Unlocking Creativity through Neurodesign and Playfulness

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A new way of thinking about digital experience

- Journey through strategies and techniques to enhance experiences in AR, VR, and AI

- Approach to Enhancing Experiences:
    - Scientific approach to art and design in AR, VR, and AI
    - Embracing playfulness and exploration in technology-driven design

- My POV for Playfulness in Innovation:
    - Importance of playfulness in sparking happy accidents
    - Fostering eureka moments through explorative design
    - Open ended experiences to spark creativity

Digital Lives: our online existence

- Exploring the evolution and significance of our online digital lives

- Digital Representation: delving into how we represent ourselves in online spaces

- Imagining what new types of creative experiences can look like online, and what new forms of expression will emerge

A dive into Neurodesign

- Neurodesign is the practice of using insights about the brain and its workings to inform design decisions

- This is not neuromarketing

- Neurodesign can include:
    - Neuroaesthetics
    - Processing Fluency: how to make designs feel more intuitive
    - How first impressions work
    - Visual saliency: what stands out?
    - Behavioural economics
    - Optimising for accessibility

- Can be applied to digital or physical experience

A real-world Neurodesign Case Study

- Sephora France and Instagram Creative Shop collaboration: DO NOT DRINK perfume release

- Created a series of AR wearable filters

- Used sensory science research to inform the visuals

- Enhancing accessibility and reach

'We launched our new fragrance line at a time when many retail locations were closed, and the lack of store foot traffic meant low sampling opportunities as a way of product discovery. So we needed a bold new digital ad strategy to successfully stand out in a crowded category.'

SAMANTHA ETIENNE, CEO, SEPHORA COLLECTION

AR Filter Design
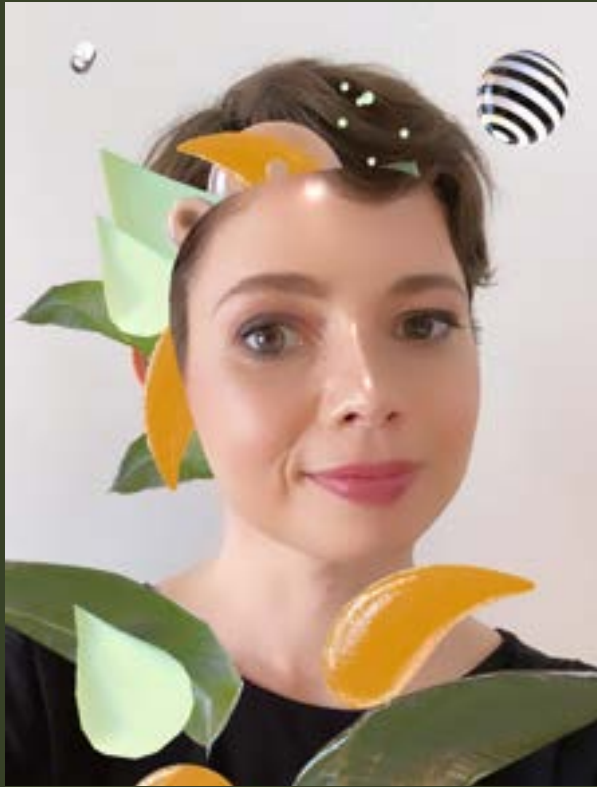
AR Filter Design

Emphasizing Play

- Playfulness can spark creativity

- Brain imaging studies show us that creativity is correlated with activation of the default brain network

- Default mode activated when we are doing a task, but it is not challenging – focused inward: e.g. gardening, walking, writing, etc

- State is felt as mind-wandering which usually involves thinking about others, thinking about one's self
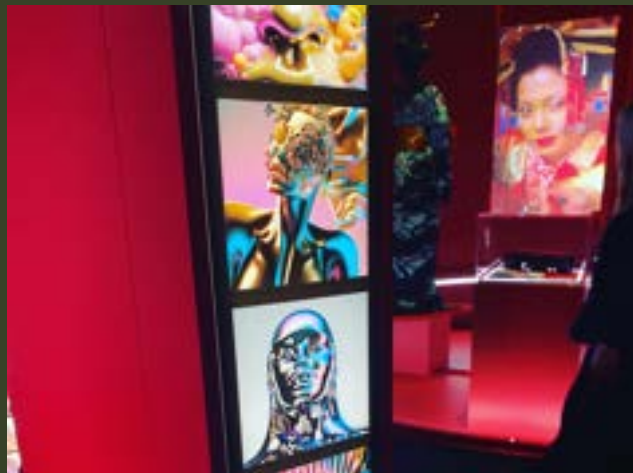
Playfulness in Action

- AR filter: Draw Jelly

- Tool for users to draw around their space in 3D

- Expanding the digital into the physical space

- Shown in Paris at Longchamp store in Paris, short film festival in Tel Aviv.

- 85k+ plays!

Merging Neurodesign, Playfulness and Creativity

- Expanding AR with AI

- Commission by ACMI in collaboration with Jnr Major to produce futuristic AI looks for their exhibition 'Goddess'

- Images were then adapted into 3D digital filters. The experience offers a glimpse into one possible future and speculates on how we might one day choose to express ourselves to the world

- Focus on playfulness for the user

- Focus on integrating neurodesign to enhance the images through a focus on texture differences, and shape differences

Insights and Tips to Unlock Creativity

Attitude and Belief

- Research shows that everyone has roughly equal creative potential. "Creative" people do have special skills, BUT anyone can learn these skills. The creative process can be accelerated and directed

Mindset

- Stress destroys creativity. The aim is for people to feel calm, yet excited, and not overstimulated. Too much cortisol interferes with optimal brain function in terms of creative ability

Collaboration Games

- Interesting objects with interesting objects stimulate curiosity and creativity. We can design interesting, stimulating places for people to collaborate

→ *future of digital experiences in the metaverse and beyond*

Thank you

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References and cited material

- Default brain network and creativity: https://www.nature.com/articles/s41380-021-01403-8

- The Science of Creativity: https://www.apa.org/gradpsych/2009/01/creativity

- Creativity and Stress: https://www.frontiersin.org/articles/10.3389/fpsyg.2020.585969/full

- A great resource on creativity games, by Robert Epsteinn, PhD. It's from 2000, but is based on scientific research and has simple games that are easy to adapt to online environments

- Do Not Drink AR Filters
  Sephora France, Meta, and Roman Bratschi at NERD production studios

- Goddess in the machine
  Creative and Production Studio: Junior Major
  AI Artist: Jess Herrington
  Software Development: AX Interactive
  3D Artists: Pixel Ninja, Susan Kosti, Kati Katona