

## LATENT SPACE INTERPOLATION

### Style Generative Adversarial Network

While I was avoiding working on the Final Major Project due to a lack of motivation and ideas, I came across a video [Fig. 356] by NegativeFeedback YouTube Channel titled 'Taking more experimental self-portraits' (2021).

Even though I was researching new ideas to develop my photography hobby, this video proved to be a great opportunity to discover a new tool for experimentation and concept that could possibly inform my project.



Fig. 356

In the video, it could be seen how the author employs a program -Runway ML- powered by machine learning to morph personal images. The outcome is a latent walk video resulting from the training of a generative adversarial network-based upon a dataset created with his images.

Since I had no previous knowledge of the topic, I decided to explore this program to understand its potential. Unfortunately, I discovered I was unable to create my own model to train with personal images with a free subscription. But even with a membership, the train of the model would have a cost based

on the size of my dataset -which was another problem since it required between 500-5000 images. Nevertheless, I was able to generate a latent video as well with images already provided by the program [Fig. 357-372].

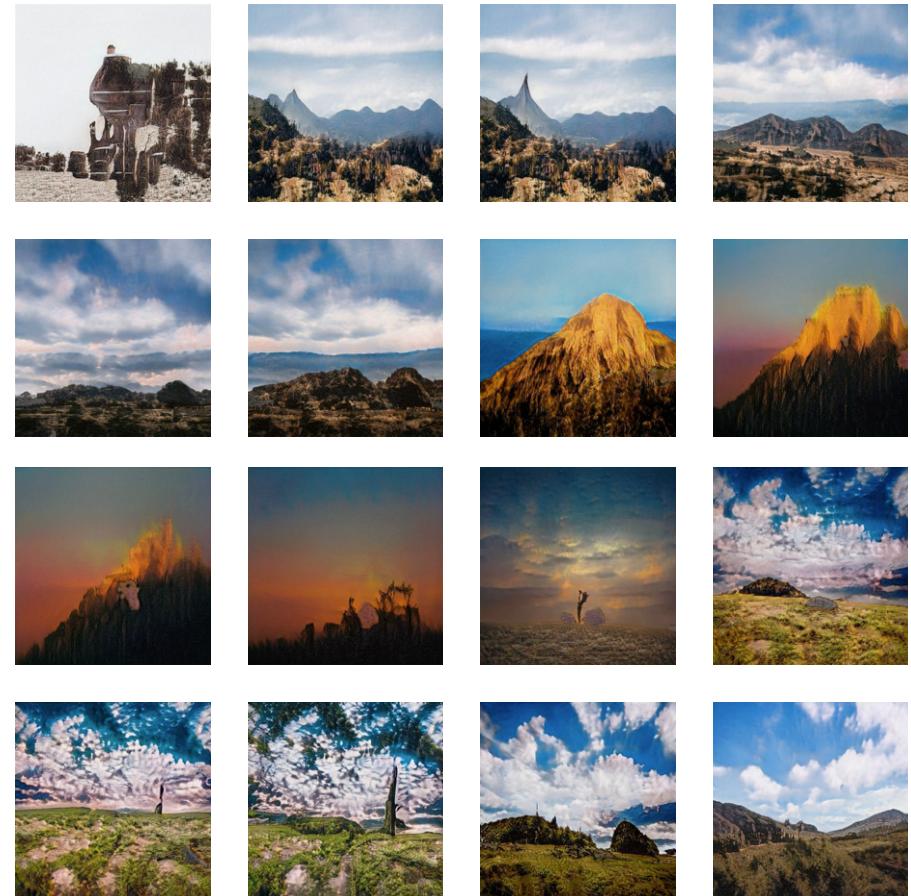


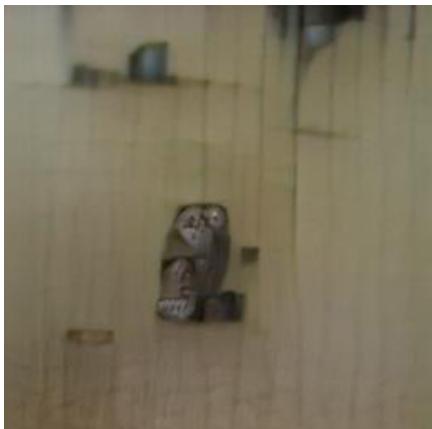
Fig. 357 – 372

Additionally, I found a model that used a text description to generate its visual representation. Even though I wasn't quite sure how it worked, I used the definitions of home I previously collected to generate new and abstract images [Fig. 373-379].



[Left] Fig. 373  
Home is a photobook or personal journal.

# *ATTentional Generative Adversarial Networks*



[Above] Fig. 375  
Home is a place of forgiveness.

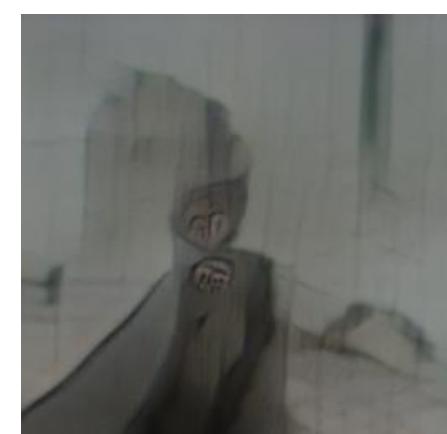
[Below] Fig. 377  
Home is where there are people or things you care about. Home is also a place where you don't have to worry that the other person won't forgive you after a fight. It is also the armor shield in our heart when we keep moving forward, and it is a very warm place in your heart that reminds you of it.



[Left] Fig. 374  
Home is an everchanging place  
Where you understand most  
references, and have the most  
cultural common ground with the  
neighbors.



[Above] Fig. 378  
Home is wherever the people  
I love are.



[Above] Fig. 379  
Home is where I can be myself.

I was definitely intrigued by the process undertaken during model training and machine learning. Even though I was well aware this methodology is obviously informed by human thinking, I thought it might be an effective and unusual way to approach my investigation. Can I employ Autoencoders and Generative Models to critically analyse, decode and visualise the insights of my research?

To answer this question I had to examine how these processes work. Due to the complexity of the topic, my aim wasn't to literally apply this system but rather understand its key points and use them as an inspiration. After reading various websites, I tried to envision how this new knowledge could inform my work.

In the following pages, I reported the sketches [Fig. 380 - 387] and notes resulting from this process of critical thinking.

Fig. 380 - 381

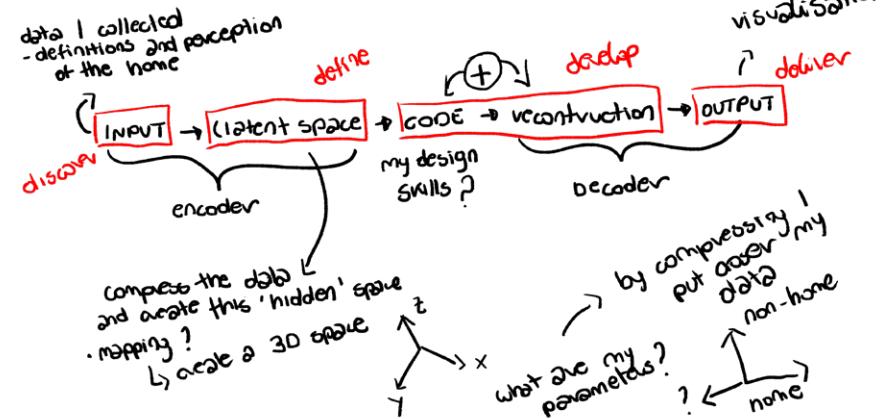
Applying my design process to the Autoencoders and Generative Models + defining Home and Non-Home in a Latent Space.

claudia-Learning on

HOW NOTIONS OF HOME  
ARE CONSTRUCTED

what are my TRAINING  
and VALIDATION sets?

- autoencoder and generative model



main parameters  
HOME and NON-HOME

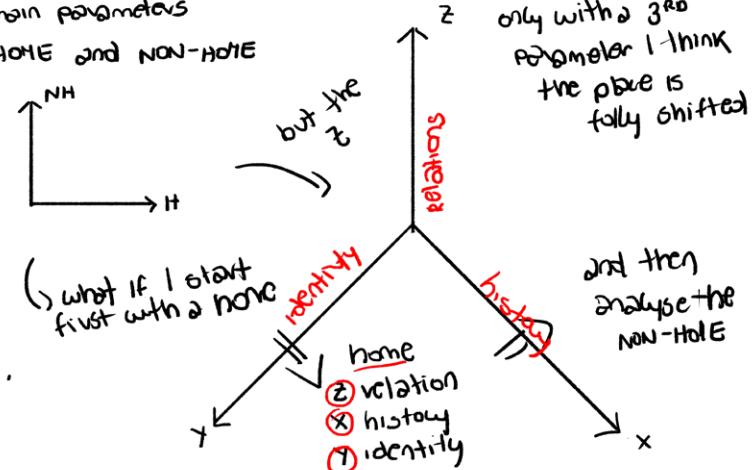


Fig. 382 - 383

Further development of a possible visualisation of the Home in a Latent Space based upon the historical, relational and identity variables.

DEFINE

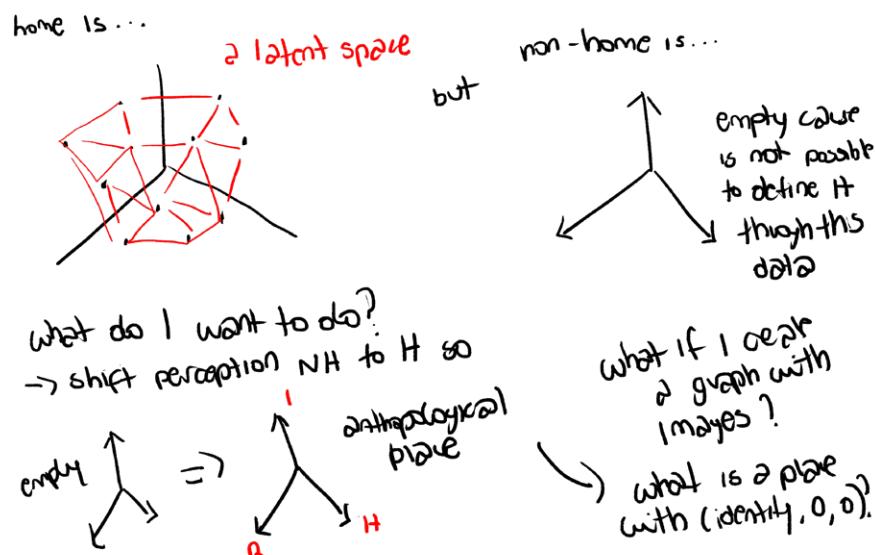
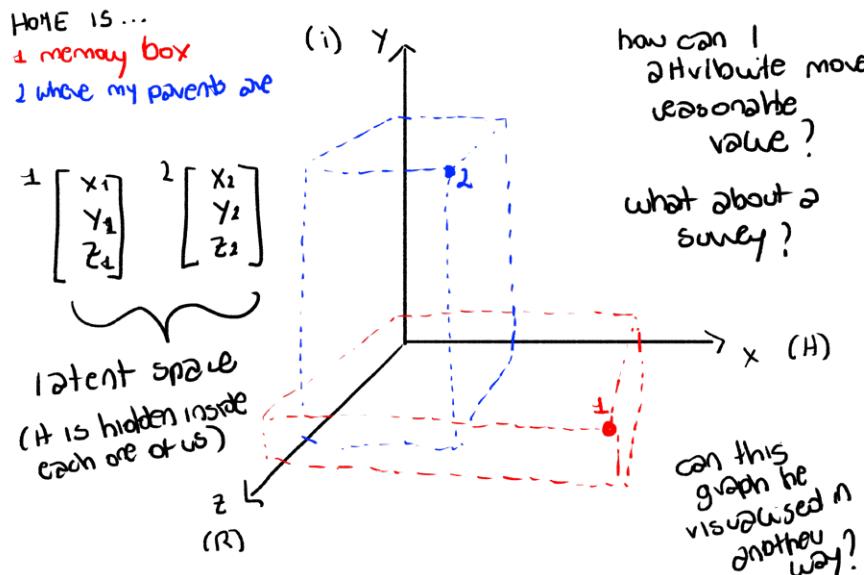


Fig. 384 - 385

Combining the visualisation of a Home (H) and Non-Home (NH) + visualisation of the shifting between the two in a 3D and 2D view.

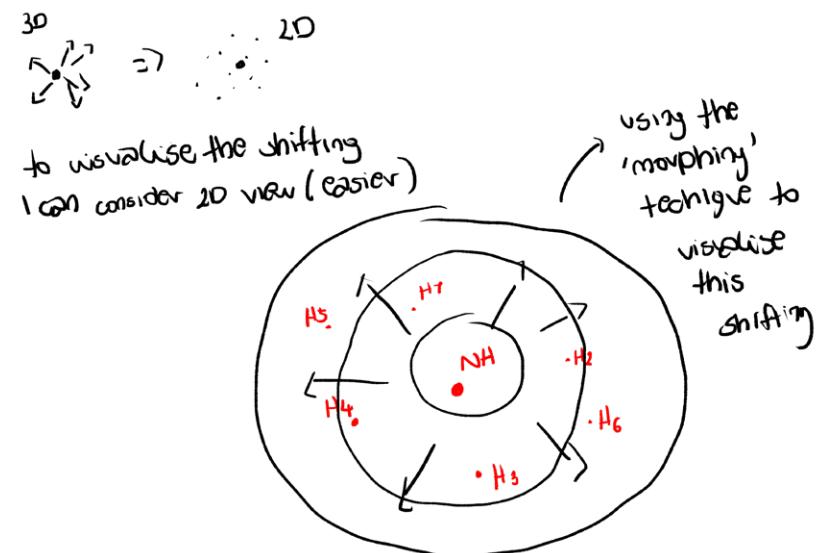
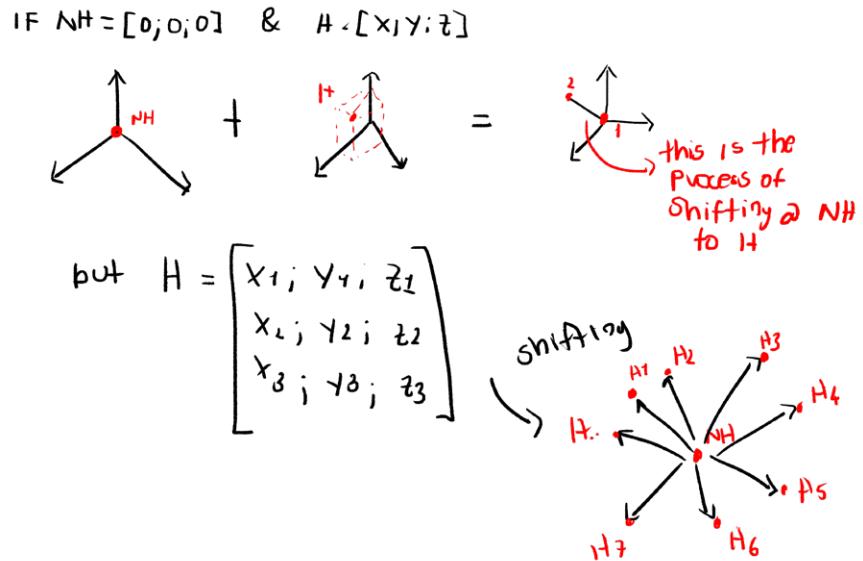


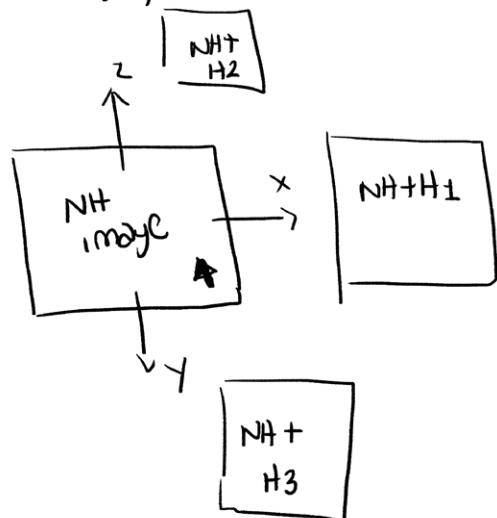
Fig. 386 - 387  
Proposal of two possible direction of investigation and visualisation  
[imagery or coordinates of points].

DEFINE

### FIRST DIRECTION - with imagery

interactive graph of  
images that morph  
together NH + > H

the user decides  
if he wants a more  
focus on identity,  
history, or relation



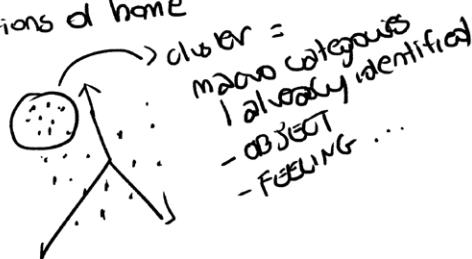
### SECOND DIRECTION - words

each definition/word to describe  
the home is compressed in a different  
space

$$\hookrightarrow H_1 = [x_1; y_1; z_1]$$

identity + relation + history

notions of home



## FEEDBACK SESSION

### Study group

On the morning of the 22nd of June, Rachel Davies, currently teaching at Graphic Design BA at Kingston, hosted a talk about her practice. However, since my study group peers and I were a little bit tight with our schedules, we decided to not attend the talk - which was going to be recorded anyway - and dedicate the time at our disposal to our study group session organised for the day by the tutors.

I believe this was the very first time we met all together to discuss our projects and, looking in retrospect, it was a great opportunity which I regret not doing it sooner. After casually talking with my peers, I believe this situation arose because of the shared situation we are experiencing. I recognise how most of us are feeling pressured by the amount of work required for a final major project which also needs to fit in with other personal commitments such as job and accommodation searching. Besides this, I believe this session was extremely beneficial.

Since I had recently discovered a new direction for my project, I wasn't able to prepare a presentation in time to pitch my findings. However, having continuously updated this process book, I used it as a structure to explain my idea. I recognise how my presentation might have been really confusing to my peers, due to the fact I didn't prepare any speech in advance and it was the first time I explained this direction to someone else. Thankfully, they were all understanding and, by a back and forth of questions and answers, I was able to communicate my idea.

They seemed to appreciate my proposal and were quite surprised by the thinking behind it. In response to what I presented they give me such great feedback. As an alternative to

imagery, Zeina suggested applying the same technique [latent space interpolation] to typography [Fig. 388]. Additionally, she added how it could be interesting to give the possibility to click on this representation and visualise the related definition of Home [Fig. 389]. Regarding the visualisation of the latent space, Zeina thought I could ask through my survey to locate the term 'home' on the graph as well [without considering its definitions].

Since I was worried if people were able to attribute a numeric value to the relation between my parameters and the definitions of home, Ell suggested using 'strongly disagree, disagree, agree, and strongly agree' instead. I thought this was a great alternative that could overcome my doubt. Lastly, they all proposed to use some type of publication or poster to explain, contextualise, and present the project and the thinking behind it.

Besides receiving feedback on my project, I also had the opportunity to comment on my peers' work. Compared to the previous feedback sessions, I believe I was more open to sharing my ideas. Thanks to a stronger and more thoughtful idea for my work, which led to having more confidence in myself, I believe I felt less inferior to my peers and that my comments could be beneficial to them. To summarise, this experience has been great and I would like to continue with these sessions more often since I finally think I have something worth showing.

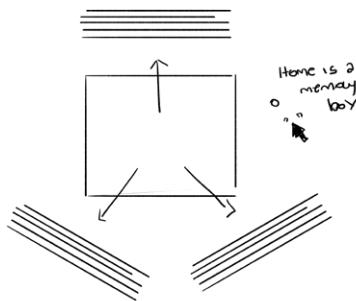


Fig. 388

**Non-home  
Non-home  
Non-home  
Family.  
Family.  
Family**

Fig. 389

## TUTORIAL PRESENTATION

### Recap and definition

To be able to present and communicate the progress of my project to the next group tutorial session on Wednesday, I summarised and defined my findings in a brief presentation. Since I was going to join a different tutor and peers, who might be unfamiliar with the research, I briefly recapped the takeaways of my current investigation.

Leading with the initial research question [Fig. 390], I introduced the key theoretical reference [Fig. 391] and a quote taken from it -which I believe summarises the condition of Supermodernty.

Going into more detail, from the book I identified three main concepts [Fig. 392] which I used to inform the context and terminology of my research [Fig. 393]. These new observations, related to the previous quote [Fig. 394], led me to a definition of new and redefined research questions [Fig. 395]. As the next step, I asked my audience to provide me with some personal definitions of home based on the prompt 'Home is...'. I grouped the findings into 7 macro categories [Fig. 396] which I used to inform some

Fig. 390

02 / 20

initial research question

**HOW ARE NOTIONS OF HOME CONSTRUCTED?**

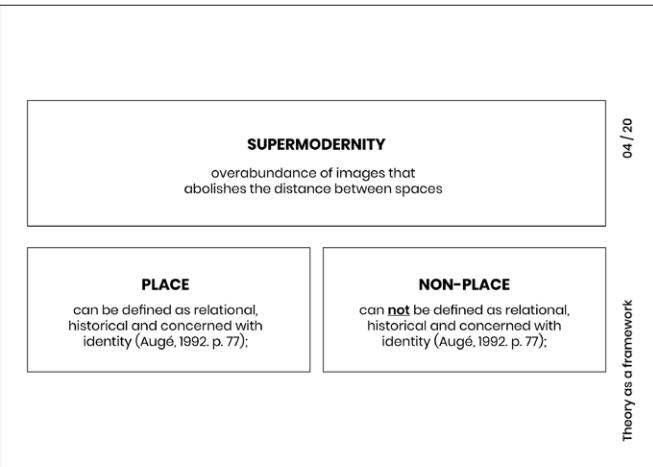
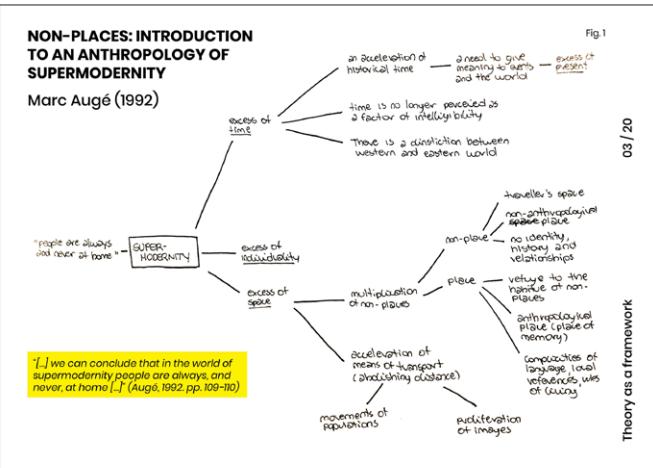
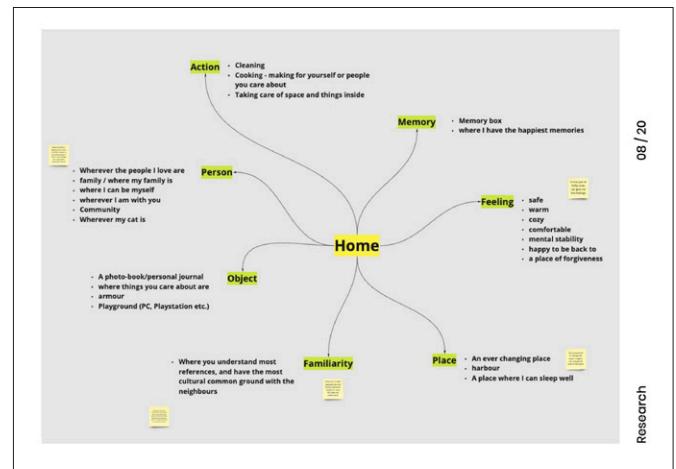
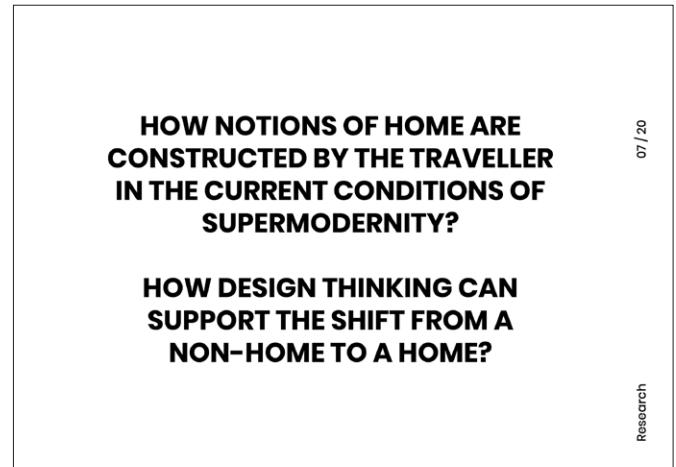
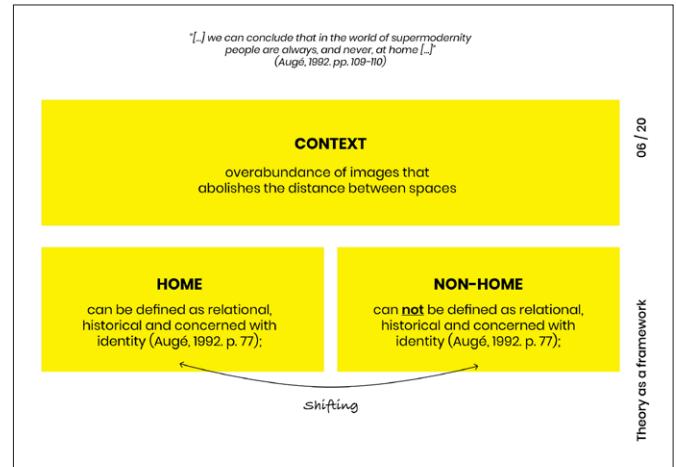


Fig. 391  
Fig. 394



visual investigations and tests unfortunately without success [Fig. 397]. However, by going back to the main theory, I realised I was missing a connecting piece [Fig. 398]. Augé vaguely describes 'space' as a "frequentation of places" (Augé, 1992. p. 85) and something "more abstract in itself than the term place" (Augé, 1992. p. 82).

Based on these affirmations, I interpreted the 'space' as a 'container' of places and non-places in which could possibly happen a shifting between Home and Non-Home. This, along with the idea and representation of the 'latent space' [Fig. 399], made me rethink my design process [Fig. 400].

Based on the Autoencoder and Generative model in machine learning, I recontextualized the definitions of home I previously collected as the input of the model [Fig. 401]. This data gets later compressed in the latent space -a 2D or 3D simplified representation of the information- by identifying its most relevant features which, in my case, are defined "as relational, or historical, or concerned with identity" (Augé, 1992. p. 77).

Therefore, in a 3D geometry, a Home ( $H$ ) could be found on variable coordinates  $H = (x_A, y_B, z_C)$  whereas the Non-Home (NH) since it can't be described by those attributes, will always be located on  $NH = (0, 0, 0)$  [Fig. 402].



Fig. 397

Fig. 398

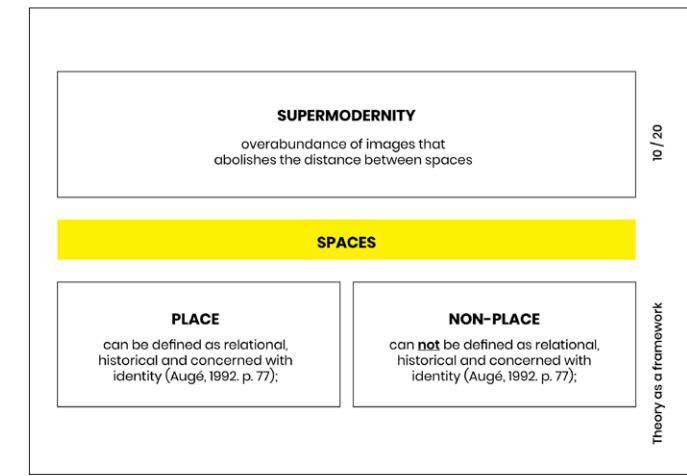


Fig. 399

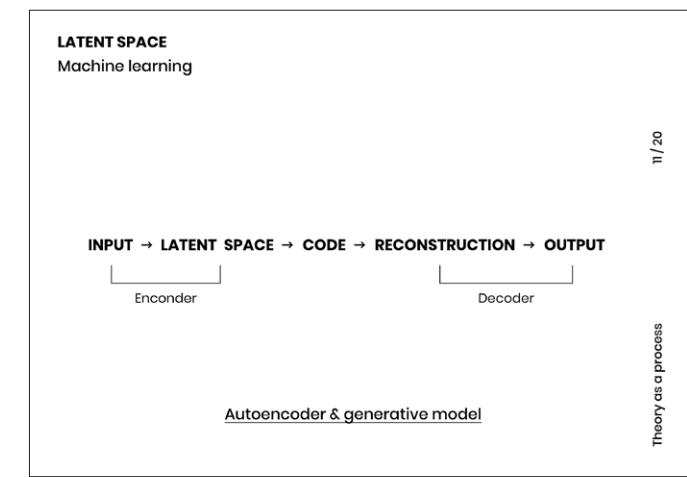
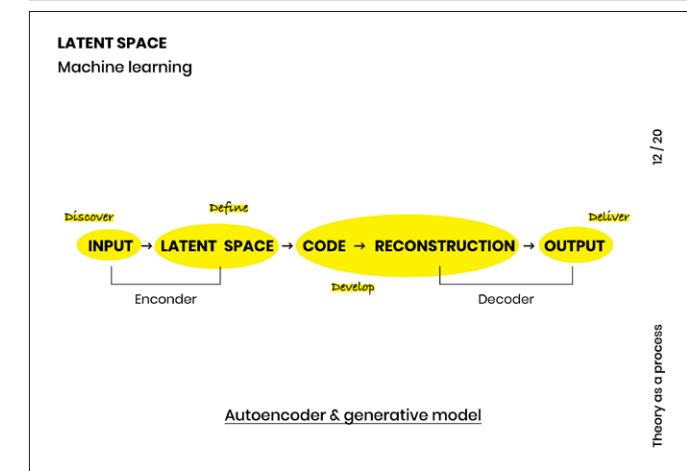


Fig. 400



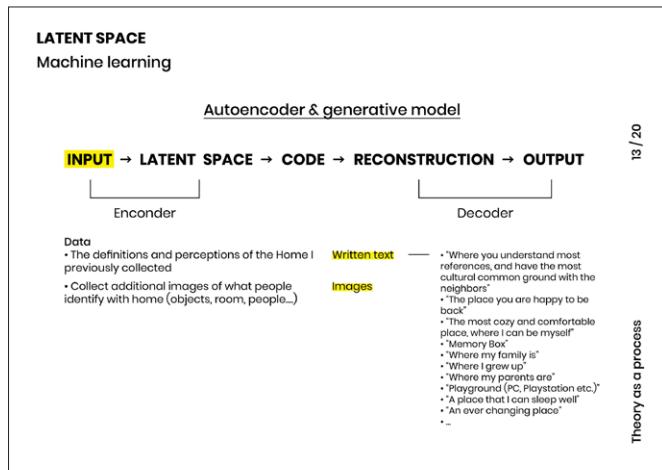


Fig. 401

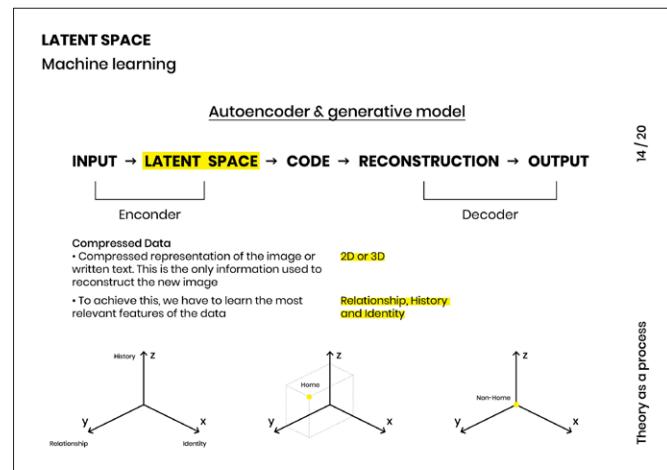


Fig. 402

On the bigger scale, I imagined locating all the data on the graph by asking my audience to assign a numeric value to the relation between the parameters and the definitions of home in the form of an agree-disagree survey [Fig. 403].

Concerning the function's code, I translated it as the instructions and concept to answer the research questions. Due to the subjective nature of the data [Fig. 404], the script employs the observer's interaction -digital or physical- to control the transit's direction between NH and H [Fig. 405].

Fig. 403

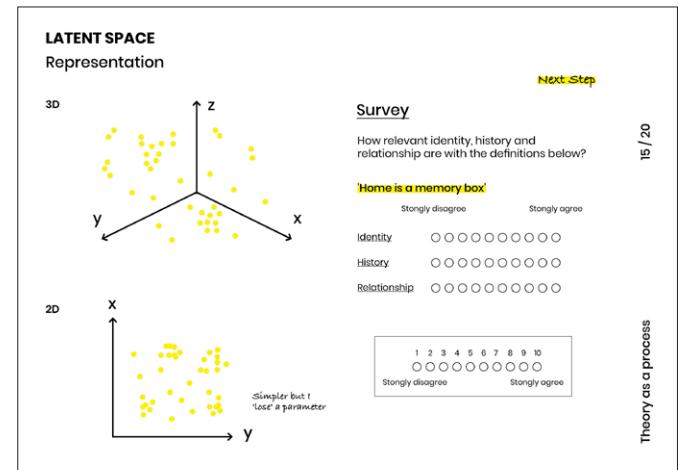


Fig. 404

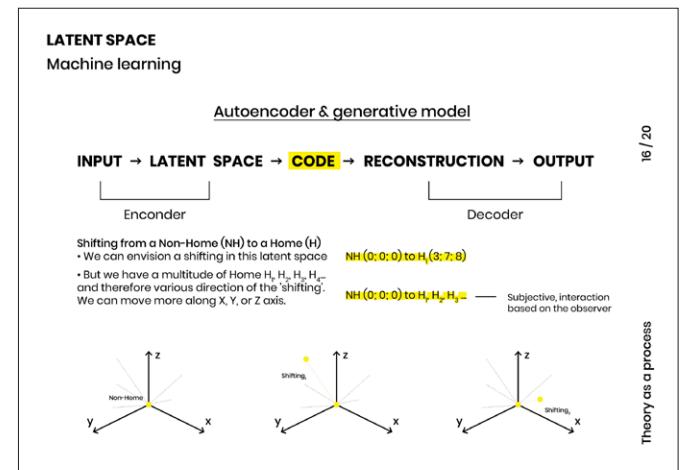
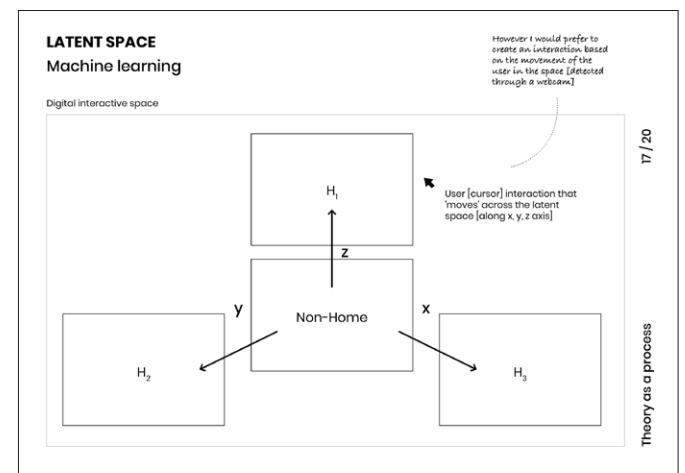


Fig. 405





At his point, I speculated to be able to reconstruct this new information through a latent space interpolation -applied to imagery- or through typography morphing -in the case of written text [Fig. 406]. For better understanding, I provided some visual inspiration [Fig. 407]. However, this element is yet to be confirmed. I expect the output to be presented in an interactive installation [Fig. 408].

Thanks to this presentation, I was able to take a step back and critically analyse my progress so far. Even though it started as a summary, it became the perfect opportunity to redefine the project from another perspective. At this point, I believe I had finally a clear definition of the approach I intended to use. This meant I could actually start visual testing with an evident purpose.

## Group feedback session

On the 23rd of June, I joined Jianji (Jenny) Liao, Yinuo (Norton) Sheng, and Shujing (Joy) Ding in a group tutorial session with the tutor to present our progress on the FMP. Even though Max encouraged us to share feedback with our peers, I felt in part unable to provide useful comments.

I think this situation arose for different reasons. It was the first time I came across their projects and, therefore, I found it particularly difficult to promptly propose suggestions due to the limited time at our disposal. Inevitably, I felt my feedbacks were worthless, unhelpful, and possibly annoying since I asked a few times to repeat some bits of the project.

Additionally, I felt quite uncomfortable speaking with my peers due to the fact I never had a proper conversation with them since the beginning of the course. This made me realise how I tend to avoid sharing feedbacks with people I am unfamiliar with but also

the importance of creating a nice studio environment with my peers. However, I believe some of my colleagues have a different opinion and much rather prefer limiting their interaction with their friends.

Nevertheless, I was able to gain some interesting comments from Norton and Max. Unfortunately, Jenny and Joy didn't quite get my theoretical thinking. This highlighted a potential problem I could encounter in the final exhibition in September. How can I successfully illustrate simply and concisely the thinking behind my project to a mix of knowledgeable and non-knowledgeable audiences? Even though it might be not an urgent issue, I believe it is something I should take into consideration in the final delivery process. This is something Max emphasised as well in one of his feedback.

He also suggested exploring and testing other outcomes besides an installation. Indeed, this might reveal new approaches and techniques to employ. Could I take advantage of the previous research on experimental publication and apply it in this context?

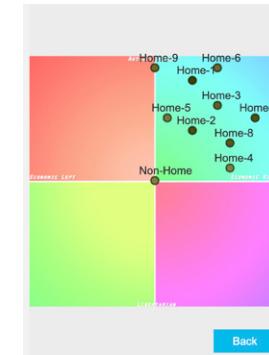
Concerning the idea of proposing a survey and the latent space representation, Max gave a possible tool of inspiration. He provided me with a link to a Politigram Compass by Lippie Liberty that, through a set of multiple-choice questions, locate your political view in a graph. I thought it was a really interesting way to create a dynamic 'latent space' representation. This website also provided a table [Fig. 409] to create my Politigram which I filled with random data to explore the efficacy of this tool for my research [Fig. 410].

On the other hand, my peer commented by saying that "The concept of coordinates is very interesting. If possible, can we conduct an interview to find out which coordinates a homeless person feels at home? This might be a grid of points and lines" (Sheng, 2021).

Fig. 409 – 410

Name	X	Y	Z
Home-1	3	8	10
Non-Home	0	0	0
Home-2	3	4	8
Home-3	5	6	5
Home-4	6	1	0
Home-5	1	5	1
Home-6	5	9	3
Home-7	8	5	7
Home-8	6	3	6
Home-9	0	9	3

I think Norton had a really good point in his comment. However, I am worried I might open up too much the investigation if I consider the experience of homeless people. Having said that, I would like to explore this point of view in further development of the project outside the Master.



Lastly, with a follow-up email, Max gave me a link to a platform that provides some free courses such as "Machine Learning for Musicians and Artists" hosted by Rebecca Fiebrink, a Lecturer in Computing at Goldsmiths, University of London.

Even though I am not sure I have the required knowledge to attend the course, I believe this is a great opportunity to discover more about machine learning - applied in the context of my research or in future personal projects. For this reason, I intend to dedicate some time to join Rebecca's lectures.

Besides the feedbacks mentioned above, one of Max's comments highlighted to me how I completely forgot to mention the relationship between my project and machine learning. The connection lies in the overabundance of images, specifically of Supermodernity, and the dataset required to train a model in machine learning. I wondered whether it was possible to employ and connect technologies and theories born in this context, such as machine learning, to investigate and analyse the 'excess of my data'.

## RACHEL DAVIES

### Personal practice

Since the previous research talk hosted by Rachel Davies was recorded, I was able to attend it later on in the week. As opposed to the previous ones, Rachel, a senior lecturer at BA Graphic Design at Kingston University, decided to show a video she had produced during lockdown to illustrate her practice. The video displayed a variety of projects she developed since the beginning of her career and acted as a recorded presentation followed by a live Q&A session.

Besides understanding how her video projects developed, the most poignant thing I learned from this experience was the potential of this media. I believe this talk has shown me a deeper level of embedded meaning that can be conveyed through a video. For instance, Rachel often collaborated with great sound designers to produce the best soundtrack for that particular story she is trying to communicate. Lastly, quoting one of Rachel's takeaways, I realised how temporary ignorance sometimes could be beneficial. Indeed, being naïve about a topic could give us a different perspective on it and therefore make us more valuable in a work environment in which we might believe we don't fit in. However, I believe it is important to consider this cluelessness as a starting point to explore further and not a condition that defines us.

## SURVEY

### Development and submission

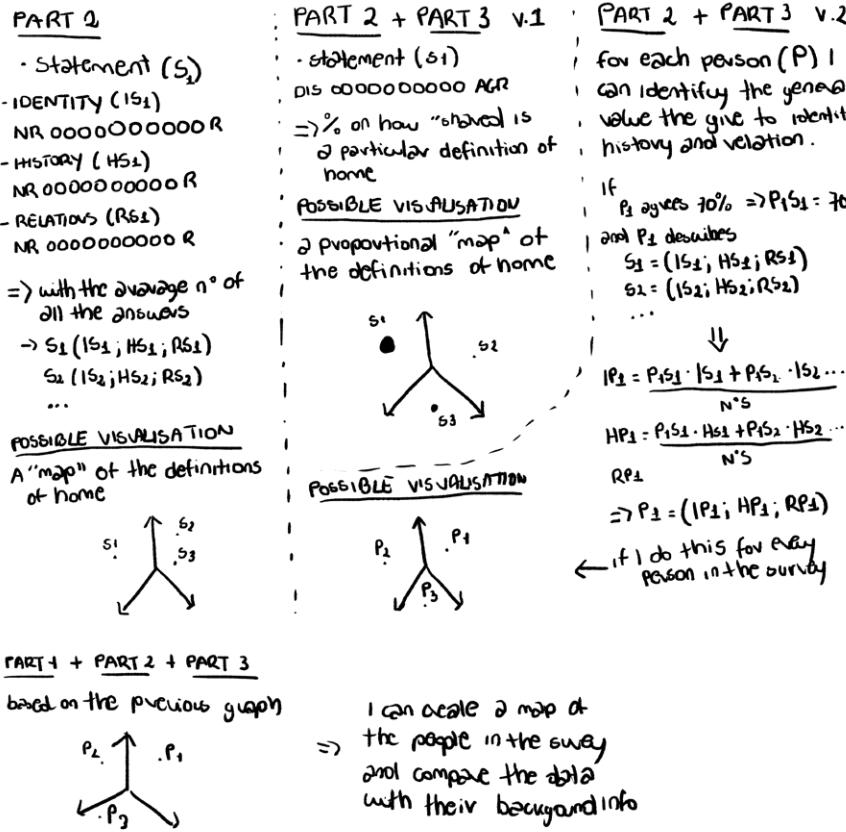
To put into practice what has been only theoretical until this point, I produced and distributed the survey proposed previously. Starting from that simple structure [Fig. 403], I changed the 'strongly agree' and 'strongly disagree' with 'relevant' / 'not relevant'. I believe these terms related more to the question I was asking the participants to respond "How relevant are identity, history, and relations with the statement?". Additionally, I added some preliminary questions to contextualise the surveyees' backgrounds.

However, after testing the survey with my father, I realised I might be able to expand the aims of this questionnaire. Indeed, he pointed out the definitions of home I was analysing were somehow biased towards one parameter than the others. For instance, considering "Home is a memory box" (Chiavazza, 2021), it might be too direct its connection with history.

Therefore, with his help, I redefined the survey in three parts [Fig. X-X] with particular intentions and analysis approaches [Fig. 413].

With the information collected in 'Part 2', I can identify for each statement/definition of home (S) its position in a graph with axis identity, history, and relation given from the average value attributed to it but all the participants in the survey. If I combine this information with the linear scale of agreement/disagreement, I believe I could create a proportional representation of the statement in the space.

On the other hand, instead of focusing on the definitions of home, I could concentrate on the 'constructors' of the home, such as the people who took part in the survey. For each participant, I could weigh their affinity with each statement, of which they provided a specific numeric value in terms of identity, history, and relations.



PART 1 + PART 2 + PART 3  
based on the previous graph

I can create a map of the people in the survey and compare the data with their background info  
 $\Rightarrow$  the people in the survey and compare the data with their background info

Fig. 413

This would allow me to identify their 'value' in terms of the same parameters ( $H_{P_1}, R_{P_1}, H_{P_1}$ ). The result would be a 'map' of the people who define home which I can compare with the participants' background information to give more depth to the data collected.

Therefore, I intended to generate two types of graphs. The first one [Fig. 414] would be a proportional representation of the Home in the space. The aims would be to (1) see the distributions of the different construction of Home in the space and analyse whether there is a greater influence of identity, history, or relations; (2) Gain a general understanding of what people

Fig. 414

believe Home is; (3) and lastly, consider whether the most common interpretation of Home is informed by a particular feature.

On the other hand, the second graph [Fig. 415], would be a representation of the connections between the constructions of Home and its constructors to compare and analyse how gender, religion, identity, ethnicity, and current style of living might influence the construction of notions of home.

Fig. 415

SUMMARYgraph 1SUMMARYgraph 2SUMMARYgraph 2AIMS

- compare and analyse how gender, religion, ethnicity, current style of living influence the construction of the notions of home

In the following pages, I reported some screenshots of the final survey I submitted. [Fig. 416 - 422]

Fig. 416 – 417

Survey introduction and PART 1 explanation.

DEFINE

**How are notions of home constructed?**

Your participation in this survey is voluntary. You may refuse to take part in the research or exit the survey at any time. You are free to decline to answer any particular question you do not wish to answer for any reason.

...

Thank you for taking part in an online survey on the investigation of the construction of notions of home. This is a research project conducted within the MA Graphic Design course at Kingston University.

The survey is structured as follow:

- Part 1: Background information
- Part 2: The construction of home through identity, history, and relations [on a scale Relevant-Not relevant]
- Part 3: Definitions of home [on a scale Agree-Disagree]

It should take approximately 7-10 minutes to complete.

**How are notions of home constructed?**

...

**PART 1: Background information**

I would like to ask some general questions about you. This information will help me contextualise your answers. The information you provide will be kept entirely confidential and will never be traced back to you as an individual. The information you provide will be used for research purposes only.

Fig. 418

Background information questions: 'How old are you?', 'Are you a student?', 'How do you identify yourself? [gender]', 'What is your religion, even if you are not currently practicing?', 'What is your ethnic group?', 'Where were you born?' [country], 'Do you live in the same country you were born?', 'What type of accommodation you are currently living in?'.

**How are notions of home constructed?**

...

**Background information**

1. How old are you?

Enter your answer

2. Are you a student?

Yes

Fig. 419

PART 2 explanation.

**How are notions of home constructed?**

...

**PART 2**

You are asked to assign a numeric value to 3 parameters [identity, history, and relationships] in relation to a brief statement. Each section has a different statement, read it carefully.

These parameters are defined in the context of anthropology and the anthropological place.

If unsure what each parameter means, please refer to these general definitions:

**Identity**  
The term can be used to refer to the religious, political, private, cultural, or ethnic realms.  
It can be identified in the shared identity (by the collective group), the particular identity (a given group or individual identity in relations to others), and the singular identity (the qualities of what make the individual or group of individuals different).

**History**  
Record and acknowledgment of past events as well as rituals, traditions, myths, and memories.

**Relationships**  
Relations with people, objects, or inscribed in spaces and spatial arrangements.

Each parameter has its linear scale from 1 to 10 and as follow:  
1: Not relevant [with the statement]  
10: Strongly relevant [with the statement]

Not relevant [1] ○○○○○○○○○○ [10] Strongly relevant

Leave it blank if you think the parameter doesn't apply to the statement at all.

-----

**Example**  
"Home is a place of comfort"  
To what extent do you believe identity, history, and relationships inform the statement above?

**Identity**  
Not relevant ○○○○○○○○○○ Strongly relevant  
"I believe identity has nothing to do with the statement above"

**History**  
Not relevant ○○○○○●○○○○ Strongly relevant  
"I believe past events inform the statement above in some way"

**Relationships**  
Not relevant ○○○○○○○○○○ Strongly relevant  
"I believe relations fully influence the statement above"

The general definitions provided in Part 2 are informed by Augé's book but found in another source (Chettri, 2017), which presented a deeper analysis of his theories. "The term can be used to refer to the religious, political, private, cultural, or ethnic realms" was part of the introduction of Griffiths's book (2018). I decided to not provide any in-text reference to avoid distracting information in a survey already long enough.

Fig. 420 – 422

Example of section in Part 2, introduction of Part 3 and a relative example of question.

DEFINE

How are notions of home constructed? ...

**Home is a memory box**

To what extent do you believe identity, history, and relationships inform the statement above?

9. IDENTITY

Not relevant 1 2 3 4 5 6 7 8 9 10 Strongly relevant

10. HISTORY

Not relevant 1 2 3 4 5 6 7 8 9 10 Strongly relevant

11. RELATIONSHIP

Not relevant 1 2 3 4 5 6 7 8 9 10 Strongly relevant

How are notions of home constructed? ...

**PART 3**

In this last section, you are asked to estimate to what extent do you agree or disagree with the definitions of home you previously responded to.

The scale is from 1 to 10 and as follow:  
 1: Strongly Disagree [with the statement]  
 10: Strongly Agree [with the statement]

Strongly Disagree [1] ○○○○○○○○○○ [10] Strongly Agree

Leave it blank if you don't agree with the statement at all.

How are notions of home constructed? ...

**To what extent do you agree or disagree with each of the following statements?**

93. Home is a memory box

Strongly disagree 1 2 3 4 5 6 7 8 9 10 Strongly agree

## MEDIA ARTS LAB LONDON

### Advertising practice

On the 28th of June, in addition to our usual schedule, some of my peers and I were invited to take part in a workshop and talk organised by Stephen Hancock, currently the Executive Creative Director at Media Arts Lab London –Apple advertisement department. The day started with a brief presentation of Stephen's project for Apple but also Nike –for which he worked before moving to Apple.

I believe the insight on this successful brand's advertising and the structure of the workflow they adopt in their projects were definitely beneficial. Quoting Stephen's presentation, I believe the most important takeaways from the talk were the terms 'immediacy' and 'simplicity' –which I realised are the core of Apple's advertising. I believe the application of these two terms to my project's concept could be extremely beneficial for presenting my work to a broader audience.

Additionally, I realised how Stephen and his team focus their strategy on a core sentence that summaries the key message they intend to convey with their advertisement, such as "Shot on iPhone" (Hancock, 2021) How can I describe my final major project in one sentence?

Stephen also emphasises how in a work environment, people always consider the potential headline than the project itself. What would it be the headline of my project? What do I want people to talk about?

Lastly, I believe one of the images Stephen displayed, could become part of the inspiration for my work. The simple Walt Disney's Map Strategy (1957) [Fig. 423] reminded me of the 2D representation of latent space, not particularly for its visual but rather the connections it creates. However, reflecting on it, I now feel I am actually

view of the arts and sciences and her idea of critically inventing new forms of collaborative working. I particularly loved her approach on 'digging where you stand' (Mazé, 2021) which is not stationary but mobilised and considered 'in relations of...' I believe the reason I was so captivated by the talk was her choice of words which definitely grabbed my attention.

All the guests' presentations, in addition to the reflections generated from the moderated discussion, made me rethink the context and outcome of my Final Major Project. Can I rethink the aims of my work? I believe I am currently exploring my design process from an unfamiliar point of view. Could this research aim to showcase how theory and interdisciplinarity informed my practice?

Rather than illustrating the results and answers to my research question, could I highlight the research and process that lead me to particular results? However, even though I am writing these reflections right after the talk, I start to feel maybe I just got way too excited and all of this doesn't actually make any sense.

Nevertheless, I believe it is worth mentioning another reflection I made in response to the guests' discussion of 'third spaces'. Even though their arguments were advanced in a completely different context, I feel this idea might relate to my project. Indeed, by analysing the construction of the home in a latent space/tri-dimensional visualisation, I believe I am creating somehow a third space.

If we compare Ramia's comments of third spaces as a decolonising tool to critique the centre and generate something new, I think it is possible to consider my visualisation as a way to decentre the Home from its notion as a physical space and produce a new visual representation.

## SURVEY

### Analysis and data visualisation

To utilise the data collected through the survey, I edited the excel sheet [Fig. 429] Microsoft Form automatically generated.

Besides creating a more functional and organised table, this allowed me to use the functions in excel to calculate the values I needed to generate the graphs. The result [Fig. 430] was a new table that reports with grey cells the definition of home in the horizontal axis (S) and the participants (P) on the vertical one. I highlighted in neon yellow the most relevant data such as the respective coordinates (I, H, R) for each statement, the average agreement to a definition, and the values needed to visualise each participant in a graph [Fig. 415].

However, as in every survey, I eliminated the answers which I believe were compromising the accuracy of the questionnaire [Fig. 431]. First of all, I highlighted in red all the cells with a value equal to zero to check if they skipped the question or it was their actual answer. Secondly, I flagged with a yellow background all the repetitive answers, which I believe indicated unreliability, and marked with a darker grey the people I needed to remove to the data collection. In the last two spreadsheets, the second table reports the background information of each participant.

At a first glance, I already noticed that the results weren't as I expected them. Even though I'll be able to confirm it through the graphs visualisation, it seems that the data it's quite homogeneous and possibly not that valuable. I believe this situation arose due to the limited amount of responses I got (23). Nevertheless, I believe the point I'm trying to make here is partially related to the data. Indeed, I would like people to see my work with a focus on its process rather than its outcome.

DEFINE

Fig. 429

Fig. 430

Fig. 431

To start generating the graphs, I summarised all the statements collected in numeric [Table 432] and preference order [Table 433], informed by the average number taken from the agreement/disagreement scale (Part 3 of the survey). To visualise them, I utilised an interactive math tool I often used in high school called GeoGebra. This choice was due to the fact I wanted to visualise the data quickly but, hopefully, still able to gather some insights. Indeed, I believed using Illustrator at this stage would have been a waste of time. However, I realised that the absence of colours and the ability to vary the point sizes limited my critical reflections.

### Graph 1

The first graph visualises the definitions of home in relation to parameters of identity (x), history (y), and relations (z). To facilitate the understanding and analysis, I decided to report the graph from a top and two side views which helped me to compare the different parameters. From the top view [Fig. 434], which displays the identity (red) and history (green) axis, I was able to draw the following reflections:

- Identity was slightly more relevant compared to history for the definitions provided;
- In terms of identity, the definitions were more close to each other, whereas for the history the definitions were more spread across the graph;
- In terms of relations, there was an overlap of 9 points;
- The average relevance attributed to identity and history was 6;
- Exponential growth;
- The spread of the definitions across the graph was proportionally related to a higher value of the parameters.

The second view [Fig. 435] visualise the points in terms of history and relations.

S1	Home is a memory box
S2	Home is where my family is
S3	Home is where I grew up
S4	Home is where my parents are
S5	Home is a playground (PC, Playstation, etc.)
S6	Home is a place where I can sleep well
S7	Home is wherever my pet is
S8	Home is where you understand most references, and have the most cultural common ground with the neighbours.
S9	Home is the place you are happy to be back to
S10	Home is where I can be myself
S11	Home is the coziest and most comfortable place
S12	Home is a place you feel safe
S13	Home is warm
S14	Home is an ever-changing place
S15	Home is wherever the people you love are
S16	Home is an harbor
S17	Home is a place of mental stability
S18	Home is familiarity
S19	Home is where people or things you care about are
S20	Home is a place where you don't have to worry the other person won't forgive you after a fight
S21	Home is the armour shield in our heart when we keep moving forward
S22	Home is wherever I'm with you
S23	Home is a space where there is shared responsibility by its inhabitants of taking care of it.
S24	Home is where you don't feel like people might judge you
S25	Home is a place of compromise
S26	Home is a place that is being taken care of
S27	Home is the ability of people to live as a family within the confines of a house
S28	Home is something you take with you

## DEFINE

Preference order [Table 433]	
S12	Home is a place you feel safe
S18	Home is familiarity
S10	Home is where I can be myself
S19	Home is where people or things you care about are
S15	Home is wherever the people you love are
S9	Home is the place you are happy to be back to
S1	Home is a memory box
S13	Home is warm
S11	Home is the coziest and most comfortable place
S2	Home is where my family is
S20	Home is a place where you don't have to worry the other person won't forgive you after a fight
S17	Home is a place of mental stability
S3	Home is where I grew up
S26	Home is a place that is being taken care of
S4	Home is where my parents are
S27	Home is the ability of people to live as a family within the confines of a house
S16	Home is an harbor
S23	Home is a space where there is shared responsibility by its inhabitants of taking care of it.
S24	Home is where you don't feel like people might judge you
S8	Home is where you understand most references, and have the most cultural common ground with the neighbours.
S6	Home is a place where I can sleep well
S22	Home is wherever I'm with you
S28	Home is something you take with you
S14	Home is an ever-changing place
S25	Home is a place of compromise
S21	Home is the armour shield in our heart when we keep moving forward
S7	Home is wherever my pet is
S5	Home is a playground (PC, Playstation, etc.)

## Same (I, H, R)

S8 - S2  
S12 - S3  
S9 - S18  
S14 - S21  
S4 - S27

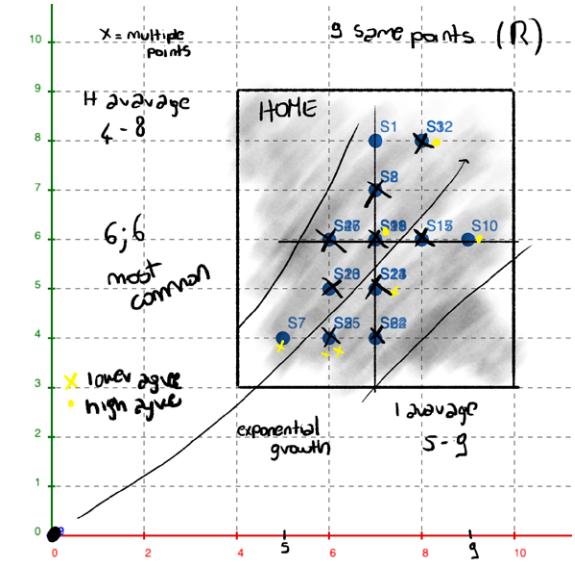


Fig. 434

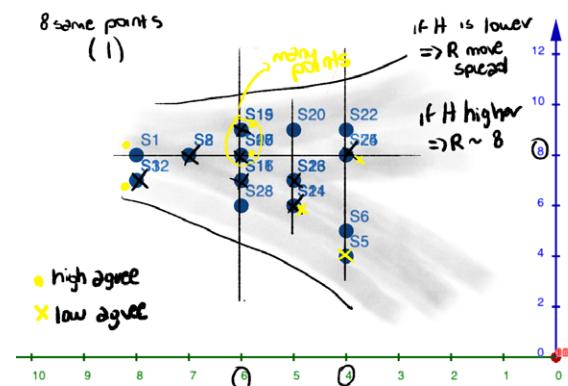


Fig. 435

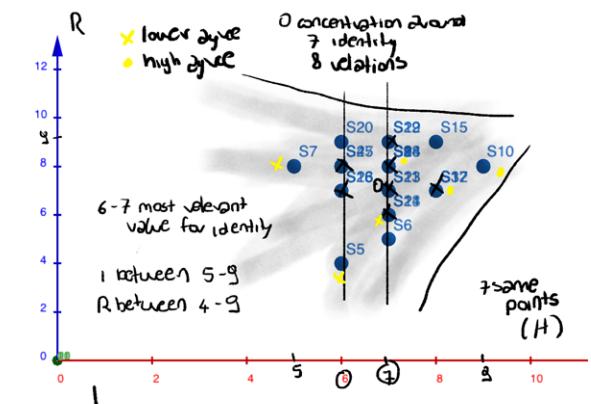


Fig. 436

- Most definitions were identified with a 4 or 6 value of history and 8 regarding the relations;
- In terms of identity, there was an overlap of 8 points;

The last view [Fig. 436] took into consideration identity and relations.

- In terms of history, there was an overlap of 7 points;
- The average relevance attributed to identity and relations was 7 and 8.

### Graph 2

On the other hand, I believe the visualisation [Fig. 437-439] of the participants on the graph with this tool wasn't really effective. Indeed, I believe only positioning the points (P) on the graph didn't help me to draw any conclusions. I believe I need to recreate this visualisation in illustrator and include some reference to the background information each participant provided.

These first visualisations made me realise that maybe I won't be able to reflect on the data as expected. What if, instead of trying to summary all the reflections, I leave the observer to draw its own conclusion based on the graphs? Should I focus my energies on visualising the data more appropriately? On the experience of the past term and the maps I developed, I believe I might have the skills to potentially achieve this.

### Same (I, H, R)

P2 - P3  
P9 - P12  
P5 - P13  
P15 - P8

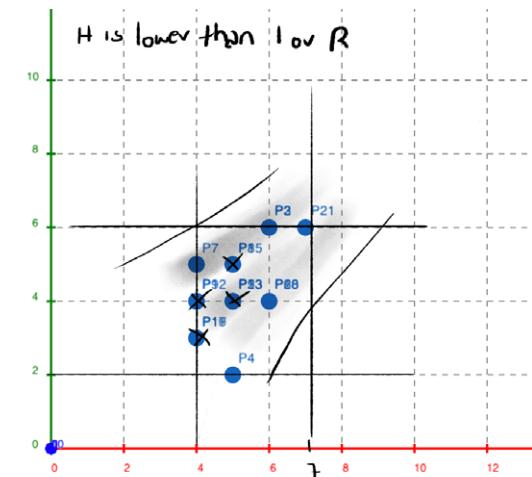


Fig. 437

x same position

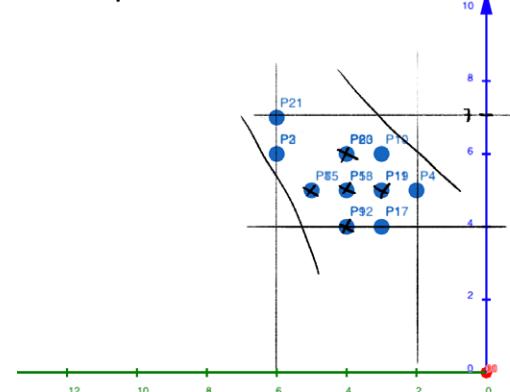


Fig. 438

4 same position (H)

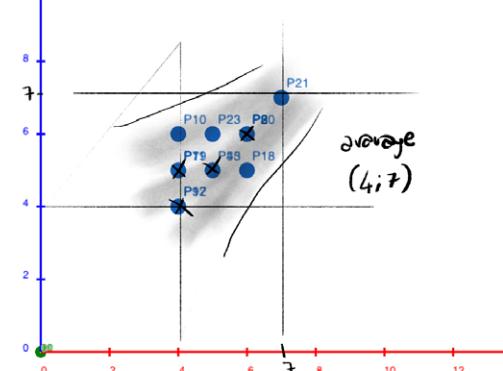
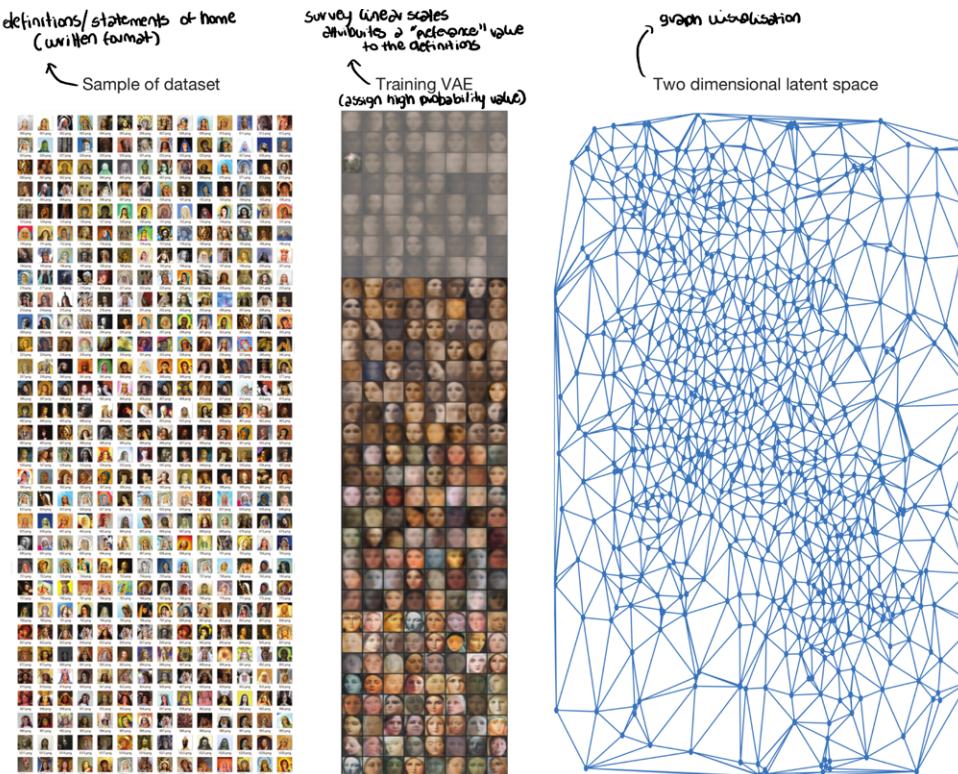


Fig. 439

## CASE STUDY

### Possible outcomes

To take a break from the previous data visualisation, I decided to undertake a brief research regarding existing projects that employ machine learning processes. On this occasion, I came across an interesting selected project developed in 2018 during the course Art and Machine Learning at Carnegie Mellon University. "Finding a Latent Space for the Virgin Mary" (2018) by Nico Zevallos [Fig.440].



could even just this be my outcome? → focus on the process rather than outcome



Fig. 440

I believe his work is quite similar to what I had in mind for my outcome. The only difference would be the use of touch instead of camera motion. Additionally, the poster he developed to summarise the project led me to some reflections [Fig.441].

Could I present my process, and therefore outcome, similarly to his illustration? Can I consider his 'training VAE', which assigns a high probability value to the data, as the survey I submitted? I believe the use of numeric linear scales to evaluate the agreement/disagreement of a definition of home, could compare with the training of 'my model'. With the help of people who took part in the survey, I believe together we undertake a process of personal training in understanding what a 'Home' is.

## FEEDBACK SESSION

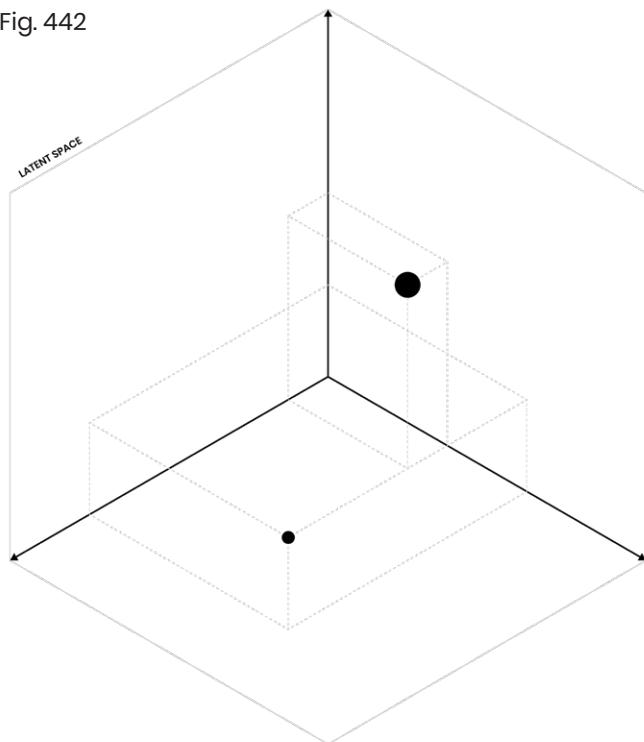
### Personal tutorial

On the 6th of July, I had a personal tutorial with the tutor Naho regarding the development of my project. Since I was mostly certain she was unfamiliar with the topic, I decided to recap the whole project as I did in the previous tutorial with Max. Indeed, I updated and slightly edited the TW9 presentation.

My expectation for the tutorial was, first of all, analysing the project's response to someone without previous knowledge. I wanted to see if the process was understandable or whether I needed to communicate it in a different way.

Secondly, I asked some doubts I came across in the previous weeks. "Could the process

Fig. 442



be the outcome of my research? Can I develop further the project after submission for the graduate show? [if I am not satisfied with the result]. Could the project participate in the contemporary debate of the introduction of machine learning in the art field? I feel the project took a completely different direction in the past weeks and I don't know how to illustrate this in the project report. Is all the previous work part of the 'starting point'?" (Chiavazza, 2021)

Her answers definitely resolved these dilemmas and encouraged me to keep working on what I was doing. However, from this talk I found the most enlightening things were Naho's comments in response to the graph visualisation [Fig. 442]. She emphasised the relation between this 'third latent space' and architecture, due to the similarity of the first with a cube/room. Moreover, she pointed out how, if we consider a 'Non-Home' in coordinates NH(0;0;0), then there is a proportionally direct correlation with the extension of the space and a higher value of identity, history, and relations.

Overall, keeping in mind the tutor's feedback, I believe I can concentrate my energies on visualising the reconstruction of the data and express more clearly my project's process.

# *Develop stage*

"The second diamond encourages people to give different answers to the clearly defined problem, seeking inspiration from elsewhere and co-designing with a range of different people. In a more focused version of the discover stage, this is when you test ideas in an explorative approach."

(Gale, C. et al. 2020)





**Founded by me, myself and I in 2021, we are a collaborative design studio engaged in ongoing partnerships with artists, curators, engineers, architects, designers and institutions. With our different expertise as communicators, strategists and researchers we aim to undertake alternative forms of design-actions to reflect and question social, political and cultural constructs. From a decentralised position, we employ digital and analog media to produce spaces, identities and graphic materials for cultural, educational, and design-orientated organisations.**

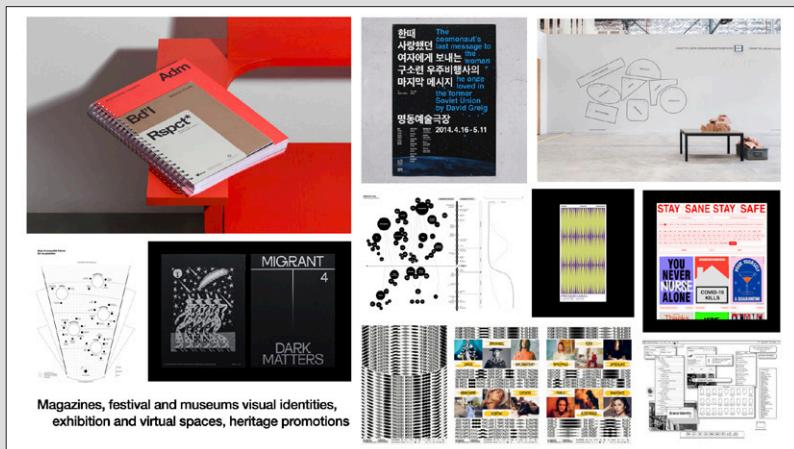


Fig. 446 - 448

## LATENT SPACE

### Visualisation

Since it was quite difficult to illustrate my concept in the previous tutorial, I made sure to finish the latent space visualisation for the next one with Cathy.

I started by creating a construction isometric grid. I opted for this view since it was more manageable than a 'random' perspective and it allowed me to visualised all the views I previously analysed. After creating the 3 axes with a maximum of value 10, I positioned the data collected. The maximum value was informed by the linear scale used in the survey.

The result [Fig. 449] was a simple illustration of the definitions of home in a graph [identity (x), history (y), relations (z)] that visualised the points from a top, left, and right views as well as a 3D one, recognisable by black dots. On the other end, in the 2D perspectives, I reduced the opacity of the dots to be able to visualise a full or partial overlapping of coordinates. I believe this allowed me to distinguish a 3D view from a 2D.

Successively, I tried to include the extent of disagreement/agreement of the survey's participants to the definitions of Home. I normalised my current values on a scale (a) 3.5-8.6 to a new scale (b) 100-400. The scale (b)'s numbers were chosen based on the current dimension of my dots. Indeed, at this stage, all the points had a scale of 100%, which I wanted to attribute to the lowest value of the scale (a).

After some quick testing, I decided to have the dots with the highest value around 400%. This allowed me to have a bigger variation between the dots while avoiding points too big or too small. To create the new scale (b), I followed some instructions I found on Google "Normalize an array of numbers to specific range" (2018)

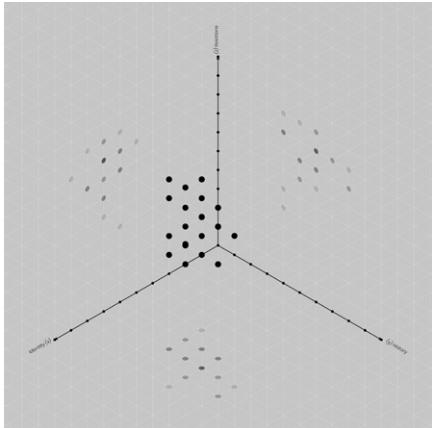


Fig. 449

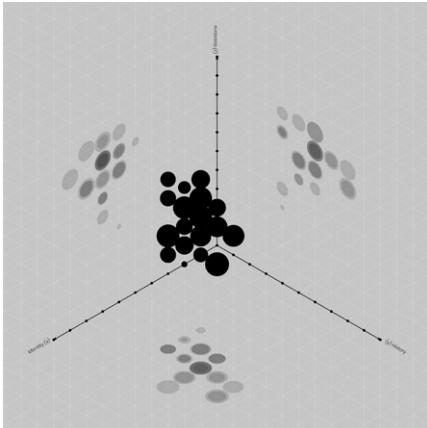


Fig. 450

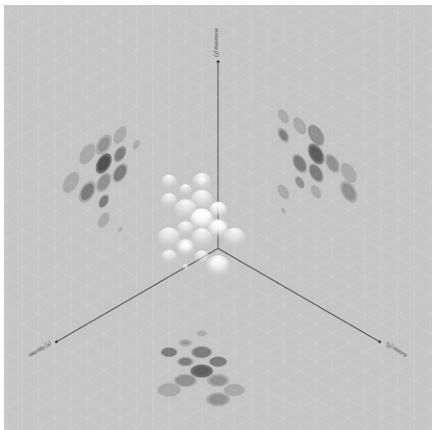


Fig. 451

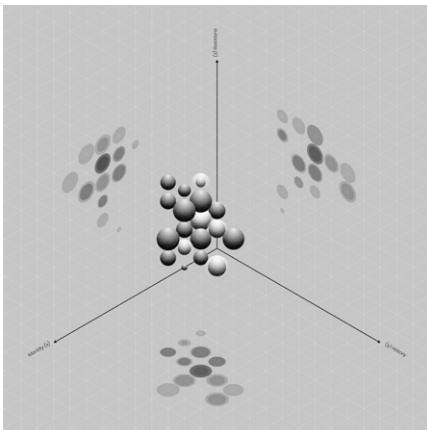


Fig. 452

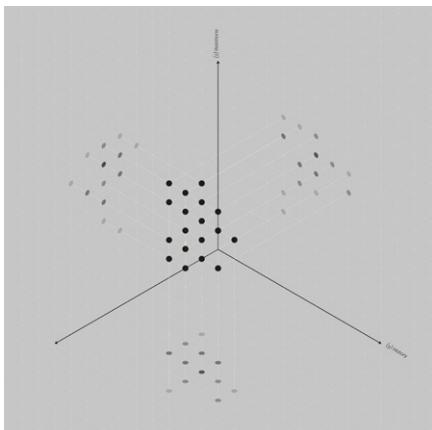


Fig. 453

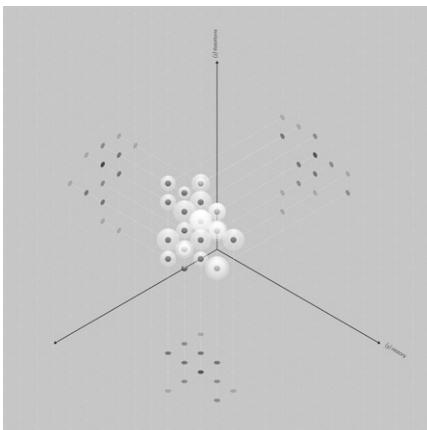


Fig. 454

by Karolis Koncevičius. I applied these new dimensions to all the points [Fig. 450].

However, I realised how this made the graph illegible due to the flat black colour which hid any depth.

Therefore, I tried two different variations which used a white grainy gradient to overcome this problem. I believed a grain texture could refer to the rough and blurred nature of the 'third space' in which this visualisation is positioned. To accentuate it even more, I removed completely the black dot and kept only the grain [Fig. 451]. However, I wasn't satisfied with the result, which I believe lacked clarity and readability.

Additionally, this tridimensionality hid any overlapping of dots in the 3D view, which I tried to bypass by showing the small black dot in case there were more statements in the same coordinates [Fig. 452]. Despite my efforts, I believe this option was unsuccessful too.

As a result, I went back to the initial visualisation. Instead of including the disagreement/agreement values, I focused on the readability of the graph. To highlight the connection between the 3D black dot and its three 2D projections I reported some dotted connections lines [Fig. 453]. I combined the result with the grainy texture [Fig. 454]. I believe the result was definitely clearer since each coordinate was still recognisable by a standard point size. However, this visual choice reminded me of some egg cells which definitely had no relation at all with my project and might even confuse the observer.

Since I was quite lost, I asked Jaehee for some peer feedback. She advised me to keep the same point size for the 2D views while utilising the grainy texture for the 3D view. Based on her suggestions, I created a new visualisation [Fig. 455].

After all these different iterations, I believe I had a clear idea of how to proceed. I started from a clean canvas once again [Fig. 456] and added progressively and in order all the information I wanted to include. I replaced the dotted connection lines with the statement (s) number to be able to attribute each dot to the designated definition of Home [Fig. 457].

Successively, I created the 3D view that illustrates the appropriate scale of agreement/disagreement to the statement [Fig. 458]. To refer to the actual 'construction' of the notions of Home, I reported with a continuous dotted line the shifting from a Non-Home [0;0;0] to the most shared and prevailing definition of Home.

The result [Fig. 459] is an irregular grid, similar to the traditional 2D visualisation of the Latent Space, where each step is identified through a Roman number to distinguish it from the number used for each statement.

Lastly, I placed the visualisation on a landscape paper and added the list of the definitions of Home with the respective identification number [Fig. 460].

Finally, all the information was included. However, I believed the graph was still lacking some understanding. Even though I decided to let the observer explore the 'latent space' and all its information on his own terms, I believe I should have emphasised somehow the takeaway of this work.

What did I learn from this and, therefore, what would I like to share with the public? I found the answer in a consideration Naho pointed out in the previous tutorial. To a progressive relevance of identity, history, and relations to the notions of Home, equals a proportionally direct expansion of the space -in this case, a latent space.

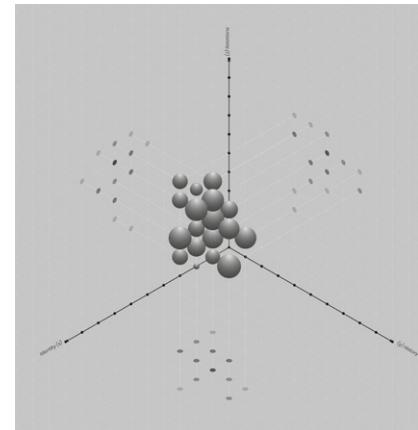


Fig. 455

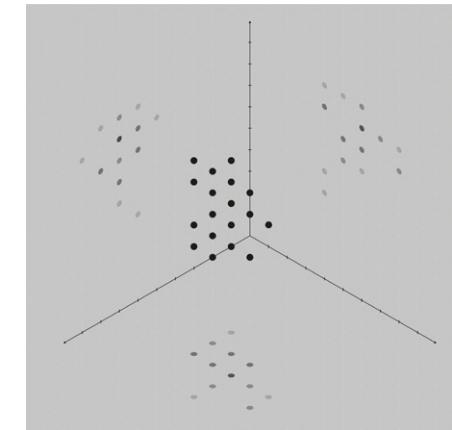


Fig. 456

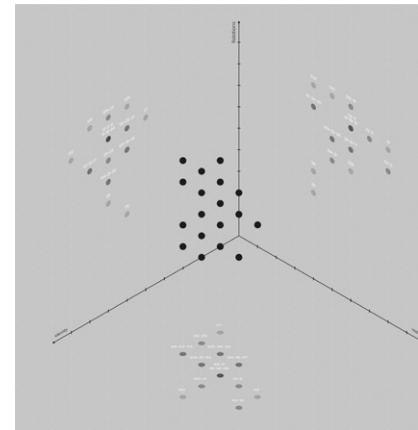


Fig. 457

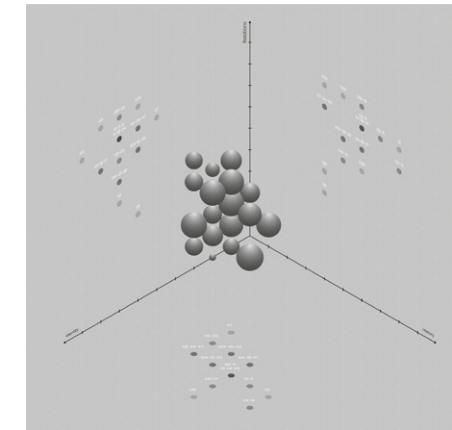


Fig. 458

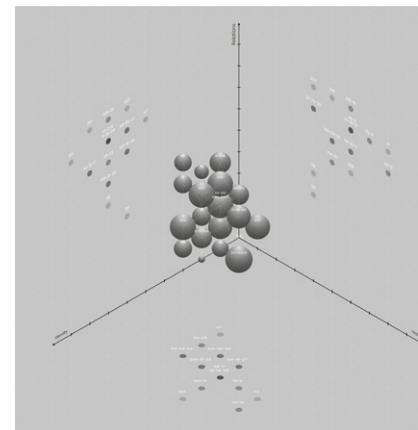
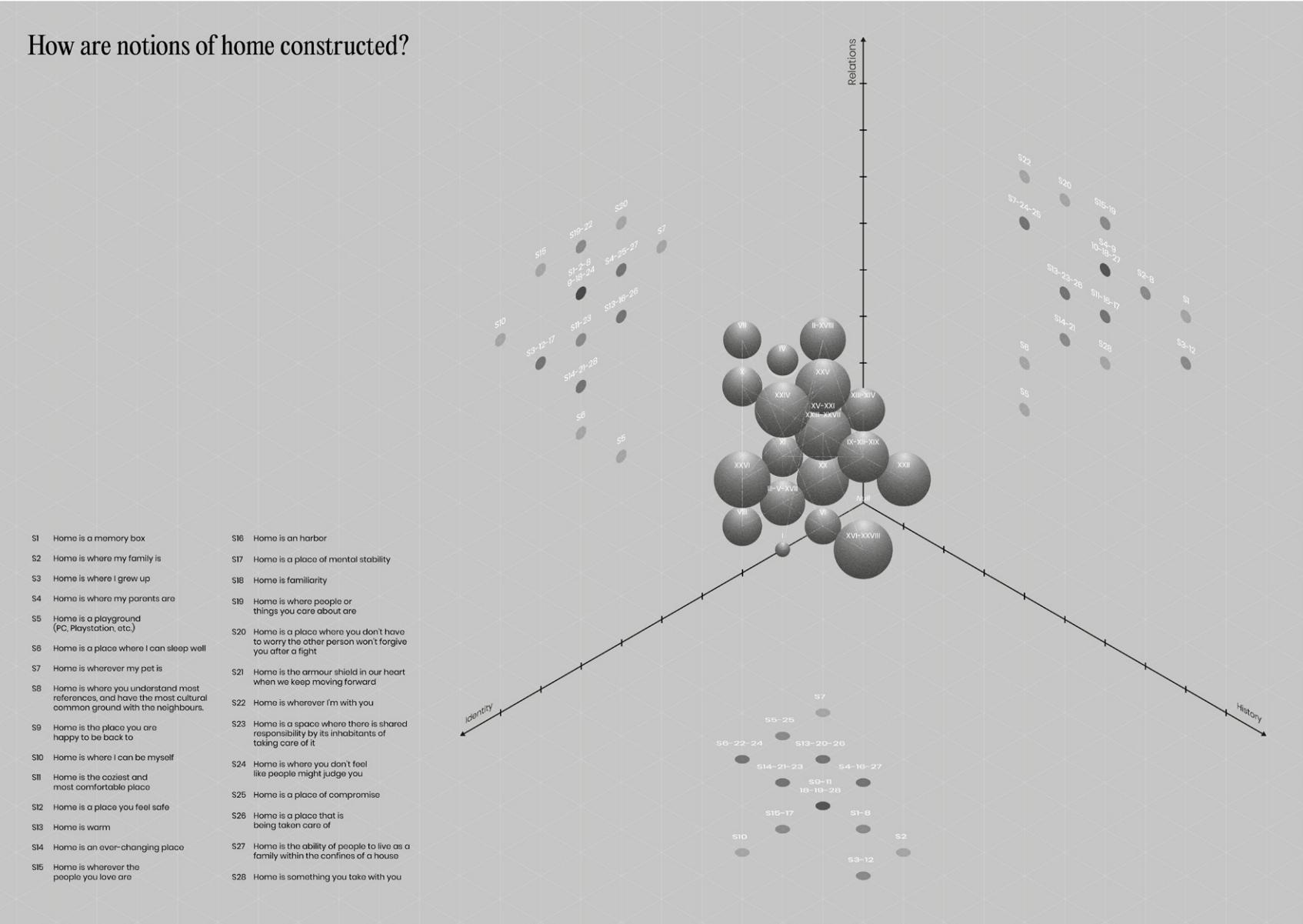


Fig. 459

Fig. 460



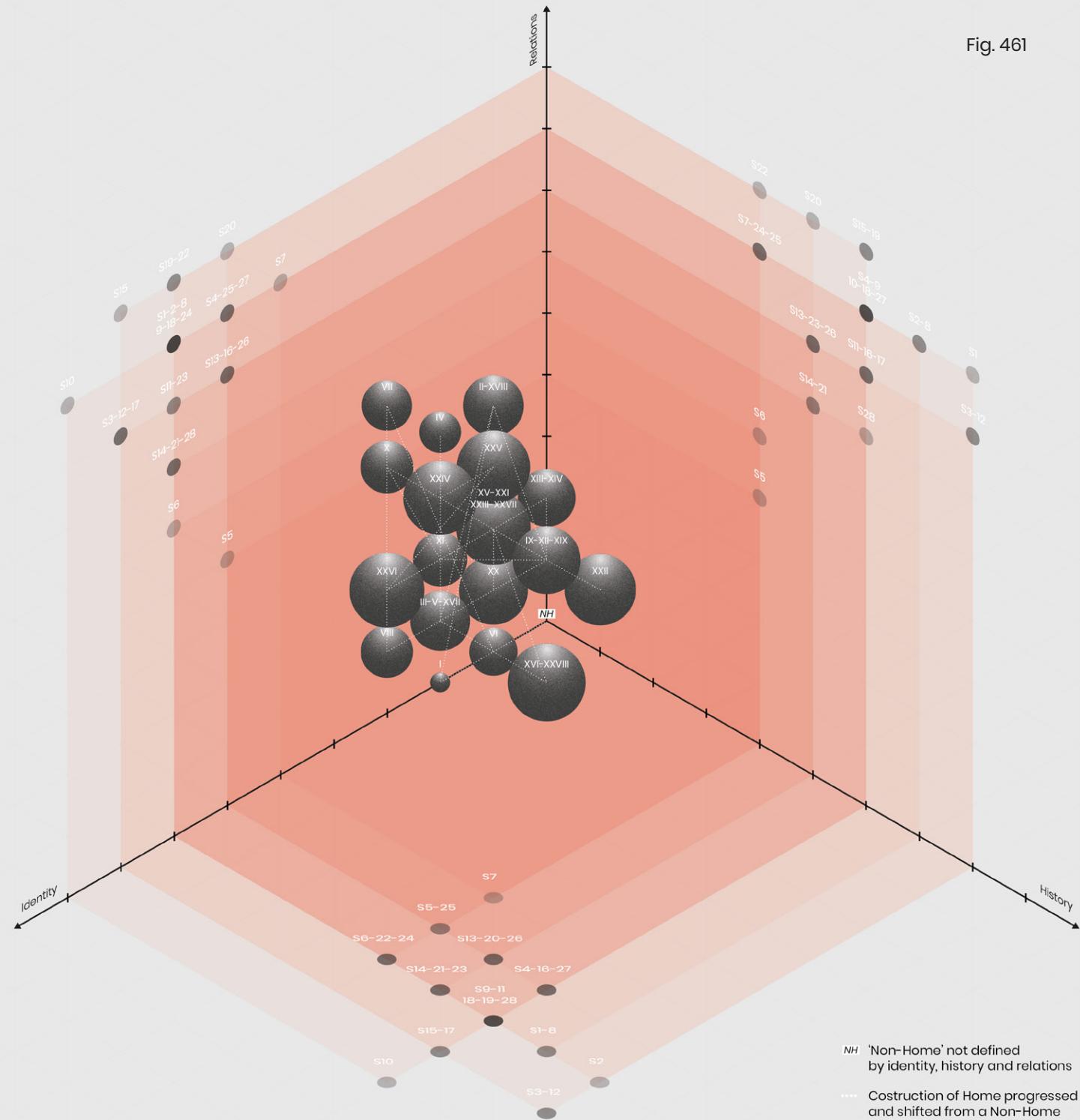
From the opposite point of view, I believe the 'traveller', who expanded his relations, identity, and relations by travelling borders, countries, and spaces, has acquired a new understanding of Home by outstretching its traditional limitations which are no longer confined by physical bounds.

Therefore, I decided to introduce one colour into this black and white visualisation [Fig.461] to highlight this idea of the expansion of the space and the Home concerning identity, history, and relations.

# Encoding notions of Home in a Latent Space

Fig. 461

- S1 Home is a memory box
- S2 Home is where my family is
- S3 Home is where I grew up
- S4 Home is where my parents are
- S5 Home is a playground (PC, Playstation, etc.)
- S6 Home is a place where I can sleep well
- S7 Home is wherever my pet is
- S8 Home is where you understand most references, and have the most cultural common ground with the neighbours.
- S9 Home is the place you are happy to be back to
- S10 Home is where I can be myself
- S11 Home is the coziest and most comfortable place
- S12 Home is a place you feel safe
- S13 Home is warm
- S14 Home is an ever-changing place
- S15 Home is wherever the people you love are
- S16 Home is an harbor
- S17 Home is a place of mental stability
- S18 Home is familiarity
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- S20 Home is a place where you don't have to worry the other person won't forgive you after a fight
- S21 Home is the armour shield in our heart when we keep moving forward
- S22 Home is wherever I'm with you
- S23 Home is a space where there is shared responsibility by its inhabitants of taking care of it
- S24 Home is where you don't feel like people might judge you
- S25 Home is a place of compromise
- S26 Home is a place that is being taken care of
- S27 Home is the ability of people to live as a family within the confines of a house
- S28 Home is something you take with you



## FEEDBACK SESSION

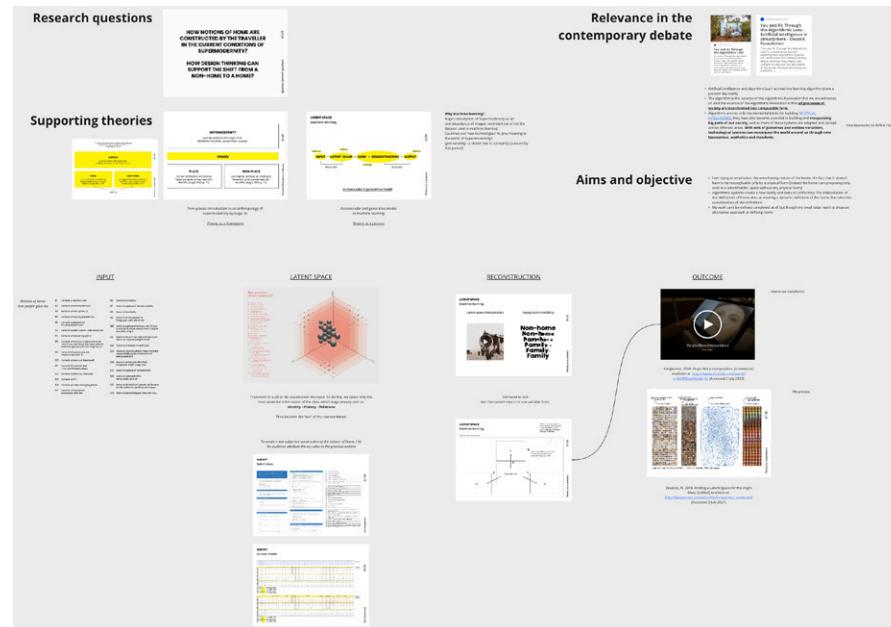
### Personal tutorial

On the 9th of July, due to previous unavoidable circumstances, Cathy organised an additional tutorial to check our FMP's progress over the past two weeks. For the occasion, I uploaded a summary of the work on Miro to allow the tutor to leave some post-it notes during the tutorial if needed [Fig. 462].

Additionally, to illustrate the connection of the project with the contemporary debate, I reported some quotes taken from the description and curational notes of a festival currently held in Greece "You and AI: Through the Algorithmic Lens" (2021).

As expected, at the end of our discussion, Cathy pointed out how I need to simplify and communicate more clearly the project.

Fig. 462



I was well aware of this problem, but I hadn't found out a solution yet. I hope to overcome the problem after I produced all the intended material.

For this reason, I believe some of the suggestions she gave me were quite distant from my intentions. I believe she focused more on expressing these definitions of Home rather than the process I employed, which was my main focus. However, I agree with her suggestion on creating a storyboard to illustrate my outcome. I believe this might help a possible observer to have a better understanding of the project.

### Presentation of FMP

To prepare for the last feedbacks session of the term, the tutors asked us to prepare a 5 minutes FMP presentation to "assess the concept, (clarity of) message, research method, audience, context, theoretical substance, relationship to contemporary design discourse, digital format, and exhibition format (proposal)" (Gale, 2021).

Therefore, I prepared an 11 slide presentation to illustrate the project. In terms of the concept [Fig. 463], I decided to specify the use of machine learning models in my investigation of the construction of notions of home. Additionally, I emphasised how the work is a response to Augé's book "Non-Places" (1992). Therefore, I reported my two key theoretical resources and how they informed the project [Fig. 464-465].

Regarding the 'message' I was unsure what the tutors meant. However, after confronting my study group, I believe they asked us to report our research questions and aims [Fig. 466].

Successively, I reported my research methodology divided into two sections [Fig. 467]. The first one refers to the initial and more general approaches I employed through the module.

On the other end, influenced by one of

Cathy's comments in the previous tutorial, I specified more clearly the methodology I used in my redefined design process.

In the last few slides, I presented the audience [Fig. 468], the context supported by personal experiments [Fig. 469], and the relation to the contemporary design discourse [Fig. 470]. Regarding the digital and physical outcomes, I still have major doubts. Nevertheless, I proposed a dedicated website that summaries the research [Fig. 471] and an interactive installation supported by printed material [Fig. 472].

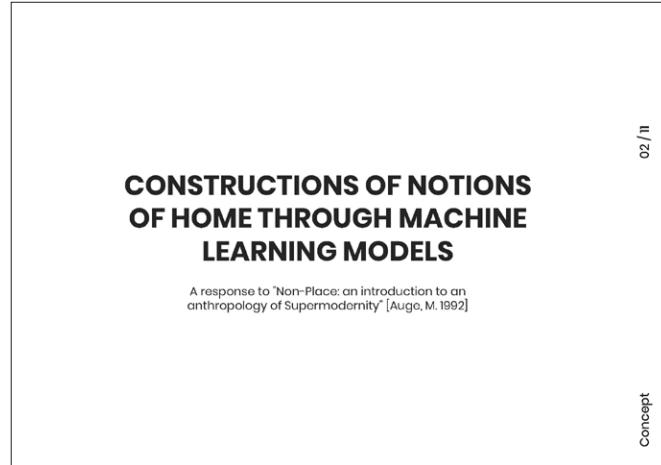


Fig. 463

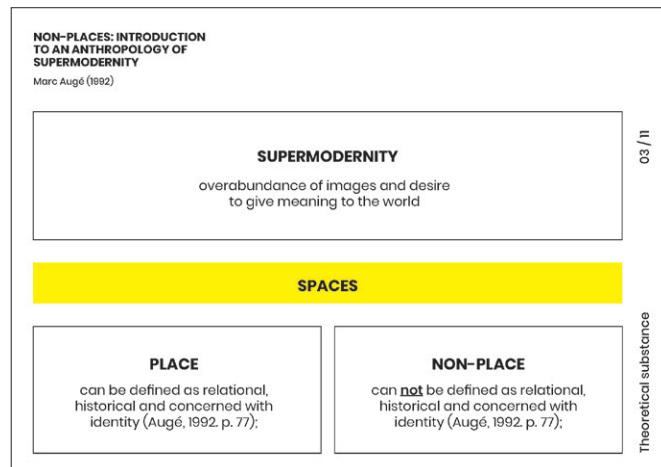


Fig. 464

Fig. 465

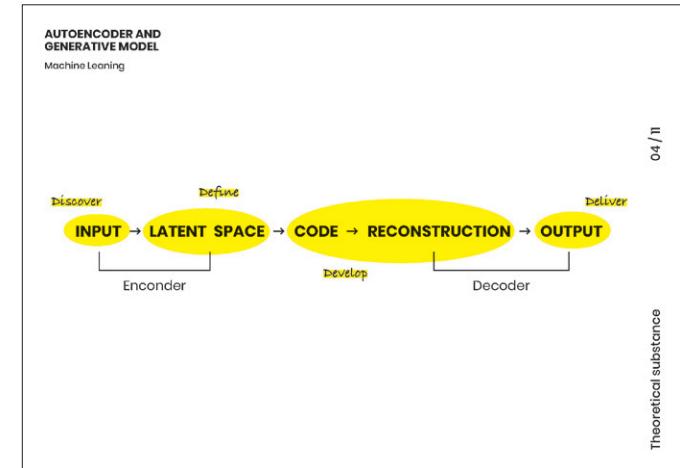


Fig. 466

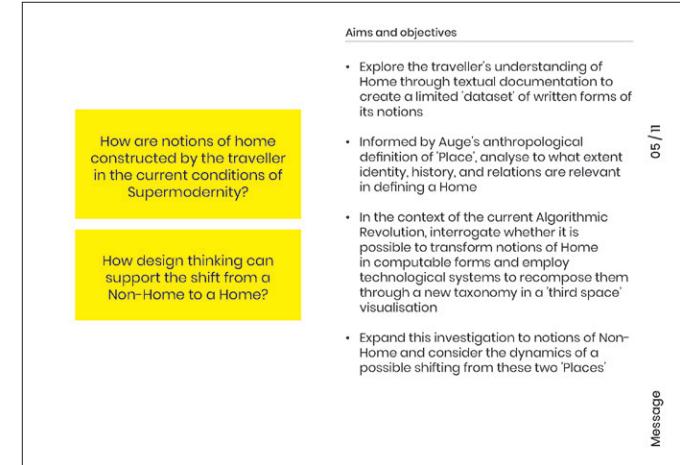
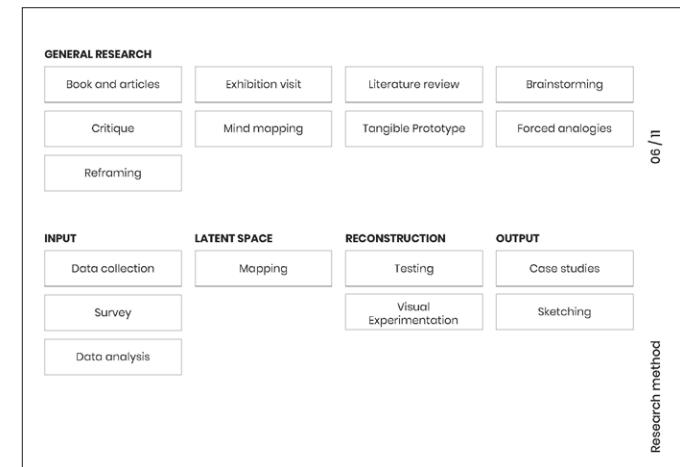


Fig. 467



**INTERNATIONAL AND HOME STUDENTS**

initially aimed towards those individuals with a more nomadic lifestyle, the focus group analysed in the survey and data collections stages became centred on students

07 / n

**Non-home Non-home Non-home Family Family Family**

**Anthropology**

**Machine Learning**

**Context**

**AI IN DESIGN EDUCATION**

How Can We Teach More Students  
How to Design With AI?

- AIGA Eye on Design's article

**ALGORITHMIC REVOLUTION**

The algorithm is the essence of the Algorithmic Revolution that we are witnesses of. And the essence of the Algorithmic Revolution is that all processes of society are transformed into computable form.

- Curatorial note from the 2021 festival "YOU AND AI THROUGH THE ALGORITHMIC LENS"

**HOME DYNAMICS**

Where do we belong? Explorations of home on Nicer Tuesdays July

- It's Nice That

09 / n

Contemporary discourse

Fig. 468

284

Fig. 469

285

Fig. 471

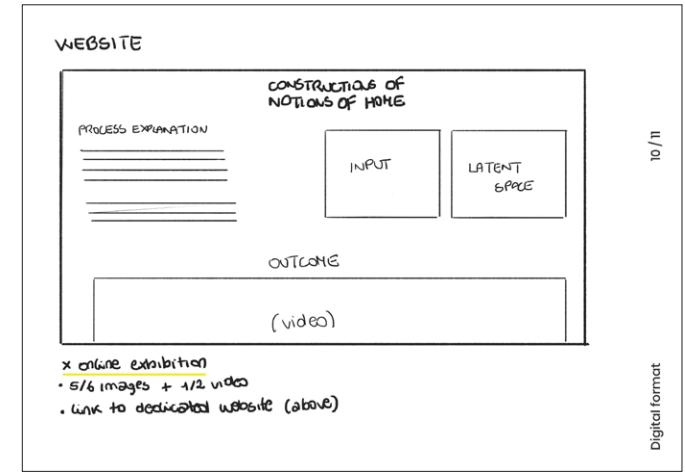
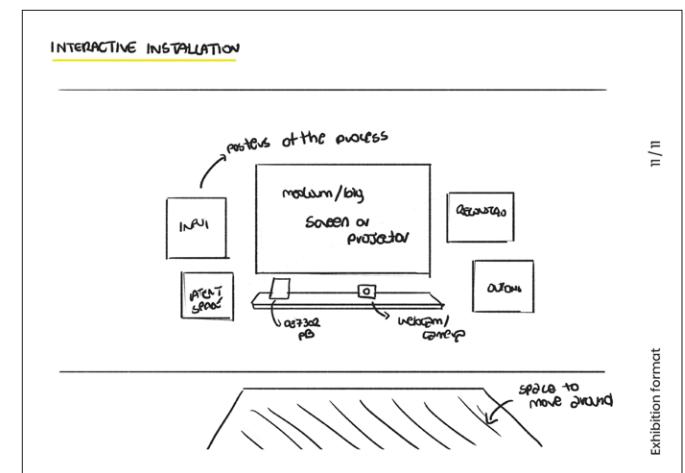


Fig. 472



## Peers and tutor feedback

From the response to the presentation, on the last feedback session, brought to light some interesting points. The tutors suggested me to:

- Think about a possible alternative of the website to create something more engaging;
- Illustrate more clearly how I responded to Augé's book;
- Be careful about the difference between algorithm and data;
- Check out the work of Superstudio;
- Think about the user journey through my project.

## MAJOR PROJECT AND DEGREE SHOW

Annie Yonkers

On the 14th of July, I attended the last workshop organised by Annie Yonkers regarding how to use the FMP and graduate show as promotional tools. From this quick meeting, I realised the importance of preparing in advance and thoughtfully how I want to present myself and my work. Indeed, this event will be a great networking opportunity. However, the most poignant thing I learned was to be able to identify my personal values and project them in my job research [Fig. 473]. Additionally, as highlighted by Annie, the FMP is probably a reflection of these values and therefore a great starting point of reflection.

Fig. 473

## Where can your work take you?

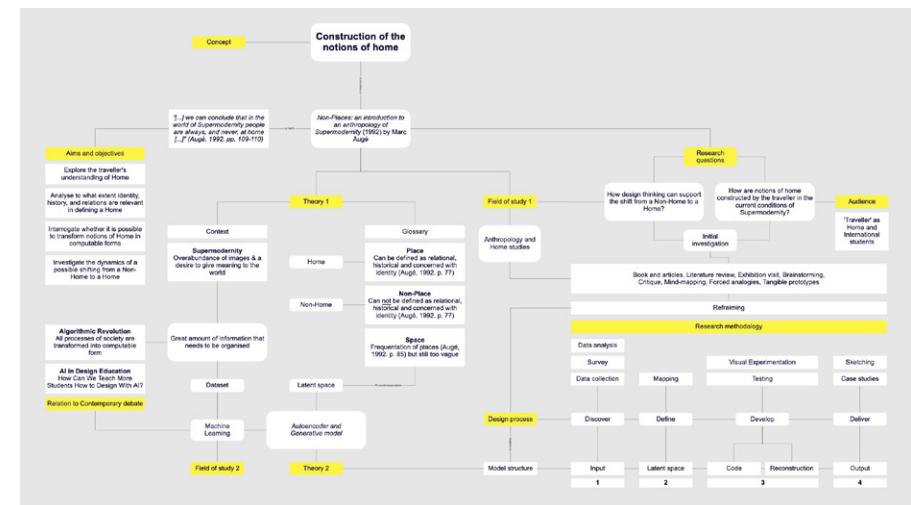
- What values can you draw out from your major project?
- What skills have you developed from your major project?
- If you could continue this work, what would that look like?
- Where could you continue this work?

## FMP SUMMARY

### Initial mapping and data collection

Due to the difficulties I continuously had in briefly explaining the project, I decided to visualise the whole research on a map. I structured it following the guidelines the tutors provided us in the previous presentation.

Fig. 474



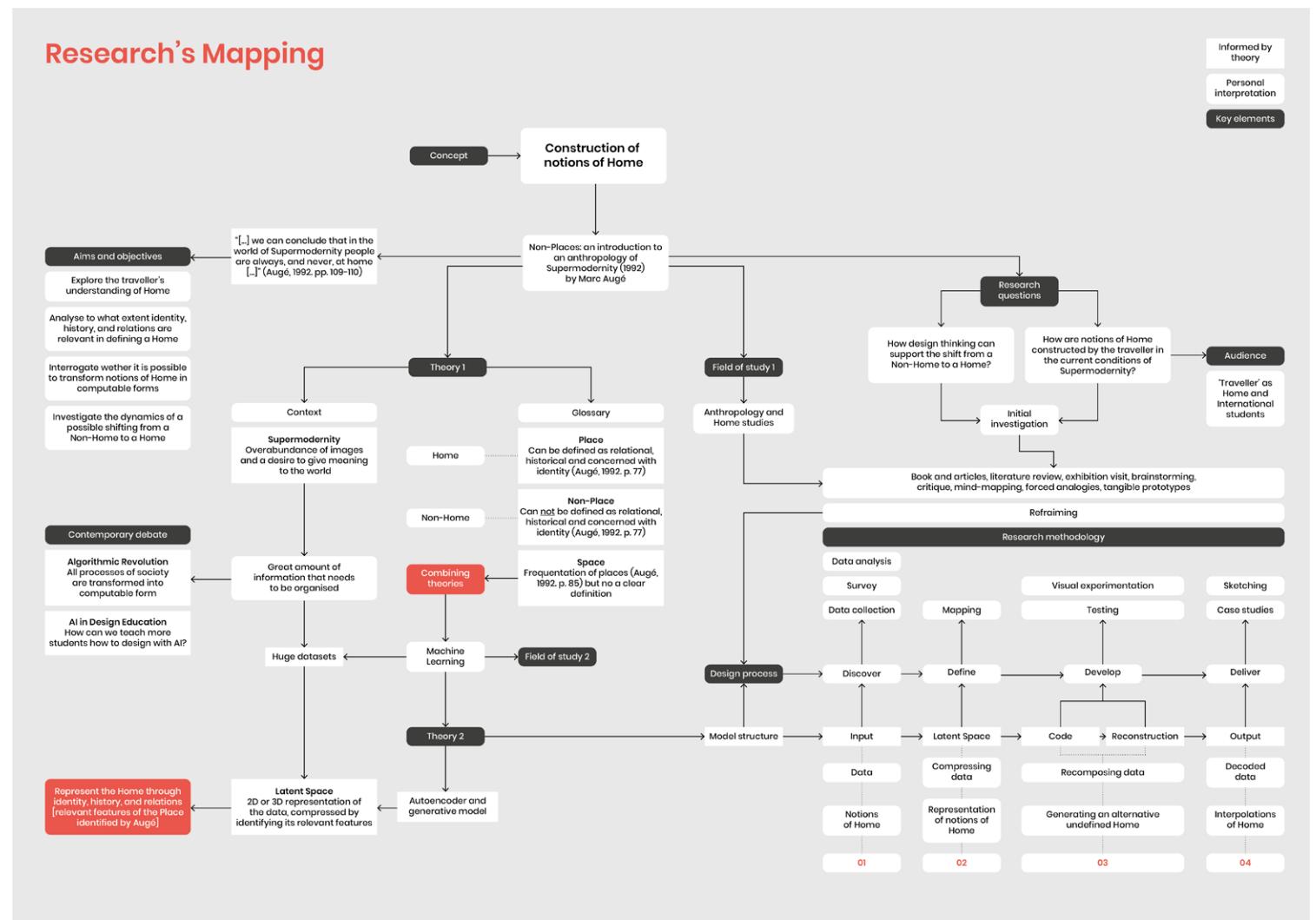
Starting from a quick visualisation through Miro [Fig. 474], I laid down all the information I wanted to communicate. However, after sharing the result with my peer Jean, she highlighted how it was unclear the connection between the two theories and what a 'latent space' actually was. Therefore, I adjusted the diagram accordingly trying to better connect the theoretical resources.

Additionally, inspired by Jean's FMP map, I divided into three categories the elements based on their source [Fig. 475].

At this point, I thought the map was clear enough for a non-knowledge audience, but I was wrong. Even though my intent wasn't to explain in detail the research but rather its 'construction', my father pointed out how the diagram's functionalism and hierarchies were uncommon

and vague. He suggested I should rethink and completely rearrange the information. I find his comments reasonable. Nevertheless, this made me wonder if I should reframe the audience of the project. What if I target the research towards a more knowledgeable audience of designers instead of a broader public. I believe this could connect to the relation of the research with the use of AI in design education.

Fig. 475



## FEEDBACK SESSION

### Study group

On the 21st of July, I joined my study group in the last feedback session of the term. Besides commenting on their work, I had the opportunity to illustrate the previous map I created. However, since it required some reading, in the session I focused on discussing with them a possible outcome of the research. At that moment, I wanted to present through mapping and key elements illustrations the current research. To achieve so, I drafted some quick A3 landscape 'posters' [Fig. 476] that could summary the work done. However, most of the information was missing. I believe this made it more challenging for my classmates to give me more substantial feedbacks since I realise my intent wasn't that clear. However, they seemed to really appreciate the map I had created.

In response, Zeina suggested creating a simple publication to illustrate more in detail the research, whereas Anna proposed the creation of a 'Manifesto of the Home' resulting from my findings. I definitely support the suggestions they gave me and it was something I had thought myself too. However, at this stage, I believe I might be too tight with the time.

Nevertheless, I believe it is something I can develop further in the break between submission and the Graduate Show.

In addition to the mapping of the whole research, I added the collage I produced in teaching week 4 [Fig. 477] to represent my understanding of Home at the beginning of the term, to be able to compare it to the outcome [Fig. 482]. Additionally, I slightly changed the Latent Space visualisation [Fig. 480], as I planned on providing the list of notions of Home in the previous poster [Fig. 479]

Fig. 476

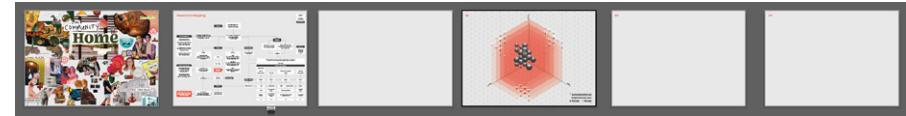


Fig. 477



Fig. 479

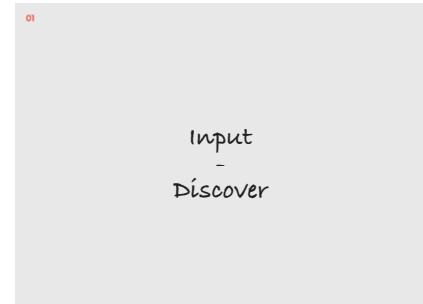


Fig. 481



Fig. 478

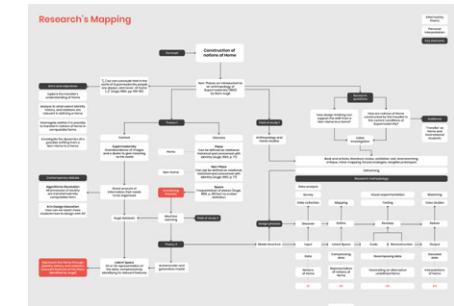


Fig. 480

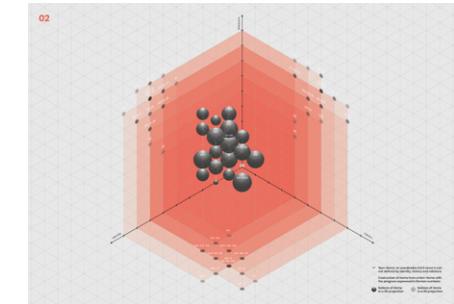
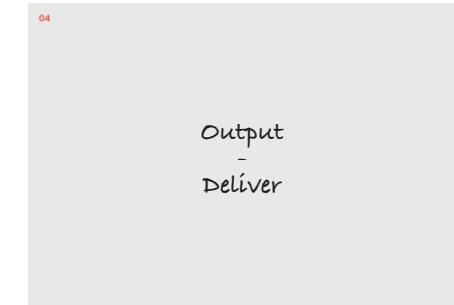


Fig. 482



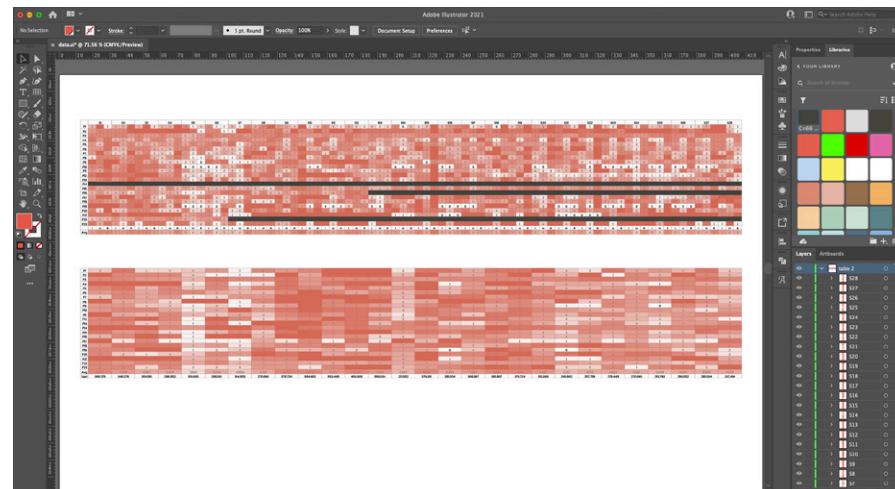
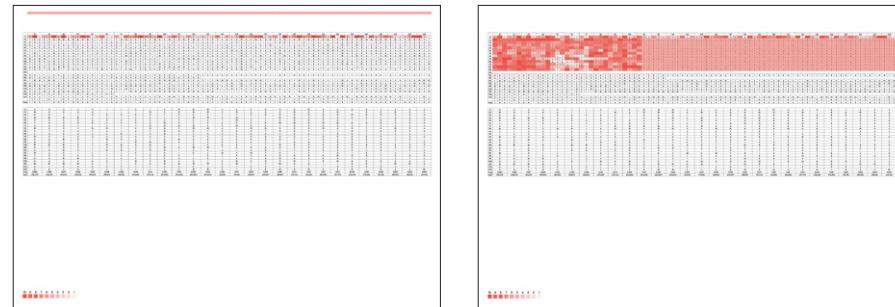
# VISUALISING THE RESEARCH

## Data collection

To continue the visualisation of the research, I explored how to illustrate adequately the data I collected through the survey. Indeed, I believe it was neither immediate nor easy to understand the excel I had at that moment.

To resolve the issue, I decided to transform the initial numeric values through a colour coding system based on different opacities. I imported the excel table into InDesign [Fig. 483], and created small rectangles with an opacity equal to their value [Fig. 484]. However, I realised InDesign wasn't the best tool. Therefore, I imported the InDesign table into Illustrator and continued the work there [Fig. 485].

Fig. 483 - 485



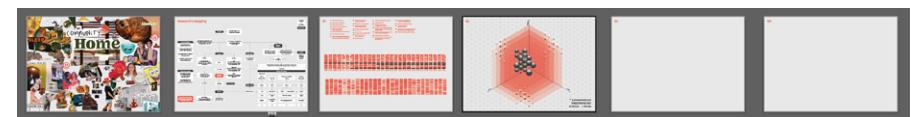
The result [Fig. 486] is a 'cool' visualisation -as described by some of my peers- which, I believe, makes the data less boring and more engaging. With this alternative visualisation, eventually supported by a minimal explanation, I intended to report the data I collected for the understanding of the 'bigger picture' rather than the data itself. Indeed, I believe it is not essential for the visitor to know in detail what the survey's results were. From this, I want the user to observe the different range of answers to discern how personal the topic is and how overcame this variety through my alternative design process.

Lastly, I added this new data to the previous posters [Fig. 487]. Even though this still requires a lot of work, I believe the result is quite effective and mesmerizing.

Fig. 486



Fig. 487



## Deconstructed Notions of Home

Since the time available was running out, I realised I had to conclude somehow the investigation I was undertaking. Following the design process I set for myself, I explored how to progress to the next stage: coding and reconstruction.

Therefore, I tested with different approaches [Fig. 488], what type of findings I could discern from the Latent Space visualisation.

The first direction I took was visualising the construction lines created from the origin (Non-Home) and connecting the definition of Home (S) in sequence: from the most disagreed to the most agreed one. The progression was created for each projection, 2D and 3D [Fig. 489]. However, I found the central spheres quite distracting.

Therefore, I replaced them with a simple black circle [Fig. 490].

The result reminded me of some abstract cubist construction or building and vaguely the work of Harold Cohen, such as Untitled (1971) [Fig. 491]. I don't exactly remember when and where, but I probably came across his name while I was reading some articles regarding AI. At that time I couldn't see any relation between our works, hence I didn't mention him. However, his work collection was the first thing that came to my mind by looking at my results.

Successively, I tried to break up these construction lines from the latent space [Fig. 492] and move them around to eventually generate new material [Fig. 493]. However, my attempt was unsuccessful. Therefore, I came back from the initial visualisation [Fig. 494] and took a different direction.

Fig. 488

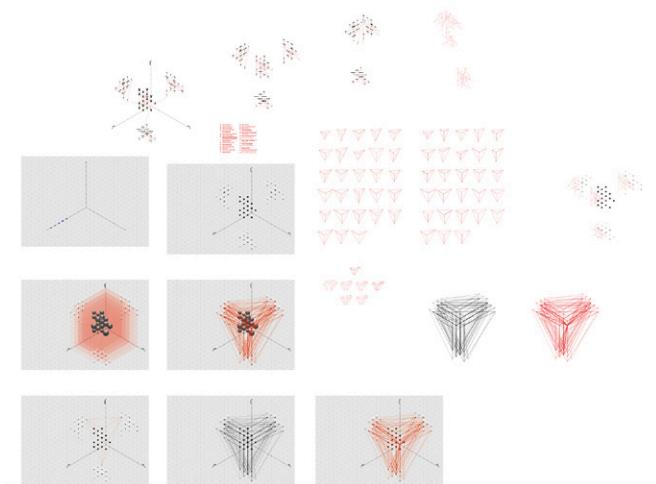


Fig. 489

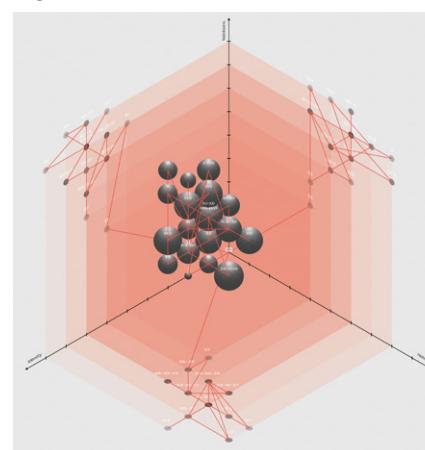


Fig. 490

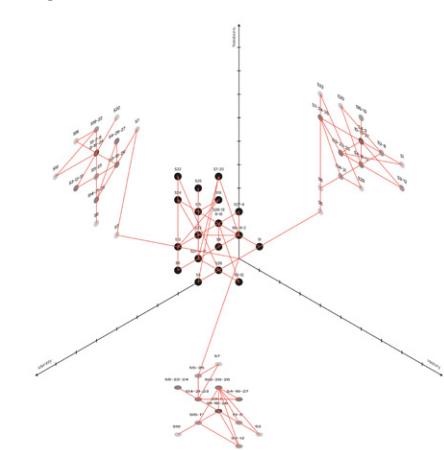
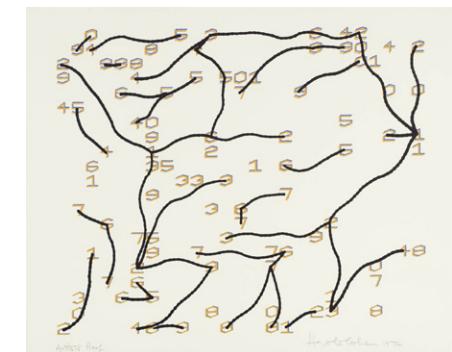


Fig. 491



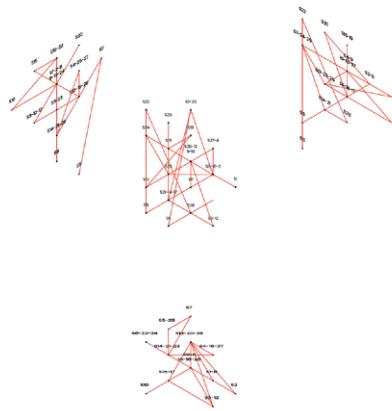


Fig. 492

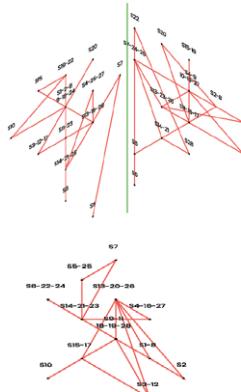


Fig. 493

Instead of connecting the points in the same projection, I linked the points of the same notion of Home. The result [Fig. 495] was a wireframe of a 3D polygon of vertices given by the coordinates (S), the origin of the graph (NH), and the 3D projection of the Home statement. I applied the same process to each one of the 28 definitions of Home I had [Fig. 496].

However, this group of wireframes [Fig. 497] was quite confusing. Therefore, I illustrated them in a more organised way visualising the different polygons as wireframes [Fig. 498] or as 3D objects [Fig. 499] where I illustrated only those sides and faces visible to the eye. Successively, since I imagined them as 'real' objects, I wondered what would happen if I took them apart, generating their exploded view [Fig. 500].

Once again, I believe the work didn't lead me anywhere, hence I abandoned this direction. Nevertheless, the resulting wireframes were quite interesting. Therefore, I decided to develop them further with a different technique. In relation to the interpolation created in many AI projects I've seen, I believe I could try to morph the shapes I had to illustrate a hypothetical 'construction' of the notions of Home.

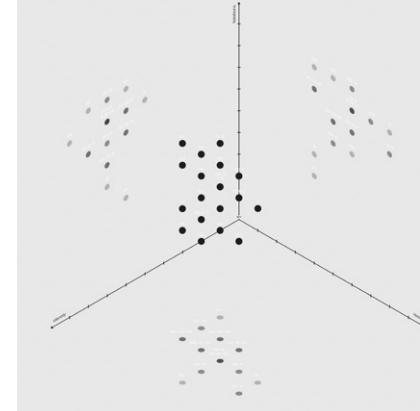


Fig. 494

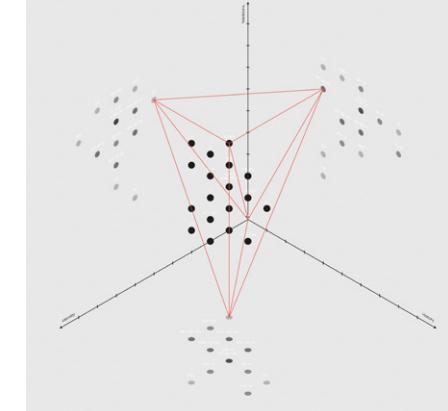


Fig. 495

I exported the previous visualisation into After Effects to animate and morph in sequence each polygon. The results were two short videos of this animation, with [Fig. 501] and without [Fig. 502] the coordinates visible.

I was quite satisfied with the result. I believe it illustrated clearly what I envisioned as a possible reconstruction of my data. However, I wondered if I could expand further these shapes and visualise them in a 'real' 3D form. Even though I considered making them physically, with paper for instance, I believe this wouldn't have been in tune with the context I was exploring: Machine Learning.

Therefore, I decided to recreate the exact same animation but in Blender. However, I am not as proficient with this program as I am with After Effects. Hence, the result didn't come out as expected [Fig. 503].

To illustrate the wireframe of the polygon, I assigned a 'transparent' material to the object which, however, I believe didn't really work with my concept. This, in addition to a simple spotlight, made the scene quite poor. Nevertheless, I believe what I produced was sufficient for the testing I was undertaking.

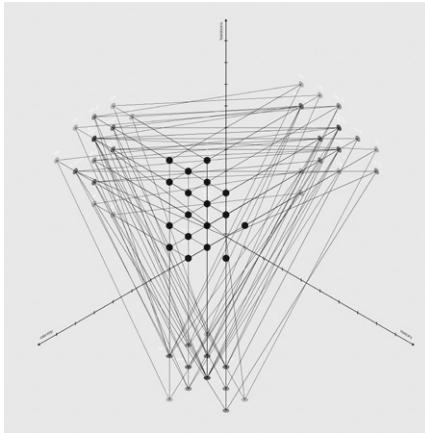


Fig. 496

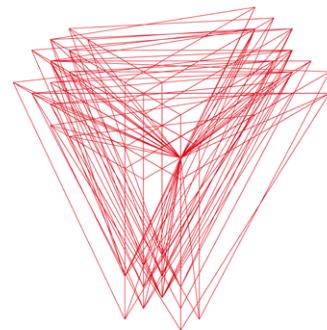


Fig. 497

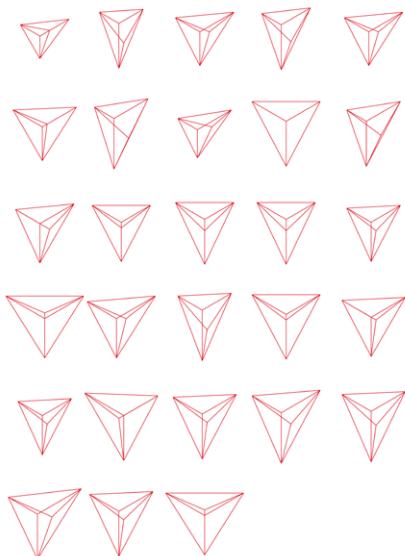


Fig. 498

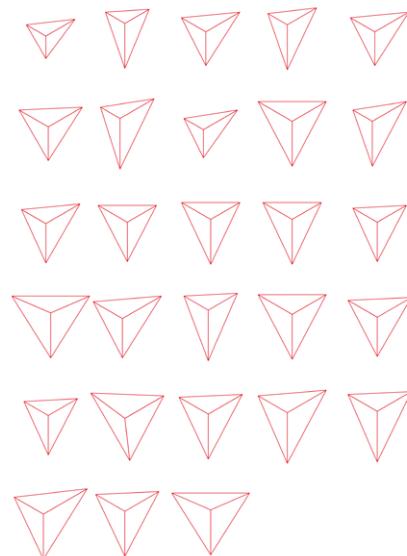


Fig. 499

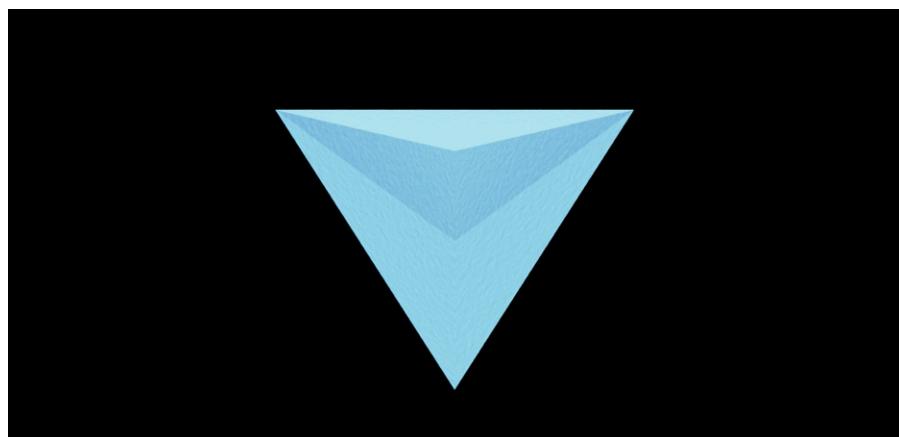
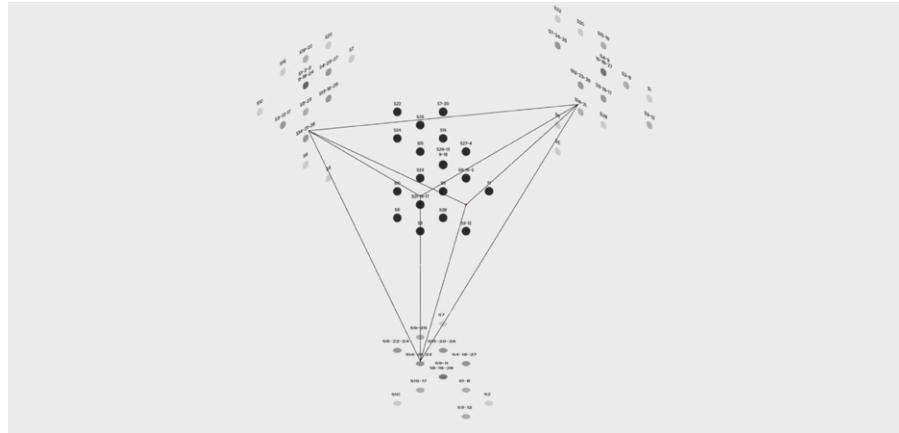


Fig. 501-503

From this experience, I believe I have opened up a possible direction for the project which, however, I won't be using at the moment since the effort I spent wasn't comparable with the results. In the case I have the possibility to develop the project further, I intend to come back to this tool. Even though this 3D visualisation didn't work out, I believe it was more effective than the simple wireframe. Indeed, it reminded me of the existing foundations of a house. Therefore, I tried to achieve the same result in Illustrator [Fig. 504-505].

From this experience and testing, I believe I had finally an idea of what I wanted to present as the outcome of my research, which I didn't consider as a real conclusion of the investigation, but rather a summary of the work done so far.

Fig. 504

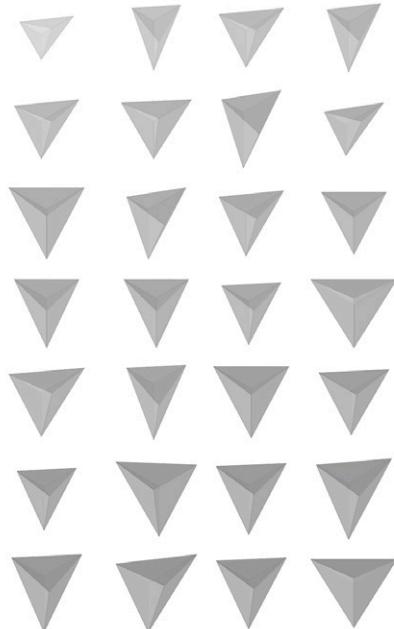
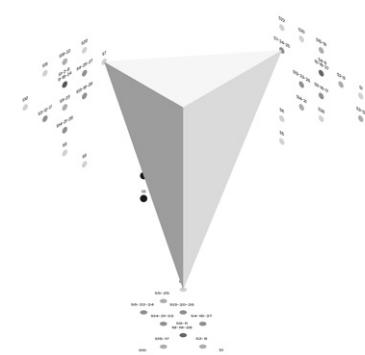


Fig. 505



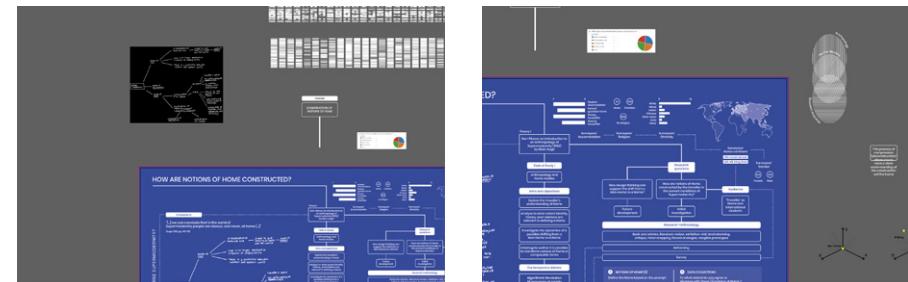
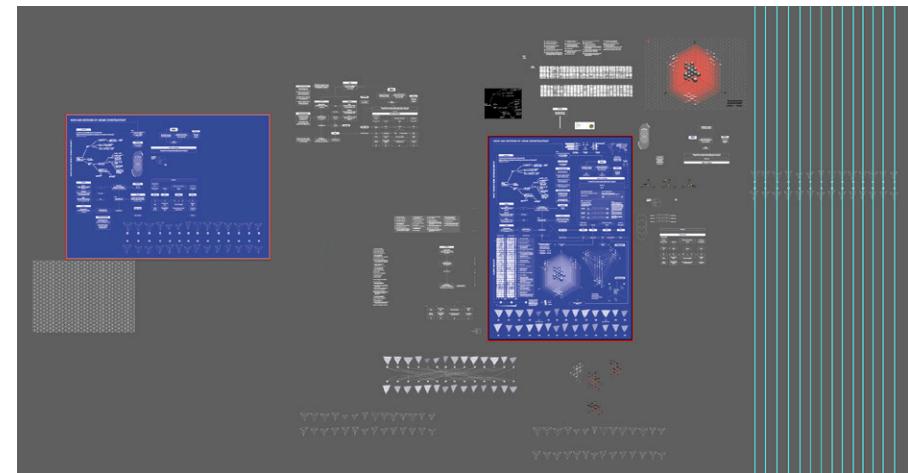
## DEVELOPMENT OF THE OUTCOME

### Research's mapping

For the first part of the outcome, I intended to produce an expanded version of the map I created to illustrate my research. As opposed to the initial draft, I decided to combine the mapping and the visualisations previously displayed in the posters to create a more detailed and comprehensive view.

To achieve so, I started testing different layouts [Fig. 506] on an A1 paper, which I believe was the perfect size to contain all the information I planned to include. In addition to the material I generated in the testing stage, I included a

Fig. 506 - 508



vectorised version of a sketch I did to summary what characterises Supermodernity [Fig. 507] and some small illustrations of the audience informed by the results obtained from the survey [Fig. 508].

I believe these new addictions were necessary to contextualise better the theoretical position and audience of the research.

The result [Fig. 509] is a detailed map of the research. The choice of colours and apparent chaos were not random. Indeed, I took as visual inspiration the blueprints designed in architecture, but not limited to. I believe my research could be envisioned as a 'blueprint' of the Home by displaying its resulting 'constructions'. Therefore, only through careful reading and some background knowledge its possible to fully comprehend it. However, due to the context of the work, I would like to design a small publication that could guide a non-knowledgeable observer through the map and research. Unfortunately, due to the closeness to the submission deadline, I realised I wasn't able to produce one in time. Nevertheless, I intend to produce one in preparation for the graduate show.

On the other hand, I produced a small video for the second and last part of the outcome. Its purpose was trying to give a conclusion to the work done until that point. Similarly to the previous part, it was a developed and more detailed visualisation of what I had previously produced. In the video, I reported on the left-hand side the list of the notions of Home I collected which light up accordingly to the usual sequence [least agreed to most agreed]. In the middle, I illustrated a 3D projection of these notions, supported by 2D projection on the right-hand side of the screen.

The result [Fig. 510-512] is what I believe could be envisioned as an 'interpolation of the construction of Notions of Home'.

Fig. 509

## HOW ARE NOTIONS OF HOME CONSTRUCTED?

