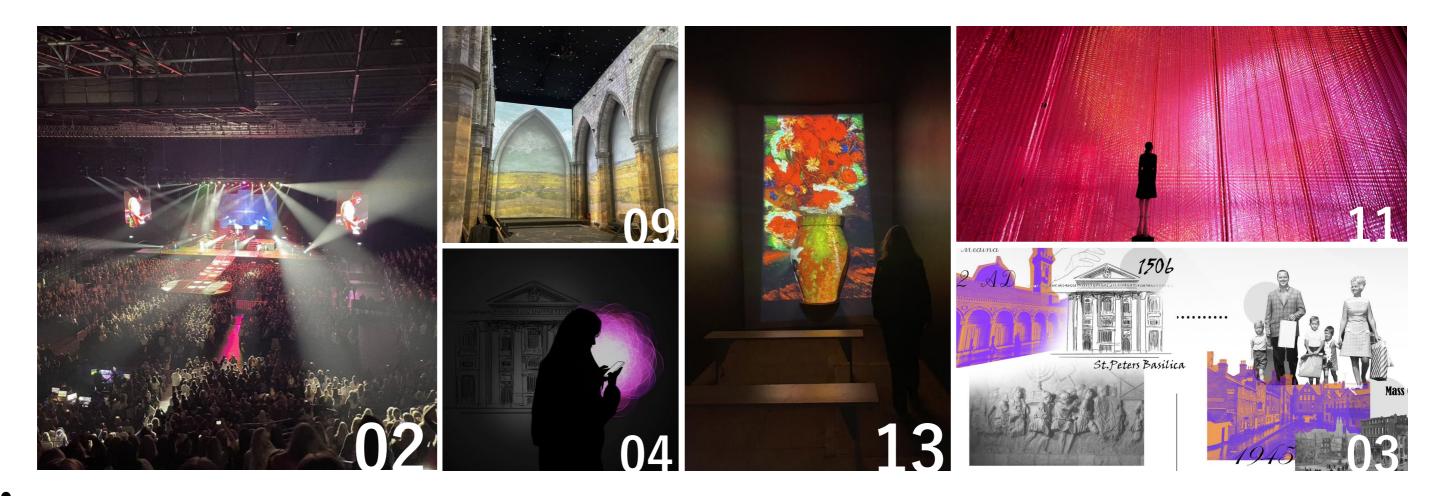
HOW CAN EXPERIENTIAL DESIGN HELP RECONNECT PEOPLE TO THEIR BUILT ENVIRONMENTS WITHIN THE DIGITAL AGE TO IMPROVE USER EXPERIENCE AND WELLBEING?

ELLIE TUOHY



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"The quality of our relationships determines the quality of our lives" (Perel, E, Psychotherapist and Author)

Experiential design is "how people use, engage and feel about things and places to build a body of knowledge with which to frame experiences." (Baurley, 2004, 275)

These experiences regenerate the connection between people and their built environment, which has been neglected for decades. Within the experience, the senses are rediscovered as people immerse themselves within the architecture and design, which is needed in order for people to truly experience and connect with a space.

"Our relationship with space is not neutral: spaces evoke emotional responses." (Locker, 2010, 85)

Human behaviour and wellbeing have become increasingly important in today's world, considering the impact that the pandemic has had on us. It is also important to recognise that architecture and design, something we face in our everyday lives, has an immense impact on the human mind, and that there are ways to improve design, which in turn benefits user experience and wellbeing.

The aim of this literature review is to gain a deeper understanding of and the history behind experiential design, it's advantages and disadvantages, to understand why it is an upcoming trend in design due to the digital revolution, and how it is a significant step in the right direction towards resolving the neglected relationship between humans and architecture within today's passive spaces.

CURRENT EXPERIENTIAL DESIGN

Considering the impact that the pandemic has had on people worldwide in recent years, human connection, wellbeing, and experience are what people are seeking out, as they were not available at the time due to people being stuck indoors, away from connections and experiences. "As for the experiencers, they're often looking for belonging, wellbeing and memorability – happenings that enrich their lives." (Ingram, 2020, Frame:149)

Types of experiential design: (according to Jason White, Executive Creative Director at Leviathan)

(Munro, L. 2015)

- Exhibition design (museums, art galleries)
- Entertainment (concerts, events, theatre, tv, and film)
- Marketing (product experiences and launches)
- Placemaking (public installations and landmarks)

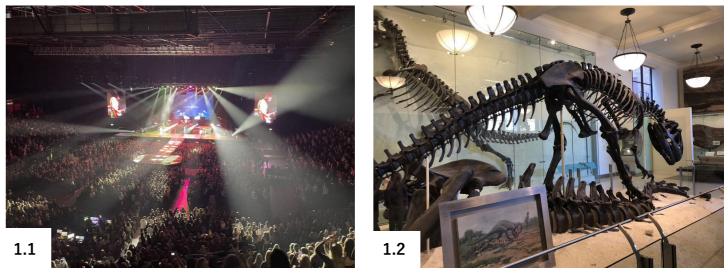


Figure 1.1. Concert at Utilita Arena, Birmingham. (Tuohy, E, 2022)



Figure 1.3. Manchester Art Gallery. (Tuohy, E, 2022)

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"When deciding how to spend their money, 3 out of 4 Millennials would rather buy an experience than something desirable." (Eventbrite, 2017)

Experiential design and immersive spaces are more prominent in today's industry due to the advancements in technology catalysed by the digital revolution. Many companies and brands have incorporated the experience strategy into their interior spaces in order to attract a post-pandemic audience that is looking for more from interiors.

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Figure 1.2. American Museum of Natural History, NYC. (Tuohy, E, 2020)

Figure 1.4. Alexandra Theatre, Birmingham. (Tuohy, E, 2022)

People don't want to be the "bodiless observer" (Pallasmaa, 2012, 29), it is within human nature to connect with others and the environment, whether that is physically or digitally. "We perceive atmosphere through our emotional sensibility - a form of perception that works incredibly quickly, and which we humans evidently need to help us survive." (Whitehead, 2018, 8)

HISTORY OF EXPERIENTIAL DESIGN

When experiential design is brought to mind, many envision digital screens and the use of technology. This is because immersive design is closely associated with technology as it became a popular design trend after the digital revolution in the 20th century.

"In 2007, Alex McDowell coined the phrase "immersive design" in a discussion around the growing field that was emerging around story-based media within the context of digital and virtual technologies." (Bucher, 2018, 5)

Experiential design, in fact, predates digital technology by a great extent as religious buildings such as temples, mosques and churches displayed ornaments and holy objects in a skilful way which created a spiritual experience for the visitor. "Many... (religious buildings) use their architecture to elevate iconic objects... and to stimulate the senses (scents, music, visual stimulation, tactility), promoting spiritual contemplation in much the same way that other states of heightened apprehension are promoted by modern exhibition designers." (Hughes, 2010, 10) Hughes also argues that it is within our human biology to display, "Display is an innate element of human behaviour, constantly practised in our daily lives", not only for ourselves but also for others which creates a place where people can learn from and experience for themselves.

It is important to understand that immersive and story-driven experiences are not just technological but also physical, which can sometimes be forgotten. Psychical immersion has been around longer than technological immersion which is why it should not be neglected in today's digital age. Immersion is as simple as learning new information and engaging with a space. Ultimately, creating a connection between the user and the space they inhabit is the aim, whether it is with digital screens or not.

"Experiential designs are successful when they encourage people to create meaningful emotional and social connections." (Chertoff et al, 2008, 407)

THE NEGLECTED RELATIONSHIP BETWEEN PEOPLE AND ARCHITECTURE

2.1

Figure 2.1. The Neglected Relationship Between People and Architecture (Tuohy, E, 2022)

Tschumi uses the term 'violence' as "a metaphor for the intensity of a relationship between individuals and their surrounding spaces." (Tschumi, 1996, 122.) He argues that architecture does not exist without action or events and that human interaction and design are parallel, which stresses the importance of designing spaces with user experience in mind.

Both of the architects' writings were originally published in 1996 during the pre-digital era, post-Industrial Revolution, and within the age of growing mass consumerism. This could indicate a straying away from human-centred architecture and design as the focus was on aesthetics, efficiency of production, and generating a large profit. Additionally, architectural movements such as Brutalism in the 1950s, which was minimalist, void of colour and large in weight and scale, neglected the senses. Historically, this was a result of the post-WWII destruction of buildings and their rebuilding back stronger; this also saw an increase in the economy but a decrease in the relationship between humans and architecture.

A more contemporary impact is the digital revolution in the 20th century, which saw an increase in digital technology and a decrease in human connection as people were more focused on the screens in their hands than the space around them. It is important to understand the context that created the shift from tactile to 'immaterial' architecture and design where the passive experiences began and what driving factors influenced them in order to combat the challenge and introduce a resolution for the relationship between people and their built environments during the digital age.

Architects Juhani Pallasmaa and Bernard Tschumi explore the relationship between humans, the senses, and architectural spaces.

"The observer becomes detached from an incarnate relation with the environment through the suppression of the other senses" (Pallasmaa, 2012, 29)

The term 'bodiless observer' is used to convey the passive relationship between architecture of our time and people, as it does not focus on human connection or experience. Pallasmaa argues that buildings have become 'immaterial' and do not invite the senses to experience a space fully.



Figure 2.2. Historical Timeline in an Experiential Design Style. (Tuohy, E, 2022)

CAN THE PROBLEM ALSO PROVIDE TO BE THE SOLUTION?

Can the neglected link between people and architecture be fixed, and can digital design be both the cause and the answer for that?

Firstly, it is evident that digital technology has many positives, however, it is also important to understand how the rise in digital technology has created a shift in the human connection to the space around us as we become fixated on the screen in our hands rather than the people and experiences available around us. "Although digitalisation is, in many ways, a fantastically positive innovation, it does not always turn us into more social beings." (Sjövall, 2021, 40)

Exhibition designers such as Team Lab, claim to use technology 'to connect people' (Team Lab, 2018) which can be seen as ironic as technology arguably disconnected people in the first place. Contemporary experiential designs offer users new experiences that were unattainable before the digital revolution as the technology was not as advanced at the time.

"We are beginning now to see the use of digital technology as a tool to help enable the exploration of new possibilities." (Szalapaj, 2005, 16)

This is an interesting topic to explore, as the thing that separated people from one another, can ultimately be used as a way in which to reconnect to each other and the space around them.

There is a "dominance of vision and the suppression of other senses" (Pallasmaa, 2012, 11) within architecture as well as digital experiential design as one cannot physically explore the design as it is two dimensional. This eliminates the possibility of all the senses engaging with a design or experience. You can see, hear, touch but there is a barrier from truly experiencing something.

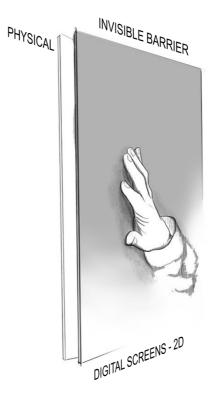


Figure 3.1. The invisible barrier between people and digital immersion is removed. (Tuohy, E, 2022)

With physical spaces, one can interact with the space and feel its tactility, whereas touch in digital design is false as it is flat. A solution to this problem would be to incorporate both physical and digital experiences so that the space does not rely heavily on superficial designs, which would dissociate the user experience. A great example of this would be AR technology "bridging the digital and physical worlds" (Crabb, M et al, 2019, 2106), together.

"We respond ever more enthusiastically to the highly artificial and constructed environment of the modern exhibition." (Hughes, 2010, 7) It is evident that digital immersion and experiential design has become a new trend in design that has gained a large following and interest. With technology advancing, designs are improving which brings new and exciting experiences for people which they have never experienced before.

"Experiential design has the potential to improve the design process of immersive, virtual technologies. By tailoring the process around maintaining a user's experience" (Chertoff et al, 2008, 411)

The term "phygital" is used to describe the "blend of the physical and the digital" (Collins English Dictionary, 2020) within Frame magazine. "In the future we'll see both: digital or phygital happenings that work with the best technology has to offer" (Ingram, 2020, Frame: 149) The hybrid design of physical and digital immersion is expected for the future of design due to it gaining momentum as a trend in recent years. It offers a solution for new immersive experiences as it does not heavily rely on digital, and the senses can still be awakened. Ultimately, 'phygital' spaces within experiential design could prove to be a beneficial contemporary tool to help rebuild the neglected relationship between people and architecture, which many companies have now started to explore.

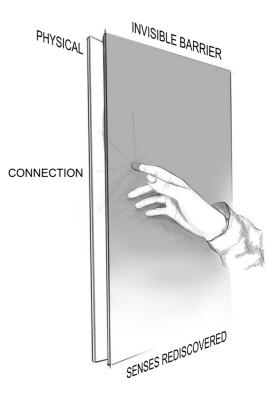




Figure 3.2. Collage of The Senses with Physical Immersion (Tuohy, E, 2022)

(GUSTATORY)

CASE STUDY

TEAM LAB | PLANETS, TOKYO MUSEUM

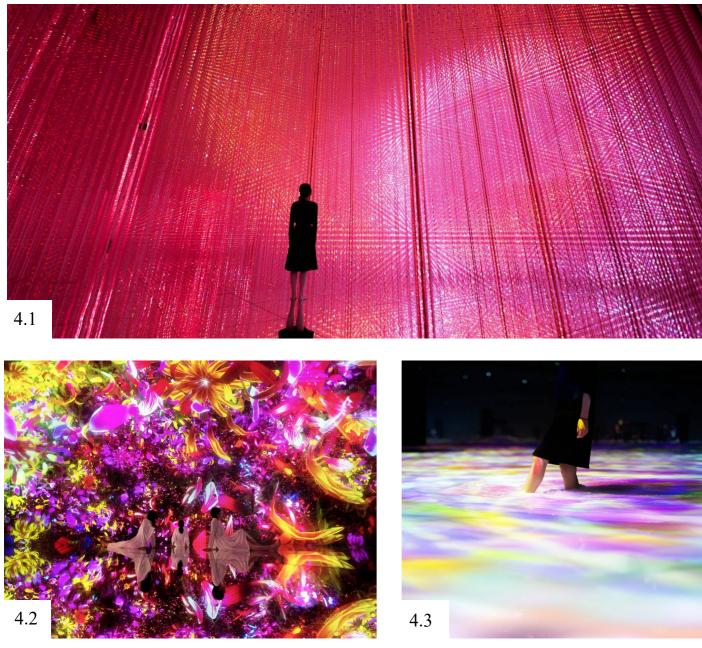


Figure 4.1, Figure 4.2 and Figure 4.3 (Team Lab, Planets, 2018)

Team Lab is a well-known artist collective; they focus is finding ways to reconnect users to the space around them. Many of their exhibitions transcend story-driven design and make users feel like they have been transported to another place and time.

The space takes you on a 'journey of self-discovery' through others and artwork. The aim of the design is to 'dissolve the boundaries between yourself and the space around you' removing the 'violence' (as Tschumi describes) and exploring a new relationship entirely.

It is also important to identify the negatives that can be found in experiential and immersive design:

- Sensory overload due to too many mirrors and harsh lights, which can be disorienting
- Entering a space barefoot is unhygienic, as many members of the public would use this space, and bacteria and germs can be passed around easier. If you have a preference for not taking your shoes off, are you then excluded from the experience?
- The overuse of digital screens eliminates the tactile element within the senses and unconsciously regenerates the 'bodiless observer' (which Pallasmaa mentions).
- Designs that are too futuristic may completely alienate the user. When the user exits the experience, the juxtaposition between illusion and reality could have a negative impact on the user experience.
- Even where the physical and digital are blended together, "sensory conflict can occur in AR when the visual information being shown conflicts with the vestibular information being obtained by the user." (Crabb, M et al, 2019, 2107) If the size and scale of information being communicated is incorrect, it can upset the digital and physical environment's balance.

Ways in which these factors can be resolved:

- Health and safety for the user is most important. Making the space hygienic, especially post-pandemic
- Designing for inclusivity. Designing for people with wide variety of conditions such as ADHD or Epilepsy.
- Not heavily relying on digital screens as this can be disorientating. Creating 'Phygital' spaces that combine digital and the physical
- •Blending reality with the experience which does not have harsh juxtaposition of a transition.

PRIMARY RESEARCH

VAN GOGH IMMERSIVE EXPERIENCE ALL SAINTS CHURCH, LEICESTER



Figure 5.1. Van Gogh Immersive Experience. 'Phygital' space. (Tuohy, E, 2022)

To be able to fully understand experiential designs impact, carrying out primary research was necessary.

"One needs to see clearly to understand" (Corbusier, 1991, 231)

The journey started with a traditional art gallery, showcasing Van Gogh's work and the context behind the designs. This introduction was not overwhelming for visitors as there are no digital screens or bright lights as you enter the space.

Further in, digital screens are introduced, which slowly transition from physical to digital in a way that would not shock the visitor and cause distress. Additionally, when exiting the experience, there is a physical workshop where visitors can sit down and create their own art.

"I want to touch people with my art." - Van Gogh

The immersive experience is an example of experiential design done correctly, as the transition between physical and digital was blended, the space was designed for inclusivity as there were open spaces without harsh lighting and digital screens where people could relax. The space was easy to navigate because it was designed around a narrative and journey through Van Gogh's life experiences.

Overall, the experience was positive as it was welcoming, engaging, and interesting. The immersion allowed visitors to connect with the space around them both digitally and physically. Knowledge was gained about the artist and their work, as well as a memorable and lasting experience.

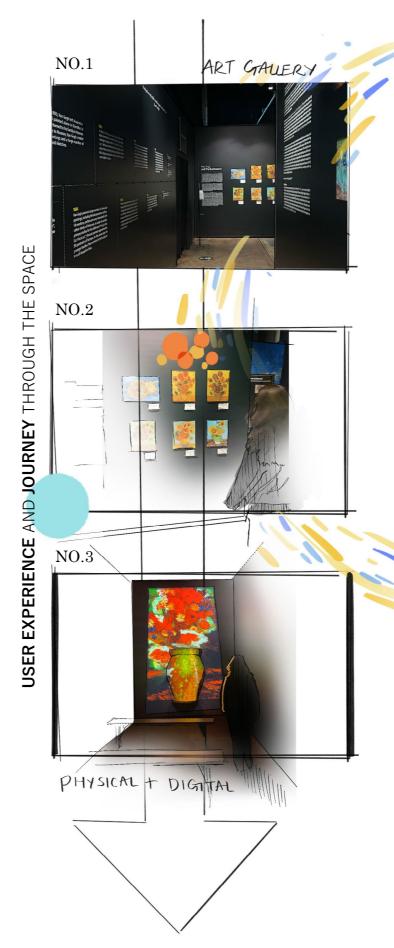
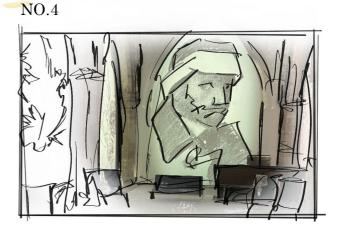


Figure 5.2. Hybrid Drawing Storyboard, Van Gogh Immersive Experience, All Saints Church, Leicester. (Tuohy, E, 2022)





CONCLUSION

From this literature review, further research and analysis has aided my knowledge of experiential design, its positives and negatives, and how it can prove to be successful in reconnecting people to their built environments within the digital age.

There is still room for improvement within contemporary experiential designs, as they currently heavily rely on digital immersion, which can only connect some of the senses due to the flatness of the digital screen. Solutions such as blending the transition from physical to digital and creating 'phygital' spaces where the transition between reality and superficiality are smoother for the user experience.

Experiential design evidently plays a crucial role in re-establishing the connection between humans and architecture as the senses reawaken and the invisible barrier between user and space, that was previously present, is removed. This can be established through both physical and digital designs, as both ultimately aim to achieve the same result: creating a human connection through the user experience.

As it is still relatively new within the design world, there is still room for improvement as technology advances and as people begin to explore new and exciting connections.

"NOTHING EVER BECOMES REAL UNTIL IT IS EXPERIENCED"

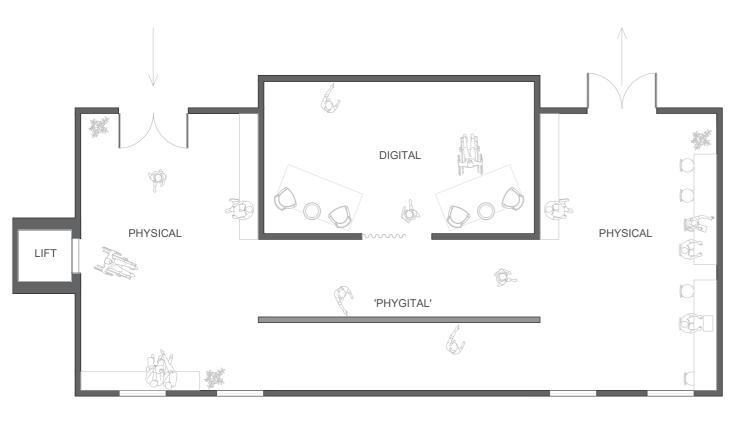
- JOHN KEATS, ENGLISH POET

DESIGN MANIFESTO

This design manifesto serves as a reminder to myself for the designs I will create in the future that will be informed by the information I acquired from this literature research, which helped shape my current design principles and deepened my knowledge of my interests, such as experiential design.

It will be simpler to manage future projects and guarantee that they are built on ideals that are relevant and advantageous to both the user and the space's developer if there are guiding principles.

This will aid me in designing with the user's experience and welfare in mind, two things that my ultimate project will emphasise.



SCALE BAR 1:100

HEALTH AND SAFETY - CLEAR NAVIGATION, SPACES TO RELAX AND STEP AWAY FROM THE EXPERIENCE
INCLUSIVITY - VISITORS USING THE LIFT HAVE THE SAME USER JOURNEY
HUMAN-CENTRED DESIGN & EXPERIENCE - DESIGNED AROUND BEST EXPERIENCE FOR THE USER

4. DIGITAL VS PHYSICAL - CREATING 'PHYGITAL' SPACES TO INTRODUCE THE DIGITAL. TRANSITION IS NOT AS OVERWHELMING.

Figure 6.1. Plan of a 'Resolved' Experiential Design Journey. (Tuohy, E, 2022)

1. HEALTH AND SAFETY

As a designer, I have a responsibility to ensure safety for users. Putting first health and safety will remain top priority to ensure that a safe and welcoming design for all. The aim is to make people feel safe and welcome enough to let their guard down and truly immerse themselves within the space.

2. INCLUSIVITY

"To be inclusive, design has to reflect the rich make-up of society and enable people from different backgrounds and worldviews to thrive including people of different ages, genders, social, ethnic or cultural backgrounds, disabilities, sexual orientations, faith or life experiences." (Design Council, 2022) Including people of all demographics with or without disabilities and medical conditions. All should be promised the same experience. Designs should not exclude any one due to being too loud or overwhelming. The aim is to reconnect people with design, bright lights and cramped environments will not achieve this.

3. HUMAN-CENTRED DESIGN & EXPERIENCE

"Today's human centred design is based on the use of techniques which communicate, interact, empathise and stimulate the people involved" (Giacomin, 2014, 608) Continue to create story-driven designs which prioritise the user of the space. Their journey through the space and how the design can emotionally affect them is important. The aim is for people to leave the space feeling like they have gained something from the experience, as little as an interesting fact, or a memorable experience in their lives.

4. DIGITAL VS PHYSICAL

Although living in the digital age, experiential and immersive design should not be overly reliant on technology. You can learn experiences by simply sitting down with a pen and paper. In order to prevent the user of the space from feeling uneasy or unwelcome inside the planned area, try to make the transition between the physical and digital elements as seamless as possible. Making new "phygital" (Ingram, 2020, Frame: 149) places that reduce the jarring contrast that existing digital experience designs have, making the space more welcoming and easing the user into the design. Finally, it is critical to understand that architecture and design are continually evolving,

Finally, it is critical to understand that architecture and design are continually evolving, that technology is developing, and that new design trends are emerging. As a designer, it is crucial to stay current with these developments. My design manifesto will develop along with my knowledge and experience as I progress through this course and my career.

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IMAGES

Cover image by (Tuohy, E, 2022)

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