Future of drawing
Designing playful creative assistants

In collaboration with Caran d'Ache

Dates: 16th of October 2023 - 17th of January 2024
Mid-crit with Caran d'Ache: 16th of November 2023
Final jury with Caran d'Ache: 17th of January 2022

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Students: MD1

Planning and what to do:
https://docs.google.com/spreadsheets/d/1DNj3_oX0Ylk0cCknxfrBinFD1PKgiu5psvVX0FJ8SFI/edit?usp=sharing

Component and Material Wishlist:
https://docs.google.com/document/d/1VKoXp-PmT5qXuNfn-LKc6YPwOwoJYS1H5w_JHSfqx4E/edit?usp=sharing

Interactive Brief: head-md-future-of-drawing-twee

Student Github Repositories: https://github.com/abstractmachine/head-md-future-of-drawing

November 16th mid-project presentations:
https://drive.switch.ch/index.php/s/83x2lqAuvwaNonM?path=%2FWork%20in%20progress%2F2023-11-16-projects-first-look

Raspberry Pi + Processing Setup : head-media-design-raspberry-pi-basics

Miro Team Link: head-md-future-of-drawing Team
Miro Board Link: Future of Drawing Board

Performative Card Deck:
https://www.jeudecartesperformatif.com/cartes/1MmepmjlUgUEHXa6AlJGlBwEgH5gafYYQm4ylukJmILQ

https://docs.google.com/spreadsheets/d/1MmepmjlUgUEHXa6AlJGlBwEgH5gafYYQm4ylukJml
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Brief

In this semester's project, we will be collaborating with Caran d'Ache, a renowned Swiss company specializing in a wide range of writing and drawing instruments. Caran d'Ache instruments provide invaluable support to designers, illustrators, artists, and novices, facilitating the realization of their creative endeavors. Although the world of Caran d'Ache may initially appear distinct from digital design practices, a closer examination reveals a significant connection. Writing and storytelling serve as foundational elements in digital practices, whether it involves composing algorithms to generate poetry or experimenting with drawing machines.

More recently, AI algorithms have been employed to generate drawings and visuals by utilizing prompts with generative models. These models hold the potential for a future where AI serves as a co-creator, assisting artists in their creative process. While these prospects are promising, they may eliminate the tactile experience associated with drawing activities (such as tracing, coloring, exploring various hues, blending, etc.). Additionally, they present a future in which these collaborators may adopt conventional forms, resembling simple chatbots that engage through text-based dialogue.

Throughout this project, we aim to explore the following questions:

1. In what forms and with what characteristics could an AI serve as an artist's assistant?

2. What novel combinations and engaging interactions could we envision in this context?

3. How might we transcend the conventional metaphor of AI as a collaborator?

By novel combinations we mean juxtaposing simple materials in unexpected ways. This can also be achieved by taking complex "new" technologies and integrating them with familiar technologies or gestures, and thereby simplify their complexity through the poetics of well-understood mechanisms or materials.

What we will create:

In this workshop, our aim is to craft playful AI creative assistants. The element of playfulness will serve as a catalyst for inspiration, encouraging individuals to broaden their artistic horizons. Leveraging the rich offerings of Caran d'Ache tools, we will conceive a new breed of interactive objects. Our primary focus will be on designing interactive objects tailored for beginners—those who may not consider themselves artists or professionals and may benefit from additional guidance in their creative journey. Such individuals often require a lighthearted approach to ease into creative activities.

These AI creative assistants will, for instance, introduce fresh and imaginative exercises, or encourage people to experiment with novel techniques and unexpected color palettes. The final outcome will be an assortment of AI collaborators designed for creative enthusiasts. For example, one AI collaborator might transform sounds into vibrant hues, while another could suggest innovative gestures. Another might prompt you to explore unfamiliar lines, and yet another could turn the act of drawing into an engaging game. Et cætera. Et cætera. Et cætera.

Selected projects will be exhibited at Plateforme 10 in Lausanne in May 2024. The selection will be made by the Caran d'Ache team during the final jury in January 2024.

Some key rules to follow

- Your AI collaborator must be interactive and mix a digital interface with a physical object. Note that the scale of your object can vary according to your concept.
- Your concept must consider the target audience given in the brief.
- Your object has to showcase a simple yet playful interaction. Your object must be thought and conceived to be showcased in the context of an exhibition and easily handled by the public.
- Reduce the number of ingredients (materials, technology, gestures, et cætera) to their strict minimum. It is the novelty of the combinations and not their number that makes for an engaging experience.
- You must participate actively in class discussion, visualize and test your ideas with mock-ups, scenarios etc...

Deliverables for the jury

- A well-considered presentation gathering your research, insights and methodology (cf. Evaluation criteria)
- A Project Documentation PDF detailing the key interactions of your object
  - Template is here: 2024-01-08 Project Documentation Template
  - Upload your file here: Project Documentation
- The final Fusion 360 file of your object
  - Export into `filename.f3d` format
  - Export into
  - Upload file here: 2024-01-18 Fusion 360 Export
- A semi-working or non-working high-resolution mockup of your object
- ~~A production outline describing the next steps required to fully produce your object~~

Competencies

- Intro to user research and interaction design methodologies
- Intro to prototyping and user-testing methodologies
- Foundational knowledge on how to create a coherent, narrative and playful interactive experience
- Intro to product design and 3D modeling
- Intro to electronics

Evaluation criteria

- 20% active participation in class conversations and punctuality - note that recurring late arrivals (more than 3 times) will affect your final grade.
- 30% quality of research, insights and methodology
- 30% quality of your final prototype
- 20% final presentation quality (document and oral presentation)

Planning overview

- **Phase 1: Observation, field research and experimentations - October 16 to October 30**
  During this phase, we will focus on understanding the Caran d'Ache world, its audience and start mapping our first ideas and research. You will apply the methodologies taught in class. We will start prototyping and pitch our ideas.

- **Phase 2: first intentions - October 30 - November 4**
  In this phase, we will define some first intentions, user scenarios and possible interaction. We will mainly create paper mock-ups to test and pitch our first ideas. Technical classes will come later.

- **Phase 3: concept - November 13 - November 16**
  This phase will focus on visualizing your project intention (mock-up, scenario, drawing) and creating a presentation for our mid-crit with Caran d'Ache

- **Phase 4: Prototyping - November 27 - December 15**
  During this phase, you will focus on prototyping your idea (3D, electronics...). You will keep iterating and think about the final details of your interactive object. You will also test your prototype during the test day.

- **Phase 5: Final development and presentation - December 20 - January 17**

In this phase, you will focus on finishing your project and final production. You will also create all the final assets needed for your presentation and final jury with Caran d'Ache.

Exhibition Space

The exhibition will take place in May 2024 at the Caran d'ache galleries at Platform 10. More information will follow at a later date.

Here is a plan of the four spaces available for the exhibition:
180712_ARC-PlanCoupes_A3.pdf

Bibliography and resources

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Le Guin Ursula K.(2019) *The Carrier Bag Theory of Fiction* Ignota, UK. download

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Ourednik André (2021) *Robopoïèses*, Switzerland, Geneva.

Suri Jane Fulton (2005). *Thoughtless Acts?* Chronicle Books. https://www.ideo.com/post/thoughtless-acts

Feminist Internet conference at IAM Internet, 2018 https://www.youtube.com/watch?v=k6wXR6U6iH8

Two AIs talk about becoming human. (GPT-3) https://www.youtube.com/watch?v=jz78fSnBG0s

GPT-4 is listening to us now | Joscha Bach and Lex Fridman https://www.youtube.com/watch?v=fxQ_JsXLMJ0