museum's collection. The visitor's motivation was "to explore something different" from their usual activities, leading to an association with the "non-goers" or occasional visitors group. It was mentioned that there was a motivation to "explore" art but uncertainty about how to look at it and doubt whether it was "for them."

First Impression. During the visit, it was noticed that exhibits on display had only plates with basic information on the object: names of artworks and authors, dates of creation, and materials used, with no contextual information provided. A feeling of "being not in their element" and uncertainty about where to start the visit was shared. The visitor mentioned that more context would be appreciated.

Using the Internet. Since the space provided no contextual information, the visitor expressed confidence that a web browser would provide relevant knowledge. They used the "Google Lens", a mobile application, to scan the artwork. Although the service correctly recognized and defined the art piece, it returned links to pages that mentioned the artwork instead of providing curated and tailored information. Browsing through these links, it became evident that time would need to be spent reading and sorting to gain understanding. Additionally, none of these links would answer specific questions. In a museum setting, the visitor mentioned that they "prefer not to have to read on a screen and instead would like to focus solely on the art".

Behavioral Patterns. The absence of contextual information led the visitor to quickly pass by artworks, only giving glimpses to them.

Conclusions. They summarized their experience as feeling uncertain about what they were supposed to comprehend from the collections, "I do not get what exactly I am supposed to get." This observation once more underlined to me the challenge faced by novice visitors of lacking guidance



Figure 8.3, Photo of a Novice Visitor exploring collection in Kunsthhaus,

and knowledge to define what pieces of a collection might interest them. The visitor shared their feeling of dissatisfaction with the lack of content and information provided by the museum, which led them to feel “excluded” and conclude their visit as being “just not for them”, jumping to the assumption that they would struggle to comprehend the art.

Observation: Contrasting Engagement Dynamics in Abstract Expressionism Room

One observation that allowed a comparison of the museum experience of visitors with different background knowledge took place during a group excursion to Kunsthau Zurich, exploring various art movements and Abstract Expressionism (Fig). Among the visitors were individuals with varying degrees of familiarity and interest in art, each reacting differently to the museum’s exhibits.

Contextual Setting. In the room with Cy Twombly’s objects on display, heightened engagement was sparked in one visitor through their connection to the art world via a relative. This visitor conversed with fellow visitors about Twombly’s masterpiece, “Goethe in Italy,” discussing topics presented in the art more in-depth, such as gestural art and artistic movements post-1945. A deep immersion in the artwork was exemplified by this visitor, drawing from their connection to art and personal interest.

Engagement and Disengagement. Meanwhile, another visitor, inexperienced in art, found themselves confused by the abstract sculptures in the gallery. One particular piece caught their interest, but comprehension of its meaning or significance was a struggle without contextual cues. The title was looked at, expecting some context to be provided on the plate, but frustration quickly grew when only the name “Untitled” was discovered. Confusion was expressed—“This is not for me. I do not get what I am supposed to get.”—and the pursuit of understanding was abandoned, with the initial enthusiasm to connect with art decreasing.

Impact of Experience. Different reactions were observed within the group at the museum, a phenomenon often encountered in museum settings. Satisfaction and learning were experienced by one person from talking about the art, while another person was left with reinforced feelings of alienation from the art world. The perception of being “not artsy” was reaffirmed, highlighting the crucial role of accessibility and guidance in fostering meaningful engagement with art.

This observation underscores the importance of providing diverse pathways for visitors to connect with and understand artistic expressions, ensuring inclusivity and enriching experiences for all.



Figure 8.4, Perspective of a Novice Visitor: exploring Cy Twombly’s art pieces

Museum für Gestaltung, Zürich.

During a visit to the Museum für Gestaltung, a group of design students was observed exploring the “Talking Bodies – Körperbilder im Plakat” exhibition (Fig). Afterwards, an exchange on their experience was conducted. Here, the main points are introduced.

The Role of Guidance. It was noted that some people can feel overwhelmed without guidance, but it depends on personal agenda and the context of the visit.

Limited Focus. When offered by their teachers to take a look at another collection, it was shared by most of the students that they did not want to see too much in a limited time and preferred to focus their attention on one collection fully.

Dynamic Media. It was interesting to observe that the younger audience preferred to engage with interactive media and make choices on the presented questions while discussing the content together. A rich discussion was created between two students with contrasting opinions on nudity in social media. This discussion was extremely enriching and shed light on new aspects for both sides, helping listeners to form their own opinions by comparing arguments. The “Talking Bodies – Körperbilder im Plakat” exhibition achieved its goal in making its visitors question societal norms and discuss them.

Context and Meaning. It was mentioned that when things are put in a certain context, it highlights a red thread between them. Specifically, when some “normal” things are put together, a new meaning is created. “It is always stories and interpretations that make meaning of the collections.”

Motivating Questions. As this particular exhibition presented motivating questions for visitors, deeper reflection on what was explored was prompted. For example, such questions were asked by objects like “should I be here?”

Meaningful Experience. It was shared by some of the students that, in their opinion, “having a goal,” in their case to observe the exhibition and find the most striking personally pieces, made their experience meaningful and rich because a more attentive look was taken.

Reflection. The exchange highlighted the importance of stimulating discussions between visitors, as it helps them to process visual and textual information, and have new original points of view on the seen objects.

Another important point raised was whether exhibitions should have a narrative or live their own life?



At Museum d'Orsay, Paris

Visitors-shared reflections on their museum experience.

The first museum visited in Paris was the Museum d'Orsay. Two visitors, freshly exiting the exhibition, agreed to share their opinions on their fresh museum experience. They expressed contrasting opinions on the experience with the permanent collection of the museum and the temporary exhibition featuring Van Gogh, "Van Gogh in Auvers-sur-Oise: The Final Months." This exhibition was the first to focus on the paintings created by Vincent Van Gogh (1853–1890) in the final two months of his life in Auvers-sur-Oise, close to Paris, opened in the autumn of 2023 at the Musée d'Orsay. Years of study on this significant period in the artist's life culminated in this show, helping the general public understand its actual significance (Fig.).

Permanent Collection

Navigating Permanent Collections. Some of the artists whose works were presented in the permanent collection were unfamiliar to the visitors. It was found to be a bit challenging to navigate the museum and understand the meaning of different areas and rooms, especially taking into account the large size of the collections on the display. Another challenge noted was understanding *where* to start and *what* to explore.

Using Audioguide. One of the visitors ordered an audio guide in advance, to learn more about the collections. When it was decided to use it, a painting's number had to be input to access the corresponding audio file. The first painting that intrigued the visitor was "The Fifer" by Édouard Manet (see Fig. 6.1). However, the two-minute prerecorded audio left a feeling of disconnection. It was realized that not much was known about Manet beyond his famous works. With many questions about Manet, "The Fifer," and the audio details, the guide was stopped as it caused for visitors further confusion.

Despite listening to multiple audio pieces about different artists' works, it was hard for them to grasp and retain a comprehensive understanding. They found the process of using the audio guide to be not as smooth as expected for a museum visit, from bringing it along to inputting numbers and playing the audio.

Temporary Exhibition:

"Van Gogh in Auvers-sur-Oise: The Final Months"

Role of Narration and Context. Fortunately, the visitors had an opportunity to visit the exhibition on Vincent van Gogh's last creative period (see Fig. 8.8). The show, consisting of about forty paintings and twenty drawings, focused on themes from this time period: first, landscapes with the village in the background; next, still lifes, portraits, and landscapes with the



Figure 8.6, "Van Gogh in Auvers-sur-Oise: The Final Months"

Fieldwork: Walks in Museums

surrounding countryside. An unusual sequence of paintings by Van Gogh in an extended double-square size was also on display.

The exhibition, structured differently from the permanent collection, offered rich context about the artist's life, motivations, and inspirations, including his drafts. For the visitors, a particularly memorable aspect was the opportunity for visitors to interact with the Virtual Reality environment in which Van Gogh created his paintings, immersing them in the atmosphere of his home and allowing them to see the palette he used.

Moreover, the displays provided rich contextual information about the artworks, Van Gogh's motivations, thoughts, and life during the creation of each piece. Many attendees gathered to discuss the artworks, connecting the drafts with the exhibited art.

Reflections

The visitors shared that, in general, their museum experience was quite mixed. While they desired more context and information to be presented more intuitively for the permanent collection, they truly enjoyed the exhibition on Van Gogh for how it immersed them in his life and made them feel like a part of his creative mind.

Being highly motivated to spend quality time in the museum and have a memorable visit, they felt that some of the pieces could be appreciated more if they had a chance to learn more about them or the artist on site.

Uffizi Gallery, Florence

During a stay in Florence, Italy, the reflection and observation of a visitor's museum experience was gathered in Uffizi Gallery in Autumn, who the visitor attended with a companion. They shared, that both had some background in art history.

Purpose of the Visit. With time constraints in mind, they decide to take an unfamiliar to them approach to visiting the gallery - focusing only on the most iconic pieces on display, such as "The Birth of Venus", "Primavera", and "Annunciation" by Botticelli and da Vinci (see Fig. 8.8). Given the vastness of the collection, exploring even a fraction of it took around one and a half hours. Interestingly, they found themselves gravitating towards tour guides who were presenting to groups, listening to the narratives crafted about the artworks.

Focused Exploration. Appreciating the visual aspect of each masterpiece, they engaged in exchanges of facts and observations, drawing from their shared knowledge of art history and the insightful commentaries offered by the guides.



Figure 8.7, Uffizi Gallery, Florence

Fieldwork: Walks in Museums

Reflections. Upon reflection after the visit, it was concluded that focusing on a few artworks and delving deeper would have provided them with a more rich experience, as during the visit they felt that they “rushed” through the collection. They suggested that having a guide would be much more enriching to them.

This observation once again highlighted the importance of the personal context described by Falk (1992). In this case, time for a visit was the determining factor.

Conclusion

Each visit to the art museum has provided fresh insights into various aspects of the visitor experience, greatly influencing the following design process. Among the recurring questions raised during these visits was, “Why turn to the internet when museums and curators already have such high-quality knowledge and answers to most of our questions?”. As the knowledge needs to be curated at one level or another, curation might be done at the level of sources of information, down to the creation of particular texts.

Another important finding confirmed by the observations is a difference in the level of guidance required by different types of visitors. While frequent visitors often have clear preferences and precise questions, novice visitors typically need more guidance and a different approach to designing their museum experience.

Lastly, in addressing the elitist perception that some may have of museums, it’s essential to explore various strategies aimed at engaging non-goers and making the museum experience more accessible to all.



Figure 8.8, *Museum d’Orsay: Permanent Collection*

8.3 VISTORS INTERVIEWS

Interview: “Bringing the Choice to the Visitor”

The museum’s cafeterias are gems where visitors with fresh perspectives, motivated to reflect on their experiences, can be found. During observational fieldwork conducted at the Rietberg Museum, insights into visitors’ experiences were gathered through interviews. The first interview partner was an experienced visitor, a lady in her 40s, with an extensive background in Asian Art. It was clear that she had her own agenda and knew exactly what she wanted to explore in the museum. Overall, the focus of the interview was on offering curated content and flexible engagement options.

Amount of Objects. Firstly, the interviewee expressed a preference for exhibitions that strike a balance between the number of objects displayed and the depth of information provided, “I think there are too many objects exhibited. It would be better to exhibit fewer objects but provide more information; otherwise, it is ‘too much.’ Especially as some inexperienced visitors will try to see everything.” She advocated for a more selective approach, favoring fewer objects accompanied by detailed information for each item.

Diverse Media. She mentioned feeling overwhelmed by the various types of media used in exhibitions: “Sometimes I feel overwhelmed. Text on the walls, in brochures, and on the phone can be too much. Also, there is a big visual stimulation.”

Non-Invasive Media. The interviewee emphasized the importance of audio guides being less intrusive, allowing visitors to maintain focus on the art itself, “I would prefer more details, but I think it would be nice to bring the “Choice” to the visitors, on what and how detailed they would like to know, triggered by my own choice.”

Knowledge Levels. The interviewee addressed the issue of information accessibility, emphasizing the need for exhibition content to adapt to visitors with different levels of expertise. They proposed a tiered approach to presenting information, starting with basic explanations and gradually delving into more complex concepts. This approach would ensure that all visitors, regardless of their level of expertise, can engage meaningfully with the exhibited collections. “Curators sometimes do not understand that novice visitors do not need too many details and complexity, and hence the descriptions lack more generic knowledge for them. The presented information should be accessible to all groups of viewers, going down in complexity for different levels of familiarity with the subject matter, for example, surface level, deeper level, complex concepts.”

Freedom of Choice. They stressed the importance of visitors autonomy in their museum experience. In their opinion, providing options for accessing additional information and tools should be done in a non-intrusive manner, allowing visitors to choose the level of engagement that suits their preferences, in other words to give visitors “the choice”.

Interview: “When I Know Something, I Can See More”

Another insightful interview occurred at the cafeteria, this time with a lady in her mid-30s, a European art teacher, who was actively discussing her fresh experience with a companion. Here are the main outtakes from the interview that took place:

Goal of The Visit. “I came here specifically to visit the kimono exhibition. Just seeing it makes me happy. I truly like to be there and look at works, and what they make with me”.

Background Knowledge. “When I know something, I can see more.”- this quote from the interviewee highlights their belief that prior knowledge enhances the viewing experience. This sentiment underscores the value of background knowledge in facilitating deeper engagement with artworks. “I read about the subject of the exhibition before I visit to have the context. I usually take notes while reading and while I am in the exhibition. I believe that knowledge should be accessible. I would prefer to learn about it while in the presence of it (kimono).”

Opinion on Audioguides. “When the concepts are overly complex, I use audioguides for children, they are more engaging and easier to understand.” They suggested that while knowledge enhances appreciation, there is value in experiencing art on an emotional and intuitive level, “But, of course, there should be place for “pure” experience. I have to be able to just focus on visual when I want. It is different for every visit.”

Interview: “Curators should see it with our eyes if they give us their knowledge”

Another interview took part in Kunsthau, Zurich. This time, a couple in their sixties immersed in the Old Masters painting section, agreed to share their museum experience. Their attention to detail and slowed pace of exploration increased curiosity about their perspective on the museum experience. Here are the insights from the interview, where both participants provided periodic answers:

Frequency of Museum Visits. “We don’t make frequent visits to museums, but we hold memberships of Kunsthau Zürich. Our understanding of art isn’t deep, we tend to visit only every couple of months. We are not sophisticated people, most things are unfamiliar to us.”

Perfect Museum Experience. “We were in Florence at the Palazzo Pitti. We had a Professor Marcello Bellini as our guide who led us on a tour of the palace, focusing on just 12 paintings. And what was absolutely fascinating, first of all, he knew everything. His knowledge was astounding; he could discuss the life Titian in such details.”

Context of Artist Life. “That’s all magical. We enjoyed the personal background of the painter so much. It brought the thing alive in a way we had never experienced before. All the context around. And we learned about the person, Titian, who all of a sudden was no longer an abstract figure but a real person who struggled with money and his landlord. We understood why he portrayed things he portrayed and why he portrayed them the way he did. And all that context is extremely important. Let us say, I know a piece visually, but I want to have more, what if there is a story behind this? I would feel more attracted to the painting. This way I only can relate to the painting as a visual piece of art that has its fascination, but is also kind of over dramatic. I have time, I have no idea about the story. It’s more like how you construct the knowledge of the words. And if you can juxtapose to that painting the life, the real life, that is the best experience to us.”

Relation to Artist. “I enjoy art the most if I can relate it to the person who made it. If you know the life behind, the suffering behind, the human dimensions, and historical context behind it, it creates different perceptions. Like with Tiziano, I ask myself, why did he do what he did?”

Way of Exploration. “We usually focus only on a few pieces. If we do not focus on a few things we get overwhelmed.”

Curatorial Interpretations. “We agree with the development that they see; it is interesting, but I cannot always follow the thinking behind it. For me, the information provided by curators is too much interpreted and too cloudy. I do not understand what they actually say. They use terms that are very specific to their profession, but I do not know them. They need to use the language of the people.

I have a feeling that curators invite us to understand their world and their knowledge, and I think it should be the opposite; they need to explain it so that we understand and need to use the language of the people. They should see it with our eyes if they give us their knowledge.”

Personal Interests. “I would like to know the general historical context of their time, but then I would narrow down to the circumstances of the artist, economic drivers, whether they could make a living out of their paintings, and who was buying them. Were they a single figure, or were there many artists at their time?”

Role of Narration. “And if one could combine static exhibit like this one with a story, and all of a sudden you bring more of the life, this thing here absolutely fantastic. Combining the narrative with the visual, if one can combine static with a story, it suddenly brings the world alive. Take, for example, this painting. I do not know the story behind it, so I can only relate on a visual level, as a visual piece of art. I would like to understand so many things about this painting: why people are moving so close, why there is no eye contact? But even if there is no information on this piece, we can actually understand from the context.

In the olden days, when there were fewer visuals, people were masters of storytelling. For example, the Arabs were fantastic storytellers. Hollywood is very good at combining narrative with visuals, whether static or moving.”

Role of Predisposition. “To know what to ask, you need to be somehow in the profession. There is a need for a good storyteller who takes your hand and pulls you into a story, leading you through a captivating narrative; it is more than just giving data. And if you can juxtapose a life to a painting, this is what makes art alive.”

Interview. “You need to have a kind of predisposition to be able to appreciate all these paintings”

Another museum visitor I interviewed was exploring the collection of Alberto Giacometti. He was a gentleman in his 40s. Here, I’d like to outline the main points of our interview.

Meaning of Art. “I think I did not get the real meaning of the art when I was younger. I have not studied art history, but I think it is important to make the links, to make the connections between the time of the artist and the society. Just to link many aspects to get to appreciate the art piece.

For example, once I read about an artist who painted a portrait that reminded him of his grandmother’s face. Now, when I visit exhibitions, sometimes I recall this. I think, it is like my grandmother. It’s not an aspect of the artwork itself, but it’s the context surrounding it.”

Connection with Living. “It is not only about the piece of art itself, for me it is important to make a connection with a living person, the artist. For example, I didn’t have much knowledge of 16th-century art except for some aspects of impressionism. It was hard for me to appreciate it. But after reading more about it, I came to appreciate 16th-century art more.

So I think that if a person who does not know much about art comes to this museum and sees Alberto Giacometti’s room, they might think, “this is awful.” “

Predisposition. “You need to have a kind of predisposition to be able to appreciate what is thrown at you, all these paintings. It creates in the mind of a viewer a worldview that is ready for what is coming (the content).”

8.4 CONCLUSION

It is hard to underestimate the great impact on the research each interview had.

Museum’s Approach and Communication. As Falk & Dierking mentioned in their book “Museum Experience”, museums have power of redefining our expectations. Rietberg museum, for example, communicated its goals and vision to the visitors quite deeply. It helped to create a “framework” for further experience. (Falk, J. H., & Dierking, L. D., 1992)

Accessibility of Information. Interviews with visitors had a red thread in them - a need for accessible information tailored to diverse knowledge backgrounds. While frequent museum-goers may want in-depth details, novice visitors may find same information overly complex.

Personalized Learning Experience. Visitors shared that personal choice in accessing information, the depth of information, and self-directed learning is a “safe” way to ensure that every visitor is included.

These interviews helped to understand the significance of visitor expectations, understanding the museum’s interpretative lens, and aligning with its overarching goals and many perspectives on the ways to explore the collections.

Moreover, the importance of contextualization upon entering each exhibition space was an important factor in shaping visitors’ mental frameworks for engaging with presented objects. By establishing a contextual backdrop at the outset, museums can effectively guide visitors toward a deeper and more meaningful exploration of the exhibited artifacts.



Figure 8.9, Aargauer Kunsthaus, Exhibition on Augusto Giacometti

9.1 RELATED WORKS

The Voice of Art by OGILVY, SÃO PAULO, BRASIL for IBM, 2017

“The Voice of Art” is particularly relevant within the scope of the research, which aims to enhance museum accessibility and engagement, particularly among demographics less tended to visit cultural institutions due to perceived barriers such as a lack of understanding or connection with art.

There is a significant disconnect between people and the cultural legacy kept in museums and art institutes in Brazil, where almost 72% of the population has never visited one. With the use of cutting-edge technology and cognitive computing, the initiative sought to close this gap by bringing a fresh interactive experience to Pinacoteca in São Paulo. Through the use of a customised app, museum goers could interact directly with a selection of artworks from the collection, getting real-time replies aided by IBM Watson’s Brazilian voice. Deeper connections between visitors and the artwork were made possible by this project, which also acted as a catalyst to raise Brazilians’ knowledge of and interest in art.

To create a deeper interaction and a profound information space around artworks curators and educators have researched the history of Brazilian art with books, texts, interviews, biographies, old newspapers and even current issues related to the artworks. Due to the consolidation of relative information, the visitors were able to ask any kind of questions and it increased the museum attendance to 340%.

Relevance

The project inspired a closer look into the work of museum professionals and integration of their research and expertise with technologies. It showcased the impact of how individualized experiences can increase engagement with art and democratize the museum experience. (The Voice of Art, 2017)

AI Connections Table by Bluecadet for Henry Ford Museum, 2022

The Bluecadet studio developed “AI Connections Table” for The Henry Ford Museum of American Innovation’s, to let visitors explore the curator’s thinking. Visitors coupled curator-created concepts with AI-driven findings on an interactive touchtable, showcasing linkages between museum objects.

These links allow visitors to explore “Intersections” in a museum crossroads, to find inventive stories concealed in collection topics like the Industrial Revolution, agriculture, and mobility.

The idea was inspired by Henry Ford's chief curator's tour, which showed how seemingly unconnected artifacts like an Industrial Revolution lathe, a trowel, and a cell phone are interrelated. This inspired the Bluecadet design team to create a comparable visitor's trip using the museum's growing digital resources.

Museum curators connected nearly 2,000 pieces from 80+ subjects. Bluecadet combined curator-led and AI insights into a single interactive web of related items to find new and unexpected connections.

The project shows how creatives and AI can work together. New connections and insights are discovered in real time, making the interaction new. Such encounters deepen my connection to Ford's brand heritage and show its influence (Bluecadet, 2022).

Relevance

The project highlights the opportunities that collaboration between creatives and artificial intelligence can achieve. The interactivity achieved is quite novel, as it shows fresh connections and insights in real time. Such an experience can provide a deeper understanding of Ford's brand history and show the brand's impact. The project served as an inspiration for the research to provide museum visitors with the opportunity to discover connections within the collections while exploring art pieces.

Ask Alice by Miro Roman, (n.d.)

The "Ask Alice" is a project developed by ETH Zurich CAAD Research that explores navigating data abundance and has significantly influenced this research. Alice, a digital construct, combines user extension and autonomous intelligence, managing diverse data streams in a unique space. It offers an interactive platform for engaging with personalized libraries and continuous data flows.

Alice's main function is presenting subjects from a standpoint of abundance, allowing users to explore topics of personal significance. For instance, asking Alice about "God" presents various interpretations rooted in specific temporal, philosophical, and perceptual frameworks. Equipping user with inquiry controllers, the platform allows them to tailor their exploration, choosing the perspective for their questions (Roman, n.d.).

Relevance

Alice epitomizes navigating the infinite with ease. The depth of "Ask Alice" aligns with the research objectives, especially in art comprehension. Just as Alice constructs meaningful narratives from extensive textual and visual data, the research aims to use generative AI to create personalized,

context-rich art explorations. The platform's method of synthesizing diverse data into coherent narratives and offering perspectives based on user parameters serves as a model for dynamic, interactive experience.

DE-VIEWER 1992 by Ars Electronica, (n.d)

At first sight, De-Viewer looks like a traditional oil painting on a wall. With closer inspection, one realizes that the painting is deforming at exactly the same place where it is looked at. The viewer's gaze affects the image, which is never seen in the same condition twice.

The project was developed as a reaction to the general attitude to computers as tools rather than a medium, still prevalent at the end of the 80s. The painter swapped brush for a mouse, but used it almost exactly the same way (Viewer, n.d.).

Relevance

The installation promotes one of the most crucial qualities of computers as a medium, its interactivity or mutual dialogue. The aspect of the unique dialogue and experience with each viewer intrigues and offers a new form of perception of art.

9.2 CONCEPTUAL MODEL & FRAMEWORK

The research, fieldwork and related work result in the practical development of the dynamic media platform "Reliq", a curatorial tool that integrates curatorial and educational knowledge directly into visitor engagement, shaping the experience of knowledge transfer for both visitors and curators. Grounded in interdisciplinary research on curatorial practices, visitor motivations, educational theories, and technological innovations, the design concept and framework serve as guiding principles for implementing this vision.

The curatorial platform is built on key theoretical points discussed in previous chapters:

Free-Choice Learning (see Chapter 2, Cultural Engagemnet Topology)

Narrative Techniques (see Chapter 5, From Knowledge to Narration)

Flow and Mindful Looking Principles (see Chapter 6, The Flow)

Thematic Coherence (see Chapter 4, Art of Curation)

Constructivist Principles (see Chapter 3, Museums as Informal

Learning Sites)

The mentioned points resulted in the following guiding principles.

Focusing on Curatorial Practices

Central to the framework is its integration into curatorial practices, equipping museum professionals with tools and methodologies to articulate their vision effectively. The platform aims make in-depth curatorial research and knowledge easily accessible and navigable.

Museum Experience as Self-Directed Learning

The core of the design concept for visitors is an experience where visitors transition from passive observers to active participants. Inspired by constructivist pedagogies and experiential learning theories, the framework cultivates “mind-on” engagements.

Personalizing Visitor Experiences

Another focus is the personalization of visitor experiences, acknowledging the unique preferences, interests, and cultural backgrounds of each individual. Applying findings from cultural engagement typologies and audience segmentation, the framework focuses on designing relevant, tailored visitor interactions.

Integrating Technology

Technology serves as an enabler in realizing the design concept by integrating immersive experiences within museum settings.

Facilitating Meaningful Dialogue

At its essence, the design concept aims to enable meaningful dialogue between visitors, artworks, and curators, fostering collaborative interpretations.

Dynamic Media for Communication

Reflecting the sensibility of museum professionals, the communication strategies and interactions are designed to be adaptive and responsive to the intrinsic motivation and natural curiosity of each visitor.

9.3 RELIQ

Reliq is a curatorial knowledge communication tool designed for museum professionals on one side, and dynamic media for individualized museum explorations for visitors on another.

Curatorial Lens

Overview. Reliq is a platform that allows museum professionals to input their research materials and construct modular entry point narratives with varying complexity and perspectives. These narratives serve as diverse entry and exit points tailored to different visitor profiles and chosen lenses. Reliq aims to provide museum professionals with a more direct way to shape visitors’ perceptions, expectations, and the information they receive, tailored to specific themes, time frames, and audience groups, making museums more democratic in their knowledge transfer mission.

Animating Accessibility and Navigability of Knowledge. The tool allows curators and museum educators to set visitor communication at different levels of complexity and depth, reflecting visitor needs and offering diverse, tailored entry and exit points for different audience segments.

From “One Size Fits All” to Individualistic Knowledge Transfer Strategy. Not limited by aesthetics of incorporating descriptive texts on the museum walls, or amount of catalogues and brochures to print, museum educators can provide full depth of their knowledge to visitors.

Rich Thematic Development. Reliq helps museum professionals overcome the limitations of physical arrangement in thematic development and connecting artworks. The tool connects artworks in various ways designed by curators or as a response to visitors’ inquiry, helping each individual explore the path that interests them.

Guiding with Mindful Looking Principles. Reliq, serving as a direct connection between curators and the museum audience, opens a new way to guide visitors where needed. By incorporating art and museum professionals’ knowledge on constructing meaningful visits, Reliq helps novice visitors explore art through Flow and Mindful Looking Principles.

Audience Lens

Personalization. Based on the Interactive Experience Model and findings from the cultural engagement typology, Reliq identifies personal context of each museum visitor by asking questions. This helps determine core factors impacting their museum experience, such as background knowledge, social context, and interests. The platform then aligns presented content with each individual’s personal agenda.

Relevance to Personal Agenda. Based on the identified personal context, Reliq offers visitors different entry points, presented as narrative paths that allow them to view the exhibition through various lenses. This allows visitors to explore collections from angles that resonate with them, accommodating to their prior knowledge and time constraints.

Visitors as Active Players of Interpretation. After selecting their preferred way, visitors can dive into specific aspects of the narration, exploring art in ways that resonate with them and formulate their own interpretations.

Supporting Social Experience. Recognizing the social goal of museum visits for many individuals, Reliq enhances social interaction by providing a tool that adjusts to group contexts. This supports shared experiences, unlike isolated experiences with audioguides, allowing groups to immerse in narratives together.

Reliance on High-Quality Crafted Knowledge and Research. Reliq allows curious visitors to explore art with high-quality information provided by museum professionals, rather than relying on the Internet and external sources with unqualified information.

Dynamic Dialogical Interface. Centring the artwork in museum experience, Reliq is designed as a voice interface for an active part of the museum visit. This has certain advantages. Voice control lets visitors concentrate on the artwork rather than reading text, creating a “cinema-like” experience where they are immersed in the narrative but focused on the visual. Using “questions” as navigating medium shortens the time for searching through catalogs to find relevant information.

Democratizing the Museum Experience. Reliq creates a safe space for novice visitors to explore art without feeling excluded or confused. At the same time, it serves as a source of high-quality, in-depth information for expert visitors interested in specific detailed content.

Overview

Reliq creates an experience, crafted by museum professionals, based on their rich knowledge to align with visitors’ intrinsic motivation. It offers personal experiences based on natural curiosity and interest in art. Instead of conventional static educational texts and audioguides, this approach allows visitors to interactively explore the crafted knowledge, follow various pathways, and understand the curatorial vision at their own pace. It transforms static museum communication strategies into enriched, dialogical interactions, meeting the needs of both novice and expert visitors, making museums’ extensive research accessible and more relevant to individuals.

**“AUGUSTO GIACOMETTI, FREIHEIT | AUFTRAG”
EXHIBITION WITH MICHAEL EGLI***Exhibition*

Augusto Giacometti. Freiheit I Auftrag
Aargauer Kunsthhaus
27.1-20.5.2024

Curation

Dr Katharina Ammann, Director, Aargauer
Kunsthhaus
Michael Egli, Co-Project Manager and author
of the Augusto Giacometti catalogue raisonné,
SIK-ISEA
Denise Frey, author of the Augusto Giacometti
catalogue raisonné, SIK-ISEA

**10.1 COLLABORATION CONTEXT
AUGUSTO GIACOMETTI. FREIHEIT | AUFTRAG**

Michael Egli (see Chapter 4: Art of Curation, Interview with Michael Egli) is the co-curator of the “Augusto Giacometti, Freiheit | Auftrag” exhibition that took place at Aargauer Kunsthhaus from January 27, 2024, to May 20, 2024. Additionally, Michael is the co-director and co-author of the catalog raisonné Augusto Giacometti.

Michael studied art history, philosophy and computer science at the University of Freiburg. Previously worked in the same position for the Niklaus Manuel catalog of works. From 2008 to 2018 Head of Databases at SIKISEA. Since 1997, involved in various SIKISEA projects on Swiss art.

Curious to explore the transformative potential of the Reliq research, Michael Egli collaborated with the project, providing valuable insights and details into the curatorial process, research, and exhibition development of the “Augusto Giacometti, Freiheit | Auftrag” exhibition. This collaboration offered a real and rich case study to serve as a basis for the design, iteration, and final implementation of the Reliq curatorial platform.

10.2 COLLABORATIVE PROCESS

Michael Egli shared his overview of the exhibition development steps and goals.

Knowledge Base

The research on Augusto Giacometti took four years and resulted in the “Catalogue raisonné der Gemälde, Wandgemälde, Mosaik und Glasgemälde.” Michael Egli, a co-author of the catalogue, shared the main literature that served as the basis for the research and the catalogue itself.

Thematic Development

Michael shared the strategies that he and the rest of the curatorial team applied to develop the main themes for the exhibition.

Communication Strategies

Michael Egli and Christina Omlin provided insights into the communication strategies the team applied, discussing diverse media they used and achievements of the goals they set.

Exhibition Development Process

Michael shared the process of the exhibition development which was unique in its nature and not an ordinary one, as the extensive research was done before the exhibition, detailing the steps and decisions that made this exhibition distinctive.

10.3 OUTLOOK ON THE EXHIBITION BY FLORIAN BRANT AND CHRISTINA OMLIN

**Florian Brand,
Assistant Curator at Aargauer Kunsthhaus,
May 16th, 2024**

Research Basis

The catalog and exhibition on Augusto Giacometti are based on extensive research by the Swiss Institute for Art Research. It includes around 560 works (glassworks, murals, and paintings), each accompanied by text and documentation, along with essays on Giacometti’s role as an artist and his theoretical thoughts on color and conservation.

Exhibition Goals

The exhibition aims to make scientific findings accessible to a broader audience, showcasing both commissioned and free works to demonstrate Giacometti’s experimental approach and exploration of color.

Communication of Research

Florian shared the challenge of communicating extensive research through brochures and the importance of contextual information for visitor understanding. He acknowledges that more interactive and engaging methods could be employed.

Research and Exhibition Themes

The researcher explained the process behind selecting themes for exhibitions, which involves understanding the artist’s work and life, and choosing themes that balance personal and market-oriented works. The Augusto Giacometti exhibition focused on showing his reworks alongside market pieces.

Educational Process

Florian emphasized the importance of simplifying complex research to make it accessible to visitors through mediation departments and interactive methods.

Compromises in Mediation

He discusses the necessity to simplify information for general audiences without compromising the essence of the research.

**Christina Omlin,
Head of Communications Media at Aargauer Kunsthhaus,
May 16th, 2024**

On Visitor Engagement

Christina highlighted the need for diverse entry points to engage different audience segments. This includes brochures for informed visitors, interactive workshops for school groups, and mediation islands for hands-on experiences.

On Target Audience

The exhibition primarily attracted those familiar with Giacometti but also aimed to reach younger, less knowledgeable audiences through innovative mediation strategies like AR and VR experiences.

Museum Perception

She addressed the perception of museums as elitist and emphasizes efforts to make them more inclusive and accessible through free entry events, diverse programming, and youth involvement in curation.

Attention Span

Christina acknowledged the challenge of maintaining visitor attention in an age of information overload. Museums need to create immersive and engaging experiences to draw visitors in.

Guided Tours

Despite technological advancements, guided tours remain popular due to the personal interaction and detailed insights they offer.

Interactive Techniques

The importance of interactive and mindful looking techniques was discussed to help visitors slow down and engage deeply with artworks.

Inclusivity

The interviews emphasize the goal of making museums inclusive spaces that cater to a wide range of visitors through various engagement strategies and entry points.

These interviews collectively highlight the efforts and challenges involved in curating and communicating art exhibitions, particularly focusing on the balance between research depth and visitor engagement.

10.4 OUTCOMES OF COLLABORATION

Michael's participation and the opportunity to prototype on the actual exhibition enabled the final prototype of Reliq to closely align with museum realities and be tested in real settings. The materials provided by Michael served as a basis for finalizing the Reliq prototype and helped fine-tune the curatorial platform's functionality, which was subject to constant iteration.

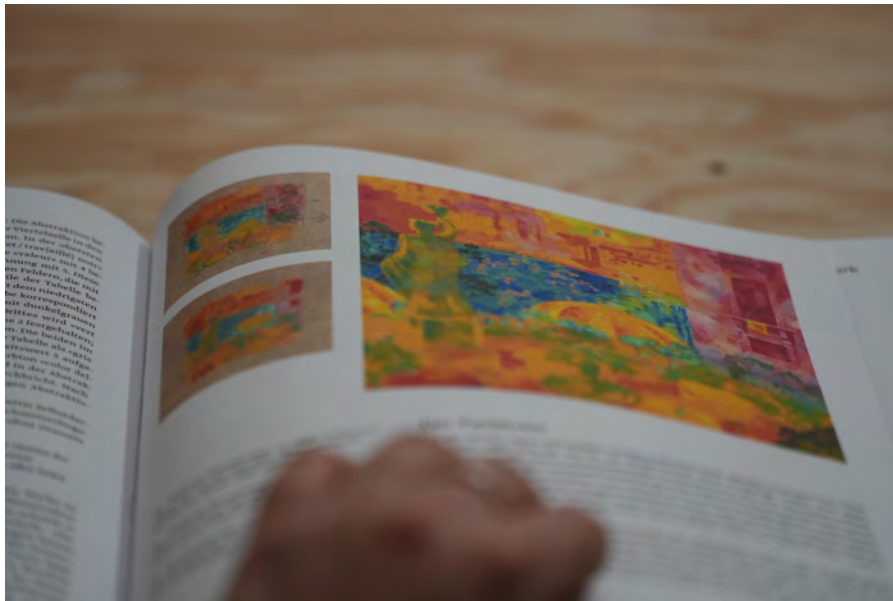
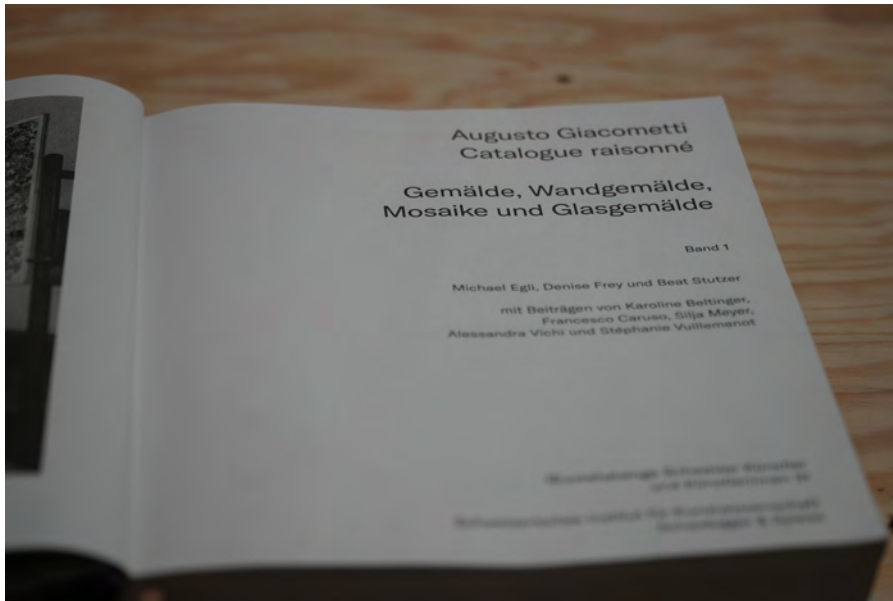


Figure 10.1—4 Catalogue raisonné

Figure 10.1—4 Catalogue raisonné



Figure 10.5—8 The Exhibition “Augusto Giacometti. Freiheit I Auftrag”

11.1 DESIGNING FOR DIVERSE VISITOR PROFILES

The research findings on audience segmentation and cultural engagement typology showcased that in-depth understanding of visitors' personal contexts is a key for designing relevant museum experiences.

Applying human-centric methodologies, two visitor profiles were designed. The profiles are based on the findings from museum visitor observations and interview data (see Chapter 8, "Fieldwork: Walk in Museums"), structured according to research findings. The primary distinguishing factor is the level of museum experience, categorizing visitors as either experts or novices. This differentiation is based on the level of individual background knowledge on the exhibition topic and arts: Daniel Bischof and Lainey Bauer.

To complete the picture of museum experience for novice and expert visitors, two visitor journey were designed, based on human-centric methodologies. Mapped to the key factors identified in the previous chapters, each journey is based on personal agenda and scenario for a visitor and mapped by the stages of the museum visit, described by Falk (1992).

Expert Visitor Experience: Daniel Bischof (see Fig. 11.1)

Daniel Bischof, 41, is a European Art Teacher from Zurich with a passion for Modern and Contemporary Art, particularly Abstract Expressionism and Surrealism. He frequently visits Kunsthaus Zurich, engaging with curators and expert-led tours. He values meaningful activities, learning opportunities, and social interaction, often conducting pre-visit research and spending considerable time analyzing each artwork.

Daniel believes knowledge and context should be provided because "when I know something, I can see more." He prefers flexible, non-intrusive ways to access information. He feels museum information should be accessible to all viewers, struggles with overly interpreted narratives, and finds it hard to ask questions without initial predisposition.

To satisfy his need for understanding and exploration, Daniel needs on-site access to curated information about artworks, a non-intrusive way to get this information based on his interests, dynamic storytelling paired with static artworks, and opportunities for in-depth discussions and interactions about the art pieces.

Expert Visitor Journey (see Fig.11.3)

Daniel Bischof, a 41-year-old European Art Teacher with extensive museum experience, heard about a temporary collection of Chinese kimonos at the Rietberg Museum. Excited by his passion for Asian art, he invited a friend to join him. Daniel's agenda for the visit is well-defined; he knows how

to navigate museum settings and what he aims to experience.

Before the visit, Daniel meticulously plans his trip, focusing on the new kimono displays. He reads a book on kimono history, makes notes, checks the museum website for updates, and chooses a visit time to avoid crowds. He enters the museum with confidence, bypassing information desks or maps, relying on his prior knowledge of the layout. Comfort and familiarity mark his initial orientation.

Once inside, Daniel proceeds directly to the kimono exhibit, spending substantial time with each piece. He reads detailed information in the catalogues and discusses the pieces with his friend, sharing insights from his pre-visit research. His engagement is deep and focused, driven by curiosity and specificity. However, he occasionally feels frustrated by a lack of information or material.

During exploration, Daniel revisits his favorite exhibits and explores adjacent ones with a targeted approach, avoiding a broad overview. He chooses exhibits based on specific interests or new displays, leading to a deeper engagement. Unlike less frequent visitors, his leave-taking is not about museum fatigue but about fulfilling specific visit goals. He may plan return visits based on museum announcements or newfound interests, feeling satisfied and fulfilled by the experience.

Novice Visitor Experience: Lainey Bauer (see Fig. 11.2)

Lainey Bauer, 22, is a Computer Science student with a newfound interest in contemporary art. She visits museums occasionally with friends or groups, seeking engaging and understandable content in a socio-political context. Lainey values social interaction, active participation, and comfort, but often feels confused and overwhelmed by the vastness of museums.

Lainey often feels overwhelmed by the vastness of museums and starts her visits randomly, trying to see everything. She struggles with complex art narratives and academic language, finding it hard to connect with artworks lacking contextual information. This makes her feel that museums are not “for her” due to a lack of relatable skills and predisposition.

Lainey needs clear, concise information about artworks that is easy to understand without prior art education, guidance to construct and navigate her museum experience, and personalized entry points into the art world.

Novice Visitor Journey (see Fig. 11.4)

Lainey Bauer, a 22-year-old Computer Science student, recently developed an interest in contemporary art. Accompanied by a friend, she visited Kunsthaus Zurich, hoping to engage more deeply with art and boost her crea-

tivity. With limited museum experience, Lainey prioritizes social interaction, active participation, and comfort, seeking meaningful activities and learning opportunities.

Before her visit, Lainey searches online for museums and reads reviews to set her expectations. However, these expectations are not grounded in direct experience. Upon arrival, she feels initially disoriented and looks around to grasp the setting. She seeks information at the desk, consults her friend, obtains a map, and starts to identify areas of interest.

Lainey begins her focused exploration, starting at what seems to be the beginning. She reads all labels and discusses what she sees with her friend, trying to personalize her experience based on her existing knowledge. Initially motivated to engage with every exhibit, she soon realizes that intensive viewing will prevent her from seeing the entire museum. As fatigue sets in, her behavior shifts to skimming through exhibits rather than examining them closely.

During her visit, Lainey engages sporadically with artifacts that catch her interest but often feels overwhelmed and confused by complex art narratives. Conversations with her friend start to deviate from exhibit content as she skims the exhibits. This feeling of disconnection leads her to perceive that museums might not be “for her.”

As museum fatigue sets in, Lainey decides to leave, influenced by physical exhaustion or time constraints. Her focus shifts from the exhibits to social interaction, discussing her visit with her friend. Despite feeling somewhat excluded by the experience, she values the social aspects and post-visit discussions.

Reflections

These visitor journeys illustrate the different approaches and experiences of different museum-goers. Accordingly, the design decisions taken should take into account the distinctive difference for visitors when exploring same content. Fighting “elitist” image of museums and designing inclusive experiences involves understanding the specific characteristics, needs, and pain points of different visitor segments like Daniel and Lainey, who respectively presents expert and novice audience segments.

11.2 DESIGNING FOR CURATORIAL PROCESS

As the practical solution has to be integrated into curatorial process of exhibition development and research, the Curatorial Journey was designed. The Journey (see Fig. 11.5) follows key moments within exhibition development process and points the needs and pain points that curators experience. The Curatorial Journey is based on the research findings and expert interviews (see Chapter “Art of Curation”). The stages and curatorial actions described in the Journey are based on the interview findings, results of collaboration with Michael Egli and theoretical research.

This table outlines a comprehensive curatorial process that integrates research, planning, education, communication, and visitor engagement, reflecting the insights gathered from the interviews.

The Journey serves as a basis for the structural development of the curatorial tool “Reliq”.

Daniel Bischof

“

When I know something, I can see more. I like to be in a museum and look at art pieces and what they make with me.

I like when paintings are juxtaposed to life. The art becomes alive when you know the story.

”

The Teacher of European Art

Daniel, aged 41, is a European Art teacher with a deep passion for Modern and Contemporary art. Daniel is particularly fascinated by abstract expressionism and surrealism, often seeking to understand the artists' motivations and the economical contexts that influenced their works.

Frequent Museum Visitor

Residing in Zurich, he frequently visits Kunsthaus Zurich, drawn to its rich collection of modern art pieces. He often engages with curators and participates in expert-led tours.

Solo or With a Friend Visitor

Sometimes Daniel brings his friends on a tour and tells them about his favourite exhibit and shares that he knows about it.

Cultural or Intellectual leisure-time oriented

Daniel seeks intellectual stimulation and a deeper understanding of contemporary societal themes through the lens of modern art.

An intrinsic love for the aesthetics and innovative techniques of modern art motivates his frequent visits to museums. "To see it. It makes me happy"

Needs

- To satisfy his need for understanding and exploration, he needs an on-site access to diverse curated information about the artworks "You need to have a predisposition to appreciate what is thrown at you. It impacts how I see"

Having a non-intrusive way to get the information he is interested in, triggered by his own choice.

Coupling static (artwork) with dynamic (story) to bring the experience to life.

Opportunities for in-depth discussions and interactions about the art pieces.

Paint Points

Knowledge/context should be provided, "when I know something I can see more", "Often I look at painting and can only connect to it at a visual level. There is no story. But I try to make a guess and know more"

Finds audioguides overwhelming, as they are not very flexible. They are "predefining" his experience, he would like to have his own "choice".

"The information presented in museums should be accessible to all groups of viewers, with different levels of complexity".

Cannot always follow the curatorial narrative, as he finds it to be "too interpreted", "Some terms are hard to understand".

Finds that lack of individual predisposition does not allow him to ask questions and know what is interesting to him.

Sometimes conducts pre-visit research on the featured artists and their works in the upcoming exhibition.

Goes to the exhibition with his friend.

Makes notes before and after the exhibition.

Likes to have a space for a "pure" experience.

Spends considerable time in front of each artwork, contemplating and analyzing the piece beyond its appearance.

Engages with museum staff and attends curator-led tours to gain additional insights.

Read on topic after the visit.

Leisure-time criteria prioritization

meaningful activities
learning opportunities
novel experiences

social interaction
active participation
comfort

Lainey Bauer

“

I do not get what I am supposed to get.

Sometimes I look at contemporary art, I feel confused but motivated, I look at the label and it provides me with zero understanding.

”

Software Engineer

Lainey, aged 22, is a college student majoring in computer science. She has recently developed an interest in cultural experiences thanks to an amazing people she met. She is keen to explore more about art, as she thinks it will help her to develop creativity.

Occasional Museum Visitor

With very limited prior exposure to art museums, Lainey looks for engaging and understandable content, placed in the socio-political context surrounding the art work.

Visits Museums in a Group

She attends museums only with a friend or a group. Would not feel comfortable to attend alone.

Organization & Participation leisure-time oriented

Lainey visits museums primarily for leisure and as a cultural outing with friends or family.

She prefers socially - oriented activity, relaxation.

Seeks enjoyable and educational experiences that offer straightforward explanations and engaging stories.

Needs

Clear, concise information about artworks that is easy to understand without prior art education.

A help to "construct" and "guide" her museum experience, without feeling lost or missing out on important exhibits.

Interactive and immersive experiences that make learning about art fun and memorable.

A way to dive into art world from her points of interest.

Paint Points

Often feels overwhelmed by the vastness of museums and starts her visits at random points, trying to "see everything" exhibited.

Do not understand some complex art narratives and the academic language used in many museum descriptions.

Struggles to connect with artworks that lack contextual information or relatable narratives.

Feel that museums are not "for her", as she lacks the skills to relate to, understand and comprehend art.

Have seen posters of the exhibition and decided to visit. Do not have knowledge on the exhibition.

Visits the exhibition in a company of two friends.

Enters museum, feels initially disoriented, looks around to grasp the setting.

Look intensely and read labels during first 30 minutes, tries to understand what she sees.

Opens "Google Lens" to get information on artwork.

Skips sections that seem too dense or academic and gravitates towards exhibitions with clear themes and storytelling.

-> Skims through exhibits rather than examining them closely.

-> Does not follow the exhibition sequence.

Leisure-time criteria prioritization

social interaction
active participation
comfort

meaningful activities
learning opportunities
novel experiences

Figure 11.1 Visitor Persona: Expert Visitor

Figure 11.2 Visitor Persona: Novice Visitor

Expert Visitor Journey

Daniel Bischof
 "When I know something, I can see more. I like to be there and look at works and what they make with me."

Scenario
 Daniel heard that Rietberg Museum has exhibited a temporary collection with Chinese Kimonos. Being passionate about Asian art, he was excited to see it and invites his friend to go and check it out.

Agenda
 Daniel has a lot of museum experience. He knows how to navigate in museum setting, what he would like to experience and look for in each particular visit.

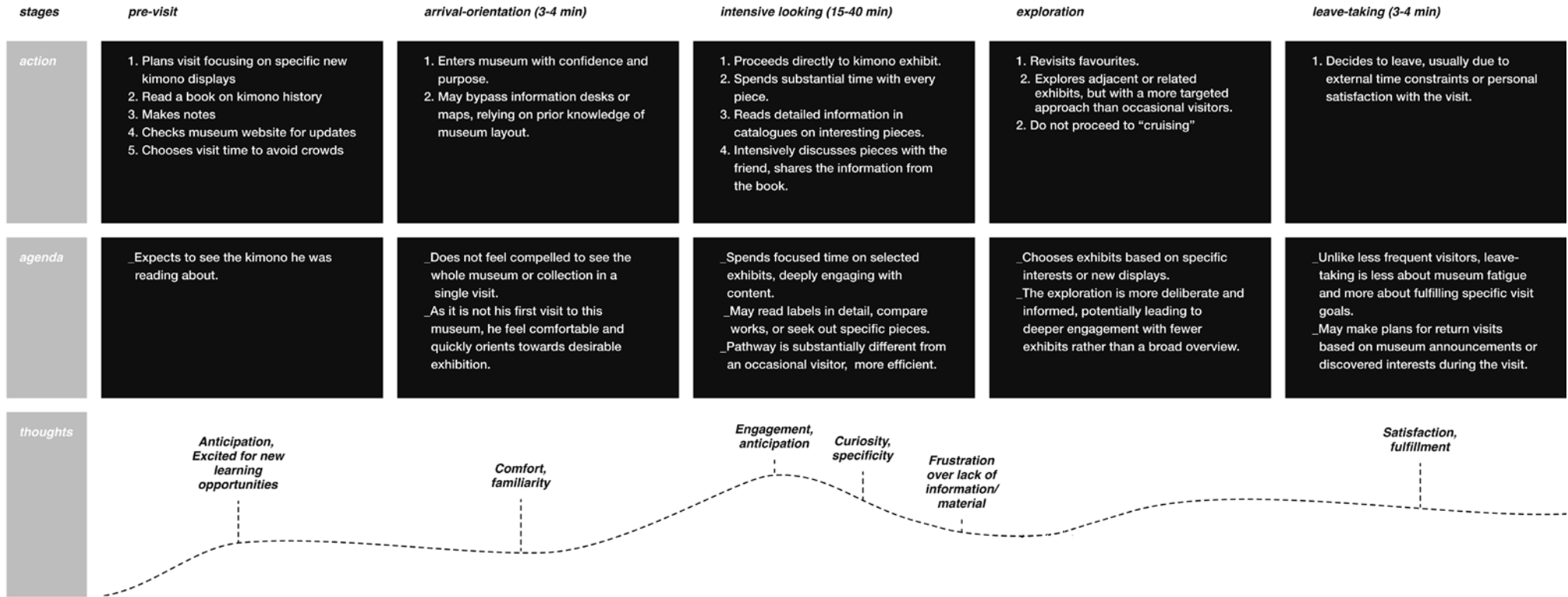


Figure 11.3 Expert Visitor Museum Journey

Novice Visitor Journey

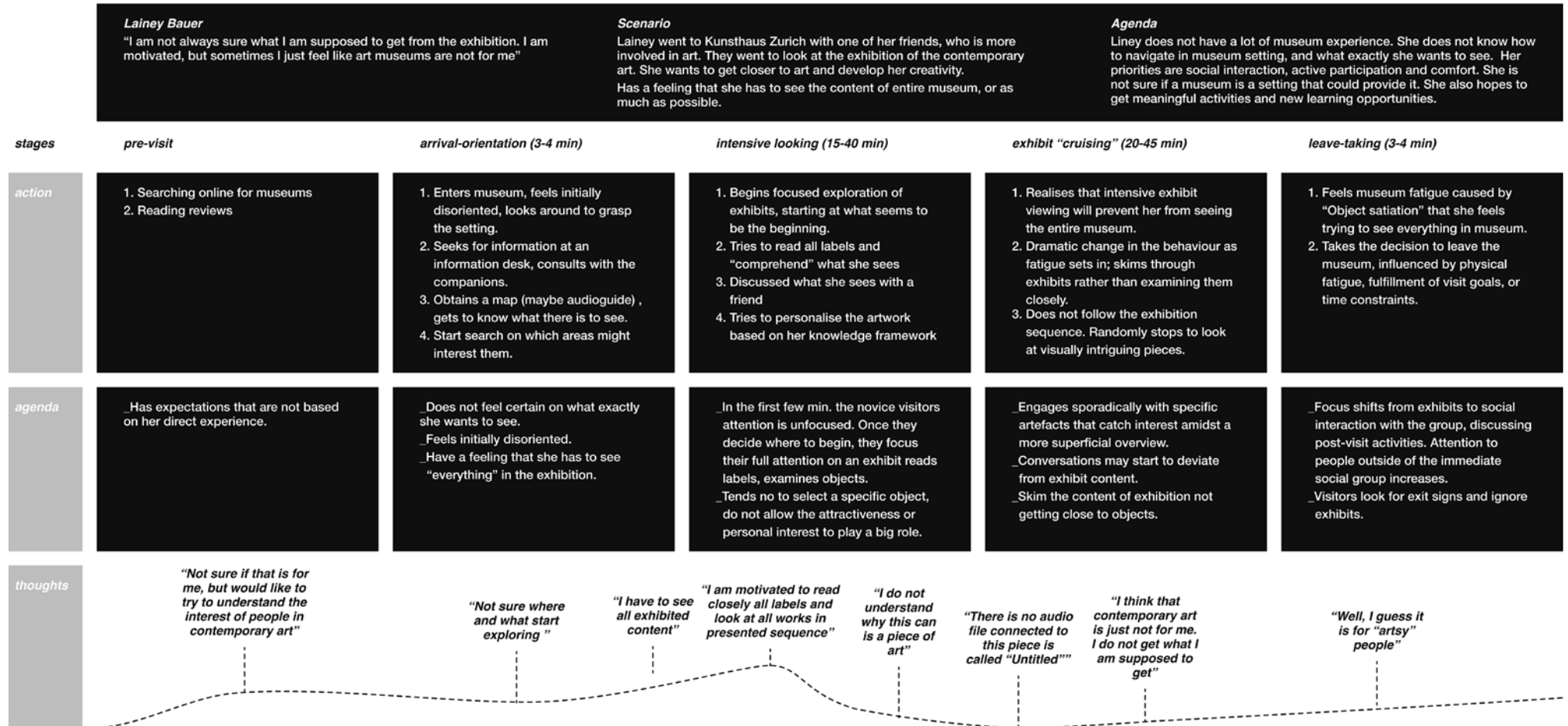


Figure 11.4 Novice Visitor Museum Journey

<i>Stage</i>	<i>Description</i>
Research—Forming Knowledge Base	<ul style="list-style-type: none"> —Conducting in-depth research on the artist and their work. —Consulting books, academic articles, and previous exhibitions. —Visiting artist studios and conducting interviews with artists
Concept Development	<ul style="list-style-type: none"> —Identifying key themes and narratives based on research findings. —Developing a thematic concept for the exhibition, considering historical and artistic contexts.
Exhibition Planning	<ul style="list-style-type: none"> —Creating a moodboard and detailed layout plan. —Deciding on the structure: linear or free-flowing, based on the exhibition space and themes. —Selecting artworks that align with the exhibition’s themes and narrative.
Educational Strategy	<ul style="list-style-type: none"> —Developing educational islands with simplified scientific results in films and sound documents. —Creating interactive tools like VR and simulations to communicate complex content. —Preparing a booklet with essential information in simple language for visitors.
Mediation Programs	<ul style="list-style-type: none"> —Planning diverse programs like workshops, expert talks, guided tours, and panel discussions. —Organizing art dialogues and intimate discussion sessions with artists, curators, and moderators.
Communication Media	<ul style="list-style-type: none"> —Utilizing film sequences, simulations, and electronic tools for teaching and engaging visitors. —Limiting text in exhibition rooms to avoid distraction; provide detailed information in booklets.
Visitor Engagement	<ul style="list-style-type: none"> —Identifying and segment audience groups: artsy type and non-artsy type. —Tailoring information and interpretation to different visitor groups, ensuring accessibility. —Emphasizing narrative storytelling to facilitate dialogue between visitors and artworks.
Feedback and Adaptation	<ul style="list-style-type: none"> —Gathering visitor feedback through observations, guided tour exchanges, and surveys. —Continuously adapting educational and mediation strategies based on visitor interactions and preferences.
Collaboration	<ul style="list-style-type: none"> —Regularly meeting with educational and communication departments to align on themes and strategies. —Coordinating with graphic and design teams to ensure visual consistency and appeal.
Final Presentation	<ul style="list-style-type: none"> —Curate the exhibition with a balance of aesthetics and informative content. —Ensure that the exhibition provokes questions and reflections rather than providing definitive answers.

Figure 11.5 Curatorial Process Journey

11.3 PROTOTYPING INTERACTIVE SOLUTIONS

PROTOTYPE, VERSION 1

The first prototype was developed based on the collection of Alberto Giacometti's artworks, exhibited at Kunsthaus Zurich. This prototype was based on a custom ChatGPT model (OpenAI, 2023).

The goal of the prototype was to test how a visitor, who has no previous knowledge on the artist and his works, would interact with the model within the museum settings and to test dialogical interactions.

To imitate input of curatorial research, the most acknowledged literature was added as the basis of the knowledge base for the model.

The model allowed to enable the selected knowledge resources, defined as the most informative on the artist.

The prototype lacked knowledge curation and detailed review: information tagging and a detailed database of the artworks, as it was personal initiative without curatorial inputs.

Model Setup for Visitor Profiling

To understand the personal context of the visitor testing the prototype, the model was prompted to gather some essential information with minimum questions, to accurately define the visitor's personal agenda.

These questions were designed based on the research findings from Chapter 2, Cultural Engagement Typology. After several tests, it became clear that questions should be asked in textual format, as voice input leaves too many space for wrong interpretations by visitors. The following five key pieces of information were requested:

“To get an understanding of the profile of the visitor you're talking to, start the conversation by enquiring the visitor about the following 5 pieces of information:

- *What is the level of visitor's knowledge & expertise?*
- *Do they need special accessibility help?*
- *Do they have any particular interest in the collection/piece or general exhibition?*
- *What way of information do the visitor prefer: text or audio?*
- *How much time does the visitor plan to spend in a museum?*

Enquire about each piece of information in a separate message, to not overwhelm the visitor. Do not under any circumstances let the user start asking questions, or answer their questions before you got those 5 pieces of information.” (Initial Prompt for the prototype version 1)

In order for the model to dynamically align the content extracted from the knowledge base to the visitor's level of the background knowledge in subject, it was given a prompt:

“Try to analyze the language that a visitor uses and adjust the complexity of your terminology and narration to fit the visitor's profile.

Make sure you adapt the content and length of your answers and the complexity of the language to the profile of the visitor.”

To invite visitors to form their own interpretations, the model was prompted:

“Begin each engagement by inviting visitors to share their thoughts, questions, or experiences related to the artwork or themes present in Giacometti's work. Use this as a foundation to adapt your narrative and educational content, ensuring it aligns with the visitors' interests and level of understanding.

Promote an environment where visitors feel empowered to express their interpretations, questions, and insights, facilitating a rich exchange of ideas and perspectives. Your guidance should support a fluid, responsive dialogue that adapts to the evolving interests and needs of the visitors, making the learning experience more inclusive, interactive, and reflective of the diverse ways people connect with art.”

Next, the prototype encouraged visitors to choose a thematic lens for exploring Giacometti's work. Suggested themes included:

- *Giacometti and Performance Art*
- *Thematic Exploration of Negative Space*
- *Comparative Cultural Perspectives*
- *Giacometti and the Non-Human*
- *Exploring the Unfinished*
- *Isolation and Despair in Giacometti's Sculptures*
- *Giacometti's Work with Existential Philosophy*
- *Giacometti in the Context of 20th-Century Art Movements*
- *Existentialism in Sculpture*
- *Evolution of the Human Figure*

Interaction Flow (see Fig 11.5)

Initially, the prototype was set to “ask” rather than lead the exploration initiative.

Visitor Profiling. Firstly, the model inquired about defined questions to create the visitor’s profile (see Fig. 11.6).

Introduction to Giacometti. Following the setup of the flow, the model provided an introduction to Alberto Giacometti, adapting the language and complexity based on the visitor’s responses. Sometimes, the visitor asked for a simplified explanation of Giacometti’s artistic themes (see Fig. 11.7).

Divergence from Narrative. Interestingly, curious in the transformation of the visual style of Alberto Giacometti’s sculptures, the visitor diverted the dialogue into the political aspects of the artist’s work. The conversation further developed into how political events, like World War II, influenced Giacometti’s vision. The visitor was interested in understanding the specific impact of the war on Giacometti’s work, leading to a discussion on the themes of isolation and existential despair (see Fig. 11.8).

Artistic Transformation. Then, while discussing the work “The Cage” (see Fig. 11.10), the visitor asked to go more in-depth into the “isolation and confinement” aspect of the artist’s work. This developed further into a discussion of the artist’s pessimistic vision (see Fig. 11.9) of the world and the personal impact of the war. The explanation piqued the visitor’s curiosity about the transformation in Giacometti’s visual style, particularly the thinning of his sculptures.

Conclusion

By engaging with the visitor and adapting the responses to their level of understanding and interest, the prototype created an individual and relevant exploration of Giacometti’s work for a visitor. Only the part of conversation described above included 2494 words, equivalent to about five A4 pages. It demonstrates that visitors can absorb much more information through audio inputs.

This prototype showed the potential of conversational AI and dialogical interface in cultural experiences. Additionally, for the visitor, the non-human aspect made visitors feel free to ask “simple” questions without feeling shy, even without previous knowledge on the artist.

As the testing was done with the Chat GPT voice interface (OpenAI, 2023), the user found it hard to control the input using the on-screen button. They were often confused about when to press to input and when not to.

Hello! How can I assist you today?

I am now in the Giacometti's collection room at Kunsthaus, can you guide me?

Welcome to the Giacometti collection at the Kunsthaus! It's a fantastic opportunity to immerse yourself in the work of one of the 20th century's most significant artists. Giacometti is renowned for his distinctive sculptures characterized by elongated forms. These pieces often explore themes of existentialism, perception, and the human condition.

As you explore the collection, you might encounter some of his iconic sculptures like "Walking Man," "Standing Woman," and "The Nose." Each of these works showcases Giacometti's unique approach to capturing the essence and fragility of the human figure.

If you're interested in specific pieces or themes within Giacometti's work, or if you have questions about what you're seeing, feel free to ask!

🔊 📄 🗑️ 🗨️

Figure 11.6 Prototype v.1, Conversation Flow

That sounds like a wonderful experience! To start, could you tell me a bit about your level of knowledge and expertise when it comes to art and Giacometti's work?

🔊 📄 🗑️ 🗨️

I had some art history lessons when I was a child, but I do not have any knowledge about Alberto Giacometti's art.

Got it, thanks for sharing. Do you need any special accessibility help while exploring the museum?

No

Are you interested in learning about a specific collection or piece by Giacometti, or would you prefer a general overview of his work exhibited here?

Maybe you could first give me some introduction to himself first, and then we will see.

Figure 11.7 Prototype v.1, Conversation Flow

Can you repeat it in a bit more simple words? And what does existential crisis or something you said mean?

Sure! After World War II, Giacometti started making his sculptures really skinny and tall. This was a way for him to show how people can feel all alone, even when they're around others. The war made a lot of people think deeply about life and why we're here, which is what some call an "existential crisis." This kind of thinking is about big questions like "What's the meaning of life?" or "Why do we feel alone sometimes?"

So, Giacometti's thin sculptures are like a way of showing those big questions in art. They make us think about how we're all in this big world together but sometimes feel like we're in our own little bubble, trying to reach out.

Is there anything else about Giacometti or his art that you'd like to know more about?

🔊 📄 🗑️ 🗨️

Can you tell me, please, more about his work called Grande Tete de Diego?

Figure 11.8 Prototype v.1, Conversation Flow

I asked why his vision on the world is quite pessimistic.

Giacometti's vision, often perceived as pessimistic, is deeply influenced by existentialist thought and his personal experiences, particularly during and after World War II. Existentialism focuses on themes like the absurdity of existence, the isolation of the individual, and the search for meaning in an indifferent or even hostile universe. These themes can give art a more somber, introspective tone.

The war, with its widespread destruction and the profound questions it raised about humanity, left a lasting impact on many artists and intellectuals of the time, Giacometti included. His sculptures, characterized by their thin, elongated forms, can be seen as visual representations of human vulnerability and the existential solitude each person faces.

Giacometti was also fascinated by the concept of perception and how it shapes our understanding of reality. His sculptures often seem to be more about capturing the distance and space around the figures than the figures themselves, emphasizing the isolation of individuals from one another and the world around them.

This focus on isolation, perception, and the inherent struggles of existence can contribute to what might be perceived as a more pessimistic worldview. However, it's also possible to see a form of resilience in his work—the enduring human spirit despite these existential challenges.

If you'd like to delve into specific works or have more questions, I'm here to help.

🔊 📄 🗑️ 🗨️

Figure 11.9 Prototype v.1, Conversation Flow

11.4 PROTOTYPE, VERSION 2

In the next iteration, the model was prompted to “guide” a visitor by the principles of mindful looking.

Summary and Analysis of the Conversation. After acquiring essential information (see Fig. 11.11), the model advised the visitor on how exactly to spend the “10 minutes” mentioned by the visitor to achieve full immersion. The model gave advice on enhancing the museum experience and offered a mindful narrative for deeper immersion (see Fig. 11.12–13)

Next conversation touched on how to appreciate modern art, the economic context of Giacometti’s life, his personal traits, and insightful quotes from him and his acquaintances. The dynamic of the conversation was quite educational and supportive.

Historical Context and Artistic Contribution. The assistant provided an overview of Giacometti’s life, the historical periods he lived through, and his motivations, highlighting how his elongated figures symbolize existential themes.

Next, by the user’s inquiry, the model explained why Giacometti’s work is considered a major contribution to modern art, focusing on his innovative approach, existential themes, and influence on art movements.

Understanding Modern Art. The visitor expressed confusion regarding modern art, and asked the assistant to explain the importance of expression, breaking traditional boundaries, and conceptual significance in modern art using simple language.

Museum Experience Tips. During the interaction, the model was “guiding” the user with practical advice on how to understand sculptures in a museum setting, such as reflecting on the context (see Fig. 11.12).

The model emphasized importance of personal interpretation, and encouraged the visitor to think about different questions the artist imposed.

Thematic Exploration. Next, discussion topic changed into different thematic lenses, such as Giacometti’s influences from African, Oceanic, and Cycladic art, and existential themes in his sculptures, provides a deeper understanding of his work.

Personal Insights. When a user asked about personal insights from the artist, the model provided quotes from Giacometti and his acquaintances offer a personal dimension to his artistic journey and philosophy (see Fig. 11.14–15).

Enhancing the Visit. A mindful narrative was created to help the visitor appreciate the sculpture in a deeper, more contemplative manner (see Fig.



Figure 11.10 Kunsthaus, Alberto Giacometti’s art piece



Hello! Welcome to our virtual museum experience. To make your visit as enriching and tailored as possible, I'd like to ask a few questions:

1. What's your level of expertise or interest in our museum's themes?
2. Do you have any specific accessibility requirements I should be aware of?
3. Are there particular topics or areas within the museum you're interested in exploring?
4. Would you prefer information in text or audio format?
5. How much time do you plan to spend on this virtual tour?

Feel free to answer these at your own pace!



Figure 11.11 Prototype v.2, Conversation Flow

I have only 10 minutes in the museum.



With only 10 minutes in the museum to explore Alberto Giacometti's work, here's a focused approach to make the most of your brief visit:

1. **Prioritize Key Pieces:** Before you arrive, try to find out which of Giacometti's most iconic pieces are on display. Works like "The Walking Man," "The Standing Woman," or any of his distinctive elongated sculptures should be your priority. Head straight to these works first.
2. **Observe Form and Texture:** Spend a moment with each key piece, observing the unique characteristics of Giacometti's work—the elongation of figures, the rough, textured surfaces, and the interplay of shadows and light. These aspects are central to experiencing his art.
3. **Engage with Space:** Notice how the sculptures occupy the space around them. Giacometti's figures often create a sense of distance and solitude, even in a crowded room. Stand at different angles and distances to see how your perception of the sculpture changes.
4. **Read the Descriptions:** If brief descriptions or titles are provided next to the artworks, take a quick moment to read them. They can offer valuable insights into the context or inspiration behind each piece.
5. **Capture the Essence:** Since your time is limited, focus on capturing the essence of Giacometti's work in your mind. Consider the emotional impact and the existential themes conveyed through the sculptures' forms and expressions.
6. **Take a Mental Snapshot:** While lingering on each piece, take a mental snapshot or, if allowed, a quick photo (without flash) for later reflection. This will help you remember and research more about the pieces you found most compelling.

Figure 11.12 Prototype v.1, Conversation Flow



Certainly! Let's create a serene and mindful background narrative to enhance your experience with a piece from the Giacometti collection. Imagine you're standing in front of one of his iconic sculptures:

As you approach the sculpture, take a moment to ground yourself. Feel the soles of your shoes touching the floor, the air around you gently brushing against your skin. Take a deep breath in, hold it for a moment, and then exhale slowly, allowing any distractions to fade away with each breath.

Now, turn your attention to the sculpture before you. Notice its slender form reaching out into the space. There's a profound silence about it, yet it speaks volumes. Imagine the sculpture as a silent witness to the world, embodying years of history, thought, and artistic exploration.

Observe the texture of the surface—how the light and shadows play over the rough, tactile marks left by Giacometti's hands. Each mark is a testament to the artist's presence, his moment-to-moment decisions as he shaped the form. Allow yourself to connect with the energy and time encapsulated in these textures.

Notice the elongation of the figure. It's as if Giacometti is stretching the boundaries of our perception, inviting us to see beyond the physical form. The sculpture, in its thinness, seems to exist both here in the space with us and somewhere far beyond, in a realm of thought and feeling.

As you stand with the sculpture, consider the space it occupies—the emptiness around it that's as much a part of the artwork as the bronze itself. Giacometti was fascinated by how we perceive space and distance, how we relate to others. Feel the space between you

In this moment, you're not just an observer; you're part of the scene. The sculpture, the space, and you are all interconnected in a silent dialogue. What does this dialogue reveal to you about your own existence, your own standing in the vastness of space and time?

Take another deep breath, letting the presence of the sculpture fill your awareness. Carry this sense of connection and mindfulness with you as you gently shift your focus back to your surroundings.

By anchoring yourself in the present and engaging deeply with the sculpture, you create a space for mindful appreciation, allowing Giacometti's work to resonate with you on a personal level.

Figure 11.13 Prototype v.2, Conversation Flow

Do you have any quotes from his family or friends about him?

Quotes from Alberto Giacometti's family and friends offer additional perspectives on his character, work ethic, and the impact he had on those around him. Here are a few:

1. **Jean-Paul Sartre**, the French existentialist philosopher and a friend of Giacometti, wrote extensively about him and his art. Sartre said, "Giacometti was haunted by the idea of a vision that would appear suddenly, all at once... He wanted the impossible: for the apparition to be durable." This comment reflects Giacometti's intense pursuit of capturing fleeting human presence in his sculptures.
2. **Annette Giacometti**, his wife, often spoke about his dedication to his work and his relentless self-criticism. She noted, "Alberto was never satisfied...with his work. Every time he started a piece, he would hope it would be his masterpiece, only to be disappointed in the end and destroy it."
3. **James Lord**, an American writer and friend who sat for a portrait by Giacometti, wrote a book about the experience titled "A Giacometti Portrait." Lord observed, "To watch him work was like witnessing the struggle of creation itself, raw and unfiltered. Despite his frustrations, there was a purity in his dedication that was awe-inspiring."
4. **Diego Giacometti**, his brother, who was also a sculptor and often assisted Alberto in his work, said about Alberto's work ethic, "He could work for hours on end, lost in his sculptures. There was a kind of magic in how he saw things, and he worked tirelessly to bring that vision into reality."

Alberto Giacometti was a complex individual, deeply committed to his art and known for his intense dedication to his work. As a person, he was introspective, often absorbed in existential questions that clearly influenced his art. His character was marked by a blend of humility and a relentless pursuit of artistic perfection, which often led him to express dissatisfaction with his work, regardless of its success or acclaim.

Here are some quotes from Giacometti that provide insight into his thoughts and personality:

1. **On the essence of his art:** "The object of art is not to reproduce reality, but to create a reality of the same intensity."
2. **On his artistic struggle:** "The more I work, the more I see differently."
3. **On perfection:** "All the sculptures of today, like those of the past, will end one day in pieces... So it is important to fashion ones work carefully in its smallest recess and charge every particle of matter with life."
4. **On the nature of his figures:** "I am very interested in art but I am instinctively more interested in truth... The more I look the more I see, and the more I see the better I can see what I look at... The head I had before me was to become unknown, unrecognizable, a total stranger."
5. **On the creative process:** "When I make my drawings... the path traced by my pencil on the sheet of paper is, to some extent, analogous to the gesture of a man groping his way in the darkness."

Figure 11.14-15 Prototype v.2, Conversation Flow



Certainly! Alberto Giacometti's work was influenced by a diverse range of cultural perspectives, including African, Oceanic, and Cycladic art. These influences can be seen in various aspects of his sculptures, from their forms to their textures and the way they occupy space.

1. **African Art Influence:** Giacometti was known to have been fascinated by African art, which he encountered in museums and collections. African sculptures often embody a spiritual or symbolic presence, something Giacometti sought to capture in his own work. The elongated limbs and torsos of his figures can be seen as a nod to the stylization common in African sculpture, which emphasizes certain features to convey power, presence, or essence rather than literal representation.
2. **Oceanic Art Inspiration:** Like African art, Oceanic art (from regions such as Polynesia, Micronesia, and Melanesia) also had a significant impact on Giacometti. Oceanic sculptures often serve ritualistic or ancestral purposes and are characterized by their abstract forms and emphasis on verticality and symmetry. Giacometti's slender, upright figures share this emphasis on verticality and an aura of otherworldliness that invites reflection on the human condition beyond mere physical appearance.
3. **Cycladic Art and Simplification:** Cycladic art, from the ancient Cycladic civilization in the Aegean Sea, is known for its simplified, geometric forms, particularly in its marble figurines. Giacometti's move towards abstraction and his focus on essential lines and forms can be linked to the minimalist aesthetic of Cycladic sculptures. His figures, though more textured and less geometric, carry a similar sense of reduction to fundamental shapes and an exploration of the essence of human form.
4. **Integration and Innovation:** What's particularly interesting about Giacometti's engagement with these cultural influences is how he integrated them into his unique artistic vision. He

Figure 11.16 Prototype v.2, Conversation Flow

11.12).

Findings

The conversation was designed to transform the visitor's experience from a potentially overwhelming encounter with unfamiliar art to an informed and individual journey. By providing historical context, thematic insights, practical tips, and personal reflections, the model helped the visitor connect with Giacometti's work on multiple levels. This approach created lasting appreciation and curiosity about the artist's work and left many open questions, stimulating visitor to come back.

11.5 PROTOTYPE, VERSION 3

The prototype of the final artifact was developed together with team of Data and Computer Science Masters from ETH (Swiss Federal Institute of Technology), Menelik Nouvellon, Eliot Ullmo, and Rasan Hussain-Younis. The final prototype is based on the knowledge base, provided by Michael Egli and his review of the exhibition development (see Chapter 12 "Artifact").

Building a Knowledge Base

Michael Egli shared the main information sources that served as a basis for the research done on Augusto Giacometti, and shared the catalogue raisonné developed as a result of a four year research. Some of the sources that were included into the Knowledge Base:

— Michael Egli / Denise Frey / Beat Stutzer, Augusto Giacometti. Catalogue raisonné der Gemälde, Wandgemälde, Mosaike und Glasgemälde (Oeuvrekataloge Schweizer Künstler und Künstlerinnen 31), mit Beiträgen von Karoline Beltinger, Francesco Caruso, Silja Meyer, Alessandra Vichi und Stéphanie Vuilleminot; hrsg. vom Schweizerischen Institut für Kunstwissenschaft, Zürich: Scheidegger & Spiess, 2023.

— Augusto Giacometti. Freiheit | Auftrag, Ausstellungsführer zur Ausstellung im Aargauer Kunsthaus, 27.1.–20.5.2024, Aarau 2024.

— Marco Giacometti, Augusto Giacometti. In einem förmlichen Farbentaumel. Die Biografie, 2 Bde., hrsg. von der Fondazione Centro Giacometti, Stampa, Zürich: Scheidegger & Spiess, 2022.

— Caroline Kesser, Immer nur das Paradies. Augusto Giacometti – Die Tagebücher 1932–1937, Zürich: Scheidegger und Spiess, 2020.

— Augusto Giacometti, Von Stampa bis Florenz. Blätter der Erinnerung, Zürich: Rascher, 1943 [mit 16 ganzseitigen Tafeln nach Zeichnungen des Verfassers].

— Augusto Giacometti, Von Florenz bis Zürich. Blätter der Erinnerung, Zürich: Rascher, 1948.

— Augusto Giacometti: «Die Farbe und ich», hrsg. von Matthias Frehner, Daniel Spanke und Beat Stutzer, Ausst.-Kat. Kunstmuseum Bern, 19.9.2014–15.2.2015, Köln: Wienand, 2014.

Structuring Knowledge Base

Next the data provided was structured, based on Michael's overview of the exhibition development process and reflected the structure of the research done by Michael and the team.

Knowledge Base Review

To ensure the integrity and accuracy of the knowledge base, each source in the knowledge base was tagged by generated tags, reflecting the content of the source and its priority.

Media Library (Artworks)

Michael provided a full list of artworks presented in the exhibition, grouped by themes to which they are related and rooms they are located. Example:

Raum E2 – Thema: Das frühe Schaffen

— SIK 91211 [Kat. 4] Augusto Giacometti Die Nacht (Ogni vivente loda il Signore) 1903. Tempera auf Leinwand. 2515 x 110 cm. Kunsthaus Zürich Inv. 785. Depositum: Schweizerische Eidgenossenschaft Bundesamt für Kultur Bern.

— SIK 22626 [Kat. 8] Augusto Giacometti Narziss 1905. Öl und Tempera auf gipsgründertem Holz. 685 x 199 cm. Stiftung für Kunst Kultur und Geschichte Winterthur Inv. 03603.

— SIK 38831 [Kat. 29] Augusto Giacometti Contemplazione um 1910. Öl und Bleistift auf Leinwand. 114 x 114 cm. Kunsthaus Zürich Inv. 2015/0020

— SIK 34519 [Kat. 70] Augusto Giacometti Dado di Paradiso I 1912. Öl und Gold auf Leinwand vom Künstler bemalter Holzrahmen. Bildmass: 1335 x 1335 cm; Rahmenmass: 143 x 143 cm. Stiftung für Kunst Kultur und Geschichte Winterthur Inv. 05223

— SIK 23659 Augusto Giacometti Blühender Lärchenzweig um 1899. Aquarell auf Papier. 50.2 x 31.8 cm; 43.5 x 28 cm (Bildmass). Privatbesitz

— SIK 1911260023 Augusto Giacometti Die Musik 1899. Deckfarbe und Aquarell auf Papier. 835 x 63 cm. Privatbesitz

— SIK 18531 Augusto Giacometti Piz Duan. Skizze einer Berglandschaft 1905. Bleistift weiss gehöht auf Papier. 30.6 x 38.1 cm (Blattmass). Kunstmuseum Bern Inv. A 9102.

— PVE2.1 Eugène Grasset La plante et ses applications ornementales Paris: Librairie centrale des beaux-arts 1896 >> Bibliotheksausleihe

— PVE2.1 Augusto Giacometti Titelblatt zu Eugène Grassets La plante et ses applications ornementales 2. Serie Paris 1899. Pastell und Kohle auf Papier 48 x 24 cm. Privatbesitz >> Leihanfrage noch nicht erfolgt

— PVE2.1 Le Japon artistique. Documents d'Art et d'Industrie 3 Bde. hrsg. von Samuel Bing Paris: Librairie Centrale des Beaux-Arts 1888-1891. >> Bibliotheksausleihe

— PVE2.1 Augusto Giacometti Welle um 1899. Bleistift auf Papier 134 x 19 cm in Skizzenbuch Nr. 35. SIK-ISEA Schweizerisches Kunstarchiv Zürich HNA 13.1.3.35

— PVE2.1 SIK 1912060027. Augusto Giacometti Blumenornament um 1896. Aquarell auf Papier auf Papier auf Karton aufgezogen. 703 x 49 cm. Privatbesitz

The documents provided by Michael allowed inclusion of detailed information on each artwork, derived from SIK-ISEA web sources.

Implementing Curatorial Vision

In order to reflect the curatorial vision developed by the curatorial and educational teams, the themes described and defined in the exhibition guide “Augusto Giacometti Freedom | Mission” were implemented in the prototype with full texts and connected artworks.

Additionally, the educational strategy and goals were discussed with Christina Omlin, Head of Communications and Media, Aargauer Kunsthaus. These goals were taken into account while developing the prototype.

Testing Exhibition Guide within “Augusto Giacometti, Freiheit | Auftrag”

The final prototype was tested directly within the “Augusto Giacometti, Freiheit | Auftrag” exhibition. Firstly, the exhibition was explored in a traditional way, with a printed bouqlet and informative text on the walls (see Fig 11.17-19). Then, the exhibition was explored with the prototype of the Reliq (see Fig 11.20-25).

Traditional way of going through exhibition involved introductory texts on the walls about Augusto Giacometti and core milestones in his artistic life, along with the bouqlet (see Fig 11.17-19).

The bouqlet provides a short introduction to Augusto Giacometti and his artistic life through 13 themes, each represented by groups of works in individual rooms accordingly. The bouqlet includes a section with very simplified “Easy Language” for each chapter, summarizing and explaining the main points of the following text in a simplified form.

Exploration with the brochure involved reading a related text within the bouqlet before beginning to explore the art in each room. While informative, it took considerable time, around forty-five minutes, to read through the entire booklet, leaving less time for engaging with artworks. The provided context added a different layer of experience and understanding. However, as it offered more general information, many details about individual artworks, were missing.

Testing with final Prototype of Reliq

The prototype was based on the rich knowledge base accumulated during the research on Augusto Giacometti and provided by Michael Egli (see Chapter 11 “Artifact”).

While entering the exhibition, the visitor was asked the following questions to “set up” right communication way:

- If a visitor agrees to anonymous data collection;
- How much time does the visitor plan to spend on their visit;
- The social context of their visit: solo, in a company or with children.
- How they would like to experience the museum;
- If they are interested in a particular aspect of the collection;
- If they prefer a structured tour or self-exploration.

When set up, the visitor continued with voice interaction. Firstly, the visitor was offered to a few entry points: “Overview” (based on the Exhibition Guide), “Giacometti: from Symbolism to Modernism” (generated on the deep analysis of the catalogue data), “Diversity in the Commissioned Work” (generated on the deep analysis of the catalogue data).

When the visitor selected “Overview”, they started exploration based on the structure of the brochure.

Firstly, Reliq shortly introduced the structure of the path, and what visitor will get to know. Then, the visitor received introduction to the artist and the artistic period the exhibition was developed around.

In the first room, the visitor got interested in the artwork “The Night” (“Ogni vivente loda il Signore”) and asked to provide more in-depth information on the artwork. Here is a part of the narrative: “It represents Giacometti’s interest in symbolism and his exploration of transcendental themes, influenced by his exposure to artists like Eugène Grasset and the Art Nouveau movement”.

While listening, the visitor asked to clarify the artist connection to Art Nouveau style, by which the work was inspired and asked Reliq to explain it in more details: “Giacometti’s early works, such as “Ornament of flowering plants” and “The Night,” reflect the Art Nouveau style with their emphasis on decorative elements, floral motifs, and symbolic imagery. These early pieces show his intricate line work and his exploration of color in new, expressive ways that were characteristic of Art Nouveau.

His association with Art Nouveau laid the groundwork for his later exploration of color and abstraction, which became more prominent in his works from the nineteen tens onward.”

During the conversation evolving around Art Nouveau, the visitor became curious to explore in depth Augusto Giacometti’s work “Narcissus”. Here are some parts of the narrative: “Certainly. Augusto Giacometti’s work “Narcissus,” created in nineteen hundred and five, stands as one of his important early paintings, reflecting the influence of Art Nouveau and Symbolism. The painting shows a scene inspired by the Greek myth of Narcissus, who fell in love with his own reflection. This theme fits well within Symbolism, which often explored mythological and dreamlike subjects to convey deeper meanings. The painting is known for its use of soft blues, greens, and golden hues, which create a dreamlike and ethereal atmosphere. These colors emphasize the reflective water surface and the surrounding natural elements, which embody the essence of Art Nouveau and Symbolism.

The use of gold and yellow tones brings warmth and an otherworldly glow to the painting, highlighting Giacometti’s skillful application of color to create a sense of illumination. This illumination plays a crucial role in emphasizing the mystical and symbolic nature of the work, making it one of Giacometti’s notable pieces that stands out for its color use and thematic depth.”

When talking about Augusto Giacometti’s work “Contemplazione” (1915), the visitor asked Reliq to provide some personal quotes from the artist: “Can you tell me, please, his personal quote on his art?”. Reliq responded: “Augusto Giacometti once said, “Self-realisation,” which encapsulates

his philosophy on art. He believed in the importance of artistic independence and creative freedom. Giacometti often emphasized that art should be a true expression of the artist’s inner self and vision, transcending the conventional expectations of patrons and critics. His focus on the self and artistic autonomy guided his exploration of color and abstraction, reflecting his desire to express his personal artistic journey through his work.”

After discussing one “Section” of the narrative, visitor was asked if they would like to continue “Let me know if you want me to continue or if you’d like me to focus on specific sections.”, “I can continue if you like.” That allowed a visitor to “control” the pace of the narrative and switch between rooms smoothly and intuitively.

Sometime the visitor asked to go back: “Can you go 10 sentences back, please?”

The narrative further was following the main theme and at specific points went in-depth based on visitor inquiry.

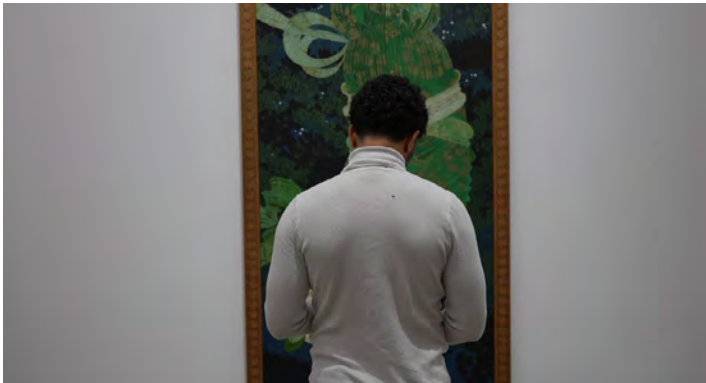
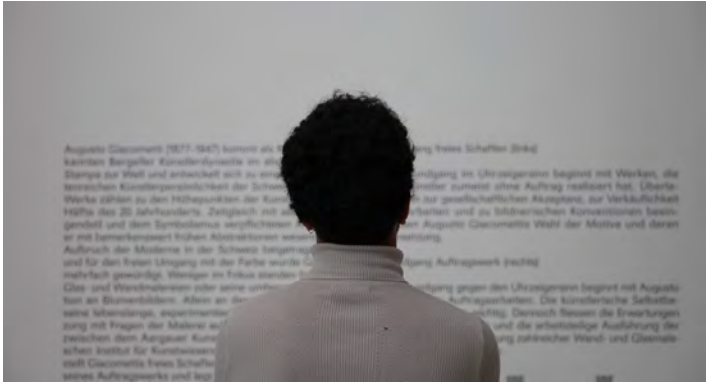
Option to read Afterwards I asked to read directly from the brochure.

CONCLUSION

The results of the prototype testing highlighted the importance of starting with higher-level narratives when possible. This approach allows viewers to delve into the details of aspects that resonate with their individual interests.

Another critical aspect is ensuring viewers are aware of the available options. Overall, visitors expressed feelings of being “immersed” in the story while simultaneously engaging with the artwork. The additional information requested by visitors helped them understand the complexity and meaning behind some artworks, which would otherwise not have been achievable.

The results of the testing round shaped the concept of two modes further designed for the platform: passive (guided) and active (self-exploration) modes described in the chapter 12, Artifact.

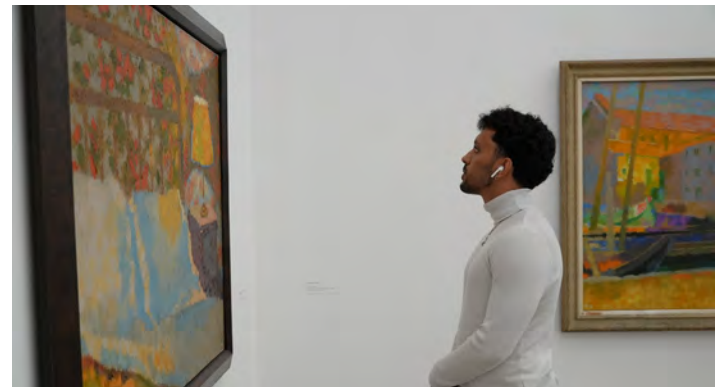


Figures 11.17–19 Experiencing the exhibition through traditional video

Figures 11.20–22 Experiencing the exhibition through traditional video



Figures 11.23—25 Experiencing the exhibition through traditional video



Figures 11.26—27 Comparison in experiencing the exhibition through traditional medium and Reliq

12.1 RELIQ, DYNAMIC DIGITAL MEDIA

The research findings, design iterations, and testing resulted in the development of Reliq—a comprehensive museum communication and experience tool. Reliq is designed to directly and dynamically connect museum professionals with visitors' experiences.

12.2 RELIQ, CURATORIAL PLATFORM

The curatorial interface was developed to naturally integrate into the curatorial process described in previous chapters. Its design and functionality are based on findings from the design exploration phase.

The primary users are curators, the educational department, and outreach coordinators, as they are mostly involved in the exhibition development, visitor engagement, and knowledge transfer strategies (see Fig.).

Next, curator proceeds to the screen with the main components of the exhibition communication process.

Reliq, Flow. Reliq guides curators (the main user group) through a straightforward process to connect a new exhibition to the platform.

Main Screen. The home screen of the curatorial interface serves as the central hub for curators, offering quick access to various sections of the exhibition development process. Home screen provides an overview on existing exhibitions connected to the platform, and the function to connect a new one (see Fig. 12.1).

Initial Setup. Curators start with adding basic information on exhibition such as the project title, status, dates, and a summary. This section also lists the roles and contact information of the team members involved in the project, ensuring clear communication and collaboration. This step, an industry standard, ensures the digital archive of exhibitions and related content is preserved and structured (see Fig. 12.2).

Exhibition Canvas. Curators then access the Exhibition Canvas, which presents an overview of available tools (see Fig.12.3).

Media Library. Firstly, the curator proceeds with “Media Library” to add and describe artworks in the exhibition. Here, curator can connect different files and add descriptive text to all individual artworks. That steps informs the platform of the pieces on a display and helps further in pathway development (see Fig. 12.6–8).

Knowledge Base. Next, curators proceed to the Knowledge Base, a comprehensive repository for all research materials, documents, and archival

content related to the exhibition. Curators input their knowledge, enabling Reliq to formulate responses based on these high-quality, curated knowledge sources. Reliq, by in-depth analysis of the provided source assigns to tags to each source (see Fig.12.4–5). Knowledge Base ensures that all essential information is accessible and well-integrated into the narrative development process.

Metadata and Tagging. To control data interpretation, curators add metadata descriptions and tag sources, chapters, and paragraphs with custom tags or edit the platform-generated ones. They also link each source with relevant artworks, ensuring accurate connections between artworks and their information sources (see Fig. 12.5).

Connect to Narrative. Options to connect the document to the exhibition narrative by adding tags or linking to specific artworks. Provides functionality to link the document to specific artworks in the exhibition, enhancing the narrative with additional context (see Fig. 12.5).

Visitor Profiling. In the Visitor Profiling interface, curators define audience segments based on their cultural institution’s needs. This step allows for fine-tuning content complexity levels for different visitor profiles (see Fig.12.13).

Narrative Canvas. As a next step, Reliq invites curators to add their own themes to the Narrative Canvas, a dynamic tool designed to assist curators in developing thematic narratives for exhibitions. a key component of the platform designed to help develop and organize exhibition narratives. The interface allows curators to create detailed, thematic storylines and provide a structured flow to the exhibition. Reliq supports the curatorial vision by linking the existing Knowledge Base with the developed themes, enabling visitors to explore aspects within each theme they find relevant. Additionally, the platform assists curators in finding and connecting relevant information from the Knowledge Base to the themes (see Fig. 12.9–12).

Corkboard. The Corkboard provides an overview of all developed themes, integrating them into visitor interface suggestions (see Fig. 12.9).

By following this process, curators can set up dynamic knowledge communication with diverse visitors through Reliq, ensuring their expertise is actively explored and appreciated by all.

Reliq does not require new information from the users. The platform functionality is designed around materials that curators generate and work with during exhibition development process. It minimizes the need for additional information input. This approach preserves the curatorial vision and knowledge, but also enhances visitor engagement by providing tailored and relevant content, ensuring that curators’ expertise is accessible.

Reliq, Narrative Canvas. The Narrative Canvas is a key component of the Reliq platform, designed to assist curators in developing and organizing exhibition narratives. The interface allows curators to create detailed, thematic storylines that enhance visitor engagement and provide a structured flow to the exhibition (see Fig. 12.10–12).

Integration with Narrative Canvas. The Knowledge Base is tightly integrated with the Narrative Canvas, ensuring that all research materials and documents can be easily incorporated into the exhibition narrative. This integration supports the development of well-researched and comprehensive narratives (see Fig. 12.10–12).

Timeline View. The Narrative Canvas screen is organized into a timeline view, allowing curators to arrange content chronologically or by thematic sequences. This helps in structuring the narrative flow in a way that makes sense both historically and contextually for the exhibition. Each segment on the timeline can be expanded to reveal more details or collapsed to simplify the view (see Fig. 12.10–12).

Theme Title and Description. At the top of the screen, the theme title “From Earth to Ether: Giacometti’s Journey Through Natural and Supernatural Realms” is prominently displayed. Below it is a brief description of the theme, providing an overview of what visitors will explore in this section of the exhibition. This sets the context for the narrative and helps visitors understand the focus of the theme.

Conversation Starters. This section includes predefined conversation starters designed to engage visitors and prompt them to think more deeply about the theme. Curators can edit existing questions or add new ones to tailor the engagement based on the exhibition’s focus. Example starters include:

– “Could you tell me please if you are interested in a specific work...?”

Concept and Introduction. The “Concept” section outlines the core ideas and thematic elements that the exhibition will cover. This helps curators ensure that all content aligns with the overarching narrative. The “Introduction” section provides a welcoming message to visitors, setting the tone for the exploration. Both sections have the option to generate content from the Knowledge Base, ensuring that information is accurate and well-researched.

Sequence Segments. The timeline is divided into various sequence segments, each representing a different period or aspect of Giacometti’s work. For each segment, the following features are available:

—High-Priority Artworks: Lists key artworks that are central to the theme. Each artwork entry includes a thumbnail image, title, and creation date.

—Documents: Provides access to related documents such as catalogues, research papers, or artist notes. This ensures that curators and visitors have comprehensive information at their fingertips.

—Tags: Each segment includes tags for easy categorization and searchability. Tags help in identifying common themes and connecting different parts of the narrative (see Fig. 12.10—12).

Generating Content. Curators can generate content for the narrative directly from the Knowledge Base. This feature ensures that all content is backed by research and can be updated as new information becomes available. It streamlines the content creation process, making it more efficient for curators to develop detailed and accurate narratives.

Adding Interactive Guiding Elements

—Add Sequence: Allows curators to add new segments to the timeline, expanding the narrative as needed.

—Add Highlighted Artwork: Highlights specific artworks within a sequence, drawing visitor attention to important pieces.

—Add Questions: Provides the option to insert additional questions, promoting further visitor engagement.

—Add Guidance: Enables curators to offer tips or additional context, helping visitors navigate complex themes.

At the bottom of the screen, curators have the option to “Complete the Theme,” indicating that the narrative segment is finalized. This helps in tracking progress and ensuring that all necessary elements have been addressed.

Visitor Profiling

Reliq allows museum professionals to have control over their audience segmentation by prioritizing and adding various factors that influence audience profiling and engagement. Key profiling factors include visitors’ background knowledge, available time for the visit, social context (whether they visit alone or in groups), personal interests in art or exhibits, and preferred methods of exploration (such as guided tours or independent browsing). The tool also features adjustable content complexity levels to adjust the

communication strategy to different visitor knowledge bases. For instance, “Level 1 (Starting)” targets visitors with some art history knowledge or those interested in deeper insights, offering simplified narratives, key facts, major artworks, and accessible language.

Conclusion

The Curational tool Reliq is a versatile and powerful tool that supports curators in developing rich, engaging, and educational exhibition narratives. By providing a structured yet flexible framework, it ensures that all aspects of the exhibition are well-coordinated and aligned with the overall vision. This interface impacts the visitor experience, making curators closer to their audience.

12.3 CURATORIAL FEEDBACK

After exploring the Reliq curatorial interface and flow, Michael Egli noted that Reliq does not require extra information from curators because they usually have the needed documents and data on the art pieces. The fact that Reliq can be seamlessly integrated into and mirror the curatorial process is one of the key points that the research aims to highlight.

Michael cited the “Augusto Giacometti. Freiheit, Auftrag” exhibition as an example, explaining that defining themes and identifying specific knowledge sources is straightforward because he and the other curators, along with the educational department, are already aware of where the information is located in the catalogue and other sources.

Reliq

New Exhibition Index Profil

Project Title Project Status

Project Summary Start Date End Date

ROLES

- ∨ Associated ∨ Name emailaddress@gmail.com
- ∨ Project Manager ∨ Name emailaddress@gmail.com
- ∨ Project Manager ∨ Name emailaddress@gmail.com
- ∨ Rights and Repro Coordinator ∨ Name emailaddress@gmail.com
- ∨ Educational Department ∨ Name emailaddress@gmail.com
- ∨ Outreach Coordinator ∨ Name emailaddress@gmail.com
- ∨ Docent Coordinator ∨ Name emailaddress@gmail.com
- ∨ Collections Management ∨ Name emailaddress@gmail.com

Figure 12.2 , Reliq, Connecting New Exhibition


Reliq Index Profil

+ Add Exhibition

- Narrative Canvas
- Media Library
- Knowledge Base
- Map
- Tag Manager
- Visitor Profiling


CURRENT EXHIBITIONS

Sammlung 24
Kunst aus der Schweiz vom 18. Jahrhundert bis in die Gegenwart
16.1.-27.10.2024




Eine Sammlung aus über 21 000 Werken ist ein lebendiges, sich stets wandelnder Organismus: Sie wird ausgestellt und eingelagert, konserviert und restauriert sowie stetig erweitert, neu kombiniert und vermittelt.

Köpfe, Küsse, Kämpfe
Nicole Eisenman und die Modernen
29.1.-24.4.2022



Aspekte der Pop und Subkultur sowie kunsthistorische Stil und Kompositionselemente von der Renaissance bis zur Moderne prägen die figurative Kunst von Nicole Eisenman (1965 in Verdun / F., lebt in New York / USA)

Sammlung Werner Cominx
Eine Rundschau
25.1.-9.8.2020



Werner Cominx (1911–1980) sammelte von 1937 bis zu seinem Lebensende gegen 15'000 Kunstobjekte. 2016 wurde seine Sammlung nach thematischen Schwerpunkten geordnet und zahlreiche Werke gelangen als Dauerleihgaben in zehn Schweizer Kunstinstitutionen.

Figure 12.1, Reliq, Curatorial Main Screen

1/4

Augusto Giacometti Erbehat | Auftrag
27.1.-20.5.2024

Media Library

Knowledge Base

Narrative Canvas

Visitor Profiles

Figure 12.3 , Reliq, Exhibition Canvas

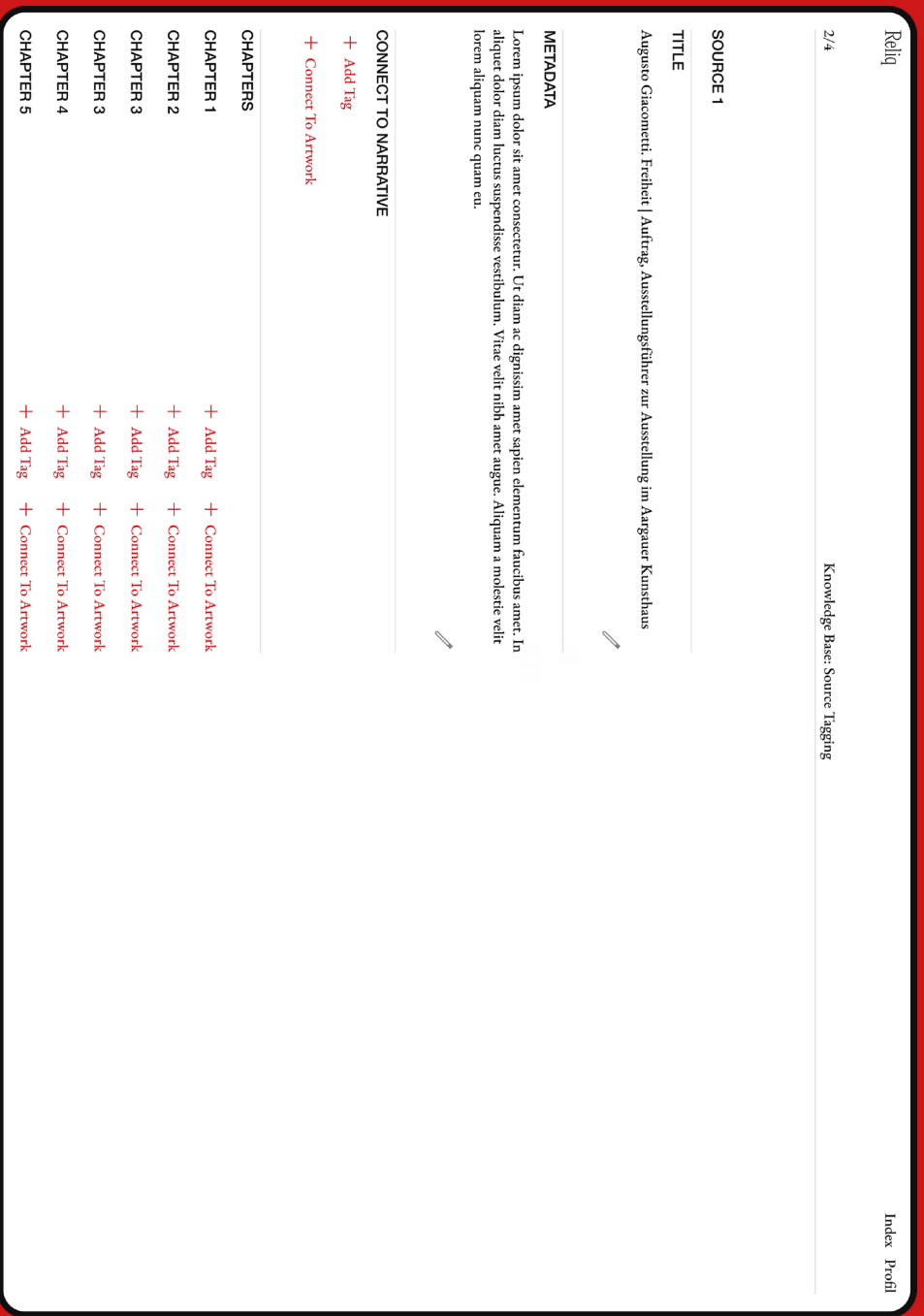


Figure 12.5, Reliq, Knowledge Base Editor

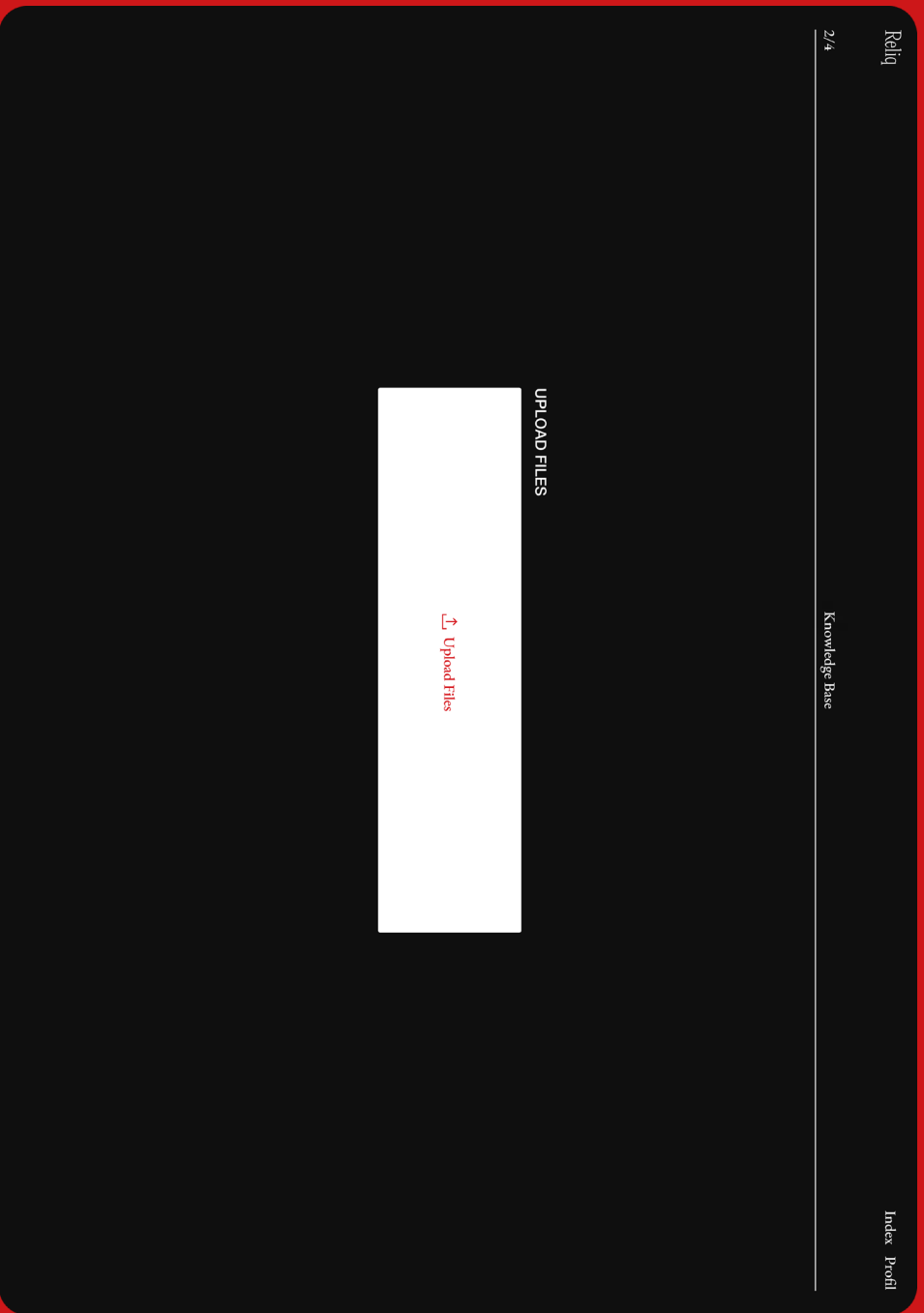


Figure 12.4, Reliq, Knowledge Base

1/4

Media Library: Artworks in the Exhibition



SIK 12103
Augusto Giacometti,
Mens Hotelzimmer in Paris
1938, Öl auf Leinwand, 111 x 139
cm, Artemides AG, Schaan



SIK 32315
Augusto Giacometti,
Kore Dächer
1911, Öl auf Leinwand, 42,5 x 63
cm, Privatsitz



SIK 69509
Augusto Giacometti,
Grosses Osteri
Mai 1926, Öl auf Leinwand, 27,5
x 35,8 cm, Kunstmuseum Luzern,
Inv. M 83 x, Deposition: Stiftung
BEST Art Collection, Luzern



SIK 73426
Augusto Giacometti,
Papaga auf rotem Grund
1932, Öl auf Leinwand, 44,3 x 36
cm, Privatsitz



SIK 68796
Augusto Giacometti,
Osterglocken
1925, Tempera auf Leinwand,
24,8 x 33 cm (Bildmass),
Privatsitz



SIK 180830003
Augusto Giacometti,
Stampa IV
1943, Öl auf Leinwand, 72 x 95
cm, Privatsitz



SIK 1811300028
Augusto Giacometti,
Stampa V
1943, Öl auf Leinwand, 72 x 95
cm, Privatsitz



SIK 24292
Augusto Giacometti, San Pietro
1935, Öl auf Leinwand, 112 x 150
cm, Museo d'arte della Svizzera
italiana (MASI), Lugano, Inv.
CCL-2750

1/4

Media Library: Artworks in the Exhibition

IMPORT NEW COLLECTION

- Import Collection As XML
- Import Collection As CSV

EXPLOIT FROM

- Connect TMS Collection
- Connect PastPerfect Collection
- Connect Vernon CMS

CHOOSE FROM THE LIBRARY



Browse

LABEL ARTWORKS

- | | | |
|-----------|-----------|------------------------------------|
| Artwork 1 | + Add Tag | + Connect To Knowledge Base Source |
| Artwork 2 | + Add Tag | + Connect To Knowledge Base Source |
| Artwork 3 | + Add Tag | + Connect To Knowledge Base Source |
| Artwork 4 | + Add Tag | + Connect To Knowledge Base Source |

Figure 12.6, Reliq, Media Library: Artworks in the Exhibition

Figure 12.7, Reliq, Media Library: Artworks in the Exhibition



Augusto Giacometti, Mein Hotelzimmer in Paris



Author(s)
Giacometti, Augusto

Dating
1910

SIK-SEA inventory number
SIK 91211

Technique
Öl auf Leinwand, vom Künstler bemalt
Holzrahmen

Figure 12.8, Reliq, Media Library: Artworks in the Exhibition

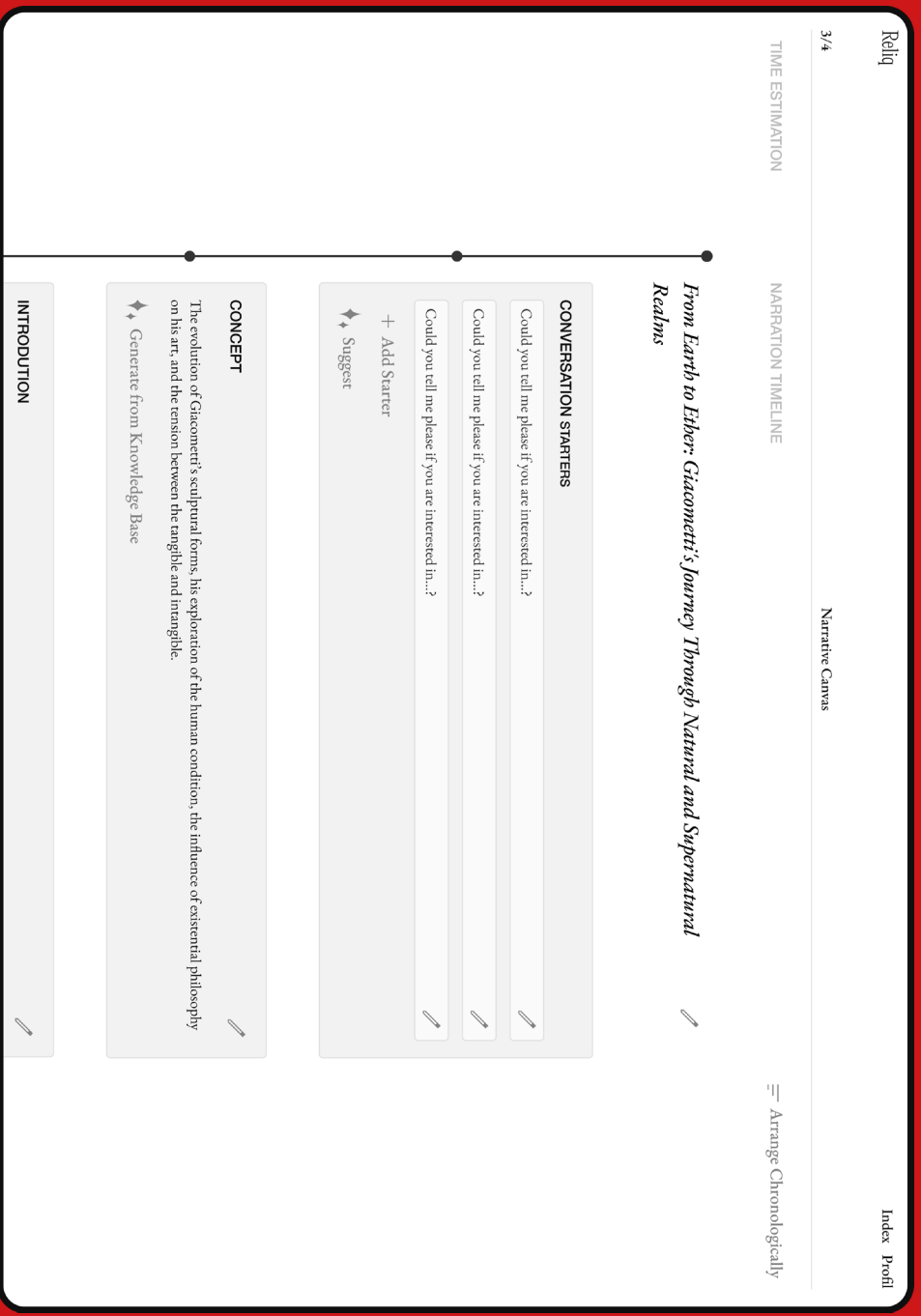


Figure 12.10, Reliq, Narrative Canvas

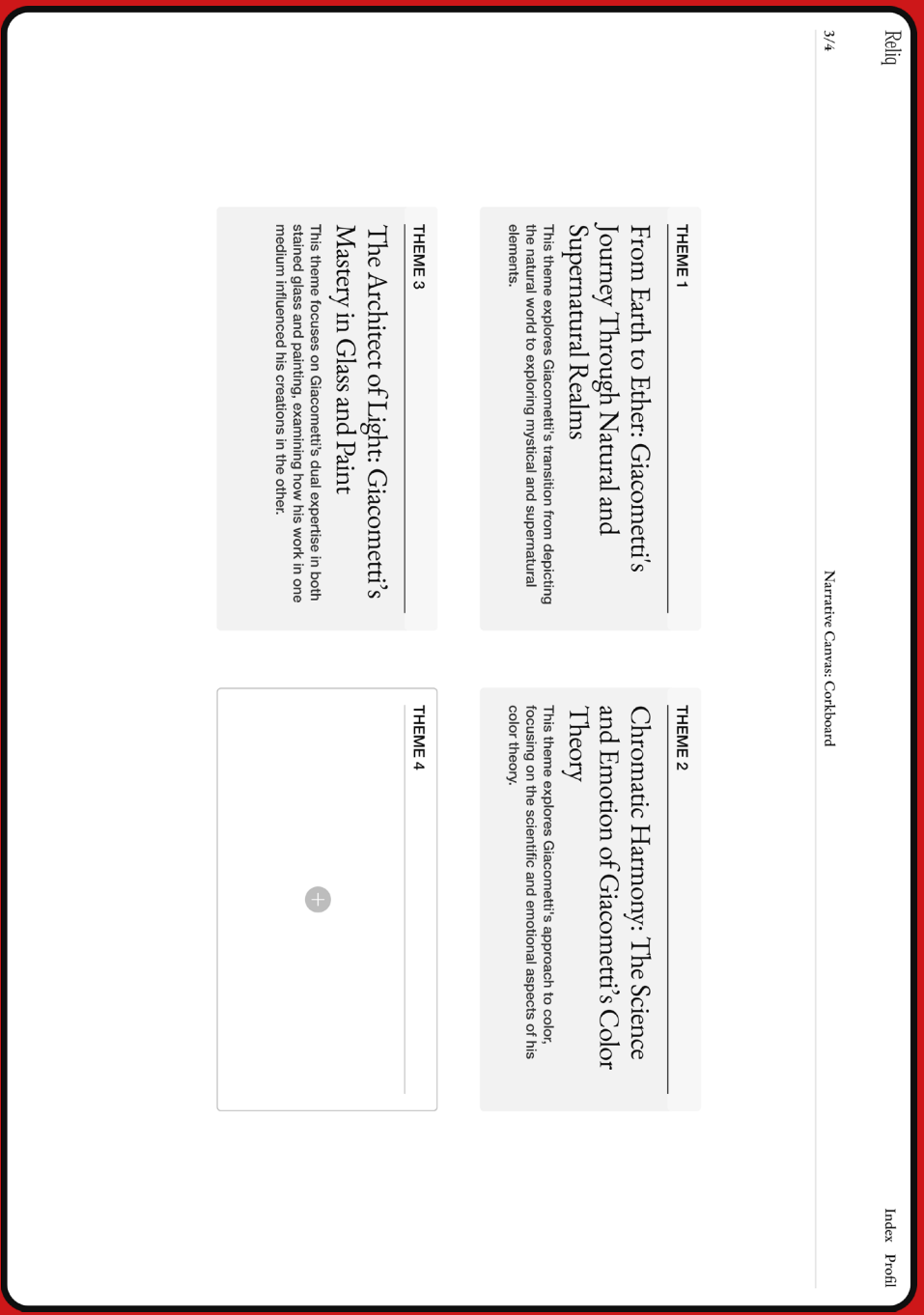


Figure 12.9, Reliq, Narrative Canvas: Corkboard

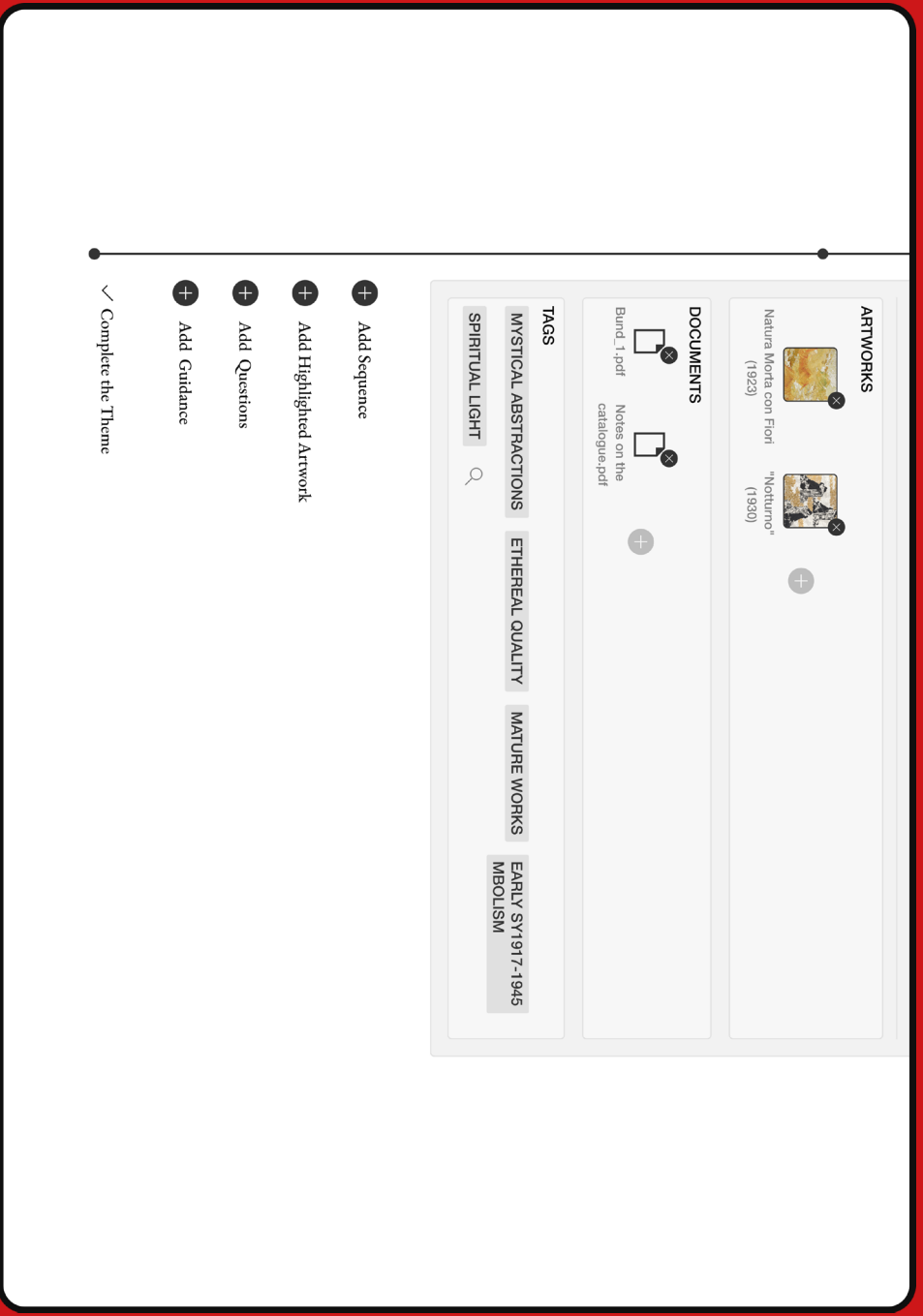


Figure 12.12, Reliq, Narrative Canvas

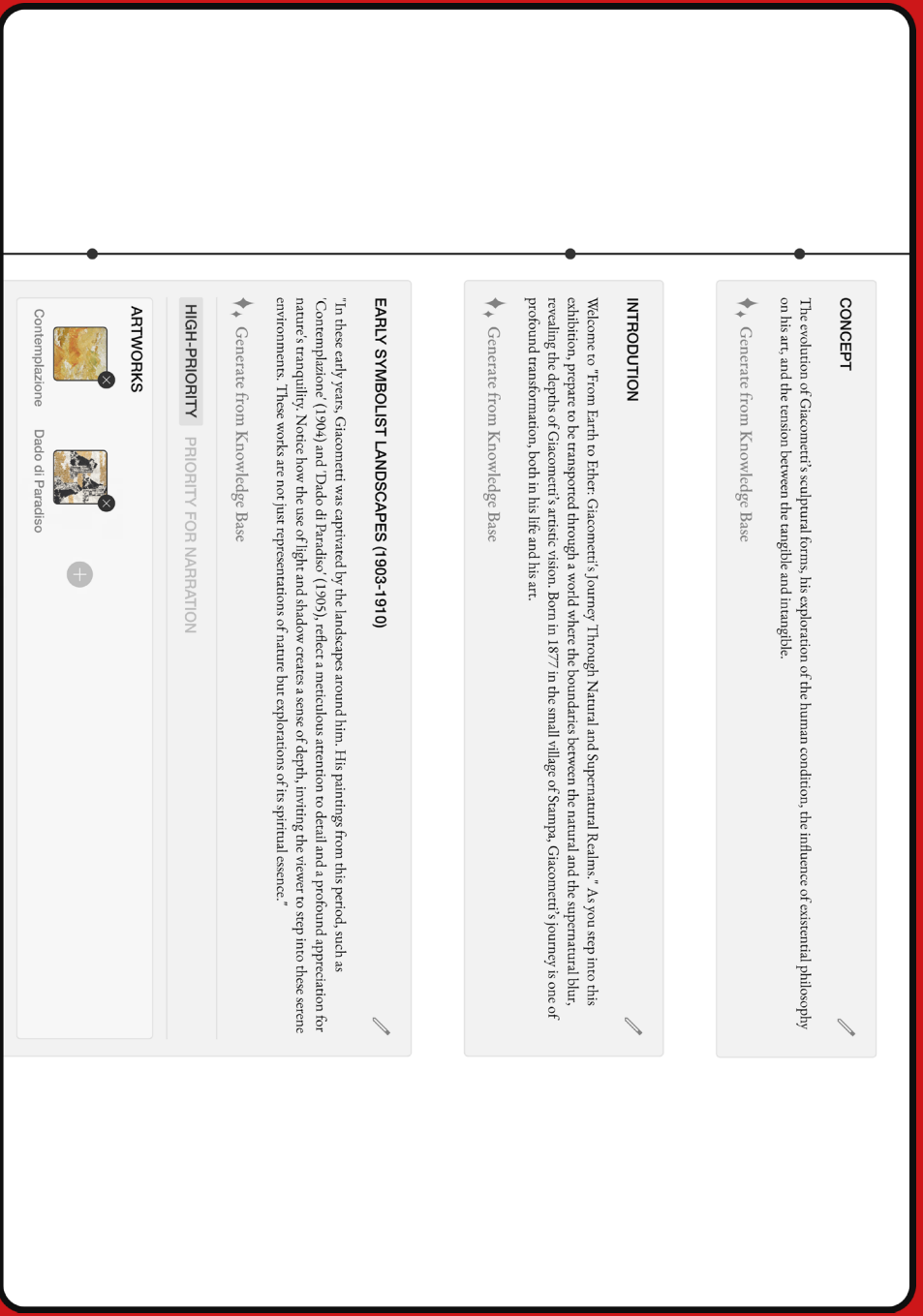


Figure 12.11, Reliq, Narrative Canvas:Corkboard

Reliq
Index Profil

4/4
Visitor Profiling

The priority of the factors impacting the audience segmentation

PROFILING FACTORS

- Priority 1 Background Knowledge ✎
- Priority 2 Time for the Visit ✎
- Priority 3 Social Context ✎
- Priority 4 Personal Interest ✎
- Priority 5 Preferred Way of Exploration ✎

+ Add Factor

CONTENT COMPLEXITY LEVELS

- Level 1 (Starting) ✎

DESCRIPTION

Moderate complexity for visitors with some knowledge of art history or an interest in deeper insights. ✎

CONTENT ADJUSTMENT

- Simplified narratives and descriptions
- Highlight key facts and major artworks
- Simplified terms

- Level 2 (Intermediate) ✎

Figure 12.13, Reliq, Visitor Profiling

12.4 RELIQ, VISITOR INTERFACE

The dialogical voice interface for visitors is an integral part of the Reliq design concept, created to be integrated seamlessly and non-invasively into the museum experience by offering a natural, accessible, and personalized interaction to museum' visitors.

The interface aims to be simple and concentrated around the main function - dialogical interaction between the visitor and the curatorial knowledge.

The design of the interface was informed by research on cultural engagement topology and the interactive experience model (see Chapter 2).

With many nuances driven by the specificity of the museum setting, designing such an interface involves viewing design from various perspectives. To create a holistic view of the specificity of voice interactions, an interview with an expert, Emily Uematsu Banzhaf, a Voice Interface Professional at Microsoft, was conducted on May 15th 2024, to outline the most important aspects of the voice interface (VUI). With Emily's expertise, the following foundational points for the voice interface within the museum setting were developed.

12.5 KEY ASPECTS INFLUENCING VUI DESIGN

Employing Conversational Interface

One of the concerns regarding employing VUI was the diverse museum visitor demographics, from young to elderly visitors, whose familiarity with such technologies can be low. In practice, according to Emily's expertise, elderly visitors tend to use voice interfaces more than expected, as they often find voice interactions to be more natural and accessible.

Comfort and Discoverability

The voice interface is easy to discover and use, with visible prompts indicating the availability of voice interaction.

Voice-First Approach

The interface prioritizes voice interactions with minimal screen use to not interfere with the process of engaging with artworks. To create a natural flow for the visitors and not feel distracted, the interface supports voice-to-voice controls and interactions, excluding the need for pressing buttons. It understands natural language and can handle interruptions (barging), ensuring a flowing conversational experience.

Personalization

Choosing the right voice is crucial, as it must resonate with users without distracting from the experience. According to Emily, if people do not like the voice, they are likely not going to come back to the experience. The selected voice should be consistent and avoid reinforcing stereotypes. The interface supports features for customizing voice, volume, and speed to suit individual preferences and needs, particularly for elderly or hearing-impaired visitors.

Accessibility

Though audio interactions might provide a more immersive, on-the-go experience, some visitors might prefer content in text form for their comfort. The platform offers both voice and text options to ensure accessibility for all visitors, as some of them may not be comfortable speaking.

Privacy Considerations

Clear communication about privacy and consent is essential. Visitors should be aware when their conversations are recorded to protect their privacy.

Conversing with Artificial Entity

Visitors' comfort in conversing with artificial entities was a significant point of consideration and debate. According to Emily's experience, contrary to expectations, conversing with artificial entities has some advantages. In some situations, according to her, people feel more comfortable asking "artificial intelligence," as it removes the feeling of being judged for a lack of knowledge. Compared to a guided group tour within museum settings, for example, asking the app will not make visitors feel judged by other visitors or that they should not take the time, as it is a shared group experience. That gives visitors the ability to go through the museum and their knowledge process at their own pace. They can take the time to understand what they're learning.

Guiding through the progression of knowledge

To help visitors discover more, the interface provides a few suggestions at the end of each explanation, guiding them to explore further. This is not shown on a screen, as it disrupts visitors' focus. Instead, the platform offers two to three vocal options that flow naturally and guide them through a progression of knowledge.

Building up Knowledge

Starting with the easiest questions and gradually offering more in-depth options: “Would you like to learn more about this topic?” Giving visitors options is one of the most important aspects. Some may want a deep dive into each piece, while others might focus on major works like the Manets. Visitors often struggle when exhibits feel disconnected, so a narrative approach can help. The key is to tell a cohesive story, connecting the pieces in each room to engage visitors effectively.

TECHNICAL CONCEPT

Bring-Your-Own-Device (BYOD) Solution

Reliq is designed to be accessible to a diverse range of museums through a bring-your-own-device (BYOD) solution.

As noted by Michael Egli in an interview, this approach is seen as the most cost-effective for museums: “I believe that more options should be made available for personal mobile devices. Utilizing smartphones is ideal as it saves costs on museum-provided hardware. Using my own smartphone, which I am familiar with, solves many challenges related to using new devices. Implementing such a system would entail significant time and costs but could alleviate financial pressures on museums and galleries.” (see Chapter 4, Art of Curation, Interview with Michael Egli)

Additionally, it is more intuitive for visitors, as they are more familiar with their own smartphones than with external devices.

Web-based Solution

The application is designed to be web-based for several reasons:

—Affordability for Museums: A web-based application is easier to update and less costly for museums to maintain. Museums often face challenges in keeping custom applications up-to-date due to limited resources and technical capacities (Interview with Michael Egli).

—User-Friendly Access for Visitors: Reliq is designed to be web-based on the assumption that it is a more convenient way to reach the service—visitors can scan a QR code or access the service via a link rather than installing a separate application on their mobile devices for a museum visit.

RELIQ, GUIDED PATHWAYS AND SELF-EXPLORATION MODES

Reliq is a dynamic platform designed to enhance museum visitor

experiences through adaptive interaction, customised to diverse levels and combinations of key engagement aspects:

1. Level of Reliq’s Guidance

—The degree to which Reliq provides structured guidance through the museum experience.

2. Level of Reliq’s Presence

—The extent of Reliq’s active involvement in the visitor’s experience.

These distinctions led to the development of two primary modes of user interaction with Reliq during their museum visit:

Guiding Mode (Passive)

Reliq guides the user through predefined pathways.

Assisting Mode (Active)

The visitor autonomously explores the collections and engages Reliq by asking questions.

Passive Exploration Mode

In the Passive Exploration Mode, the pathway is predefined, and Reliq autonomously decides on the subsequent topics within the established narrative. This mode is characterized by:

—*Structured Pathways*: Reliq provides a structured narrative, guiding the visitor through a curated sequence of information and experiences. This ensures a comprehensive exploration of a specific theme or topic.

—*Autonomous Decision-Making*: Reliq autonomously selects the next topic within the narrative, ensuring continuity and coherence. For example, if the chosen theme is the Art Nouveau period, Reliq will continue to provide detailed information on this period unless the visitor indicates a desire to explore a different theme.

—*Narrative Continuity*: If a visitor diverges from the narrative, Reliq will prompt them to decide whether they wish to continue with the current theme. This maintains the flow and depth of the exploration, ensuring that visitors gain a thorough understanding of the topic.

—*Example prompt*: “We will explore the Art Nouveau period... I can continue if you like.”

Active Exploration Mode

In the Active Exploration Mode, there is no predefined path. This mode is characterized by:

–*Visitor-Initiated Interaction*: The visitor actively engages with Reliq by asking questions. The narrative is dynamically formed based on these inquiries, allowing for a more personalized and interactive exploration.

–*Dynamic Narrative Formation*: The narrative is not predetermined but rather evolves based on the visitor’s interests and questions. This mode fosters a more engaging and responsive experience.

–*Flexibility and Control*: Visitors have greater control over their exploration, enabling them to delve deeper into specific areas of interest. Reliq will follow the narrative initiated by the visitor and will prompt for confirmation if the visitor’s questions diverge significantly from the current theme.

–*Example prompt*: “Let me know if you want me to continue or if you’d like me to focus on specific sections.”

Comparative Analysis of the Modes

Level of Guidance

The Guiding Mode provides a higher level of guidance, ensuring a comprehensive and structured exploration. In contrast, the Assisting Mode offers minimal guidance, allowing visitors to direct their exploration based on their interests.

Visitor Autonomy

The Assisting Mode empowers visitors with greater autonomy, enabling them to explore topics at their own pace and according to their curiosity. The Guiding Mode, however, ensures that visitors receive a thorough and cohesive understanding of the theme.

Interaction Dynamics

The interaction in the Guiding Mode is more passive, with Reliq taking the lead. Conversely, in the Assisting Mode, the interaction is more active and visitor-driven, with Reliq responding to the visitor’s queries.

By offering these two distinct modes, Reliq adapts to different preferences and learning styles, enhancing the overall visitor experience. This adaptability ensures that both novice and expert visitors will find interactions that match their expectations in terms of content depth and more. Additionally, the same visitor may have different personal agendas on different visits, which will also impact their preferred mode. Whether a visitor prefers a structured, guided exploration or a self-directed, inquisitive approach, Reliq can

provide a rich and fulfilling experience.

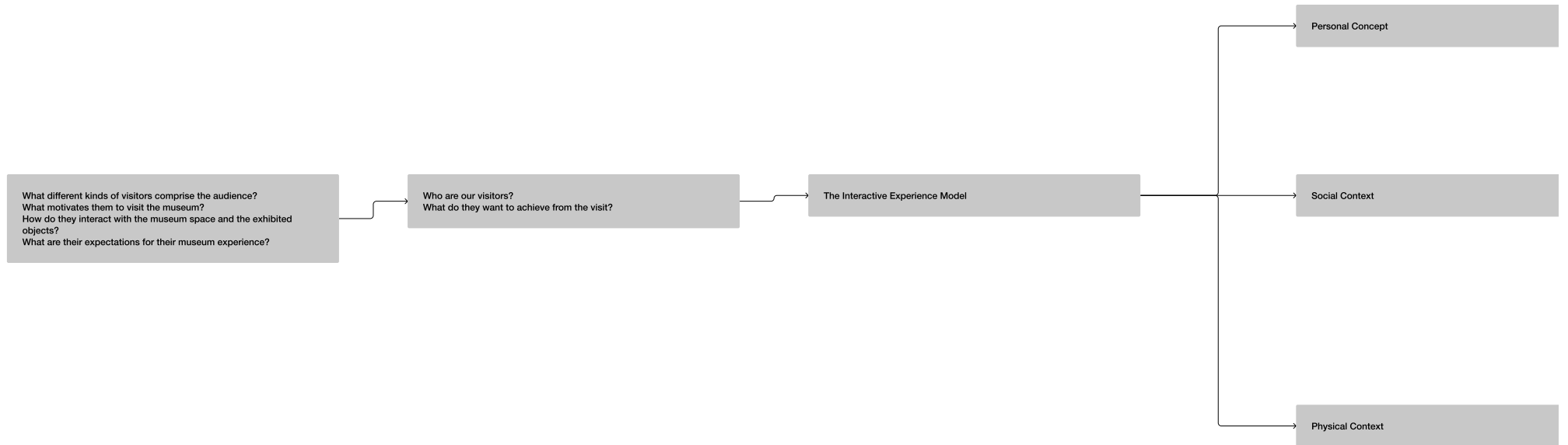


Figure 12.11, Reliq, Logic behind the application

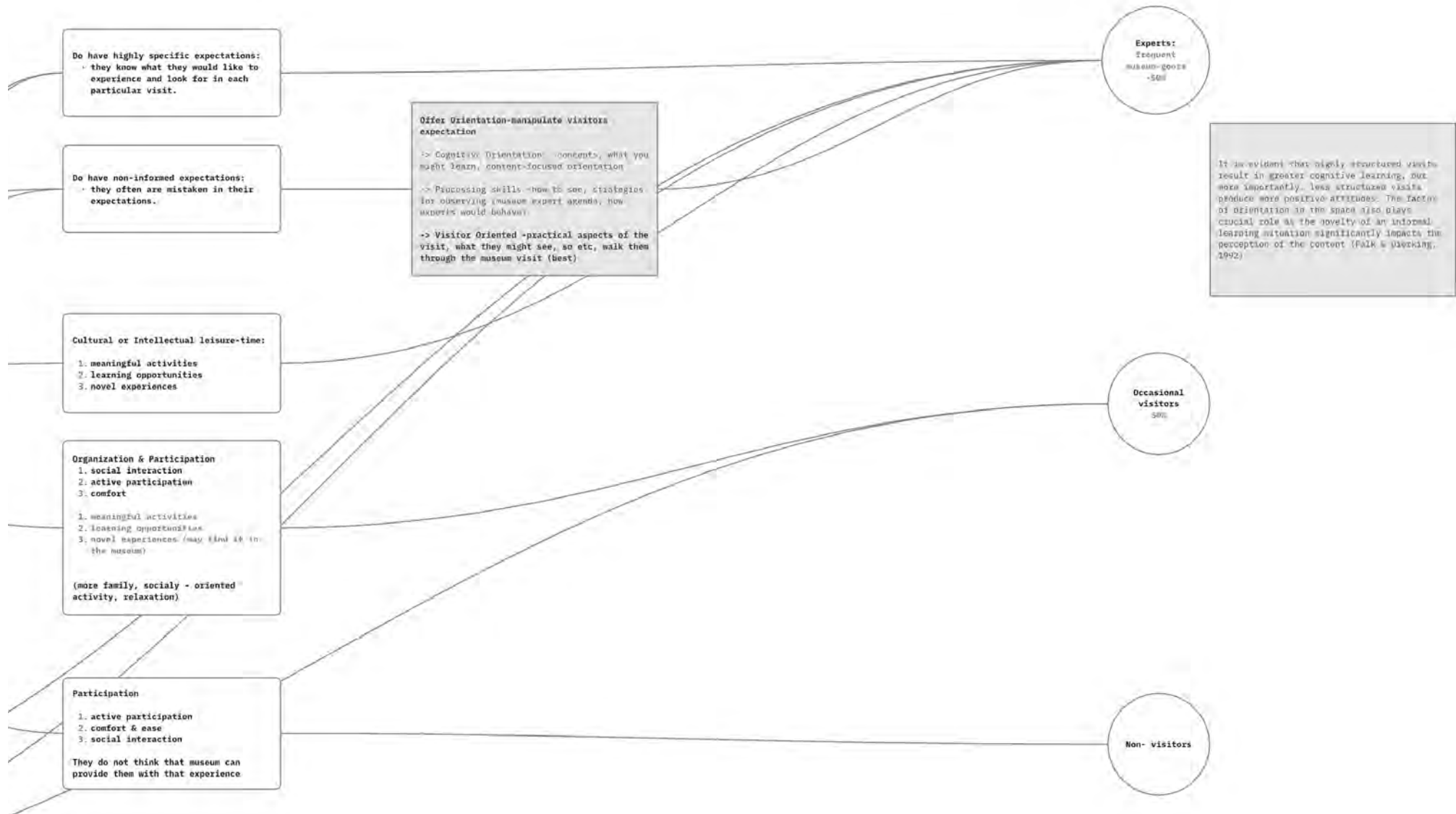


Figure 12.,12 Reliq, Logic behind the application

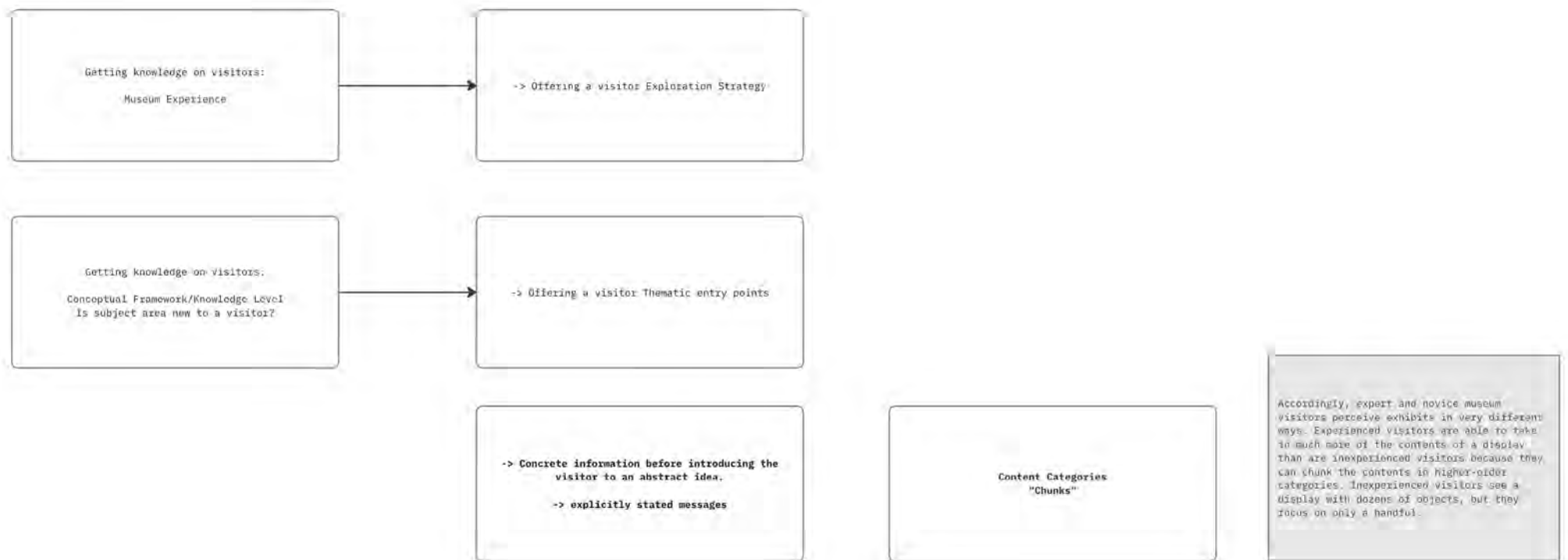


Figure 12.13, Reliq, Logic behind the application

RELIQ, USER FLOW

Menu

Upon accessing the web application, visitors can navigate based on their interest in specific museum collections, artists, or artworks. This initial step allows users to quickly orient themselves and select their primary area of interest.

Journey Personalization

After selecting their object of interest (e.g., the Augusto Giacometti. Freiheit | Auftrag exhibition), visitors proceed to the journey personalization screen. This stage involves customizing the experience based on individual preferences and requirements.

1. Privacy Settings: Visitors first decide on their privacy preferences, ensuring their experience aligns with their comfort levels regarding data sharing.

2. Personalization Questionnaire: The visitor answers five questions curated by the museum's curatorial and educational team to tailor the experience:

- Time Availability. Helps determine the most engaging path based on the visitor's available time.

- Group Size. Tailors the interface for solo or group experiences, fostering shared exploration.

- Experience Type. Offers options to Learn (educational), Relax (leisurely), or Explore (diverse styles).

- Specific Interests. Allows visitors to focus on particular themes or topics of interest.

- Accessibility Needs. Ensures the experience is accessible and comfortable for all visitors.

Voice Interactive Experience

Based on the answers provided, Reliq customizes the visit experience:

- Guiding Mode (Passive): For a structured experience, Reliq follows a predefined narrative, offering a cohesive and comprehensive exploration of the selected theme or exhibition.

- Assisting Mode (Active): For a self-directed experience, Reliq responds to visitors' questions and interests, dynamically adjusting the narrative based on their input.

Reliq's adaptability ensures that every visitor, regardless of their preferences or time constraints, receives a tailored and enriching experience, enhancing visitor engagement and maximizing the educational and entertainment value of their museum visit.



Figure 12.14, Reliq, Main Screen

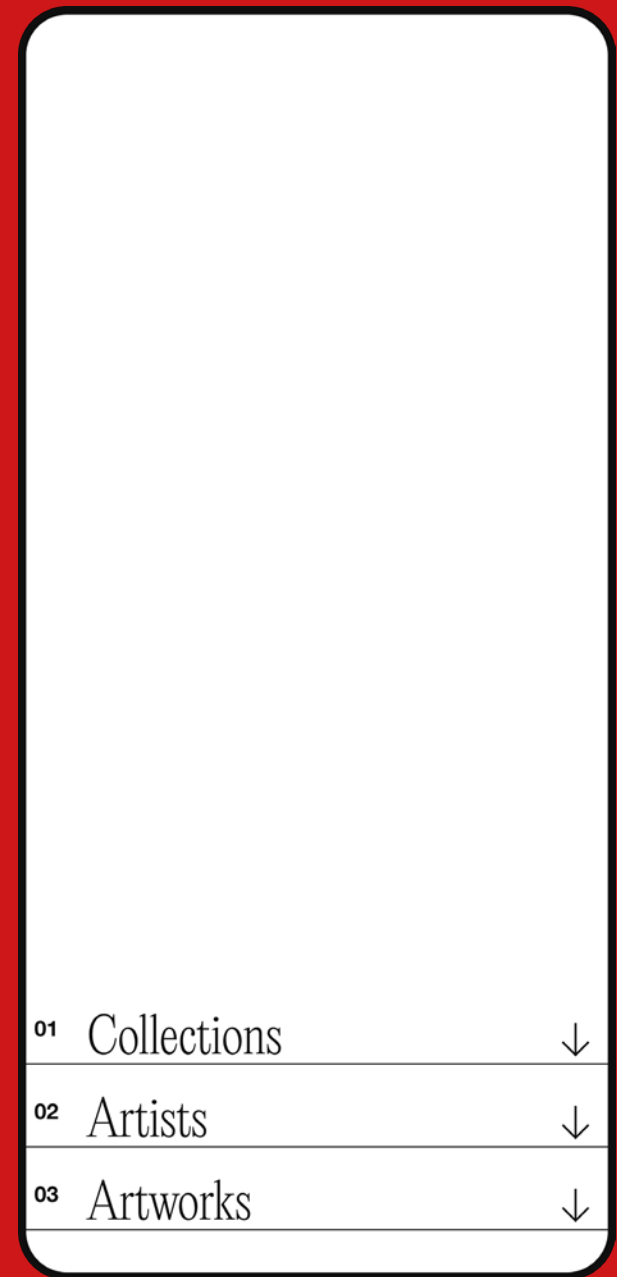


Figure 12.15, Reliq, Menu

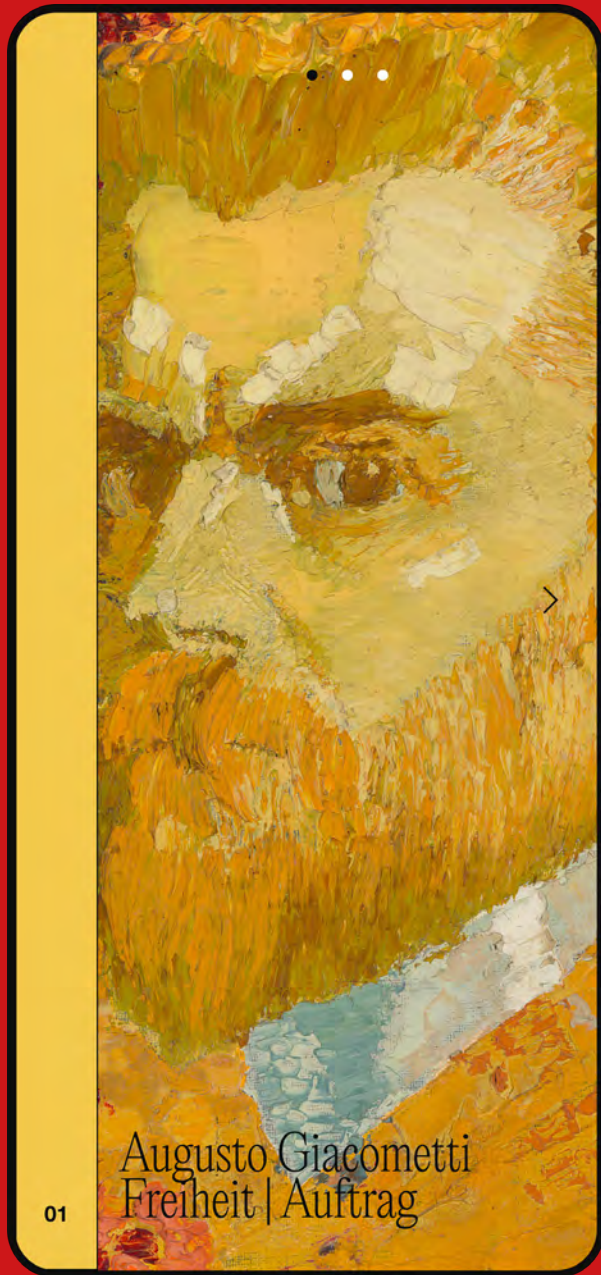


Figure 12.16, Reliq, Menu



Figure 12.,17 Reliq, Menu

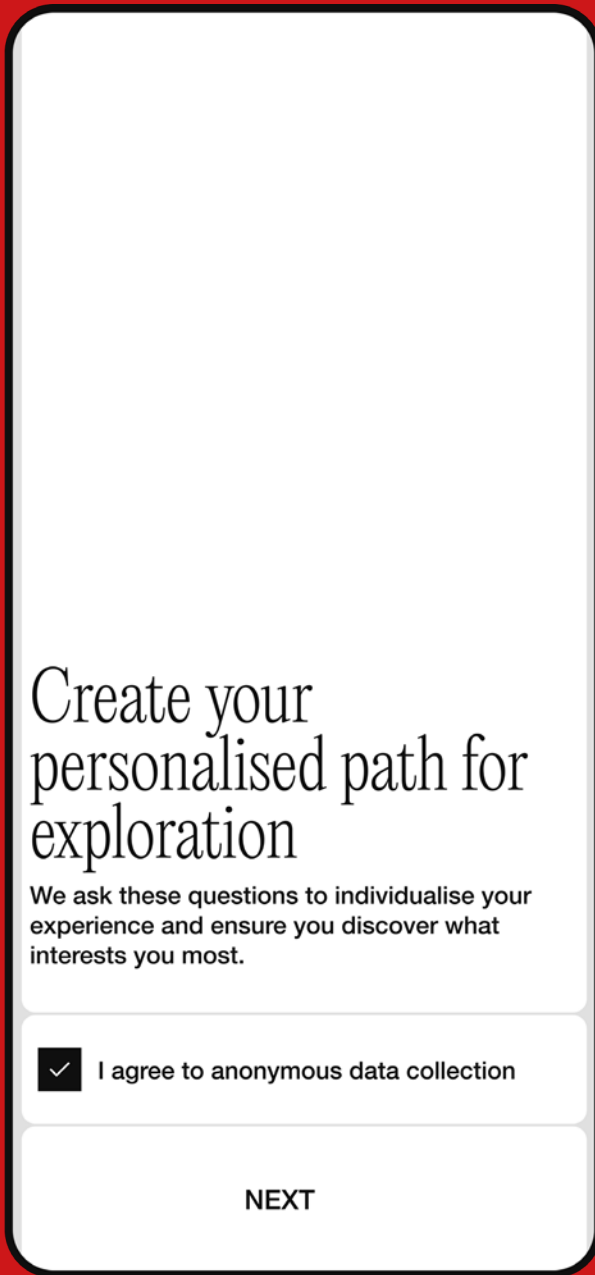


Figure 12.18, Reliq, Personalization

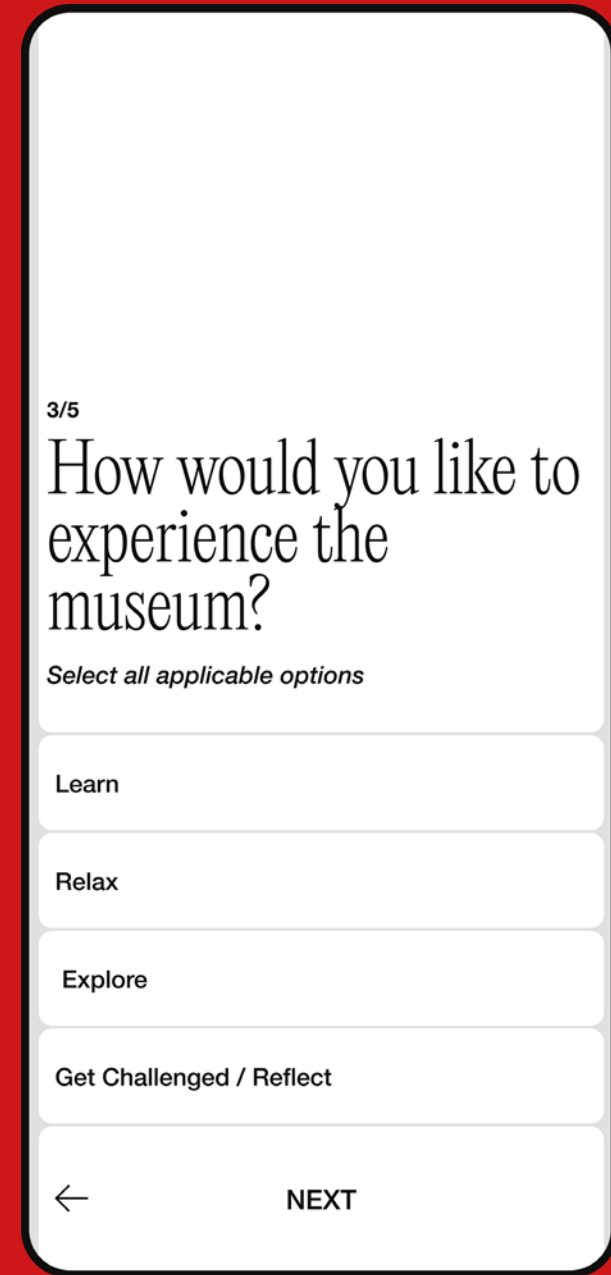


Figure 12.19, Reliq, Personalization

¹ Giacometti And Modernism

Explore Giacometti's role in this transition from Symbolism to Modernism, highlighting how his unique approach to color and form positioned him as a crucial link between these two influential art movements



EXPLORE



² Diversity In The Commissioned Work

Explore Augusto Giacometti's ability to maintain artistic independence even within the constraints of commissioned projects



Figure 12.20, Reliq, Path Selection



Figure 12.21 Reliq, Voice User Interface, "Passive Mode"

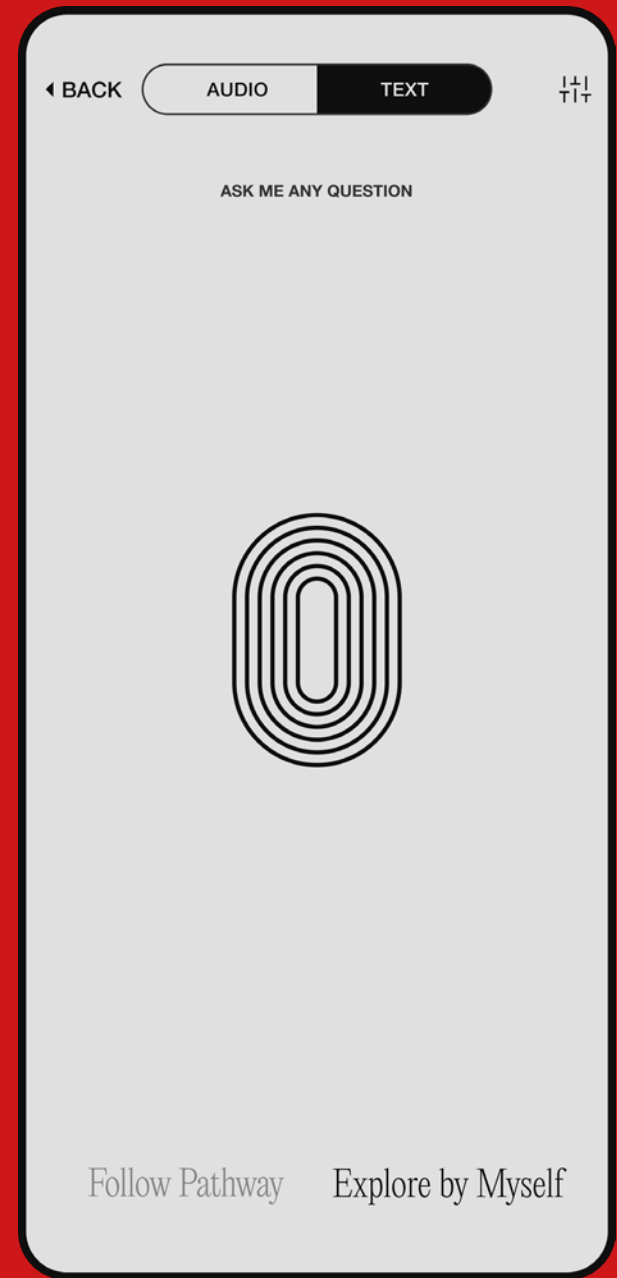


Figure 12.22, Reliq, Voice User Interface, "Active Mode"

12.4 RELIQ, EXHIBITION

Reliq is a platform for museum professionals and visitors, and its representation has to clearly explain both aspects. To communicate the role Reliq plays for both sides, the exhibition was divided into two parts, each designed to immerse visitors in the stages from exhibition development and curation to final visitor experience.

A video showcasing the steps of the curatorial process and the integration of Reliq was chosen as the key medium for communicating the Curatorial Flow. Since the process of curating and developing exhibitions is familiar only to museum professionals, it was essential to provide context to the visitors and answer the questions “Why?” and “How?”. The video followed the curatorial process and demonstrated how the platform aids curators and transforms the visitor experience.

After providing visitors with an overview on the transformational role Reliq plays in the curatorial process, visitors were invited to experience the results of the collaboration with Michael Egli on the “Augusto Giacometti, Freiheit | Auftrag” exhibition. They were offered a glimpse into the experience enabled by the platform within the museum settings.

OUTLOOK FOR RELIQ

Reliq is a result of the multi-faced research, that aimed to cover in-depth both the curatorial process and visitor engagement. The platform has the potential to be developed further and grow. Several necessary steps and essential aspects must be considered to advance the research and enhance Reliq as a tool for museum professionals.

Continuing Iterative Testing

To create a product that will be naturally integrated into the museum processes more testing has to be done with visitors presenting different audience segments as well as with museum professionals, who are supposed to use the tool in their daily practice and provide their feedback based on repeated interactions.

Cooperation with Curators

For more in-depth development, closer collaborative work with curators and museum educators is essential. These professionals possess granular, detailed knowledge gained through their daily practice, and Reliq can benefit from close collaboration with them to ensure that the tool suits the curatorial process and aids museum professionals in connecting with their audiences.

User Experience and Interface Design

Continuous improvements in user experience design are necessary to make the platform more intuitive and easy to navigate. Feedback loops from users should be incorporated into iterative design cycles to refine and perfect the interface and interactions.

Scalability and Adaptability

Reliq's ability to scale and adapt to different types of museums and exhibitions is another critical area for further development. The platform should be flexible enough to accommodate various curatorial styles and exhibition themes. Customization options will allow museums of different sizes and focuses to tailor Reliq to their specific needs, increasing its utility across the museum sector.

Educational Impact

Assessing the educational impact (knowledge transfer quality) of Reliq on museum visitors is essential to assess its effectiveness. Studies and surveys should be conducted to measure how Reliq impacts visitor learning and engagement.

Future Research Directions

Future research should focus on exploring new interaction paradigms and expanding Reliq’s functionalities. Investigating how Reliq can be used in different cultural contexts, exploring its potential in non-traditional museum spaces, and examining its impact on diverse visitor demographics will provide insights for its ongoing evolution.

Moreover, Reliq could serve as a model for similar applications in other domains, such as education and heritage preservation, where inclusive and personalized knowledge dissemination is crucial. By continuing to iterate and expand upon the principles and concepts developed in this thesis, Reliq might contribute to the future of knowledge dissemination in cultural contexts.

By developing further in the mentioned areas, Reliq has the potential to grow and evolve, transforming the ways museums engage with their audiences.

CONTRIBUTION TO THE FIELD OF KNOWLEDGE DISSEMINATION

Reliq serves as an example of how artificial intelligence and state-of-the-art technologies can act as enablers, helping to illuminate human knowledge.

Reliq deals with “plenty” and helps visitors navigate through the unknown, encouraging their curiosity. Reliq functions as a transition, a sort of bridge, providing access to broader knowledge on one hand and helping to effectively—and more importantly, meaningfully—navigate this knowledge on the other. Connecting individual interests and needs to the wealth of knowledge and making this knowledge relevant to those individual interests is a key aspect where Reliq contributes to the knowledge transition practices.

This approach may open new ways for knowledge dissemination in various fields, where expertise meets individual needs. Access to information and easier navigation through the abundance of data might “bring to life” a wealth of information that is currently inactive or underutilized, “recycling” it in new ways and forms, allowing knowledge to shine from diverse perspectives.

Non-linear exploration is another aspect essential for knowledge transition practices. Reliq explores ways of creating those non-linear explorations, making the knowledge transition process relevant to each individual.

From a curatorial perspective, Reliq allows curators to set visitor

communication at different levels of complexity and depth. This adaptability of communication ensures that the communication strategy of the museum professionals is dynamic and adaptive to the needs of various visitor profiles.

Reliq creates a safe and inclusive space for novice visitors to explore art without feeling excluded or overwhelmed, while also serving as a source of high-quality, in-depth information for expert visitors. This democratization of knowledge ensures that museums cater to a wide range of visitor expertise and interests, making high-quality curatorial content more accessible.

CONTRIBUTION TO THE FIELD OF INTERACTION DESIGN

This research set out to address challenges in the area of museum engagement, particularly focusing on the integration of curatorial knowledge into the visitor experience and creating democratic personalised museum engagements. The following sections outline how the initial goals of the research were met.

Reliq’s contributions to the field of interaction design majorly lie in exploring, conceptualizing, and designing more personal and inclusive museum experiences. Reliq activates an expert knowledge that usually stays “behind closed doors”, and shifts linear exploration process to an interactive co-creational process.

Enhancing Curatorial Communication

One of the key objectives was to equip curators with tools to effectively communicate their vision and expertise to a broader audience. The research successfully developed a curatorial platform integrated into the existing curatorial process. The Reliq platform brought curatorial knowledge from behind the walls to the forefront of the visitor experience. By integrating this knowledge into dynamic media interfaces, the research ensured that visitors could access detailed and nuanced information about the exhibits, thereby enhancing their overall understanding and appreciation.

Reliq supports curators by providing a structured framework to create thematic storylines and connect with visitors dynamically. Reliq not only preserves the integrity of curatorial narratives but also makes them accessible and relevant to a diverse audience.

Curatorial Empowerment

This tool allows curators to shape visitor perceptions, expectations, and the information they receive, thus directly influencing the educational and

interpretive experience of museum-goers.

Personalization and Tailored Experiences

Another key objective of the research was to enhance the engagement and comprehension of art by diverse visitors by making museum experience more democratic. This was achieved through the development of dynamic media tools that offer personalized and flexible visitor engagements. These tools are designed to cater to both novice and expert visitors, addressing their individual unique motivations and personal agendas.

Reliq applies the Interactive Experience Model (Falk, 1992) and findings from cultural engagement typologies to personalize visitor art explorations. By aligning content with each individual's personal agenda and offering different entry points and narrative paths that resonate with visitors, Reliq's approach shifts from a "one size fits all" strategy to a more individualized knowledge transfer model, enhancing relevance and engagement for diverse audience segments.

Dynamic Dialogical Interaction

The voice interface of Reliq centers the museum experience around artworks, allowing visitors to engage in a "cinema-like" experience where they can concentrate on visual elements while interacting with the narrative through voice commands. This method reduces the need for textual engagement and enhances immersion. The use of questions as a navigational medium shortens the time required for searching through catalogs, providing a more intuitive and engaging exploration. Reliq transforms passive observation into active exploration and dialogue.

Reliq has an ambitious goal: to immerse visitors in narratives without distracting from their engagement with the artwork. The design of interactions with such a tender and subtle nature should be further explored with the goal of achieving truly seamless interactions that fully enhance the overall experience of engaging with art.

The solutions developed through this research offer a sustainable path forward for museums seeking to enhance their relevance and accessibility, to remove the "elitist" look.

Reliq integrates digital and physical experiences within museum settings, using technology to create a seamless and adaptive interaction framework. At a time when emerging technologies might be seen by some as a threat to engagement, Reliq serves as an example of how technology can deepen emotional and mindful interactions with tender subjects.

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