How can Sousanis's concept of multiple perspectives inform the design of workshops for young professionals?

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This study explores the use of multiple perspectives in design research workshops, drawing inspiration from the work of Nick Sousanis (2015). A literature review centered on multiple perspectives, in conjunction with Sousanis's graphic novel Unflattening, advises that different modes and media should be employed in the workshop design.

The workshop included two activities, a worksheet centered around creating a dating profile for money, and a barter exchange. The objective of the workshop was to explore people's emotions and experiences towards money. The design of the worksheet and the barter exchange were centered around using images and text, and collaborative group working, respectively. The workshop was conducted and designed around young professionals who utilise visual media. Young professionals were defined in a previous study as those aged 18-30 years old, in white collar employment.

The workshop results demonstrated the effectiveness of using a collection of different media to generate new ideas and solutions. In particular, the use of drawing produced a gendered image of money, and the collective nature of the barter brought changes in behaviour such as manipulation, persuasion and narratives into the experience.

The implications of using Sousanis's work as a reference for designing the workshop included the emphasis on multiple perspectives which helped to create a more creative and engaging workshop experience. However, Sousanis's lacked attention to positionality. Positionality is the "practice of a researcher delineating his or her own position in relation to the study" (Qin, 2016). Without this, the workshop design allowed the focus to be on creative approaches and outcomes rather than the accessibility for non-creative people.

This study suggests that diverse perspectives can be valuable for design and research workshops, by introducing different media and allowing participants to elaborate, insightful outcomes can be gained. However, it is essential to carefully consider the implications of using different media and to design workshops that are inclusive to all participants. It is key for the researchers understand their own position so as to not influence the design of the research.

Keywords: multiple perspectives, design research workshops, Sousanis, creativity, positionality

Introduction

Why do we care about young professionals, and who is Nick Sousanis? In July 2023, a collaborative research initiative led by the author sought to explore the intricate relationship between individuals and their emotions tied to money. An intriguing observation emerged from earlier research, wherein participants grappled with the question: "Do you own your money, or does your money own you?" Initially, 66% asserted ownership, yet upon reflection and discussion, this conviction dwindled to 33%, underscoring the fragility of our perceived control over finances. The indecision among the remaining participants signalled their relationship with money's nuanced and intricate nature, particularly in the current financial climate, as acknowledged in the 2023 IMF Report (International Monetary Fund, 2023).

The research focused then on young professionals, defined as 18-30-yearolds engaged in white-collar employment. A comprehensive analysis of a broader primary research study revealed stark differences in money-related opinions between this demographic and those above 30. These disparities were further validated by She et al.'s (2023) study, highlighting various influential factors on the economic well-being of young professionals, ranging from macroeconomic shifts to personal aspects like sociodemographics, personality traits, and mental health (p. 333).

To delve deeper into the experiences of young professionals, a design research workshop was chosen as the methodological approach. This decision was informed by the dynamic nature of workshops, which, as indicated by Fass (2017), provide a conducive environment for in-person interactions, creativity, and observations. This perspective challenged earlier notions by Brooks-Harris and Stock-Ward (1999), expanding the utility of workshops beyond personal growth and skill development to encompass a rich source of in-person data collection (p. 1).

Moreover, Russmann and Svensson's (2017) documentation of young professionals' reliance on visual media influenced the choice to incorporate visual elements in the workshop. The graphic novel "Unflattening" by Nick Sousanis (2015) inspired its advocacy of integrating visual and verbal communication in scholarly work. This aligns with the central argument of the thesis, mirroring Sousanis's call for embracing multiple perspectives to enrich the design process.

The thesis explores the significance of multiple perspectives in design research, emphasising the role of visual and written elements and collaborative methodologies in eliciting diverse viewpoints. A literature review establishes the foundation, drawing parallels between media diversity and Sousanis's communication methods. The subsequent discussion outlines the workshop design and anticipates outcomes that underscore the imperative of incorporating diverse perspectives in all facets of design research. This paper argues that designers can craft more meaningful and inclusive solutions to intricate problems through a multiple-perspectives approach.

Literature Review

Multiple perspectives and a dialogic approach

Exploring Multiple Perspectives through Various Media

This essay looks at Sousanis (2015) for an explanation of multiple perspectives; however, there are more interpretations of this phenomenon. 'Multiperpectivity' is defined in The Living Handbook of Narratology as "a mode of storytelling in which multiple and often discrepant viewpoints are employed for the presentation and evaluation of a story and its story world" (2014). This definition acknowledges that there are many viewpoints, but it is purely in terms of storytelling, rather than research, which could be viewed as short-sighted or limited in terms of application to other expressions. Serafini and Gee (2013) describe a similar concept to Sousanis around multiple perspectives in the form of media. However, their terminology centres on 'modes' and 'ensembles'. They argue that a mode is a culturally rooted system of visual and verbal elements designed for specific communicative purposes, and a multimodal ensemble refers to a text incorporating multiple modes to convey meaning. (p.12) Their argument aligns with Sousanis (2015); multiple forms of media can be combined to work together. The application of multiple 'modes' could be helpful in workshop activities and, therefore should be included in the design of the study.

Multiple perspectives are also valued by Minksy (1988, p. 54), who asserts that "the secret of what anything means to us depends on how we've connected it all to other things we know. That's why it's almost always wrong to seek the "real meaning" of anything. A thing with just one meaning has scarcely any meaning at all." Minksy refers to 'anything', allowing readers to apply their beliefs to their circumstances. In this instance, my interpretation of Minsky's statement supports the hypothesis that multiple perspectives allow more meaning from a design object or design research approach. There is no singular way to tell us everything we seek to know, and seeking more benefits the outcome.

Understanding why we should have multiple perspectives is crucial for the reasoning for implementing them, and Haraway's statement explains: "It matters what thoughts think thoughts. It matters what knowledges know knowledges. It matters what relations relate relations. It matters what worlds world worlds. It matters what stories tell stories." (Haraway, 2016, p. 35) Through this, Haraway implies the necessity to scrutinise the mental frameworks guiding our understanding and actions in the world, encouraging us to challenge our assumptions, which will be applied to workshop design.

Literature Review

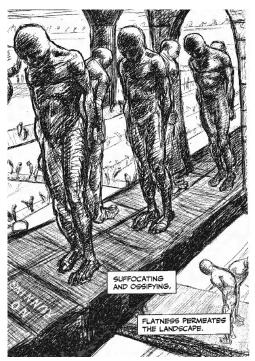


Figure 2. 'Flatness' (Sousanis, 2015, p. 5)

Unpacking Unflattening Concepts

To investigate how to use Sousanis' concepts to enhance the design of workshops, we must first understand how the ideas are developed. Within Unflattening (2015), Sousanis initially describes the limitations of looking from only one perspective by depicting a singular perspective as 'flat' (p. 5). The idea of flatness or seeing in 2D is extended through the metaphor of two eyes seeing two views (p. 31), the limitations of verbal-only interactions (p. 58) and the reminder of the importance of the continued, dynamic ability to move and a sustained consciousness of other perspectives (p. 146).

Sousanis weaves an immersive narrative that challenges the conventional way of seeing and understanding the world, emphasising the value of multidimensional perspectives and the interconnectedness of ideas and experiences. To do this, Sousanis uses the graphic novel format of words and images to construct a narrative that challenges conventional modes of thinking and explores the power of visual communication. Sousanis argues that by embracing the visual richness of comics, we can expand our perspectives and gain a deeper appreciation for the complexities of knowledge and experience (p. 66).

NHICH VIEW IS TRUE?

Figure 3. 'Parallax' (Sousanis, 2015, p. 31)



Figure 4. 'Dynamic' (Sousanis, 2015, p. 146)

This is in alignment with Conners (2017), who affirms that readers of comics should "consider how they construct meaning when they transact with this form of storytelling." (p. 14). In discussing the graphic novel/comic format, both authors assert that utilising the visual aspects within comics can expand perspectives and deepen understanding. Therefore, the power of non-written elements should take prominence in the design of workshop activities to allow participants to engage with the narrative and knowledge the workshop may employ.

One of the critical ways Sousanis conveys his ideas is by employing a dialogical approach by utilising multiple visual and verbal communication forms to present his ideas. O'Connor and Michaels define dialogic discourse as follows, 'Dialogic discourse connotes social relationships of equal status, intellectual openness, and possibilities for critique and creative thought (2007, p. 277). Sousanis develops this dialogue throughout the book by juxtaposing images of comics, graphic novels, and other forms of visual media with his written commentary. This creates a dynamic interplay between the visual and the verbal, allowing readers to engage with the material in various ways.

The dialogical approach is also evident in Sousanis's writing style. He often uses informal language and colloquialisms, creating intimacy and immediacy with his readers. This conversational style also helps to convey the personal nature of his experiences with comics. The informality of Sousanis echoes the works of Iser (1978), who argues, 'If the reader and the literary text are partners in a process of communication, and if what

Literature Review



Figure 5. 'Comics' (Sousanis, 2015, p. 66)

is communicated is to be of any value, our prime concern will no longer be the meaning of that text but its effect.' (p. 54). Iser here discusses the value of words being the outcome of reading them, which is the essence of Sousanis's work in Unflattening and a pivotal takeaway to understand how to design workshops with multiple perspectives in mind.

Through this use of the comic form, Sousanis demonstrates the transformative potential of visual thinking. By juxtaposing images with text, he invites readers to actively engage with the material, making connections and drawing inferences that extend beyond the literal meaning of the words on the page.

Summary

Drawing insights from Nick Sousanis's "Unflattening" and other scholars has highlighted the importance of multiple perspectives. It emphasises the need for diverse viewpoints in design research, highlighting the transformative potential of visual thinking. The review suggests a dialogical approach, as seen in Sousanis's work, for effective participant engagement in workshop design. Overall, it underscores the significance of embracing varied perspectives for a deeper understanding of complex ideas and experiences. Within this theoretical framework, Sousanis's concept of multiple perspectives can inform the design of workshops for young professionals.

Methods

Worksheet and barter exchange

In the initial stages of the research project, the thematic analysis returned the statement that "money now has the power to control our lives, and we have to let it." Therefore, we designed a workshop in response to this statement. Our main objective was to test in practice whether this was true. Secondary to this was to explore whether we can manipulate the circumstances to change the outcomes.

This project adhered to the ethical guidelines established by the University of the Arts London. Worksheets after collection were anonymized and used exclusively for research purposes with participants' consent. Consent was also obtained for workshop data, recordings, and images, accompanied by detailed information regarding their intended usage.

The researchers recorded the whole session, took notes, and collected the worksheets for analysis. At the end of the session, an open conversation for thoughts and feedback was held, which was documented through note-taking only. The observing researcher was writing any key statements from the discussions, and also recording behaviours and actions within the barter exchange.

Workshop Structure

The workshop was structured as follows:



Figure 6. Workshop setup

- Introduction and overview of the workshop: This will allow participants to settle in and allow them to understand the upcoming activities
- <u>"Dating Money" worksheet:</u> The worksheet is being used to probe the emotions and impressions our participants have about money, with both drawing and writing sections to combine the two different media.
- <u>Four-stage barter exercise</u>: The barter exchange introduces collaborative working and gives space for the different strategies and perspectives to be expressed.
- <u>Reflection</u>: After the activities have been completed, a chance to reflect on how people felt both about money and the activity itself.

In alignment with the outcomes of a previous research study, we invited eight people aged 24-27 of mixed gender and backgrounds to participate, who either were or had been in employment, qualifying them for our category of 'young professionals'. It was hosted in the University of Arts LCC library, and was anticipated to take one hour to complete.

Activity 1: Date your money worksheet

The first activity was a worksheet entitled 'Date your money'. Using a familiar dating application as a template, the we asked participants to write this out as if money was a person hoping to date people.

Questions: Name Image (to be drawn) Birthday Location Questions 1: "Dating me is like..." Questions 2 and 3: these questions were chosen at random for the printouts; the entire selection is shown in the appendix.

Using the template, we anticipated the questions would allow people to personify money as the participants would have a recognisable way to express their feelings about the topic. The participants were given a range of writing materials, one worksheet each, and seven minutes to complete the task. At the end of the task, each participant was asked to present their dating profile to the rest of the group and explain their thoughts behind their answers on the worksheet.

Activity 2: Barter Exchange

By creating an exercise where money was removed, tasks were undertaken, and money was added back into the scenario, we could observe each participant's behaviour as the circumstances were changed and its effect on the outcome of the activity. Each sub-activity was explained to the participants immediately before starting.

There were four rounds of the exercise, each increasing in complexity: Specific single-item trade with no monetary value (3 minutes) Category-based exchanges with no economic value (5 minutes) Category-based transactions, with values now shown (5 minutes) Hidden categories (new, not as previous) starting without money, added in part-way through. (5 minutes)

The items used in the barter exchange were familiar, day-to-day items. The values assigned to them were intentionally distorted to create more focus and conflict on the 'needs' (getting the category items) and the 'wants' (more monetary value). Therefore, the participants could not make assumptions about the objects or their values and would need to consider each trade carefully.

A list of the categories, items used and assigned monetary value of items can be found in the appendix.

Results

Worksheet and barter exchange



Figure 7. Worksheet in progress

Activity 1: Date your money worksheet

The outcome of the worksheet was the participants' responses to the prompts, written and drawn in the workshop and collected by the researchers for analysis after the event. A table of these results can be found in the appendix.

Of the participants who had drawn their vision of money as a human, 66% (4/6) people depicted a man. This is a strong indication that people viewed the gender of money as often masculine, and a result specifically from the image portion of the worksheet. Participants were more inclined to draw a person than give it human characteristics, as the space for a name, birthday and location across the data set had two non-responses from various participants. Furthermore, the birthday and location responses were varied and did not portray any themes. This could be due to the participants having differing backgrounds, leading them to value money differently, or the task needing to be explained more clearly to the participants to ensure the worksheet is completed.

Participant 2 had a consistent narrative of an unnatural or uncomfortable depiction of money as a human, "good but evil"; a dating partner should want to 'improve themselves'; they [money] can do more "than you ever imagined". Participant 5 is Chinese; therefore, their answers are heavily influenced by this person's context and background; for example, they title money "Grandpa Mao" and talk about the power that stems from this person representing money. This suggests that the participants' personality and social and cultural backgrounds will influence their answers and, therefore, the outcome of the results.

In reviewing the exercise collectively, a key observation was that a significant amount of creativity was used when completing the dating worksheet. This was the intention of the worksheet design; therefore, it was successful in that aspect; however, each of the Question 2 and Question 3 prompts would benefit from review and more testing, as only some of them were completed or were answered as intended by the researchers. This could be a matter of explanation and time allowed to complete the task, as English was not the first language of many of the participants, so this could have affected their overall understanding and ability to complete the worksheet. A follow-up questionnaire could be implemented to test these assumptions in quantitative form to allow for restructuring of the worksheet section if necessary.

Activity 2: Barter Exchange

The barter took place in four stages, first with a specific single-item trade with no monetary value, before introducing category-based exchanges, and then adding prices to the items. Lastly, we gave out paper with new categories hidden from the other participants, starting the round without money, added in part-way through. The data was collected by reviewing the video recordings of the event, plus notes taken from a researcher purely noting observations. The purpose of this activity was to understand the effect of money being added to a situation, and therefore, the observations were primarily around this aspect. All observations are in qualitative form with no specific data sets or categories chosen, as due to the size of



Figure 8. Exchanges in progress

the group and the setup of the activity, many themes were discussed simultaneously in an unstructured format.

The observations from when pricing was introduced to the trading was that participants would think more about protecting and maintaining the total value of the goods in their possession, carefully weighing up the trades on offer. However, when the researchers advised there was little remaining time to complete the task, money was deprioritised to succeed at obtaining the items needed for their category. This shows a significant set of behaviour changes through the utilisation of money, for when the trade was held with no pricing set on any items, the participants were more generous to each other and more comfortable with exchanging based on need alone.

Whilst not intended to be tested, the impact of time available for each task significantly impacted the participants' feelings and actions. Specifically, in the last task, which was using new categories and the prices were introduced part-way through, participants appeared confused and stressed, trying to manage new information at a quick pace. This may have reduced the reliability of the outcome for the final round, as the trades may not have been completed correctly. Participants were heard being unsure about trades and unable to see the pricelist, which was only displayed in one part of the room. The inability to properly view a critical piece of information is an aspect of the workshop design which will need reconsideration for further iterations.

One participant who had started with much less monetary value assigned to their items reported that they devised a strategy to build up their capital by bartering on category-based needs before becoming more selective about what to exchange. Their observations from the assignment were that those with more money had more power and had a better "starting position". Therefore, this participant adapted their approach to suit their position. The distortion of 'wealth' across the group was intentional; however, it wasn't explicitly preplanned; the items were assigned randomly as the researchers did not anticipate the group devising their own strategies. This aspect of the workshop had not been designed and, therefore, should be an aspect that should be examined and refined.

Another critical insight was that the participants were observed manipulating each other and using emotional ploys to plead and beg for items. These actions occurred throughout the barter activity, regardless of whether they traded singular or multiple items with or without money and categories. The manipulation and emotional ploys may have only occured because the participants knew each other; repetition with strangers will be required to fully explore whether these tactics are a result of the workshop activity. Additionally, the participants were witnessed creating narratives for themselves within their category assignment. This insight has broader implications for the workshop's design, as we had asked participants first to embody money as a human, create a narrative around them, and then abandon the concept in the next activity, only for those taking part to introduce it themselves.

Lastly, a number of participants may have been disadvantaged when trading as some needed clarification on the items or categories. Within the workshop design, we did not create a table or chart for items within each category for Tasks 2 and 3; a guide sheet may have been appropriate to assist the group in making their decisions for their trades.

Overall, the bartering exercise successfully tested the impact of money on behaviour in a controlled situation: the structure of asking participants to complete tasks in two situations allowed the researchers to observe the behaviour changes, which aligned with the expectation that money would change people's approach to exchanging items. The participants laughed and joked throughout the activity and reported they had fun during the exercises. This is also a point of success, as they were engaged and enthusiastic to try each activity.

The workshop structure worked well overall, each part of the planned activities were completed, however we did run over time, and completed the final reflection part in a separate location. The introduction, settling in and being ready to start did not happen efficiently, and the time estimated for each participant's mini-presentations was insufficient, so either the workshop should be extended to 1.5 hours or these sections should be reduced.

Discussion

Where was positionality?

Overview

The workshop was designed for and attended by young professionals. However, as it was being implemented as a trial before engagement with external participants, the workshop described was attended by fellow students in the MA User Experience Design course. Whilst the researchers could attain feedback on the designed elements and structure in a separate review session, this familiarity with the researchers and each other could influence the outcome and insights. Knowing each other meant that the participants could be more persuasive within the barter exchange and more confident in their opinions and expressing themselves with the worksheet answers and presentation, something strangers may have needed to be more willing to do.

The influence of Sousanis (2015) and the two versions of multiple perspectives was present in both activities in the workshop, firstly in the use of different media in the worksheet and secondly in the collaboration within the barter exchange.

The Worksheet

The worksheet design included several variants on Questions 2 and 3. However, this variation of questions wasn't helpful as there were fewer consistent answers across the data. While themes still occurred, the lack of consistency has resulted in less reliable data. In reflection, the researchers queried the overall structure of the worksheet within a workshop. Design workshops are a "form of participatory design consolidating creative co-design methods into organised sessions for several participants to work with design team members" (Martin and Hannington, 2019, p. 189). The participatory nature of the workshop was lost here in favour of implementing Sousanis's ideas of multiple media. However, this could be reconsidered into a more dynamic activity. Sousanis (2015) asserts that "to step beyond the flat and narrow, we need a kaleidoscope of views, that convey both our dimensionality and dynamic capability." (p.146). The worksheet has returned to the 'flatness', working on a solo 2D activity, and therefore, further iterations of the workshop could be developed into a more active session.

The missing responses indicate that it is more challenging than the researchers had thought to envisage money in human form. Yet the answers provided the insight that money is often gendered as masculine. This insight wouldn't have come out if money had been described in its terms and context. Using multiple perspectives brought out another side of people's impressions of money and provided evidence for our design basis.

The Barter Exchange

The feedback from the group acknowledged that the lack of and subsequent addition of money had entirely changed their priorities when bartering and that their personalities still significantly affected whether they were generous or mean with their trades.

The most critical insight was including narratives in our barter exchange to provide context for why they undertook these activities. This is supported by Huron et al. (2017), who found that, in iterating their workshop designs, scenarios gave context to the participants to aid their activity outcomes and used the scenarios to refine what outcomes were being created. (p. 1419). This insight from Huron et al., paired with our workshop hosting, concludes that giving the participants a narrative to follow would increase their engagement with the activity and the data received from it.

The categories and contents require review, as participants had required continual clarification, for example, which items existed within the 'Activity' category or what an item was, such as a resistance band. Buchanan (1992) theorised that "categories have fixed meanings that are accepted within the framework of a theory or a philosophy, and serve as the basis for analysing what already exists." (p.12). The categorisation structure provided to the participants was unclear; whilst some ambiguity was intended to provoke discussion, this will require refinement to guarantee the study's replicability. "Preliminary operationalisations and fuzzy inferences are not a crime, but a normal starting point of scientific discovery. Yet to progress toward precise claims, the initial vagueness must be recognised and tackled in subsequent studies " (Scheel, 2022, p. 3). The observations and feedback from the study, in alignment with Scheel's proposal, strongly advocate that, for precision in data collection, the designers must consistently provide identical starting points for each activity.

However, the balance between precision and flexibility should be fine-tuned to ensure the playful elements are maintained and the light-heartedness of the workshop environment is preserved. Binder and Brandt (2008) claimed that the workshop is a collaborative, less structured event used in co-design sessions, emphasising collective exploration and shared suggestions. Unlike a laboratory, it lacks a focus on measurement and standardised processes, highlighting its playful and participatory nature. (p. 118). The set-up for the workshop was to encourage spirited discourse through the necessity of bargaining with one another.

When reviewing the barter activity, it was noted that the participants' personalities played a significant role in their actions; for example, one participant who made a generous trade then realised that financially it hadn't been wise; however, they had done this as a helpful act to another player. There are more than one type of narrative (Grimaldi, 2013), therefore there is potential here to expand beyond the introduction of narratives towards tempering personality traits by asking participants to take on different approaches to barter throughout the exercise.

The involvement of multiple people interacting with each other gave us a new perspective on how different personalities can influence an outcome, particularly in a group setting (George, 1990). It led us to review our backgrounds and how much that may have influenced the design of the workshop. The research team leaned upon Sousanis's concept of multiple perspectives regarding people and media, and the workshop had successful outcomes. Yet we couldn't rule out that we hadn't designed a workshop for designers, given the subjects' backgrounds were somewhat the same as ours.

Positionality

Positionality is the "practice of a researcher delineating his or her own position in relation to the study, with the implication that this position may influence aspect of the study, such as the data collected or the way in which it is interpreted." (Qin, 2016). This is supported by The Sage Encyclopedia of Action Research, which defines positionality as "the stance or positioning of the researcher in relation to the social and political context of the studythe community, the organisation or the participant group." (Coughlan and Brydon-Miller, 2014) Both definitions of positionality emphasise the importance of social context in shaping our perspectives and interactions with the world. They also both recognise that positionality is not fixed but can change over time depending on the situation. In relation to our research workshop, we had not identified our position in designing a workshop for people who were from non-creative backgrounds, and the testing of the session did not provide feedback on this aspect. Looking retrospectively, the workshop elements should have been designed with multiple authors influence, rather than purely Sousanis (2015), who focuses on the benefits of multiple perspectives, and not on first understanding the singular.

Sousanis's failure to discuss or develop the idea of understanding positionality before introducing the need for other people's perspectives is a significant oversight. Sousanis depicts that humans are of the same making and 'standardised' (p. 13). In contradiction with this sweeping statement, it could be instead suggested that Sousanis lacks an acknowledgement and encouragement of positionality. By not discussing positionality in the book, Sousanis (2015) misses an opportunity to help readers understand the importance of this concept and how it applies to design research. As a result, some readers may come away from the book with a limited understanding of how to conduct ethical and inclusive design research. In addition, Sousanis's failure to discuss positionality early on undermines his arguments about the need for other people's perspectives. After all, if we don't understand our positionality, how can we truly understand the views of others?

Conclusion

Where do we go from here?

This paper brings together the understanding of multiple perspectives from the work of Sousanis (2015) and others (Serafini and Gee, 2013; O'Connor and Michaels, 2007) and the concept of workshop design as set out in Fass (2018). The project was to design a workshop which was informed by these readings. the intention underlying this focus was to investigate whether multiple perspectives would be effective in providing reliable, trustworthy data in a workshop setting.

The evidence from the workshop reinforces the importance of incorporating multiple perspectives in all areas of design research. The workshop was conducted with young professionals, demonstrated and used visual and written elements to elicit diverse responses and give different perspectives. We found that these visual and written texts fostered a more holistic understanding of the design topic, which, here, was money. The findings of this research align with the work of Sousanis (2015), who advocates for integrating multiple perspectives to achieve a more nuanced and effective conversation (p.67).

Overall, the workshop design had successful outcomes; the project design planned for participant feedback on the workshop to assess effectiveness. The participants reported engagement with the topic and said that they felt comfortable talking about money and power. The participants felt valued and empowered in the workshop and this allowed the diversity of beliefs surrounding money to emerge in the analysis of the data. The workshop's collaborative working methods also highlighted their effectiveness in bringing together individuals with different backgrounds and expertise, leading to more inclusive and innovative design solutions. Lastly, the participants also reported in the reflection session their behaviour changed when pricing was introduced within the barter exercise, which confirmed our hypothesis that money has power over our behaviour in unpredictable ways.

The project also highlighted the lacuna in Sousanis' work, which does not sufficiently address positionality. This became clear in the context of the project with the realisation that the workshop had been designed from the perspective of designers rather than in order to incorporate the multiple perspectives of the participants. This was a clear limitation; A belief that there is a single, objective perspective, for example, that of the researcher, limits the inclusivity of workshop design and therefore the completeness of the data.

In conclusion, I would claim that multiple perspectives are essential for effective design research. Sousanis quotes Calvino:

Whenever humanity seems condemned to heaviness, I think I should fly like Perseus into a different space. I don't mean escaping into dreams or into the irrational. I mean that I have to change my approach, look at the world from a different logic and with fresh methods of cognition and verification.

Italo Calvino 1993 p.7 in Sousanis, 2015, p. 26

I believe that by adopting an approach that embraces diverse perspectives but also respects positionality, designers can create more meaningful, inclusive, and innovative experiences. Binder, T. and Brandt, E. (2008) 'The Design:Lab as platform in participatory design research', International Journal of CoCreation in Design and the Arts, 4(2), pp. 115-129. doi: https://doi.org/10.1080/15710880802117113.

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- Barter categories (Activity 2 & 3) and price list (Activity 3)
- Barter hidden categories (Activity 4)
- Worksheet responses
- Results of worksheet table

Barter Exercises 3: Item Pricing

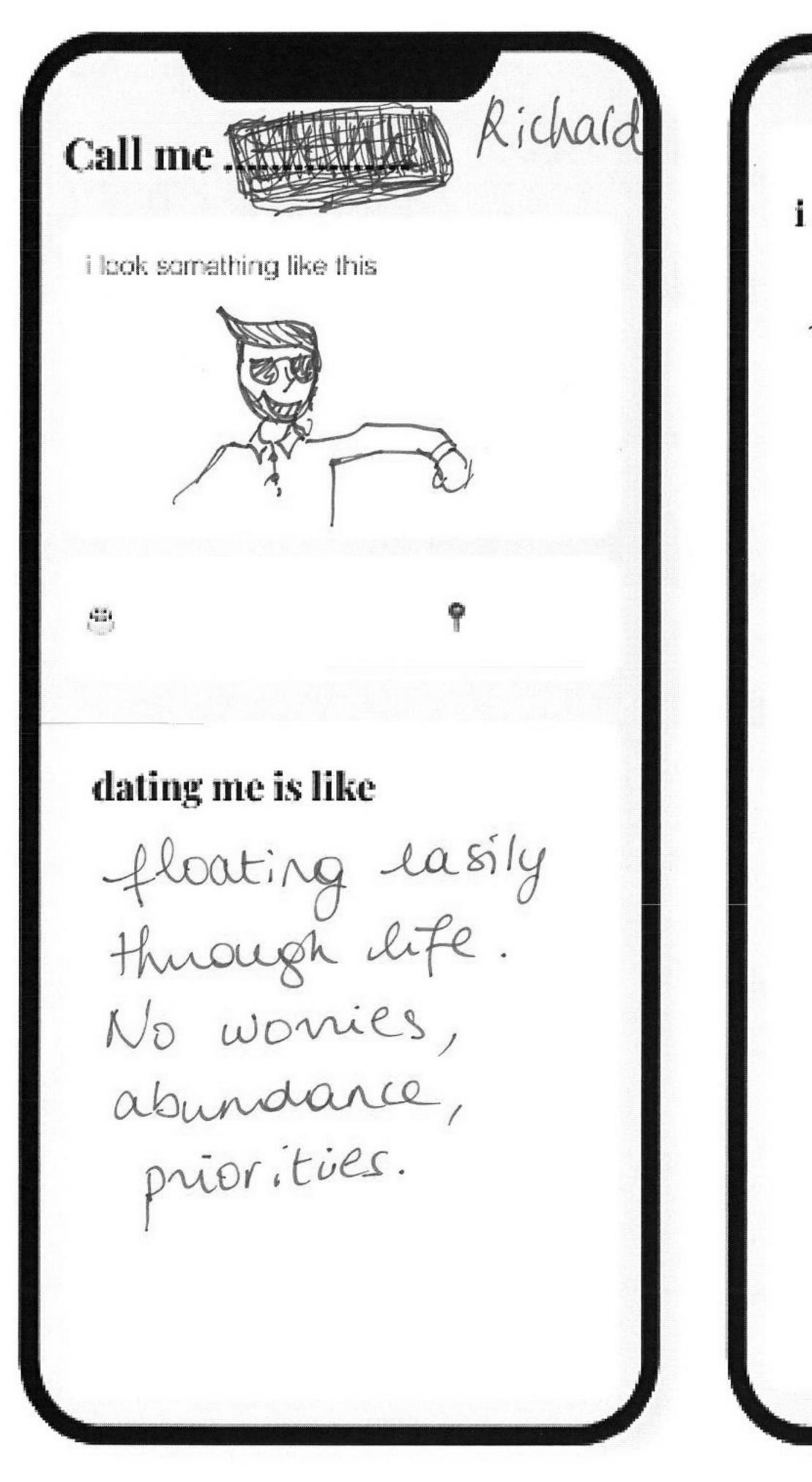
ltem	Price
Water	£10
Energy bar	£7
Green hair tie	£3
Pink hair tie	£12
SPF lip balm	£0.50
Sunglasses	£22
Book	£13
Notebook	£20
Pen	£8
Painkillers	£2
Plasters	£1
Теа	£20
Travelcard	£30
Cotton ball	£31
Cough drop	£41
Umbrella	£43
Mascara	£10
Lipstick	£16
SPF cream	£19
Reading glasses	£2
Heat pad	£6
Headphones	£1
Resistance band	£12
Watch	£50
Body spray	£7
Condom	£6
Hand sanister	£4
Coffee	£46
Powerbank	£48
Coffee keep cup	£23
Mints	£22
Toothbrush	£11
Tote bag	£33

Exercise 2 & 3 Categories:

- Health
- Weather
- Beauty
- Activity
- Sport
- Study
- Travel
- Entertainment

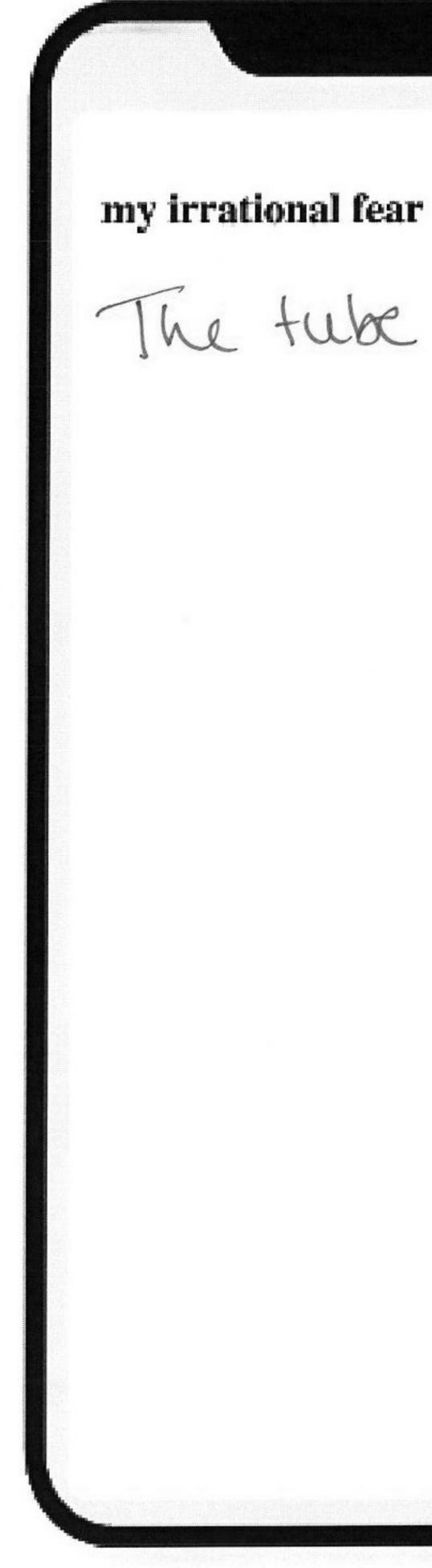
Barter Exercise 4: Hidden Categories

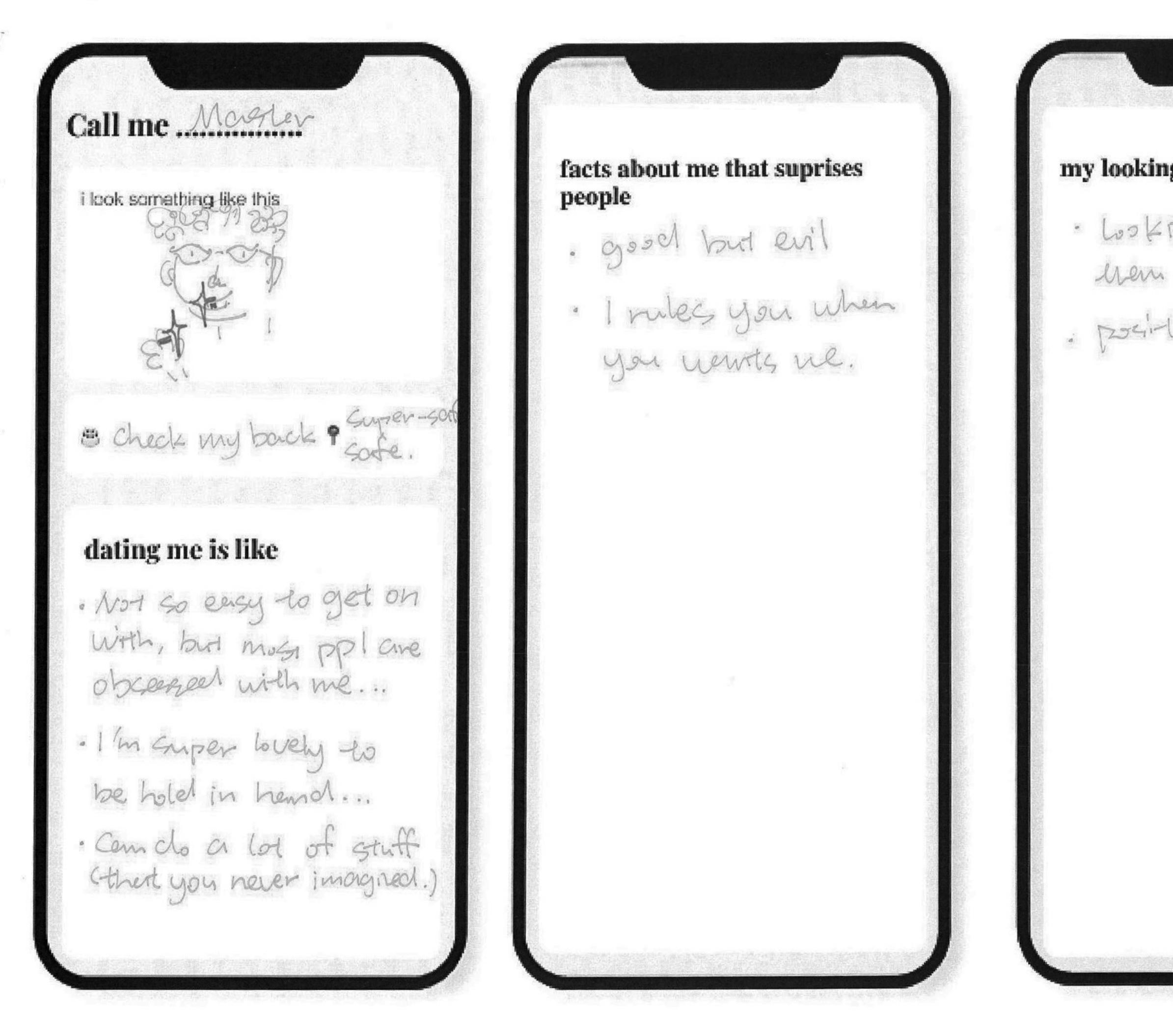
CYLINDRICAL ITEMS - water - spf lipbalm - pen - umbrella - mascara - lipstick - body spray - hand sanitiser - keep cup	RED/ORANGE - water - energy bar - notebook - (painkillers) - tea - cough drop - spf - body spray	BRANDED - energy bar - spf lipbalm - sunglasses - tea - travel card - bandaid - mascara - spf - headphones - body spray - hand sanitizer - power bank - mints
FOOD/DRINK - water - energy bar - tea - coffee - mints	RECTANGULAR ITEMS - energy bar - book - notebook - painkillers - tea - travel card - bandaid - cough drops - heating pad - condom - power bank - mints - tote bag	BLUE/BLACK - sunglasses - spf lipbalm - travel card - umbrella - headphones - resistance bands - mints - toothbrush - totebag
ONE-USE ITEMS - water - energy bar - painkillers - cotton ball - tea - bandaid - coughdrop - condom - coffee - mint		

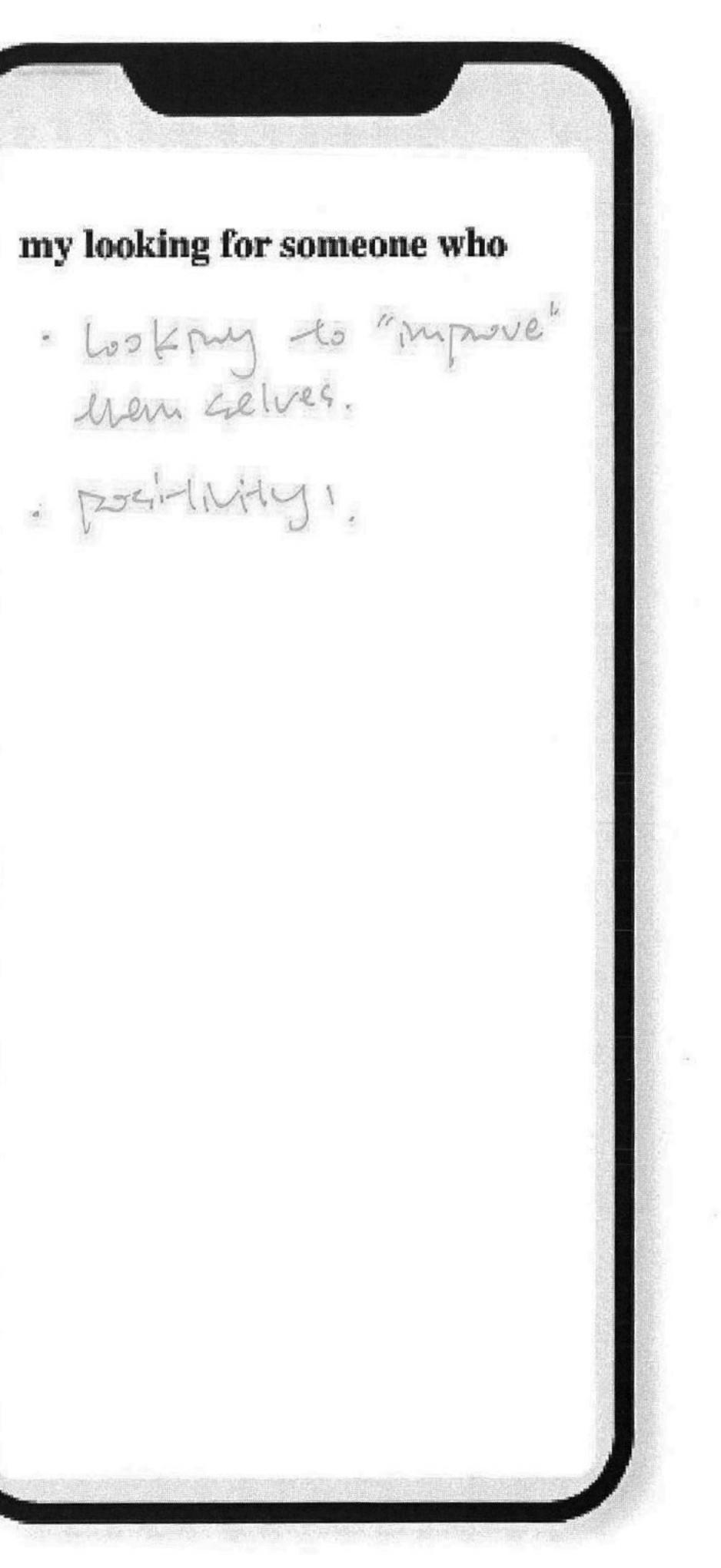


i am regualr at

Travelling, Playing Ternis, Shopping.









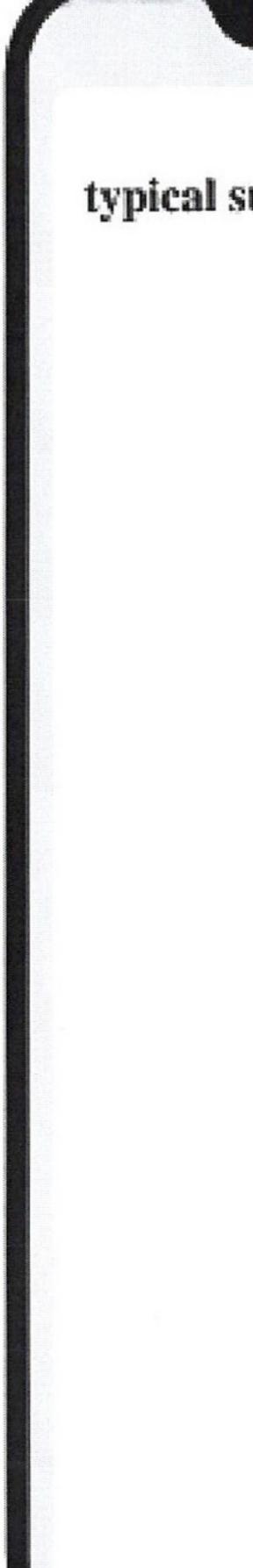
Use the north of myself and in teturn we will have a fur time together. Hope my privalue can make you happy and you Con contribute your emotional value.

all i ask is that you

On provide emotional value. give us a meaningful

experience.

Something not able to neight or negate.



typical sunday with me

Call me Winstm...

i look something like this

suits a fie (very formal)



· privately owner

dating me is like

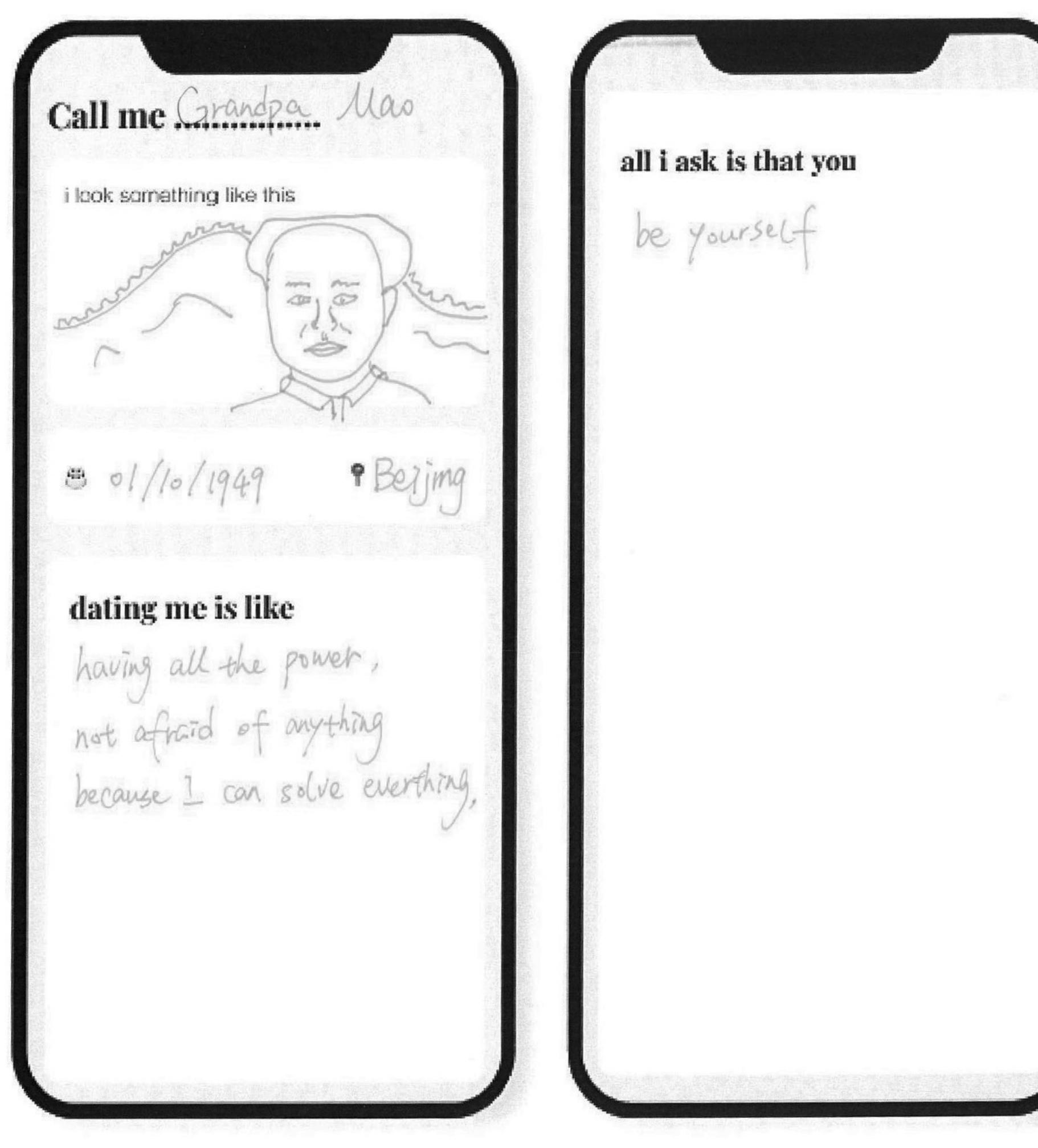
123

dont have to warry about where N what - wherever you like to go - whateve you want to do

my dream job

the most influencial, impactful and powerful person in the world.

i am looking for someone who - materialistic - passive (submissiv - listents to others gainions/ thoughs easier.



all i ask is that you

be yourself

travel, watch movie, read books, have tood.

typical sunday with me

Living your ideal life.

Call me

i look something like this



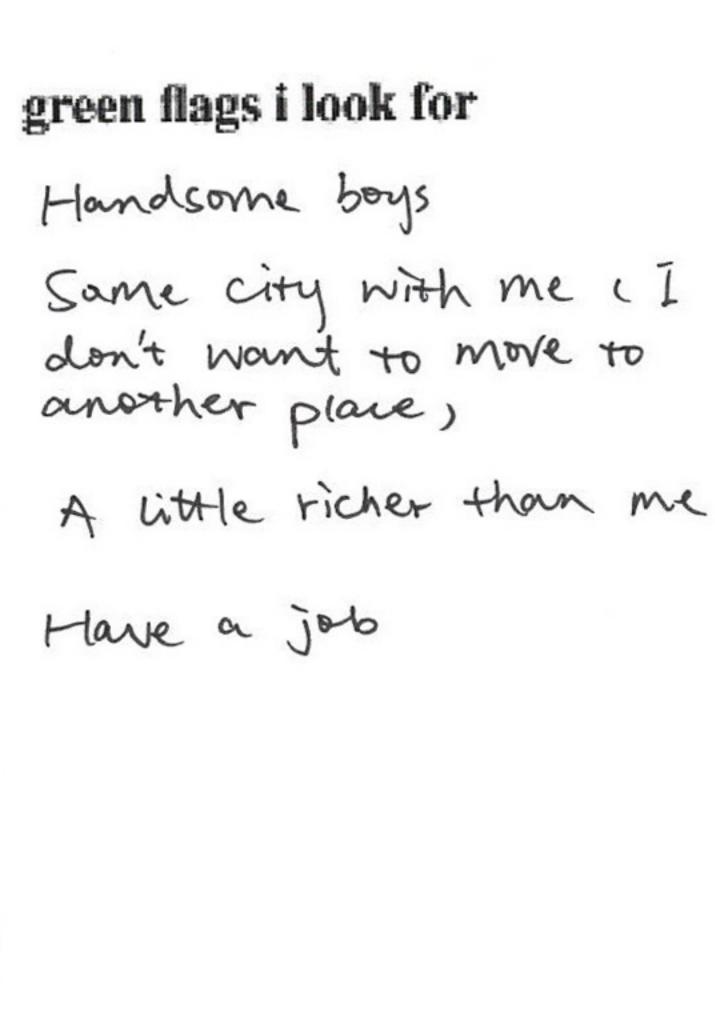
17/12/1999 PLondon

dating me is like

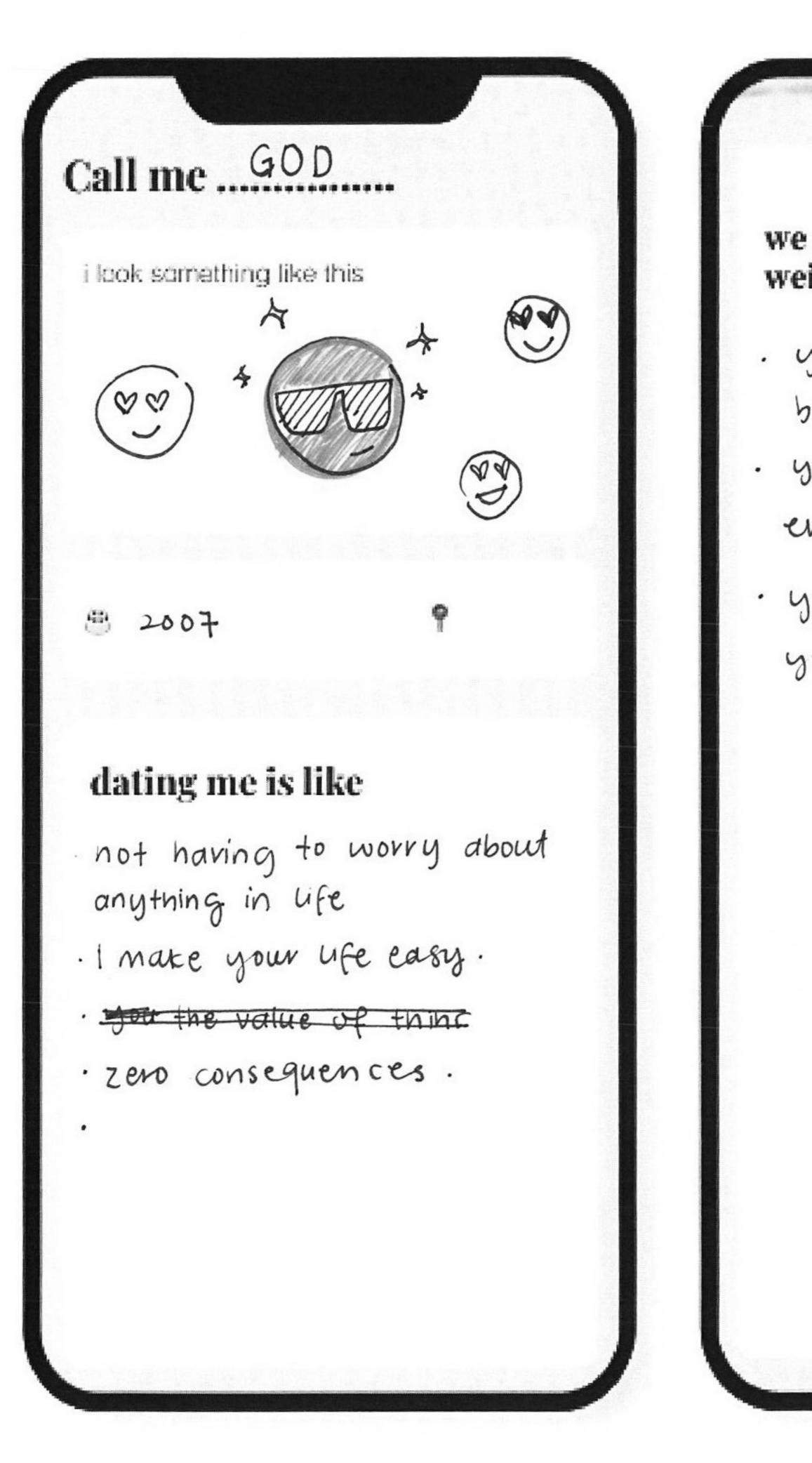
Going out to have some activities like watching movies, goingto p winterwonderland etc. I don't mind spend money in AA. but I'll have a better impression if the boy offer to pay more.

facts about me that surprises people

Money is noth everything but it is important



Same city with me I don't want to move to



we are the same type of weird if

- . you think you're the
 - bes7
- · you have power over
 - evenyone else
- · you can get anything you want



typical sunday with me

Responses from Workshop Activity One: Money's Dating Profile								
No	Name	Picture	Birthday	Location	Question 1	Question 2	Question 3	
1	Richard	Male, sunglasses, shirt, slick hair			Dating me is like floating easily through life. no worries, abundance, priorities	I am regular at travelling, playing tennis, shopping	My irrational fear is the tube	
2	Master	Male, curly hair, gold tooth, gold jewellery	Check my bank	Super-safe safe	Dating me is like not so easy to get on with, but most people are obsessed with me i'm super lovely to hold in hand can do a lot of stuff (that you never imagined)	Facts about me that surprises people good but evil i rule you when you want me	i'm looking for someone who is looking to 'improve' themselves has positivity	
3		dollar sign	5/6/2008	Royal palace	Dating me is like use the worth of myself and in return we will have a fun time together. Hope my value can make you happy and you can contribute your emotional value	All i ask is that you can provide emotional value to give us a meaningful experience something not able to weigh or measure	A typical sunday with me	
	Winston	a tie (with description "a suit and tie, very formal")		privately owned island	Dating me is like don't have to worry about where and what wherever you like to go whatever you want to do	My dream job the most influential, impactful and powerful person in the world	I am looking for someone who is materialistic passive or submissive listens to others opinions or thoughts easily	
;	Grandpa Mao	Emperor Mao	01/10/1949	Beijing	Dating me is like having all the power, not afraid of anything because i can solve everything	All i ask is that you be yourself	A typical sunday with me living your ideal life travel watch movie read books have tools	
i		Female, young, fringe and long hair, smiling	17/12/1999	London	Dating me is like Going out to have some activities like watching movies. going to winter wonderland etc. I don't mind spending money in AA but i'll have a better impression if the person offers to pay more.	Facts about me that surprises people money is not everything but is most important	Green flags i look for handsome same sity as me as rich as me has a job	
,	God	ungendered, sunglasses, smirk	2007		Dating me is like not having to worry about anything in life i make your life easy zero consequences	We are the same type of weird if you think you're the best you have power over everyone else you can get anything you want	A typical sunday with me	