Kunstschule Wien

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HUMAN CONNECTION
An interactive exhibition
Graphic design, Animation and experimental film
Diploma thesis / Summer semester 2024

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1. Introduction

This project is centered around an exhibition design that encourages visitors to interact with the designs and posters and explores ways to increase the engagement of the audience and the effectiveness of communicating information. This work is an experiment and not a finished project, rather a mockup and exploration of possibilities on a smaller scale that will fit the limited space of the Diploma exhibition.

This project incorporates the use of three-dimensional features, such as cut-out elements and 3D printed figures all in a comprehensive identity design to connect various topics and mediums together on 4 A0 posters. These additions add depth to the traditionally flat poster. Some of these elements are connected with magnets and allow to be removed and invite interaction, allowing visitors to physically engage with the pieces by picking up elements. This interactive layer introduces a hierarchy of content, increases engagement and leaves the audience with a more memorable experience.

At the core of the exhibition is the theme of the human connection, a subject that was inspired by the interactive nature of the display and explores the importance of being engaged, not only in the content of the exhibition but also the world that we live in instead of being bystanders which for me is of great importance as now we have access to live news and amazing new technology around the world yet some of us decide to only watch and not participate.

2. Inspiration

The inspiration for this project stemmed from the Wien Museum, which has integrated infographics, data, and narratives through tactile elements. The museum features a range of interactive components, from elaborate 3D models and sculptures to wearable clothing, offering a tangible connection to the stories it tells.

On further research i also came across Stefan Sagmesiter's the happy show which was very closely related to what i was trying to achieve with my project. Interactive elements, infographics and creative ways to communicate messages with the audience. For example a bicycle that will light a sign that says 'actually doing the things' when exercising on it, or containers with numbers indicating level of happiness which is filled with balls thrown in by the audience.

While the mentioned exhibitions are good examples of exhibition communication design, there are many bad examples that we can see and encounter everyday and sometimes it is really a shame since this will lead to interesting knowledge and information being overlooked. For example scientific papers and learning materials that are badly designed.

Drawing from my background in digital interactive design and user experience, I aimed to bridge the gap between digital and analog design. In an era where digital interactivity often overshadows physical engagement, there's a growing appreciation among younger audiences for tangible experiences, such as reading physical books instead of digital media.

In some cases it is also necessary for some tactile feedback as users interact with an interface. For example, mobile phones use vibrations when typing to confirm that the letter has been pressed, or in cars physical buttons help drive control settings like climate, light ect… safer and more intuitively by giving them feedback and removing the need to look away from the road. However, this also brings up some challenges, how do we present information and how do we decide on a method for effective learning? How do we keep everything within a comprehensive visual and interactive system with the limitations of the physical world and guide the wide target audience from many ages and backgrounds in the right direction?

3. Role of graphic designer in exhibition design:

In an exhibition, many teams are involved. Depending on the type, different content developers gather information and materials for the exhibit, for example social scientists or historians. It is the graphic designer's job to develop a cohesive visual identity for the provided information in the exhibition, which can include color schemes, typography, and imagery that align with the content of the exhibition. The designer also ensures that signage and icons make navigation through the exhibition intuitive and easy for visitors. An important part of this process is testing the design and observing the visitors' experience. In my project, this is feasible since more than 300 people are expected to attend. Tests on a smaller scale are also essential to ensure the functionality of the work.

Collaboration is also a very important part of the process. Graphic designers typically work closely with other professionals involved in exhibition design, such as curators, architects, and multimedia specialists, to ensure that all visual and thematic elements are harmoniously integrated. In my project I collaborated with some of my colleagues and friends on some parts of the project to put my coordination and team working skills to test and to ensure a good experience for the visitor.

Collaborations:
David Kier: Designing the gutenberg press.
Adriana Mehmedovic: Assisting in assembly of the posters and sculptures
Steven Mainka: Assisting in research, gathering information and content for the work

All these elements are crucial for designing a space that presents information to the audience effectively. It is important to remember that the purpose of an exhibition or museum is to showcase various works, information, and objects to the visiting audience. Hence it is important in the design process to set aside personal preferences and design for the audience instead of oneself.

4. Studying works of studios in vienna that are active in exhibition design

I researched several local studios and agencies in Vienna to gain a better understanding of how an exhibition should be designed.

One of the most crucial aspects of exhibition design is the proper layout and typography, which facilitates the reading of extensive texts. It's important to avoid clustering too much text in one area and to ensure that the size and color of the text are adequate for readability from the intended distance. It is also to note that most people don't read everything they see and they start from the shortest paragraph and once they see a paragraph that expects them to have read the previous paragraph they get frustrated and skip the section.

In some cases, corresponding illustrations and imagery complement the text, and larger installations may be used to convey information more effectively and add depth to the exhibition materials. Additionally, the design of data is vital. Without thoughtful design, data could appear as only numbers and words that could be hard to understand on first sight and easily overlooked. Visual aids like maps, tables, and graphs with proper colors, accompanying illustrations and graphics can significantly enhance the effectiveness of the presented data.

Some notable exhibition designs can be seen on https://www.bauerund.com/
Many of the design principles mentioned above, such as effective layout, typography, the use of visual aids and installations are evident in their works.

(Photo 1)

5. Content of work

The theme of the project "Human Connection" is exploring the importance of community and collaboration within us. This selected topic sets a set of problems for this small scale project, the topic can be very broad and include a huge amount of data and information to present which would make reduction and simplifying necessary to not overwhelm the audience.

For this, the topic has been divided into 4 main topics:
"Our Story," "The Human Experience," "Our Inner System," and "Our Community" are the main topics chosen for the exhibition. These themes are arranged chronologically, starting from the past with "Our Story," which depicts events and instances of collaboration, highlighting the importance of knowledge exchange. Moving to the present, "The Human Experience" and "Our Inner System" explore current realities, the randomness of life, and the experience of being alive, including aspects like mental health, social media, and modern technology. The sequence concludes with "Our Community," looking towards the future. This segment features an interactive piece that encourages visitors to contribute their own designs, wishes, and visions for the future, adding a personal touch to the posters.

Each topic has to also be comprehensible standalone to ensure visitors can start from a further point in the topic if one area of the exhibition is populated. At the core of this project, the Design, visuals, ways to communicate information and the whole experience comes first and then the actual written content as this project is about exhibition design and user experience in graphic design and art.

6. Active learning

This work includes many educational and informative materials and the challenge with these is to present them effectively without making the audience feel like they are reading a lecture transcript. The big difference between a lecture and this information material is that the students are forced to learn the lecture material to pass but the visitors have no obligation to stop and read what is written, however the information is still important nonetheless. In this case it is important to have visitors read, question, debate, think and analyze. The lack of activelearning can lead to ineffective learning no matter how interesting the actual content is

7. Storytelling through interactive sculptures:

One effective way to enhance visitors' curiosity and engagement is to reveal information gradually, using storytelling techniques in the design. This approach not only allows visitors to choose which parts they wish to read fully but also helps declutter the space, creating a cleaner and more inviting design that is less overwhelming. In digital media, this action is straightforward, typically managed through a button that redirects users to a different page. However, implementing this in analog media requires creative solutions.

For instance, at the beginning of the first poster ("Our Story"), it is necessary to introduce some historical events, but graphically representing all these on paper would take up considerable space and diminish the experience. To address this, I have placed a 3D printed container designed to resemble a time capsule. This container serves as an analog 'call to action' button, similar to those used in digital user experiences.

The container itself is a mysterious object—its contents are hidden, compelling visitors to pick it up and explore what's inside. This discovery process transforms passive viewing into an active, hands-on experience. Once a visitor picks up the container, they are immediately engaged, motivated to open it and uncover the information inside. This interactive method not only captures attention but also ensures that visitors are actively involved, as they physically interact with the content presented. Similar methods are used throughout the exhibit, such as doors on the poster that prompt visitors to open them with a written question, encouraging interaction to find the answer. Additionally, on the third poster ("Our Inner System"), pieces of a face can be lifted to reveal hidden messages, and some 3d printed texts designed to read out different words depending on the angle they are seen from or in other words agamographs that correspond to the deceptive nature of internet, media and modern technology intriguing those visitors who are curious and question the design elements.

Other interactive features include the "Sea of Information" sculpture at the bottom of the first poster. The central theme is the pursuit of knowledge, and visitors interact by using a magnifying glass with magnets to move particles within an acrylic glass container, unveiling the text and illustrations underneath. Also, the "Squished Faces" sculpture on the second poster ("The Human Experience") may not be directly interactive, but it fuels curiosity. We often make initial judgments based on facial expressions and body language; this sculpture, with its unusual depiction of squished faces, prompts visitors to question why the faces are distorted, thereby encouraging active learning.

8. Encouraging collaboration and interactions between visitors:

We humans are inherently social and thrive in communities, engaging with loved ones. To encourage this interaction, the board game "Human Experience" was created. This game is a blend of various board game elements including role-playing, resource gathering, and player interaction, similar to "The Game of Life," "Catan," and "Monopoly." It offers players a chance to navigate through an imaginary life, experiencing randomness, making choices, engaging in debates, and questioning morals with humor and unexpected twists. However, designing this board game presented multiple challenges such as providing clear instructions, ensuring playability, managing game duration, and presenting it vertically on a poster using magnets to hold game figures in place. Given the limited space of the project, it is crucial to ensure there is enough room for players near the posters while maintaining distance from other interactive elements. The layout must be carefully planned to prevent congestion and evenly distribute visitor traffic. Each round of this game takes about 25 minutes, allowing visitors to immerse themselves and take a break during the huge diploma exhibition and also my project human connection.

Another interactive element that requires significant engagement is the Gutenberg press, positioned away from the board game on a side table. Inspired by a combination of Lego and printmaking, this press allows users to create multiple copies of their artwork. Visitors can keep copies, gift them, or leave some at the exhibition, enhancing their sense of community connection. Making prints takes considerably more time than simple drawings with pens and markers typically used in exhibitions. To solve this, premade tiles and blocks that attach to the print bed like Lego were created, featuring precut, seamless designs that can be easily combined. This variety in styles and designs offers potential for future expansion. The development of this print press and its tiles posed substantial challenges, as online resources were limited. Creative solutions were required, such as repurposing parts from an old espresso machine to operate the press and ensuring the device was simple enough for anyone to use, thus reducing interaction time.

9. Visual identity

The visual identity of an exhibition plays a big role on how the exhibition is perceived and a coherent one helps with all the different pieces and works in an exhibition to blend together and feel like they belong in one place. It is important to know what we are trying to achieve with visual identity.

9.1 Target audience

The first step is to get to know the audience and know who we design for. Seen from previous years visitors who visited the diploma exhibition, i could conclude that mostly are people between the age of 20 and 30 and also some older age group between 40 and 60 as they are friends and families of the exhibitors and most of them are somehow involved in the art world or can appreciate art which can leave some room for more abstract installations such as the squished faces. Since most visitors do not expect to be able to interact with pieces in an art exhibition like the Kunstschule Wien, it is important to have things indicating that objects are interactable.

9.2 The type

This project integrates a range of textual elements, sculptures, and illustrations, highlighting the importance of avoiding unnecessary details that could distract from the primary information and interactive experience. However, it's crucial that the font retains character and conveys a friendly and inviting feeling. The selected typeface, Ofelia Text, perfectly meets these criteria with its variety of weights and geometric shapes that allow for easy customization in further advertising materials and proper visual hierarchy using different font weights.

After choosing the typeface, selecting the appropriate size and scale for each text segment is essential to ensure optimal readability. In this project, 7 different sizes are utilized to establish a clear hierarchy and enhance readability:

-161pt for main headlines on each poster, which makes the text visible from a distance and readable past people in front of the viewer.
-72pt for the main header of each text section on the poster, designed to be legible from approximately 3 meters away, attracting curious visitors.
-32pt for the main body text of each poster, with a readability distance of 1.5 meters, encouraging visitors to come closer while allowing space for others to pass by or engage with the content.
-24pt for headers of detailed explanations, enticing more curious visitors to approach while maintaining a distance conducive to interacting with interactive elements.
-14pt for the body of detailed texts.
-12pt and 9pt for headers and body texts on playing cards respectively, used in the board game. These smaller sizes are appropriate for text that will be read up close, as the cards are designed to be physically picked up and viewed at a closer range.

To ensure these choices in font size effectively serve their intended purpose, I've used online resources like leserlich.info to confirm readability and eliminate subjective judgments. Further,

the text sizes have been validated through real-life tests, printing samples, and assessing them with individuals of varying visual capabilities.

9.3 Colors:

Colors play a pivotal role in the emotional impact of design, and a carefully chosen color palette can unify various elements within a design. The selected colors are Turkey red, Myrtle green, Olivine, Honeydew, Sandy Orange, Murray, Bright pink. These colors are applied in varying intensities to ensure cohesive integration and to establish a clear hierarchy within the works and also ensure enough diversity for more interesting design.

The background of all posters is Honeydew, which not only makes the space more inviting but also enhances the visibility of white 3D-printed objects through contrast while avoiding being too bold and getting unnecessary attention. The greens, serving as the primary colors, instill a sense of calm and safety across the displays. Darker and more muted shades of green are strategically used in areas intended to evoke a melancholic feeling.

In the board game section, a more vibrant use of colors draws attention and injects energy, contrasting sharply with the black and white 'Squished Faces' above, which heightens the visual impact and adds an intriguing twist to the palette of the posters. The use of orange highlights interactive features and navigational aids, ensuring that guidance through the exhibition is intuitive for visitors.

The reds are critical for conveying urgent and important information. In the context of the board game, red also signals danger, with cards in this color typically indicating a lower probability of favorable outcomes. This helps players make quick decisions about whether to take risks or avoid certain actions, without needing to read and analyze each move in detail.

Sandy Orange #ed944c	Turkey Red #a41916	Murrey #f6f9eb	Bright pink #ed697a
	Myrtle Green #446c6a	Olivine #89af75	Honey Dew #f6f9eb

(Photo 2)

9.4 Illustrations and icons:

Maintaining a cohesive style across all illustrations and icons is another crucial step to achieving a unified visual identity. Research indicates that using icons can humanize designs and make them more relatable, as they are universally understood. However, it's important to carefully manage their use and choose the right style to avoid overwhelming the design.

Throughout the project, I have maintained a simple yet effective style to represent the accompanying information. This style is subtly adjusted for each type of interaction within the project, while still adhering to the original aesthetic.

In the illustrations, I aim to be straightforward and use recurring motifs that evoke the theme of connection—such as wavy lines, and depictions of flowers and plants, which suggest a sense of ongoing movement and individual paths, yet reinforce our interconnectedness. The use of illustrations in infographics is particularly important as it engages the audience immediately, prompting them to question the meaning and actively engage with the information presented and have a general idea of what the information is about at first glance. This approach is often more effective and efficient than relying solely on words, numbers, and traditional visuals and charts.

The use of illustrations and icons is especially crucial in the board game to enhance the playing experience, making it more enjoyable, playful, and intuitive and giving the game it's own character.

For the visuals and designs on the tiles of the Gutenberg press, it's vital to balance abstract and seamless shapes with special tiles that allow each person to create a design unique to them. This not only stays within the visual language of the exhibition but also simplifies and enhances the manufacturing process of each tile, ensuring they are both simple and uniquely appealing.

(Photo 3)
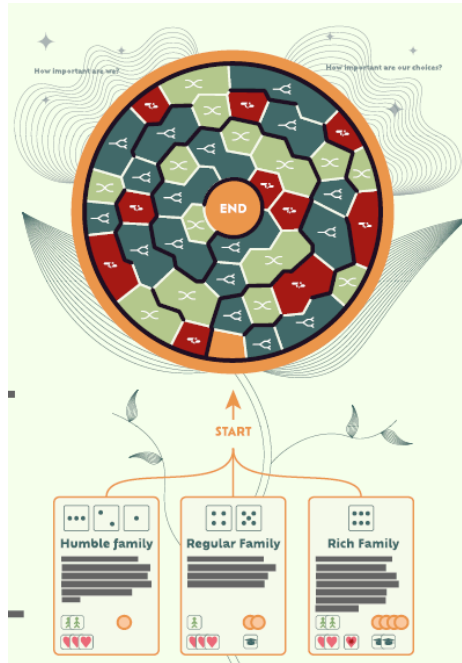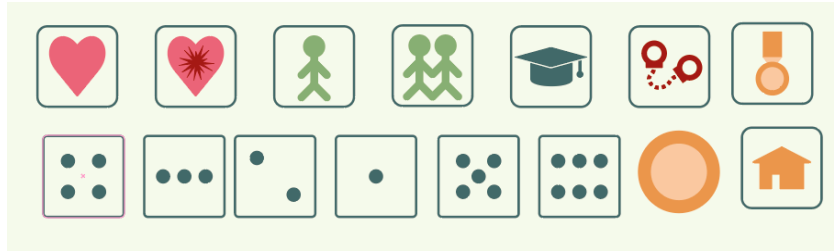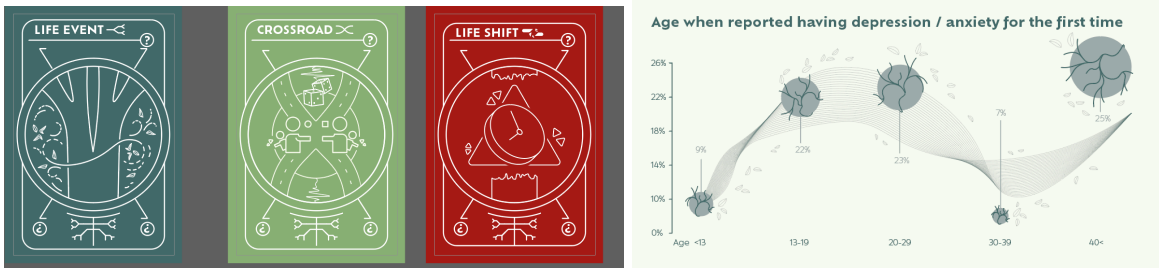
(Photo 3)

10. Building the project

Building and managing a project of this magnitude was a challenge in itself. Effective time management and a clear understanding of one's capabilities are crucial aspects of the process. Ambitious ideas can sometimes hinder the creative process, making it essential to set realistic expectations and deadlines, especially when you are managing yourself.

This project required extensive 3D modeling and manual cutting. While the 3D modeling itself was time-consuming, the actual printing presented significant challenges, particularly when working with large objects like the time capsule and squished faces. For example, the time capsule, though optimized through strategic positioning and modeling for printing in separate parts and subsequent assembly, still required 27 hours of printing time, not including the trials that failed.

To address print distortions and enhance quality, experiments and research were necessary. Another challenge was achieving a uniform look, as the workshop where I printed, Happylab, had a limited selection of filament colors. To overcome this, I resorted to spray painting the prints.

Assembling the 3D objects involved cutting each piece out of cardboard. Manually cutting these would have been too time-consuming and less precise, so I used a laser cutter for the cardboard to save time and increase accuracy. However, all the paper pieces on top were still hand-cut to fit the cardboard. I experimented with various glues and types of paper to find the best methods to prevent wrinkling and damage. Ultimately, I decided on a mixed approach: spray paint for delicate papers, wood glue for more robust objects, and screws for heavier elements.

Since many heavy objects needed to be glued and attached, I mounted the posters on cardboard. This not only differentiated them from the wall behind but also added depth to the work. For example, I could cut out parts of the cardboard to create designs that appeared to go behind the actual poster, like the time capsule, which has a hole behind it as if it was dug out.

Working with such large posters also posed challenges in alignment and transportation. Throughout each step, continuous experiments and tests were essential to ensure good quality.
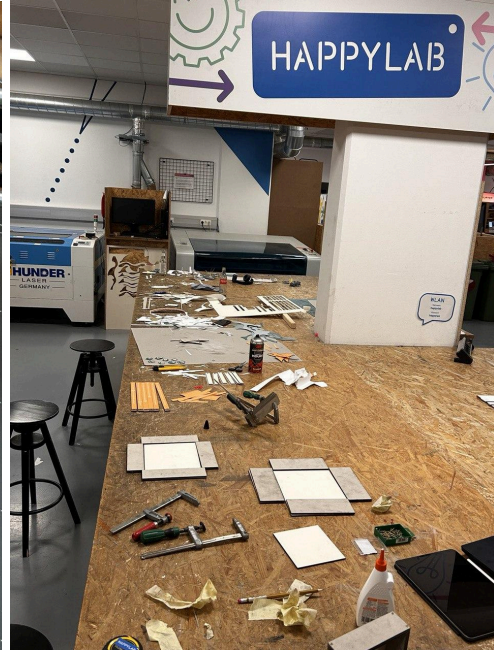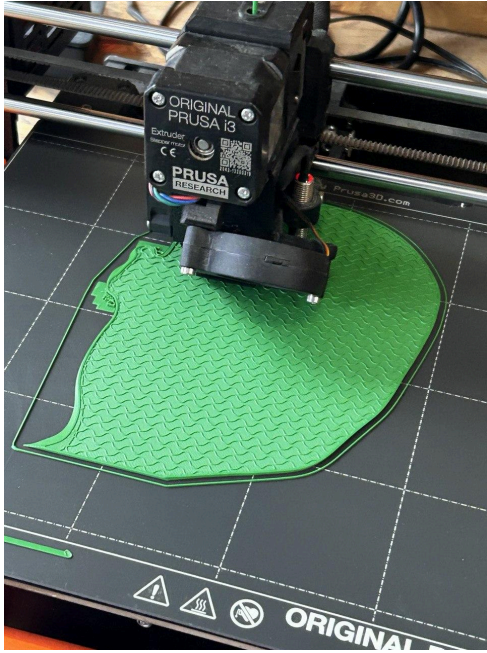
(Photo 4)

11. Closing statements

In conclusion, this diploma project represents a combination of interactive design and educational engagement, crafted to promote human connection through a hands-on, immersive experience. By blending the tactile appeal of 3D elements with the informative researched content, the exhibition invites visitors not just to view but to participate actively in the learning process. Each element, from the design of the typeface to the choice of color palette and the use of interactive sculptures, was chosen to enhance the educational impact and aesthetic harmony of the display. This project not only serves as an experimental exploration of the possibilities within exhibition design but also as a testament to the power of thoughtful, engaging design in transforming how we interact with information and each other. Through challenges and discoveries that this project created, the journey of creating this exhibition has been a huge learning experience for me and i hope to be able to work on similar real world and bigger projects like this in the future and after my diploma.

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13. List of photos

Photo 1:
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Photo 2:
Main colors of project

Photo 3:
Example icon and illustrations

Photo 4:
assembly and build process