

ISTANBUL TECHNICAL UNIVERSITY ★ GRADUATE SCHOOL

**RETHINKING CULTURAL PROBES THROUGH METAPHORS:
THE CASE OF WORKING FROM HOME**



M.Sc. THESIS

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Department of Industrial Design

Industrial Design Programme

MAY 2023

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**CULTURAL PROBES YÖNTEMİNİ METAFORLARLA YENİDEN
DÜŞÜNMEK: EVDEN ÇALIŞMA ÖRNEĞİ**

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To my home,



FOREWORD

“Everything in life is a metaphor.”

Haruki Murakami, Kafka on the Shore

I am thankful for this journey that helped me appreciate the metaphors that make our understanding. Writing a thesis seems to be a solitary practice, but in my experience, it was only possible once all the stars were aligned. I wish to express my gratitude to those who made that possible.

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May 2023

Rengin GÜREL
(Interior Architect, Researcher)



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RETHINKING CULTURAL PROBES THROUGH METAPHORS: THE CASE OF WORKING FROM HOME

SUMMARY

User-centered design focuses on users and their experiences to guide, inform, and inspire the design process. Toward a better understanding of the user experience, designers and design researchers rely on user data obtained by a variety of user research methods. Some of these data collection methods such as cultural probes and semi-structured interviews are suitable to collect narratives from users that reveal their thoughts, wishes, and aspirations. Although design research has focused on the potential of user narratives to direct the design process, the metaphors in these narratives have not been fully explored.

Metaphors are present in many aspects of daily life, including language, thought, and behavior. And, they are not merely literary devices that help to understand one thing in terms of another. Metaphors form the way people think and experience the world. And they are the devices that help to convey one's experience and encourage creative thinking.

The literature review shows that the relationship between design and metaphors is explored by many researchers. Previous studies on metaphors and design predominantly focuses on how designers use metaphors as an instrument for creativity and inspiration. Designers employ metaphors to come up with unique answers to design problems. However, design literature mostly explores metaphors created by designers, and studies that pay attention to how metaphorical narratives of users can communicate their experience and inspire the design process remain limited. From this perspective, this thesis aims to explore how metaphors in user narratives can stimulate designers to generate design concepts.

Design research utilizes various innovative methods to inform and inspire the design process such as workshops, collage, card sorting, and cognitive mapping. Among these, the cultural probes approach has gained prominence and is frequently employed to collect qualitative data based on the self-documentation of the participants. Maps, postcards, and other items are gathered together in probe kits, which are designed to elicit creative responses. The cultural probes method enables users to express themselves freely because the researcher and participants are not in the same environment. Therefore, this strategy helps to comprehend the user experience, including the aspects of people's life that are not immediately accessible to designers. As a result, the cultural probes method promotes the creative design of products and systems.

One of the experiences that designers and design researchers need to comprehend in order to develop better products and systems is the working practices of users. Working from home practice, though it dates back to the late 1990s, has recently been popularized as a result of the COVID-19 pandemic. Since the practice of working from home has become more common in developing countries due to poor traffic conditions, the spread of computers, and easy access to mobile phones, it has

been discussed in the literature that working from home may become a norm in the future. For this reason, making sense of this practice from the perspective of the user is important in terms of its contribution to the design literature and discipline.

In this thesis, the cultural probes approach is employed to gather user data in the form of literal and metaphorical text to comprehend users' experiences working from home. The study focuses on how metaphorical speech can reveal details about the user experience, and influence the ideation stage of the design process. The research relies on semi-structured interviews along with the cultural probes method to collect data from designers. Then, the study utilizes the qualitative content analysis method to analyze the collected data from users, and designers.

The empirical study conducted in the scope of this thesis includes three phases, which are explained in the sixth chapter. In phase I, user research was conducted to investigate the users' working from home experience. The user research aimed to gather user narratives with literal and metaphorical contents with the cultural probes method. In phase II, the collected user data were communicated to the participating designers along with a design brief. Lastly, in phase III designers responded to the presented user data, and how they utilized them in their design ideation process. The study relies on qualitative content analysis to analyze two sets of data: user narratives collected with cultural probes, and designer responses that contain their reflections on the material, and initial design ideas.

The findings of the study are presented on three main topics: findings on the users' experience working from home, followed methodology, and use of metaphorical narratives in design ideation. The findings of the research suggest that narratives with metaphorical contents can inspire designers during their ideation process, and encourage designers to empathize with users. In terms of generated design ideas, the study indicates that metaphorical narratives lead to more thorough design ideas, which are more detailed and holistic compared to the ideas triggered by only the literal user narratives. Moreover, metaphorical user tales served as the inspiration for design concepts that heavily focus on the concept of interaction.

According to the study carried out for this thesis, user accounts with metaphorical expressions may be vital tools for understanding user experience and serving as an inspiration for design practice.

CULTURAL PROBES YÖNTEMİNİ METAFORLARLA YENİDEN DÜŞÜNMEK: EVDEN ÇALIŞMA ÖRNEĞİ

ÖZET

Kullanıcı merkezli tasarım, tasarım sürecini yönlendirmesi, bilgilendirmesi ve ilham vermesi için kullanıcılara ve onların deneyimlerine odaklanır. Tasarımcılar ve tasarım araştırmacıları kullanıcı deneyimini daha iyi anlamak için çeşitli kullanıcı araştırma yöntemleriyle elde edilen kullanıcı verilerine güvenirlir. Yarı yapılandırılmış görüşmeler ve cultural probes gibi veri toplama yöntemleri, kullanıcıların düşüncelerini, isteklerini ve arzularını ortaya koyan anlatılar toplamak için uygundur. Kullanıcı anlatılarının tasarım sürecini bilgilendirme potansiyeli tasarım araştırmalarının odak noktalarından biri olsa da, bu anlatılardaki metaforlar literatürde henüz derinlemesine keşfedilmemiştir.

Metaforlar dil, düşünce ve davranış da dahil olmak üzere günlük hayatın pek çok alanında mevcuttur. Onlar yalnızca bir şeyi başka bir şey açısından anlamaya yardımcı olan edebi araçlar değildir. Aynı zamanda metaforlar, insanların düşünme ve dünyayı deneyimleme biçimlerini oluştururken bu deneyimlerin aktarılması ve yaratıcı düşünceyi tetiklemesi durumunda yardımcı görevi görürler.

Literatür taraması, tasarım ve metaforlar arasındaki ilişkinin birçok araştırmacı tarafından incelendiğini göstermektedir. Metaforlar ve tasarım üzerine mevcut araştırmalar, ağırlıklı olarak tasarımcıların metaforları yaratıcılık ve ilham için bir araç olarak nasıl kullandıklarına odaklanmaktadır. Tasarımcılar, tasarım sorunlarına özgün yanıtlar bulmak için metaforları kullanmaktadır. Ancak tasarım literatürü çoğunlukla tasarımcılar tarafından yaratılan metaforları incelemektedir. Bu noktada kullanıcıların metaforik anlatılarının kullanıcı deneyimini aktarma ve tasarım sürecine nasıl ilham verme potansiyeline odaklanan çalışmalar sınırlı kalmaktadır. Bu perspektiften hareketle bu tez, kullanıcı anlatılarındaki metaforların tasarımcılara tasarım konseptleri üretme konusunda nasıl ilham verebileceğini araştırmayı amaçlamaktadır.

Tasarım araştırmaları, tasarım sürecini bilgilendirmek ve ona ilham vermek için atölye çalışmaları, kolaj, kart sıralama ve bilişsel haritalama gibi çeşitli yenilikçi yöntemler kullanır. Bunlar arasında nitel veri toplamak amacıyla kullanılan cultural probes yaklaşımı önem kazanmıştır. Bu yöntem, katılımcıların kendi kendilerini belgelemelerine imkan sunmaktadır. Haritalar, kartpostallar ve diğer öğeler, yaratıcı yanıtlar ortaya çıkarmak üzere tasarlanan probe kitlerinde bir araya getirilir. Cultural probes yöntemi, araştırmacı müdahalesinin bulunmadığı bir ortam sunduğundan, katılımcılar kendilerini özgürce ifade edebilmektedir. Dolayısıyla bu strateji, insanların hayatının tasarımcılar tarafından hemen erişilemeyen yönlerini de araştırmaya dahil ederek kullanıcı deneyiminin anlaşılmasına yardımcı olur. Sonuç olarak, cultural probes yöntemi ürün ve sistemlerin yaratıcı tasarımını teşvik eder.

Tasarımcıların ve tasarım araştırmacılarının daha iyi ürünler ve sistemler geliştirmek için anlamaları gereken kullanıcı deneyimlerinden biri de kullanıcıların çalışma pratikleridir. Evden çalışma pratiğinin geçmişi 1990'ların sonlarına kadar uzanmakla birlikte bu pratik, COVID-19 pandemisinin bir sonucu olarak yakın zamanda popülerleşmiştir. Gelişmekte olan ülkelerde kötü trafik koşulları, bilgisayarların yaygınlaşması ve cep telefonlarına kolay erişim gibi nedenlerle evden çalışma pratiği daha yaygın hale geldiğinden, literatürde evden çalışmanın gelecekte bir norm haline

gelebileceği tartışılmıştır. Bu nedenle bu pratiğin kullanıcı perspektifinden bakış ile anlamlandırılması, tasarım literatürüne ve disiplinine katkısı açısından önemlidir. Bu tezde, kullanıcıların evden çalışma deneyimlerini anlamak amacıyla literal ve metaforik metin halindeki kullanıcı verilerini toplamak üzere cultural probes yöntemi kullanılmıştır. Çalışma, metaforik ifadenin kullanıcı deneyimiyle ilgili ayrıntıları nasıl ortaya çıkarabileceğine ve tasarım sürecinin fikir aşamasını nasıl etkileyebileceğine odaklanmaktadır. Araştırma, kullanıcılardan veri toplamak için cultural probes yöntemine ek olarak yarı yapılandırılmış görüşmeleri de içermektedir. Kullanıcılardan ve tasarımcılardan elde edilen verileri analiz etmek için nitel içerik analizi yöntemini kullanılmıştır.

Bu tez dokuz ana bölümden oluşmaktadır: giriş, tasarım araştırmalarında metaforlar, cultural probes, evden çalışma, metodoloji, araştırma, verilerin analizi, bulguların yorumlanması ve sonuç. Giriş bölümünde çalışmanın amacı ve kapsamı, ardından çalışmanın önemi, tezin metodolojisi ve yapısı ile araştırma soruları yer almaktadır. İkinci bölümde, tasarım araştırmalarında metafor kullanımına ilişkin literatür incelenmiştir. Bu bölümde metaforlar ve tasarım arasındaki ilişki açıklanmıştır. Üçüncü bölümde, cultural probes yönteminin arka planı ve tasarım disiplindeki kullanımına ilişkin akademik araştırmalara yer verilmiştir. Dördüncü bölümde, evden çalışma kavramı tanımlanıp bu pratiğe ilişkin güncel araştırmalar sunulmuştur. Genel olarak, bu üç bölüm bu tezin literatür taramasını oluşturmaktadır.

Araştırmanın metodolojisi beşinci bölümde tanıtılmaktadır. Bu bölümde veri toplama yöntemleri ve analiz yöntemi açıklanmaktadır. Bu çalışmada kullanıcılardan veri toplamak için cultural probes yöntemi, tasarımcılardan veri toplamak için ise yarı yapılandırılmış görüşmeler kullanılmıştır. Toplanan veriler nitel içerik analizi yöntemi ile analiz edilmiştir.

Bu tez kapsamında yürütülen ampirik çalışma, altıncı bölümde açıklanan üç aşamadan oluşmaktadır. Birinci aşamada, kullanıcıların evden çalışma deneyimlerini araştırmak için bir kullanıcı araştırması yapılmıştır. Kullanıcı araştırması, cultural probes yöntemiyle literal ve metaforik içerikli kullanıcı anlatılarını toplamayı amaçlamıştır. Aşama II'de, toplanan kullanıcı verileri bir tasarım föyü eşliğinde katılımcı tasarımcılara iletilmiştir. Son olarak, üçüncü aşamada tasarımcılar kendilerine sunulan kullanıcı verilerine ve bunları tasarım fikirleri oluşturma süreçlerinde nasıl kullandıklarına yanıt vermişlerdir. Çalışma, iki veri setini analiz etmek için nitel içerik analizinden yararlanmıştır. Bu iki veri seti: cultural probes yöntemiyle toplanan kullanıcı anlatıları ve tasarımcıların kendilerine sunulan materyal üzerindeki yansımaları ve ürettikleri tasarım fikirlerini içeren yanıtlardır. Yedinci bölüm, hem kullanıcıların tamamlanmış probe kitlerinin analizini hem de tasarımcıların verilen probe kiti çıktıları belgesine ilişkin düşüncelerini içermektedir. Her bir veri setini incelemek için nitel içerik analizi kullanılmıştır. Bu bölümde hem kullanıcı anlatılarının hem de tasarımcı yanıtlarının nitel içerik analizinin sonuçları açıklanmaktadır.

Sekizinci bölüm bulguların yorumlanmasını kapsamaktadır. Çalışmanın bulguları üç ana başlık altında sunulmuştur: kullanıcıların evden çalışma deneyimlerine ilişkin bulgular, takip edilen metodoloji ve tasarım fikirlerinde metaforik anlatıların kullanımı. Araştırma bulguları, metaforik içerikli anlatıların tasarımcılara fikir üretme sürecinde esin kaynağı olabileceği ve tasarımcıları kullanıcılarla empati kurmaya teşvik edebileceğini göstermektedir. Üretilen tasarım fikirleri açısından çalışma, metaforik anlatıların, yalnızca literal kullanıcı anlatılarının tetiklediği fikirlere kıyasla daha ayrıntılı ve bütünsel tasarım fikirlerine yol açtığını

göstermektedir. Dahası, metaforik kullanıcı hikayeleri, etkileşim kavramına yoğun bir şekilde odaklanan tasarım konseptleri için esin kaynağı olmuştur. Sonuç olarak araştırma, metaforik ifadeler içeren kullanıcı anlatılarının ve bunların tasarım fikirlerini teşvik etme ve kullanıcı deneyimini aktarma potansiyellerinin keşfedilmeye değer olduğunu göstermektedir. Metaforlar insanların dünyevi deneyimlerine ilişkin anlayışlarını şekillendirdiğinden, kullanıcıların deneyimlerini anlamlandırmak ve tasarım sürecine ilham vermek için kritik araçlar haline gelebilir.





1. INTRODUCTION

This chapter of the thesis encompasses the aim, scope, and importance of the study. Then the methodology, structure of the thesis and research questions are presented.

1.1 Aim and Scope of the Study

In this study, the cultural probes method is used to collect user data in the form of literal and metaphorical text to understand users' working from home experience. From a user-centered design perspective, the study focuses on how metaphorical speech can give information about the user experience and stimulate the initial ideation phase of the design process. The study encompasses the collection of user narratives with literal and metaphorical content through cultural probe kits and presenting it to designers along with a design brief to understand how metaphorical user data can inspire the design ideation process. In the scope of this research, findings, and interpretations on the working from home experience, the methodology, and design ideation with metaphorical narratives are presented.

1.2 Significance of the Study

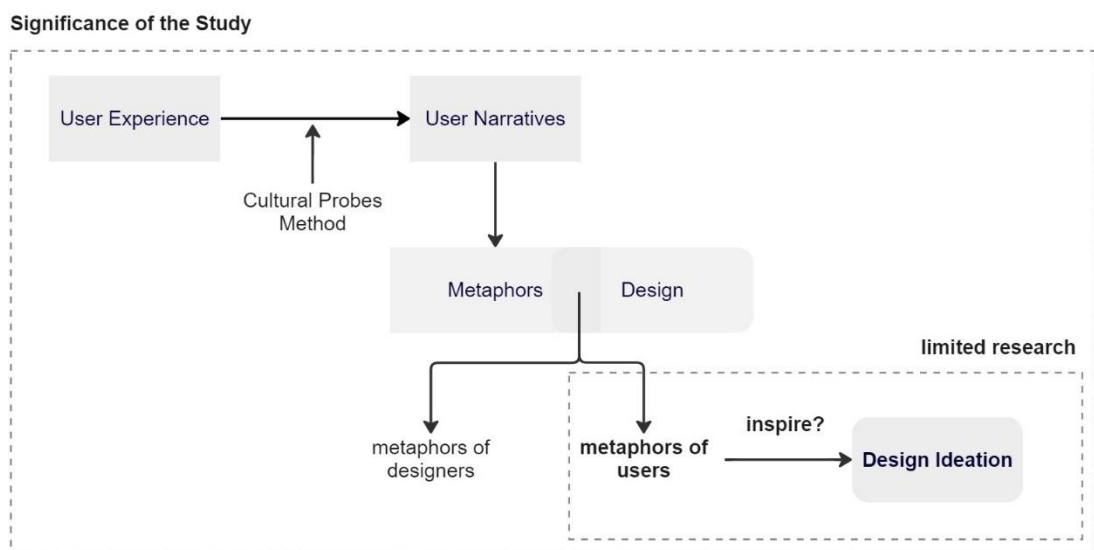


Figure 1.1: Diagram explaining the significance of the study.

Users and their experiences are the main emphasis of user-centered design, which uses them to inform, inspire, and lead the design process. Designers and design researchers rely on several types of user data collected by a range of user research approaches to gain a deeper knowledge of the user experience. Although user narratives' ability to guide the design process has been a subject of design study, little is known about how metaphorical user narratives might convey the user experience and motivate the design process (Figure 1.1).

Since metaphors frame the way we think, act, and experience our world (Lakoff & Johnson, 1980), it is unsurprising to notice that they are a part of design thinking and practice. Metaphors are widely used in design practice, and there are studies that investigate the function metaphors play in design studio (Casakin, 2012), design problem solving (Casakin, 2007), and across the whole design process (Casakin, 2006). However, previous studies on the relation between metaphors and design mainly focus on the metaphors produced and used by designers. Although some researchers focus on metaphors uttered by users (Şen & Çelikoğlu, 2019) this topic remains as understudied. This thesis argues that metaphors in user narratives carry a rich potential to enlighten researchers and designers within a particular focus on cultural probes.

1.3 Methodology and Structure of the Thesis

This thesis has nine main chapters: introduction, metaphors in design research, cultural probes, working from home, methodology, the study, analysis of data, interpretation of findings, and conclusion. Introduction chapter includes the aim and scope of the study, followed by the importance of the study, the methodology and structure of the thesis, and the research questions.

In the second chapter, the literature on the use of metaphors in design research is investigated. Then, the third chapter includes the academic research on the cultural probes method including its background and use in the design discipline. In the fourth chapter, the notion of working from home is defined, and the current research on this practice is presented. Overall, these three sections compose the relevant literature review of this thesis.

The methodology of the research is introduced in the fifth chapter. This chapter explains the methods of data collection and the method of analysis. In the sixth

chapter, the study is explained in three phases. Phase I entails the user research process. This chapter includes sections on participating users, preparation and sharing of the cultural probe kit, and outcomes of the user research. Phase II explains how the collected user data were communicated to the participating designers. In three sections, the participant group of designers, the preparation of the document of probe kit outcomes and the design brief, and transferring the document of probe kit outcomes to designers are explained. Finally, Phase III entails how designers responded to the presented user data, and how they utilized them in their design ideation process. These phases of the study are summed up in Figure 1.2.

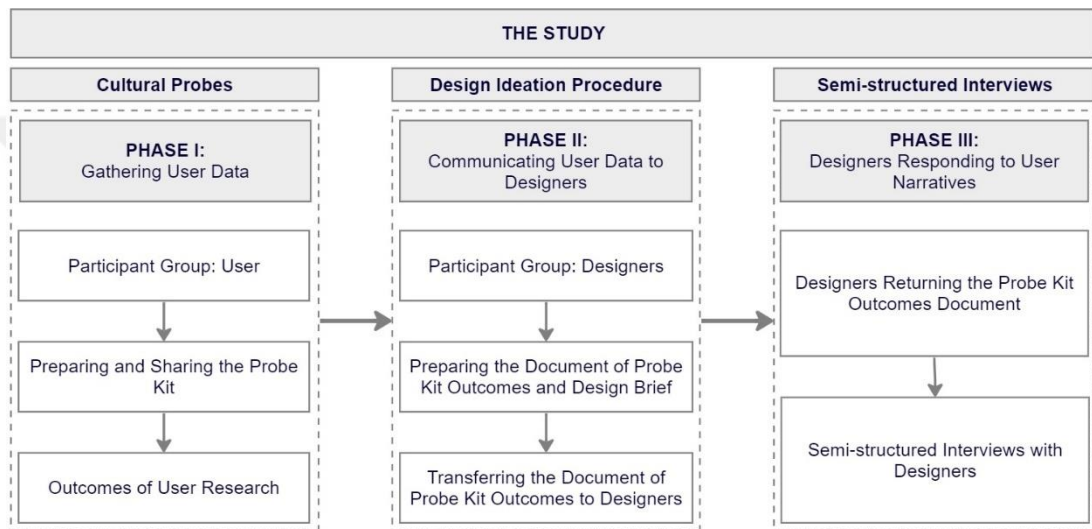


Figure 1.2: Diagram explaining the study's phases.

The seventh chapter includes both the analysis of the completed probe kits of users and the designers' reflections on the given document of probe kit outcomes.

Qualitative content analysis was utilized to investigate each set of data. This chapter explains the outcomes of the qualitative content analysis of both the user narratives and the designer responses.

The eighth chapter encompasses the interpretations of the findings. In order, interpretations of the user experience of working from home, methodology, and metaphorical narratives in design ideation are explained. And lastly, the ninth chapter encompasses the conclusion of this thesis.

1.4 Research Question

This study has been carried out around the main research question “How can metaphors in user narratives inspire designers?”. Sub-questions of the thesis are as follows:

- How can the cultural probes method be utilized to collect metaphorical data from users?
- What kind of metaphorical data could be collected from users through cultural probes to stimulate idea generation?
- How can data on how metaphorical user data inspire the design idea generation process be collected from designers?
- How do metaphorical user data inspire designers?

2. METAPHORS IN DESIGN RESEARCH

Jaynes (2000) argues the basic foundation of our language is metaphor, and it is not a “mere extra trick of language”. He uses the term metaphor in the broadest sense, which is when a word for one thing is used to describe another because there is some sort of resemblance between the two or between their relationships to other things (p. 48). There are several well-established theories related to metaphor put out through the years, such as interaction theory (Black, 1962), conceptual blending theory (Fauconnier & Turner, 2002), and conceptual metaphor theory (Lakoff & Johnson, 1980). These theories each place distinct emphasis on various facets of metaphor, such as its cognitive mechanics, linguistic characteristics, social setting, and cultural importance. Among these theories, this thesis focuses on the conceptual metaphor theory proposed by Lakoff and Johnson (1980).

In their book, *Metaphors We Live By*, Lakoff and Johnson (1980) argue that metaphor extends to everyday life not only as in language, also as in our thinking and acting. They argue that our use of metaphors in common speech can help us grasp the metaphorical nature of the ideas that form our behavior and actions, and they give the example of the metaphor *time is money*:

“You're wasting my time.

This gadget will save you hours.

I don't have the time to give you.

How do you spend your time these days?” (Lakoff & Johnson, 1980, pp. 7–8)

They highlight that to envision time, we make use of our daily interactions with money, finite resources, and valuable possessions, thus *time is money*, *time is a limited resource*, and *time is a limited commodity* are metaphorical concepts (Lakoff & Johnson, 1980, pp. 8–9).

According to Lakoff and Johnson, a metaphor consists of two main elements: source and target. In the construction of the metaphor, a mapping takes place between the source and the target, and certain characteristics of the source are transferred to the target (1980). In short, metaphors are conceptual domain-to-domain mappings. And

these maps are not generated randomly; rather, they are “grounded in the body and in everyday experience and knowledge” (Lakoff, 1993, p. 245). If these elements are analyzed in the metaphor *time is money*, the concept of *money* is the "source" and the concept of *time* is the "target". The fact that the "source" of the metaphor, *money*, is a "limited resource" and a "valuable commodity" is mapped onto the metaphor's "target" which is *time*. The basic structure of the metaphor with the example of *time is money* is shown in Figure 2.1.



Figure 2.1: Basic structure of a metaphor.

The word “metaphor” originates from the combination of two Greek words: “meta” which means "over, across" and “herein” which implies "to carry, bear" (Online Etymology Dictionary, n.d.). Therefore “metaphor” means “to carry over” or “carry across”. Cila (2013) points out that, the Turkish equivalent of the word “metaphor” is “mecaz”, which is borrowed from the Arabic “macāz,” which appropriately implies a “bridge,” as in a metaphor that unites two disparate things in terms of their meaning. She asserts that this leads to fresh discoveries, the emergence of deeper layers of meaning, the downplaying of some features of each, and the illumination of others. As Snodgrass & Coyne (1992) explain “metaphor is the transference of one concept to another”(p. 62). To sum up, the qualities are “carried over” from the *source* to the *target* when people construct metaphors, and they “build bridges” between the *source* and *target*.

Metaphors are important because they are fundamental to how humans think and perceive the world, and they shape humans’ understanding of reality and enable abstract reasoning (Lakoff & Johnson, 1980). Furthermore, “metaphor in this broader definition is a figure of thoughts rather than just a figure of speech” (Snodgrass & Coyne, 1992, p. 62). Therefore, metaphors have been an important research topic for many scholars and disciplines. Various researchers studied metaphors in relation to science (O’Connor, 2019; Veit & Ney, 2021), education (Mayer, 1993; Petrie &

Oshlag, 1993; Sticht, 1993), arts (Cupchik, 2003; Veit & Ney, 2021), architecture (Casakin, 2006, 2007, 2012), and design (Blackwell, 2006; Çelikoğlu Merzalı, 2019; Cila, 2013; Cila, Borsboom, et al., 2014; Cila, Hekkert, et al., 2014a, 2014b; Coyne & Snodgrass, 1995; Cupchik, 2003; Hekkert & Cila, 2015; Hekkert & Leder, 2008; Krippendorff & Butter, 2008; Lockton et al., 2019; Sen & Merzali Celikoglu, 2019; Snodgrass & Coyne, 1992). Metaphors are even present in ancient technical texts, and some of them survived for centuries (Humar, 2021). Moreover, models that help us understand the world are indeed metaphorical. Snodgrass & Coyne (1992) suggest that “models are metaphors”, and metaphors communicate meaning through the use of a hermeneutical interpretation. Even the scientific models function as metaphors by translating ideas about the structural links of a scientific theory to the connections that constitute a referent (As cited in Snodgrass & Coyne, 1992, more details on the equation of scientific concepts, models, and metaphors, especially those that illustrate it using formal model theory, can be found in the following sources: Black, 1962; Hesse, 1980; Hutten, n.d.). Further research suggests that metaphors play a critical role in scientific models (Bailer-Jones, 2002; Hallyn, 2000; Lakoff & Johnson, 1980; A. (Ed.) Ortony, 1993; Wartofsky, 1979).

Metaphors are not only an important part of the way we speak, but they also help us to make sense of our worlds. Since “the way we think, what we experience, and what we do every day is very much a matter of metaphor” (Lakoff & Johnson, 1980), design activity is no different. Metaphors may explain intricate concepts in a "compact" and "vivid" way that would be challenging to do using literal language (Gibbs, 1994 as cited in Cupchik, 2003, p. 15). Metaphors can also encourage novel views, and creativity. To give an illustration, Veit and Ney (2021) argue that focusing on metaphors in science and comparing them to metaphors in art brings up fresh perspectives on “creativity in science”. Their study suggests that metaphors can play a significant role in creative research on the level of science and can provide a variety of aesthetic benefits, including the ability to make the unexpected appear more familiar. Thus, metaphors may support novel scientific viewpoints (2021). And these characteristics can logically reduce the psychological resistance towards novel views (O’Connor, 2019 as cited in Veit & Ney, 2021).

Various research investigates the relation between metaphors and design (Cupchik, 2003; Hekkert, 2006; Krippendorff & Butter, 2008; Van Rompay, 2008).

Nevertheless, most of the existing work about metaphors in design research focuses on how designers use metaphors in their designs.

Using metaphors in design practice can assist problem solving in design, foster creative thinking, and lead to innovative products. Casakin (2006) argues that reasoning metaphorically has a big impact on how creative ideas are developed when dealing with problems. He further asserts that metaphors support the structure of thought and show circumstances from novel perspectives in the field of design. His study examines the intricacy and value of using metaphors at various stages of the design process, including defining design concepts, framing design circumstances, creating goals and constraints, mapping out structural linkages, and applying them to the design challenge (Casakin, 2006).

Casakin, (2007) argues that metaphors contrast unknown design problems with known situations, and support designers in their ideation process. His research asserts that the use of metaphors in design practice can promote creative thinking and innovative products as opposed to “reusing known design schemas and familiar solutions” (Casakin, 2007). Similarly, in their study, Lockton et al., (2019) introduced a series of workshops with a method to utilize metaphors in idea generation. They use metaphors to generate ideas and reframe problems in design (2019). This supports the argument that metaphors foster creativity and the discovery of design ideas.

Earlier studies point out the utilizing metaphor in design processes to identify, frame and answer design problems (Casakin, 2012; Schön, 1979) and some researchers argue, with help from metaphors, designers can translate concepts to product properties (Hekkert, 2006; Van Rompay, 2008). Furthermore, researchers investigated the use of metaphor, exclusively in product design. In her work, Cila (2013) explores “product metaphors”, how designers use metaphors to give meaning and appreciation to the end product. Further research encompasses the generation of product metaphors (Cila, 2013), aesthetic choices for product metaphors (Cila, Borsboom, et al., 2014), source selection for product metaphors (Cila, Hekkert, et al., 2014b), and how designers make use of metaphors (Hekkert & Cila, 2015), and the role of designers’ expertise and intention when using product metaphors (Cila, Hekkert, et al., 2014a).

In her work, Cila explains that in a product metaphor, the target is created in such a manner that it reminds users of the source in some way. She gives the example in

Figure 2.2. Here the user is asked to perceive and use an umbrella (the target) as a Samurai sword (the source). She explains the difference between a linguistic metaphor and a product metaphor. A linguistic metaphor only involves the connection of two terms, and there is a mapping between source and target that creates a “conceptual correspondence”. On the other hand, a product metaphor includes two different types of mappings from source to target: a conceptual mapping similar to that found in linguistic metaphors to create the metaphorical link between source and target, and a physical mapping to make this relationship evident in physical form, as seen in Figure 2.2 (2013, p. 12).



Figure 2.2: Samurai umbrella designed by Materious derived from Cila, (2013).

Although there is much research on metaphors in the design field, most of this research mainly focuses on metaphors generated by designers. Metaphors are an important part of how designers think and design, but they are also a part of how users make sense of their world and communicate their experiences. Research exploring the metaphors in users’ speeches and narratives is limited. Though one such study (Sen & Merzali Celikoglu, 2019) examines metaphors in user narratives and highlights the significance of metaphoric information derived from users as a source of design inspiration. They find that participant designers prefer to concentrate on user expressions with rich metaphorical content and use these metaphorical contents to generate initial design concepts by offering deeper insights into users' understanding and a change in designers' perspective towards more open, holistic approaches to design ideas (Sen & Merzali Celikoglu, 2019). Similarly, Çelikoğlu Merzalı’s research proposes a method that utilizes expressive narratives to inspire design, especially in the conceptualization process leading to design ideas by

encouraging designers to identify metaphors. Her study shows that while interpreting the metaphors the designers try to find alternative representations referring to the same concepts by creating generative metaphors, which open up new ways of looking at the situation by defining new connections (Çelikoğlu Merzalı, 2019). Since user-centered design pays attention to the user's needs, problems, and experiences, user research becomes a crucial step of the design process to understand the user experience. Since metaphors make up an immense part of users' speech, it is important to study them with their metaphors. Closely examining the metaphors uttered by the user can inform the design process to design better products, spaces, services, and experiences.



3. CULTURAL PROBES

Throughout its history, the purpose and practice of design discipline changed, and an approach that focuses on the user experience emerged. User-centered design approach focuses on the user and the user experience, so various research methods are used to make sense of the user experience and understand it in the context of design. Human centered design methods consist of creative methods that are such as design workshops, collage, card sorting, cognitive mapping, velcro modeling, visual studies, camera studies and document annotations (Hanington, 2003, p. 13). Many of these methods and tools are being used in design research such as design probes which Mattelmäki, (2006) adapted from cultural probes (Gaver et al., 1999) and contextmapping (Visser et al., 2005). Cultural probes method (Gaver, Dunne, & Pacenti, 1999) has become prominent to perform user research in the field of design and has been commonly used to “gather qualitative data based on participatory user self-documentation” (Thoring et al., 2014). As Gaver et al. assert, probe kits are collections of maps, postcards, and other materials that are “designed to provoke inspirational responses” (Figure 3.1). Similar to astronomic or surgical probes, designers leave these probe kits with participants and wait for these kits to return (1999, p. 22).



Figure 3.1: A cultural probe package (Gaver et al., 1999, p. 22).

According to (Gaver et al., 1999) the cultural probes method serves a few key purposes. First, the probes are components of an experimental design approach that

focuses on responsiveness. Secondly, this method addresses a typical problem that arises while making projects for unfamiliar groups. The cultural probes method helps designers to understand the local cultures so that new design suggestions wouldn't come about as irrelevant or conceited. Also, the method aims to find a balance between potential users and designers so that the user group does not unnecessarily impose their wants and wishes on designers' ideas. At the same time, the method allows designers to guide the groups' discussion toward novel concepts by not letting designers take over the conversation (1999).

The fact that designers create the materials specifically for that group of participants and their setting makes the cultural probes method powerful (Gaver et al., 1999). Therefore, each probe kit should be designed for the participants and setting of each research (Figure 3.2).

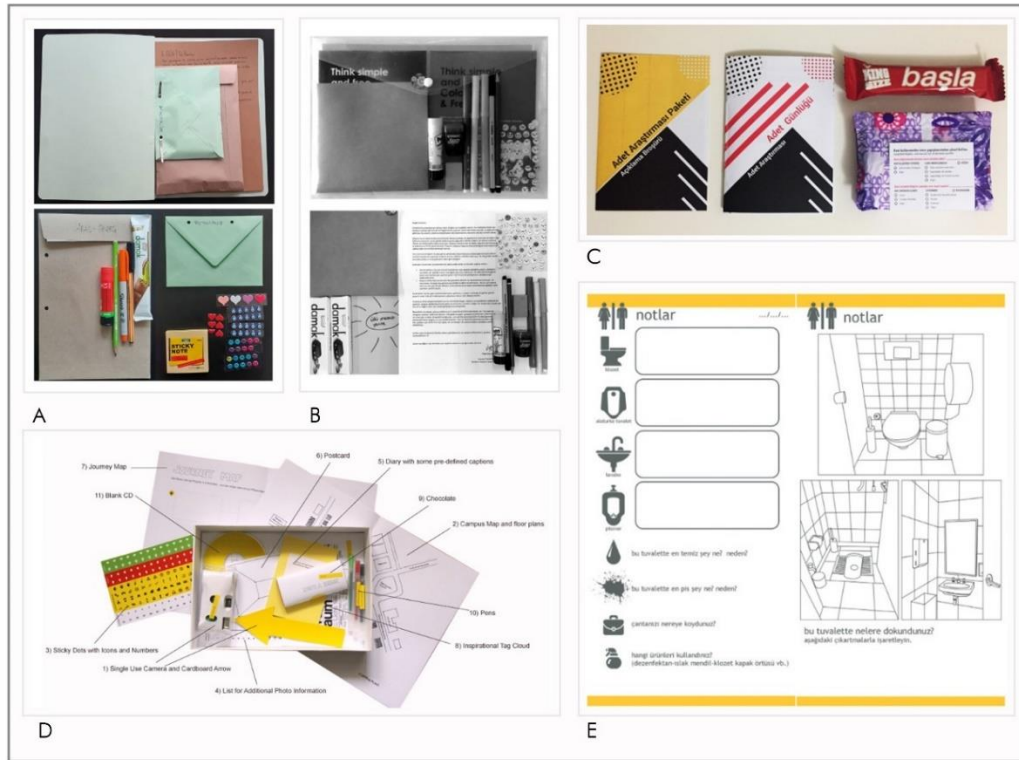


Figure 3.2: Probe kit examples from different research. (A: Gürel & Merzalı Çelikoğlu, 2022; B: Celikoglu et al., 2017; C: Efiltili, 2018; D: Thoring et al., 2014; E: Sözbir Köylü, 2015)

As a result of their literature review, Thoring et al. (2013) classify the items that are included in cultural probe kits and the functions of these items. Cultural probe kits may include items such as wrapping, diaries, maps, frameworks, photo/video documentation, and many other tools (Table 3.1). When designing a cultural probe

kit, designers choose these items according to their functions such as documentary, visionary, inspirational, motivational, practical, and instructive.

Table 3.1: Classification of cultural probes items (Thoring et al., 2013).

Probe Kit Item	Explanation
The Wrapping	The item that stores all of the components of the cultural probes kit. This might be any kind of packing, including a bag or a box.
Diary	The diary is one of the most common items of a cultural probes kit. It is a notebook that the participants fill up with their thoughts or observations. It can be completely blank or filled with instructions or templates for participants.
Maps	Maps show the layout of a particular area, such as a building's floor plan or a geographical map. In these maps, participants can either record their observations or activities or they might add imaginative ideas.
Frameworks	Frameworks are formed for various objectives, which the participants fill out with their thoughts or observations. Examples of frameworks include Venn diagrams, bulls-eye maps, process maps, Gantt charts, user journey maps, mind maps, concept maps, and many others.
Photo/Video Documentation	Visual documentation is a common practice in cultural probes. Probe kits may include tools and instructions to take photos or videos for participants to document places and situations.
3d Tools and Materials	These materials include cardboard, clay, Lego bricks, and other three 3-dimensional items offered to participants for them to build things.
Random Probes	In the probe kit, researchers may include random items for participants to use without instructing them on how or when to use them to reveal unexpected situations.
Surveys and Questionnaires	Even though cultural probes tend to focus on rich, qualitative data, it is feasible to include brief surveys and questionnaires in the probe kits.
Gifts	Probe kits may include certain items to motivate participants to complete the tasks and thank them, such as a bar of chocolate.
Supporting Materials	The aim of having supporting materials is to make the participants' work more pleasant, such as writing instruments like pens, and things that improve the probe kit's "atmosphere" or "story".

In this sense, cultural probes (Gaver et al., 1999) became a prominent method in conducting user research in design. Variations of cultural probes have been developed, including domestic probes, empathy probes, value probes, and technology probes (Mattelmäki, 2006). The probes were thought to be helpful in circumstances when observing individuals in their homes would have been unpleasant (Carter & Mankoff, 2005; Çelikoğlu, 2015; DeLongis et al., 1992). Since the researcher and

participants are not in the same setting, the cultural probes approach allows users to respond freely (Celikoglu et al., 2017). By encouraging and inspiring the design of provocative products and systems, this approach uncovers parts of people's lives that are not readily available to designers.



4. WORKING FROM HOME

The way we do our jobs is closely related to the time we live in and the technologies we use. Since the late 1990s, technological and connectivity advancements have made remote working methods outside of the office more widely adopted (Bloom et al., 2015; Tagliaro & Ciaramella, 2016), although it has been described in a variety of ways over time including telework, telecommuting (Allen et al., 2015; Darouei & Pluut, 2021), working remotely, smart working (Bolisani et al., 2020; Brynjolfsson et al., 2020; Gottlieb et al., 2021), long-distance working, remote working from home, and working outside of the office (Federici et al., 2022). Researchers discuss the potential issues that come with working from home (more widely remote working) such as the state of the work-life balance and how working from home can help that, as well as its advantages including flexible work (Bloom et al., 2015). They also consider how working from home can increase production and productivity. This makes “working from home” a multi-faceted experience that is closely related to the user.

Work from home practices had long been established prior to the COVID-19 pandemic, but are only moderately prevalent (Federici et al., 2022). Moreover, Bolisani et al. (2020) suggest the number of smart workers was substantially lower before the COVID-19 pandemic. But, many businesses, institutions of higher learning, and government agencies across the world encouraged their staff to begin working from home (Brynjolfsson et al., 2020; Gottlieb et al., 2021). Deole et al. (2023) report that many businesses now permit their workers to conduct business remotely. According to them, employees are increasingly working from home, but until recently, many businesses were hesitant to provide this choice. However, the COVID-19 pandemic, which started in 2020, has radically altered the trend (2023). For example, in reaction to the COVID-19 pandemic, most IT businesses worldwide mandated that their workers operate from home in March 2020, turning the tide on the scale of experience and perception of working from home (Smite et al., 2023). In this context, Turkey is no exception.

The coronavirus (COVID-19) pandemic, which began in 2019 and continued to progress rapidly in 2020, was declared to be a “pandemic” by World Health Organization in March 2020 (Sevin et al., 2020, p. 8). The COVID-19 outbreak was first observed in December 2019 in Wuhan, China, and spread rapidly to countries in the Far East, Asia, Europe, and Africa, causing many cases and deaths (Demir et al., 2015, p. 81). To reduce the spread and transmission of the virus, several measures have been taken by nation states, such as travel restrictions, closure of borders, curfew, quarantine application, transition to distance education by interrupting education, adopting the model of working from home or flexible working (Serinikli, 2021).

In mid-March 2020, in response to rising illnesses and deaths, many European governments called for social distancing measures to limit the spread of the virus (Deole et al., 2023). Akca et al. (2020) assert, working from home has been implemented at various levels around the world to reduce the risk of transmission of COVID-19. Working from home is also deemed a working method to protect employees, their families, and public health under the social distancing rule (2020, p. 75). In several Western countries, about half of the workforce was operating entirely from home by late spring 2020 (Bonacini et al., 2021; Brynjolfsson et al., 2020; Deole et al., 2023). In this context, Turkey applied similar measures. According to research conducted within 15 days of the announcement of the first COVID-19 case in Turkey, nearly half of the respondents stated all employees were working from home at that time (Deloitte, 2020).

It is being discussed that working from home could be the future of operations (Bloom et al., 2015; Bolisani et al., 2020). Studies suggest that for developing nations, the worsening of traffic conditions, and the spread of computers, and mobile phone access caused the working from home practice to grow more widespread (Bloom et al., 2015). Based on the available data, Bolisani et al. (2020) assert that if working at home continues to be the norm after the pandemic, particularly for administrative staff, this will have a huge influence on how working activities are organized in businesses and public organizations. Additionally, Smite et al. (2023) suggest that it is reasonable to anticipate that working from home practice will persist as many information workers express their inclinations to continue working from home. After almost two years, the pandemic has permanently altered workplace values despite sporadic attempts to restore society (2023).

5. METHODOLOGY

The aim of this study, which followed a user-centered design approach, was to collect qualitative data that would reveal an understanding of how metaphors uttered by users can become an inspiration to designers. This study qualitatively explores user narratives with literal and metaphorical content as a source of inspiration for designers. The research focuses on metaphorical user narratives, based on an interpretive approach, to see how they influence the design process. The first phase of the study is the user data collection. The subject chosen to collect user data on is the experience of working from home.

Working from home has been defined in several different ways over the years (Allen et al., 2015; Bolisani et al., 2020; Brynjolfsson et al., 2020; Darouei & Pluut, 2021; Federici et al., 2022; Gottlieb et al., 2021). In the case of this paper, working from home refers to the literal term of working while being at home due to the COVID-19 pandemic, and this paper focuses on the home as the environment of working and the experience of working from home, literally.

The focus of this research was to collect user data on a defined, multi-faceted and timely user experience rather than studying the working from home experience itself. Therefore, during the study participants were not asked to specify their time or duration of working from home. Instead, they were asked to share both past experiences from the times of quarantine, and current experiences since some of these participants continued to do their jobs from home. Although studying the working from home experience itself is not in the scope of this thesis, it presents the findings on how users experienced working from home. In addition, it illustrates how designers interpret the collected user data from design ideas.

Working from home was chosen as a topic to be explored from the user's perspective, since it is a relevant and current everyday practice. Also working from home practice includes many aspects that could be improved from a design perspective such as the environment (home) and used products (computer, domestic products etc.). Furthermore, working from home includes both work and leisure

practices that can be enhanced by design. To collect user narratives on many facades of the working from home experience, cultural probe kits were prepared and shared on Instagram with the users who volunteered to participate.

The study relies on the cultural probes method to gather information from users, and semi-structured interviews to collect data from designers. And, this thesis relies on qualitative content analysis as the method to analyze and interpret data. Methodology of the thesis is presented in Figure 5.1.

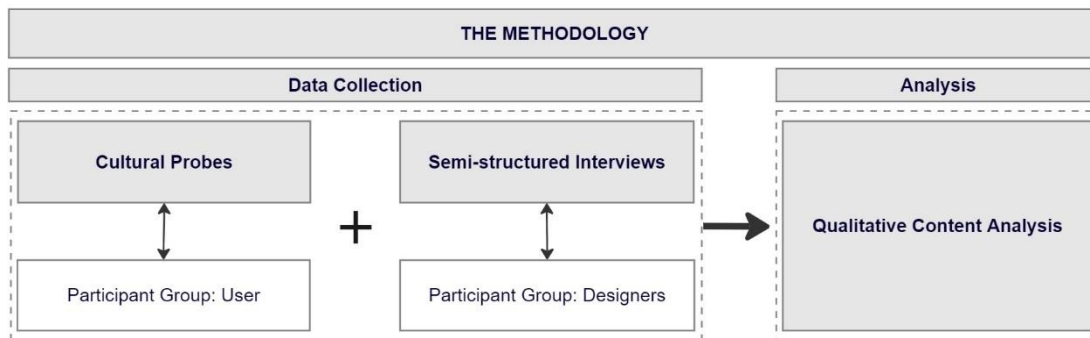


Figure 5.1: Methodology of the thesis.

5.1 Methods of Data Collection

Since the aim of this research is to understand how designers interpret literal and metaphorical user data, determining the method of data collection method was critical. To include both literal and metaphorical information, the collected data was chosen to be in the form of text. To acquire user data that gives in-depth information about the user experience and that is concise so designers can absorb it effectively, the user data collection method chosen was cultural probes.

After the user data were collected with cultural probes, users' responses to probe kit tasks were formatted into a document and given to designers along with a design brief. Designers were asked to think of design ideas that would improve working from home experience. Then semi-structured interviews were conducted to understand how designers were inspired by the given user data, with a focus on metaphorical narratives. In the following sections the method used for collecting user data (i.e., cultural probes) and gathering information on how designers ideated with the given user narratives (i.e., semi-structured interviews).

5.1.1 Collecting data from users: cultural probes

Coined by Gaver et al. (1999), cultural probes method involves participants documenting themselves via images and narratives. Within the scope of this study, the participants were prompted to think about their way of working from home including their environment, the things they use and the times they spend on working and leisure. And users were asked to document their lives with written and visual records they made.

Throughout the study, cultural probes method was utilized as the user data collection method, and this method was conducted virtually in the social media platform Instagram like Hamarat, (2021) and Gökaltay, (2022)'s works. Collected user narratives were formatted into a probe kit and given to designers along with a design brief that asks them to utilize the narratives for design inspiration. Designers reflected on the user narratives and came up with design ideas using text, sketches, and images. And, designer reflections on the probe kits are collected, and semi-structured interviews are conducted to make sense of the designer reflections and get an in-depth understanding of their ideation process using the user narratives. Finally, designer reflections were examined with qualitative content analysis to uncover how designers employ user narratives for design ideas.

Within this study, cultural probes were chosen as the user data collecting technique to gather user data that provides comprehensive and digestible information about the user experience. Participants were asked to consider their home-based work environment, the tools they use, and the amount of time they spend working and having fun as part of this study. Additionally, users were invited to produce textual and visual records of their life as a form of documentation.

5.1.2 Collecting data from designers: semi-structured interviews

Interviewing, as a common research method, can be utilized in both qualitative (semi-structured and unstructured interview) and quantitative research (structured interview). However, this method differs in its execution in qualitative versus quantitative approaches. Bryman and Bell (2016) distinguish the way researchers interview while conducting qualitative versus quantitative research as following: in quantitative research, the methodology is highly structured to increase validity and reliability, and the interview is conducted to address a specific set of research questions that the researcher has outlined. They compare this to qualitative

interviewing which is much less regimented and frequently involves more open-ended questions, additionally, it gives more freedom to change and add research concepts once the inquiry has started.

When conducting qualitative interviews there are certain methods to execute it efficiently and acquire meaningful information from the participants. For example, Bryman and Bell (2016, p. 240) suggests it is commonly advised to go off topic when conducting qualitative interviews, conversely in quantitative research, deviating from the interview schedule is frequently prohibited since it violates the established study plan and might affect validity and reliability.

Bryman and Bell (2016, p. 240) suggest unlike structured interviews, which are often meant to produce particular responses that can be swiftly transcribed and processed, qualitative interviews focus on getting rich, nuanced responses from the interviewee. They also point out that qualitative interviewing tends to be flexible, responding to the path that respondents take the interview in and maybe modifying the research's emphasis in response to problems that come up during the interview. Structured interviews, on the other hand, are frequently rigid due to the requirement to standardize interactions with all interviewees.

The method of semi- and unstructured interviews is intended to reveal how interviewees themselves perceive and make sense of problems and experiences.

(Bryman & Bell, 2019, p. 242). Merriam and Tisdell (2016, p. 110) summarize the qualities of semi-structured interviews as:

- A combination of more and less structured interview questions are included in the interview guide.
- All queries are flexible.
- Typically, certain information is sought of all replies.
- Most of the interviews are directed by a list of questions or topics to be addressed.
- There is no set phrasing or order

Semi-structured interviews are distinguished from other qualitative interviews by the fact that they are built around a pre-written interview guide (Newing et al., 2011, p. 101).

Newing et al. (2011) assert that the topics included in the interview guide may be open-ended questions or they may just be generic subjects. This gives the

interviewee a lot of freedom in choosing how to respond even if the researcher has a list of questions or very precise themes to discuss (Bryman & Bell, 2019, p. 241). Furthermore, the phrasing and arrangement of the points are not always predetermined, and the first response to each question can be followed up with comments, suggestions, and new inquiries to foster dialogue (Newing et al., 2011, p. 101). Similar language is used from interviewee to interviewee, and all the questions on the list are often asked (Bryman & Bell, 2019, pp. 241–242).

The goal of semi- and unstructured interviews is to elicit the respondents' own interpretations and explanations of occurrences (Bryman & Bell, 2019, p. 242). Schensul and LeCompte (2013, pp. 171–172) describes two key uses for semi structured data collecting methods are as follows:

- To define and supply the variables and objects needed to design survey questions for an ethnographic survey, with an importance on providing both the highest variation and redundancy.
- To identify themes (factors and variables that are common to many instances) and patterns (individual responders or events) within cases in a qualitative data set.

This study focuses on the latter. In the scope of this study, qualitative and semi-structured interviews were conducted to uncover how designers made sense of the narratives in the probe kits and developed design ideas with them.

5.2 Method of Analysis: Qualitative Content Analysis

Krippendorff (2004) argues that data are always the products of specified techniques and are always aimed toward certain purposes, in contrast to the frequent assumption that data reflects observations or readings. He further argues that data in content analysis are the results of processes chosen by the researcher to answer particular questions about phenomena in the context of provided texts. As a result, data are created rather than discovered, and researchers are required to explain how they created their data (Krippendorff, 2004, p. 81).

Qualitative content analysis is defined as “a method for systematically describing the meaning of qualitative material”, and this is accomplished by categorizing content as instances of a coding frame's categories. (Schreier, 2012, p. 1). Krippendorff (2004) summarizes the steps of qualitative content analysis as:

“Unitizing: relying on unitizing schemes.

Sampling: relying on sampling plans.

Recording/ coding: relying on coding instructions.

Reducing data to manageable representations: relying on established statistical techniques or other methods for summarizing or simplifying data.

Abductively inferring contextual phenomena: relying on analytical constructs or models of the chosen context as warrants.

Narrating the answer to the research question: relying on narrative traditions or discursive conventions established within the discipline of the content analyst.” (2004, p. 83)

Schreier, (2012) notes that qualitative content analysis only assists researchers in describing their data in the specific ways that they define. With qualitative analysis, researchers are not permitted to fully explain the significance of the data in every single detail. This trait highlights a key distinction between this method and other qualitative data analysis methodologies, particularly those that have their roots in a hermeneutic tradition. With each stage, these techniques lead the researchers along a spiraling path where they need to consider additional factors and develop an ever-more thorough understanding of their content (2012).

6. THE STUDY

The purpose of this research is to investigate the ways metaphorical expressions of users can inspire design with a qualitative approach. To investigate this, a dataset that includes both metaphorical and literal expressions and sheds light on the user experience was needed. In light of this, user research was conducted on the working from home experience in the first phase of the study, and user narratives are gathered through cultural probes. Then the collected narratives are analyzed through the qualitative content analysis method. The second phase includes a procedure with the participant designers in which they receive a design brief and a set of completed probe kits filled with user data. Designers are asked to read the user data and utilize it to develop design ideas. Finally, semi-structured interviews are conducted with the participant designers. The interviews aim to understand how designers get stimulated by the probe kit data. Phases of the study are summed up in Figure 6.1.

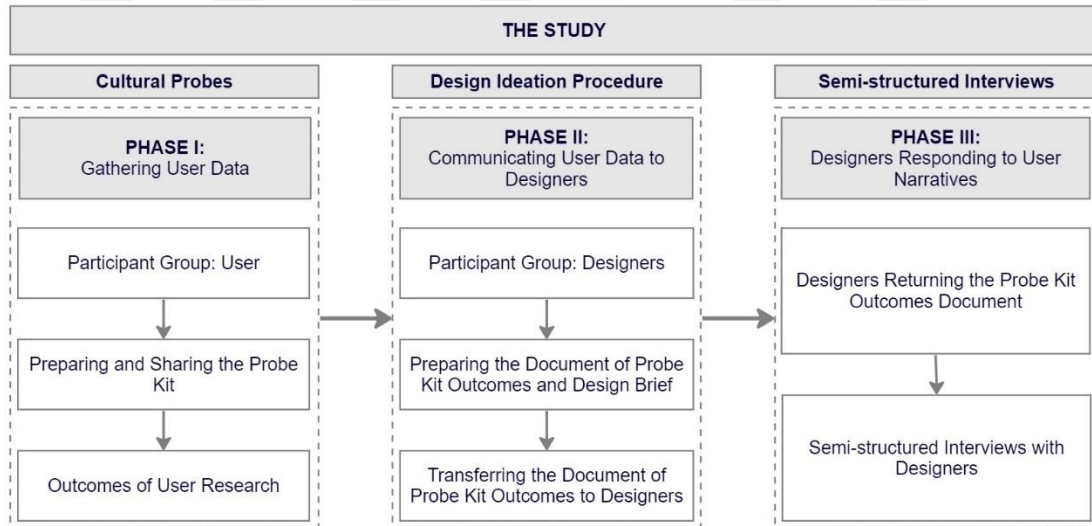


Figure 6.1: The structure of the study.

6.1 Phase I: Gathering User Data

To collect user narratives about their experience of working from home a probe kit is designed to include various tasks. This probe kit was designed to be shared online with the participant users via Instagram.

6.1.1 Participant group I: Users

The only prerequisite for users to participate in this study was that they worked remotely at some point. Throughout the research, users were encouraged to report their prior and present working-from-home experiences. Since this study used Instagram as its online platform for conducting cultural probes, the participants needed to be familiar with the platform Instagram and its user interface.

27 people initially participated in the study, but only 12 participants continued and finished all the tasks. The participants' ages ranged from 23 to 53, with an average of 28, and there were 23 women and 4 men. All of them are university graduates, and twelve participants are currently pursuing graduate degrees. The participants work in various professions, including design, architecture, education, engineering, and medicine. It is relevant to note that all the participant users in this research have occupations in sectors that are relatively compatible with working from home (Dingel & Neiman, 2020) including education, information technology and design.

6.1.2 Preparing and sharing the probe kit

This study was conducted virtually on the social media site Instagram. Digitally implementing cultural probes is a recent approach. In Hamarat (2021)'s master's dissertation, probe kits were the first to be used on Instagram. Moreover, Gökaltay (2022) employed cultural probes in the same medium and approach. She suggests that this approach is appropriate for use on Instagram to benefit from the platform's familiarity factor and reach more respondents. The COVID-19 pandemic, similar to Hamarat (2021) and Gökaltay (2022) influenced the decision to perform this study online. This stage of the study is summarized in Figure 6.2.

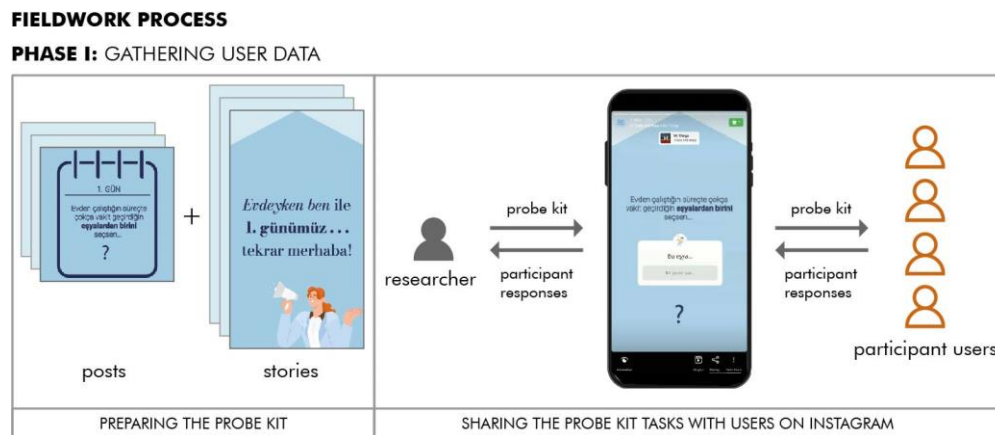


Figure 6.2: Preparing the probe kit and sharing it with users.

Before making the probe kits, Instagram was investigated to learn how users may engage with it. Users can respond to daily stories provided by other accounts, according to observations. Additionally, the platform provides "stickers" that may be used in these daily stories to allow users to share songs and reply in text with emojis. They can communicate by using text, GIFs, emojis, and pictures. Moreover, Instagram allows users to reply to shared stories, pinned highlights and messages via direct messaging. Participants could interact with the tasks in many ways in this digital environment. Daily stories, highlights, and posts were prepared as visuals and shared through the platform.

Tasks that were shared through Instagram stories and posts formed the probe kit. The probe kits' primary goal was to make sense of the working from home experience; hence questions were created to capture both the concrete and abstract elements of the experience. The following are the categories for the probe tasks: object, environment, work, and leisure (Table 6.1). Tasks that aim to collect literal and metaphorical data were prepared for each task category. To elicit more detailed responses from the participants, questions were open-ended. Even though some of the assignments required images, most of the tasks were completed by writing.

Table 6.1: Task categories.

Type	Category	Task	Day	Task Content
(None)	(None)	TD1	Trial Day	If you were to have a "house party" today...
Physical	Object	OL1 (Object, Literal)	Day 1	● What song would it start with that reflects your home? Why did you choose this song?
		OM1 (Object, Metaphorical)	Day 1	If you were to choose one of the objects you used the most while working from home...
		OL2 (Object, Literal)	Day 2	● What did you do with this object at home?
		OM2 (Object, Metaphorical)	Day 2	If you were to choose one of the objects you used the most while working from home...
	Environment	EL1 (Environment, Literal)	Day 3	● If this object could speak, what would it tell me about you? Why?

Table 6.1 (cont.): Task categories.

Type	Category	Task	Day	Task Content
Physical	Environment	EM1 (Environment, Metaphorical)	Day 3	Which product did you enjoy the most while working from home? Why?
		EL2 (Environment, Literal)	Day 4	If this product was a living creature, what would it be like? Why?
		EM2 (Environment, Metaphorical)	Day 4	While working from home, where was the spot you spent the most time in? Why?
Conceptual	Work	WL1 (Work, Literal)	Day 5	If this spot was a person, how would you describe them to me? Why?
		WM1 (Work, Metaphorical)	Day 5	Where is your favorite place in your home, and could you send me a photo? Why do you think this is your favorite place?
		WL2 (Work, Literal)	Day 6	Think of your working from home experience... - Which is a moment that is a must? - Could you please revive that moment or memory and take a picture of it? - Could you describe what happens there?
		WM2 (Work, Metaphorical)	Day 6	Let's fill in the blanks! Working from home is like ... Because ...
	Leisure	LL1 (Leisure, Literal)	Day 7	Think of a time that you spend leisure time at home. - Could you please revive that moment or memory and take a picture of it? - Could you describe what happens there?
		LM1 (Leisure, Metaphorical)	Day 7	Which TV show would describe your leisure time at home the best? Why?

For the study, the probe kit was prepared digitally and shared for eight days on Instagram (including one day for testing and seven days for tasks). “Evdeyken.ben”, which is Turkish for "me at home," was the username chosen for the study's Instagram account, which was used to communicate with participants and distribute the probe kit (Figure 6.3).



Figure 6.3: Instagram account “evdeyken.ben”.

Tasks were shared on the Instagram account each day for eight days. The identical images were posted as "highlights" and "posts" on the platform since the stories could only be viewed for 24 hours, but posts can be seen perpetually. Tasks were distributed in these two forms so that participants may finish any tasks they missed on the day of sharing. In her Instagram account "hey scooty," Hamarat (2021) followed this task-sharing process. Later, Gökaltay (2022) conducted her study with the instagram account "kiymetli seylerimiz," by adopting the same strategy. Since previous research showed promise in terms of the depth of data gathered using this method, this study adopted a similar practice. Considering all of this, probe tasks were created for Instagram to allow familiar interactions.

The probe kit's layout and appearance, especially the colors and graphics, were an important aspect. Probe kit is designed to appear well-thought-out and welcoming. The kit's visual elements indicated the study's subject: working from home, such as the background suggesting a roof and the recurring image of a woman working from home (Figure 6.4). Each task in the probe kit was shared as pictures that could be shared as Instagram stories or posts. To make the shared daily stories more interesting and enjoyable, some related music and stickers were incorporated. The account and its graphic elements were thought to make it approachable to encourage responses from participants.



Figure 6.4: An Instagram post from the study showing its graphic elements.

After creating the Instagram account and preparing the tasks to be shared as stories and posts, the account was shared, and research was announced through researcher's personal Instagram account to reach out to as many potential participants as possible. Prior to sharing the probe kits four posts were shared to introduce the study to the participants. The first two posts included information about the following process in terms of its aim, length, and participants' role. Potential participants were informed that participation in this research will be done voluntarily, and their privacy will be secured. Information posts also ensured that they could reach out to the researcher at any time via the account "evdeyken.ben" and ask any questions they may have. In the third post, participants were informed that to participate in this study the only pre-requirement is to have experience of working from home. In the fourth post, participants were encouraged to follow the account and activate their notifications so they would not miss the probe tasks. These informative posts helped communicate with the potential participants. Also, participants were added to the "close friends list" so the posts shared by "evdeyken.ben" account would appear at the beginning of shared stories.

The study took place in May of 2022, and during this time Turkey did not have mandatory quarantines. Depending on the employer and type of business different ways of working were present: going back to work similar to the pre-pandemic, working from home or remotely, and hybrid working. In this context, participants were allowed to share their current or past experience of working from home. Participants were also informed that they could participate in the research even when their working from home experience could have happened in a hybrid way (working from home for half of the week etc.) or in a different home. The fourth post reminded

participants to follow the “evdeyken.ben” account and open their notifications to be notified when new daily tasks were shared. They were also informed that the daily tasks would be in the form of daily stories that are pinned in the account as highlights, and posts. Participants were informed that they can use direct messages or comments to complete the given tasks.

A countdown animation was shared before the trial day to announce the beginning of the study (Figure 6.5). Including the trial day, all posts shared during the eight days of this study had songs related to the topic of each task to make the process more enjoyable and engaging for the participants.



Figure 6.5: Countdown animation shared as a story prior to the trial day.

To make the eight days of story preparation more enjoyable and engaging for the participants, individual music was selected for each of the stories. Tasks were shared in sequence as multiple images to make them readable and appropriate for Instagram platform. Tasks included Instagram stickers for participants to type in or send a song. Since typing in the sticker has a character limit to writing, participants were also advised to use direct messages. As Gökaltay (2022) asserts, most of the research used cultural probe kits with disposable cameras so that participants could capture pictures for tasks, although participants in this study could take pictures and share them using their smartphones easily.

On the trial day of the study, participants were asked to attend a fictional "house party" and "send a song reflecting their home that they would play at their house party". This initial assignment helped to determine how many of the followers were interested in taking part and to see whether they could readily interact with the activities. During the main part of the study two questions were asked each day for the following seven days—one literal and one metaphorical.

On each day of the study, the first task aimed to gather literal information, and the second task aimed to collect metaphorical content. These two daily tasks were related to each other in terms of their theme. For example, the first day's tasks were both about the "mostly used object when working from home". For the literal task, participants were asked to choose an object which they used frequently when working from home and write what they have done with that object. And for the metaphorical task, participants asked to write a response to "what would this object tell me about you, why?". The questions were under the theme "objects". The first question was asked to understand the participants' mostly used objects and their use. The second question aimed to gain information from the user by encouraging them to look into themselves from the perspective of their object and empathize with the products they use.

The second day's tasks were about the theme "objects", and the first task asked information about participants' favorite objects, and their use experience. And the second task aimed to gain information about the product's qualities and user-product relationship by asking "If your favorite object was a living creature, what would it be like, and why?".

The third day of the study had tasks under the category "environment" and aimed to gain information about the space where they spend their most time while working from home and their relationship with that place. Then on the second task participants were asked to describe "if this place was a person what would they be like". This task aimed to encourage the participants to look into their favorite space from a different perspective.

On the fourth day of the study, participants were asked to send a photo of their favorite place at home and describe how they spend their time there and why they enjoy being there. Second task of the day was "if this place was a person what advice would it give to you?". The aim of this task was to gain information about the problems participants face while working from home. This question aimed to give an

outsider perspective to the participants so they could communicate their observations on themselves effortlessly.

Fifth day of the study consisted of two tasks formed around the category “work” and aimed to gain insights about the working experience of the participants by asking them to summarize this working from home experience in one word and describe the experience with a song.

Two tasks of the sixth day were also under the category of “work” and asked participants to share a routine of their working from home days and complete the sentence “Working from home is like ...” and explain why.

Finally, the last two tasks were formed around the theme “leisure” and aimed to gain insight into participants’ leisure experiences at home. The first task asked participants to describe their leisure practices and describe their leisure times by relating it to a tv show.

6.1.3 Outcomes of the user research

To make sense of the users' working from home experiences, the cultural probes method was used. In this section the outcomes of the completed probe kits are presented. It is important to note that, throughout the time frame of the research, not every participant continued to contribute to the study for all eight days. The number of participants dropped from 27 to 12 people. The reason could be that collecting user data through cultural probes gives a responsibility to the user to keep up with the process and reflect on each day’s task.

Throughout the cultural probes study, participant users shared their most used and favorite objects and spaces in their homes, their work and leisure practices, as well as their feelings and problems by completing each task in the probe kit. Probe kit tasks, tasks’ aimed contents and sample quotations from received responses are shown in Table 6.2. Analysis of these responses acquired from the completed probe kits is explained in chapter 5.

Table 6.2: Probe kit tasks, their aimed contents, and sample quotations.

Day	Task	Task Content	Aim	Sample Quotations
Trial Day	TD1 (Trial Day)	If you were to have a "house party" today... • What song would it start with that reflects your home? • Why did you choose this song?	• Testing the prepared Instagram probe kit and preparing participants to interact with it. • Implicitly understanding the emotions evoked by the participant's home.	• <i>Let's Get It Started – The Black Eyed Peas</i> • <i>Because of its name.</i>
Day 1	OL1 (Object, Literal)	If you were to choose one of the objects you used the most while working from home... • What did you do with this object at home?	• Understanding the most frequently used products and frequently performed activities. • Acquiring literal data.	• <i>My headphones.</i> • <i>I attended online meetings, listened to music while working, sometimes took a break and watched TV series.</i>
Day 1	OM1 (Object, Metaphorical)	If you were to choose one of the objects you used the most while working from home... • If this object could speak, what would it tell me about you? • Why?	• Understanding the user and her working from experience through their object and the relationship between the object and the user. • Acquiring metaphorical data.	• <i>(My headphones) would say that I am addicted to it.</i> • <i>Because I cannot do without it.</i>
Day 2	OL2 (Object, Literal)	• Which product did you enjoy the most while working from home? • Why?	• Understanding the most enjoyed products and performed activities. • Acquiring literal data.	• <i>My table lamp.</i> • <i>Because it changes the atmosphere and makes my evening work happier.</i>
Day 2	OM2 (Object, Metaphorical)	• If this product was a living creature, what would it be like? • Why?	• Understanding the qualities of users' most enjoyed products, user – product relationship. • Acquiring metaphorical data.	• <i>A swan, I think.</i> • <i>It is white, with a long neck and a bit fragile.</i>
Day 3	EL1 (Environment, Literal)	• While working from home, where was the spot you spent the most time in? • Why?	• Understanding the most frequently used spaces at home, and what makes users spend their time there. • Acquiring literal data.	• <i>The living room.</i> • <i>There are fewer sleep-inducing factors.</i>
Day 3	EM1 (Environment, Metaphorical)	• If this spot was a person, how would you describe them to me? • Why?	• Understanding the user's environment and their most frequently used space, its qualities, and its relationship with the user. • Acquiring metaphorical data.	• <i>(He would be a) grandfather who spends time in front of the window every day in his shirt and suspenders.</i> • <i>A peaceful image like my living room.</i>

Table 6.2 (cont.): Probe kit tasks, their aimed contents, and sample quotations.

Day	Task	Task Content	Aim	Sample Quotations
Day 4	EL2 (Environment, Literal)	- Where is your favorite place in your home, and could you send me a photo? - Why do you think this is your favorite place?	- Understanding user's environment and their most enjoyed space at home, its qualities and performed activities. - Acquiring literal data.	<i>My favorite things together - my plant that came as a gift and my extremely comfortable armchair.</i> <i>It is spacious, cozy, and has a nice view.</i>
Day 4	EM2 (Environment, Metaphorical)	- If this place would give you advice, what would it say? - Why?	- Encouraging users to voice their needs and problems from an outsider perspective. - Acquiring metaphorical data.	<i>"Calm down, you'll manage."</i> <i>I guess they would want peace at home.</i>
Day 5	WL1 (Work, Literal)	- Let's fill in the blanks! - If I were to summarize my working from home experience it would be ... - Because ...	- Understanding the users' working from home experience. - Acquiring literal data.	<i>If I were to summarize my working from home experience it would be "chaotic".</i> <i>I am not skilled at controlling time.</i>
Day 5	WM1 (Work, Metaphorical)	- Which song describes your working from home experience the best? - Why?	- Encouraging users to look from an outsider perspective. - Understanding the users' feelings and working from home experience. - Acquiring metaphorical data.	<i>The Jetset Life is Gonna Kill You - My Chemical Romance.</i> <i>The song that gives the feeling of trying to keep up with everything at once.</i>
Day 6	WL2 (Work, Literal)	Think of your working from home experience... - Which is a moment that is a must? - Could you please revive that moment or memory and take a picture of it? - Could you describe what happens there?	- Understanding the users' routines and working from home experience. - Acquiring literal data.	<i>Natural light is essential. Even if there is no sun. And my pouf allows me to lift my feet and sit comfortably in front of the computer.</i>
Day 6	WM2 (Work, Metaphorical)	Let's fill in the blanks! - Working from home is like ... - Because ...	- Understanding the users' working from home experience. - Acquiring metaphorical data.	<i>It is like a half full/ half empty glass.</i> <i>It changes a lot depending on where you look at it. But this is clear to me: it is neither wonderful nor disastrous.</i>

Table 6.2 (cont.): Probe kit tasks, their aimed contents, and sample quotations.

Day	Task	Task Content	Aim	Sample Quotations
Day 7	LL1 (Leisure, Literal)	Think of a time that you spend leisure time at home. • Could you please revive that moment or memory and take a picture of it? • Could you describe what happens there?	• Understanding how users experienced leisure while working from home. • Acquiring literal data.	• <i>Taking care of myself, flowers, home. I turn on music, I make coffee. It sounds so classic.</i>
Day 7	LM1 (Leisure, Metaphorical)	• Which TV show would describe your leisure time at home the best? • Why?	• Encouraging users to look from an outsider perspective. • Understanding how users experienced leisure while working from home. • Acquiring metaphorical data.	• <i>That's a very difficult question. My favorite show to watch at home is Gilmore Girls. It has the feeling of my mood of being at home.</i> • <i>In Gilmore Girls, everyone is like a family, warm and cozy. That's what I have/want in my house.</i>

6.2 Phase II: Communicating the user data to designers

To get insight into how collected user data might be understood from a designer perspective, users' probe packages were shared with a selected group of designers. In the scope of this thesis, participants followed a procedure to reflect on the given document of probe kit outcomes and come up with design ideas. The procedure with designers follows a similar structure to works of Çelikoğlu, (2015) and Sen and Merzali Celikoglu (2019). The procedure includes giving designers a design brief with a set of user data to be their source of inspiration.

Çelikoğlu (2015) collected ethnographic narratives through participant observation and virtual ethnography and gave them to stimulate designers to generate design ideas. In her study, the relevant conversational content was summarized as quotations and divided into sections depending on the predetermined questions, and these prepared user narrative documents were given to designers (2015). Similarly, in this study, the designers were given probe kits, that are completed by users, along with a design brief.

In this research, the aim was to stimulate designers' ideation process by giving them probe kits completed by the participant users to understand how metaphorical user data could inspire the design ideas.

6.2.1 Participant group II: Designers

Collected user data were shared with 18 people who are trained in the field of design. Designers voluntarily took part in this research, and each designer was given the same design brief along with the finished probe packages. Given probe packages included 12 users' completed tasks of 6 to 7 days. Since these packages were in the digital form (text and images on Instagram chat) completed probe kits were formatted into a pdf document so designers could examine them easily. Each designer used the given data independently to complete the design task in accordance with the instructions provided.

6.2.2 Preparing the document of probe kit outcomes and design brief

Collected user data were not suitable to be presented on Instagram (Figure 6.6, Figure 6.7). To keep the participant users' privacy and communicate the user responses to the participant designers in an effective way a document containing the probe kit outcomes was prepared.

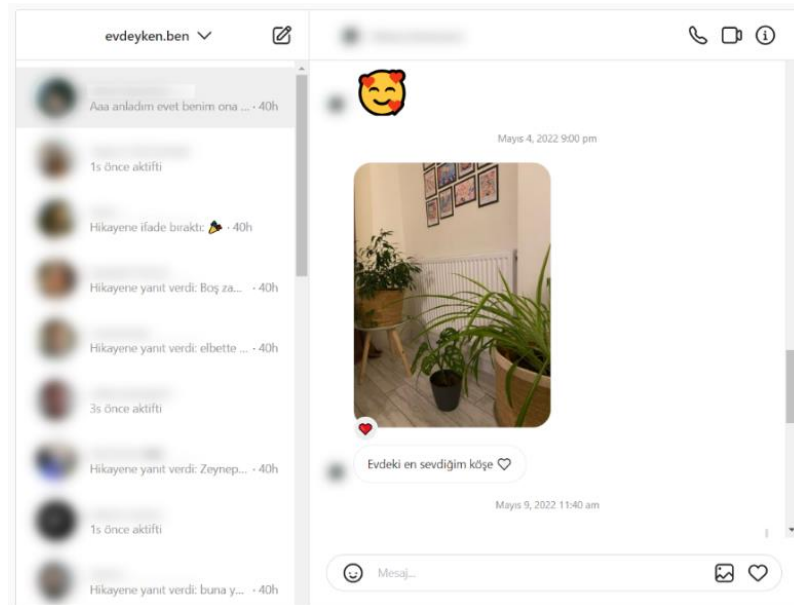


Figure 6.6: Task responses appearing in the Instagram message box.

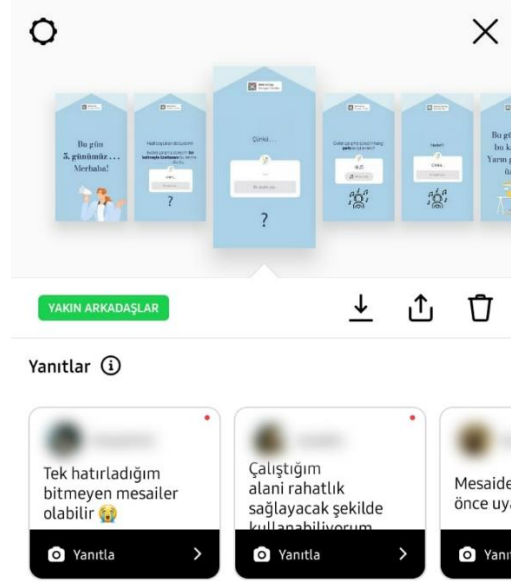


Figure 6.7: Task responses appearing on the story's screen.

The prepared document aimed to convey the completed probe kits in a holistic way that is loyal to the cultural probes methods' characteristics. For that reason, completed kits were formatted into a pdf document that includes 12 participant users' completed tasks. Names of the participants were anonymized in the document. The design of this document was critical since the way this data is presented could affect how it would be perceived by the participant designers. Hence, the given document needed to involve space for participant designers to write and make sketches.

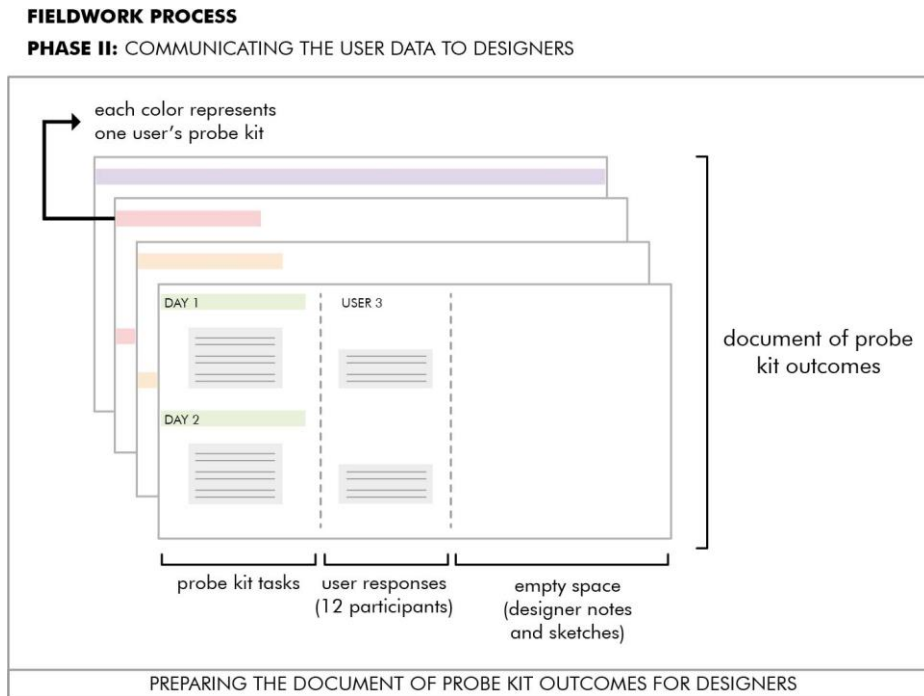


Figure 6.8: Document of probe kit outcomes.

In the light of these criteria, two pdf documents were prepared: one in the form of a document with 42 pages (Figure 6.8), and the other in the form of a comprehensive poster (Figure 6.9). Both documents were presented to the designers. Most of the designers used the paged document rather than the poster.

FIELDWORK PROCESS

PHASE II: COMMUNICATING THE USER DATA WITH DESIGNERS

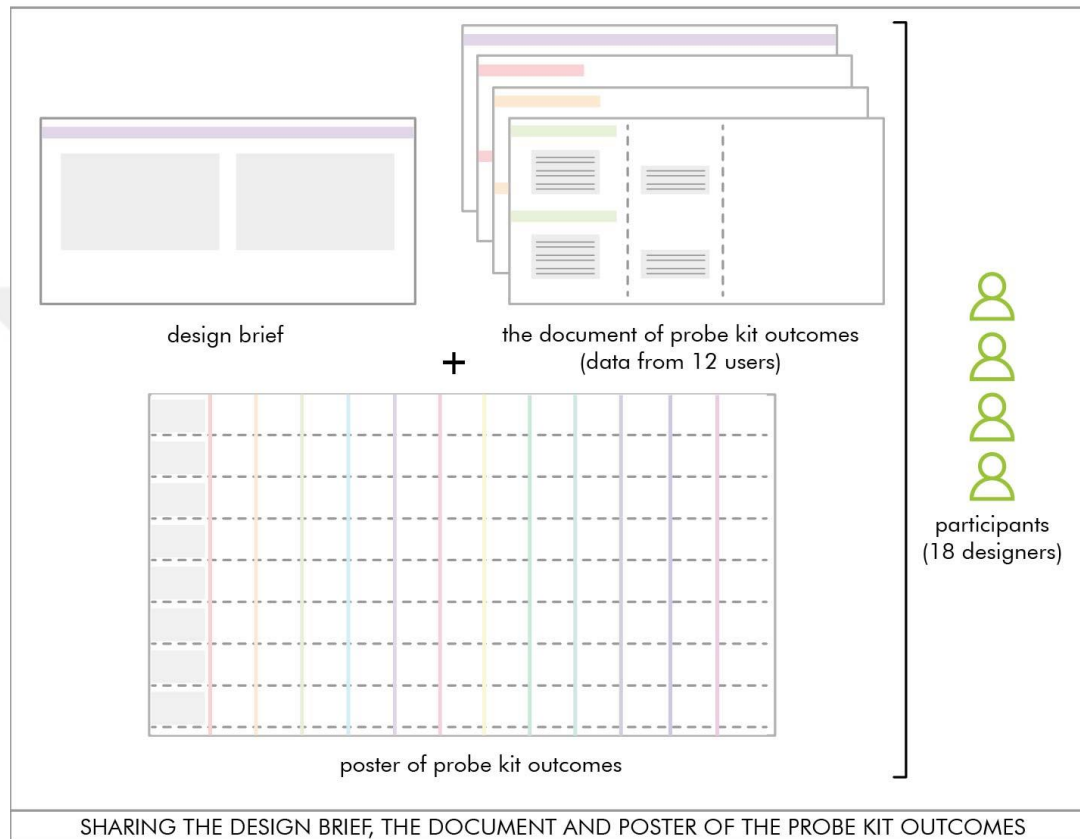


Figure 6.9: Sharing the design brief, the document of probe kit outcomes, and poster.

Brief for the design task was prepared similar to the design brief written by Çelikoğlu (2015). Participant designers were asked to read the probe kits, highlight the parts that inspired them for a design idea and write or sketch their ideas onto the document. The given design brief was structured in a way that is loosely structured, allowing designers to reflect on it freely.

6.2.3 Transferring the document of probe kit outcomes to designers

Individual invitations to participate in this research were sent to designers through email along the document of probe kit outcomes and the design brief. 18 participants agreed to participate in the research, and all of them were graduates from the design field. The design task was explained in the email (Figure 6.12) and the first pages in

the sent document (Figure 6.10, Figure 6.11). Also, participants were encouraged to ask any questions they might have. Designers were asked to complete their reflections on the given document, send it back after one week. However, it took most of the designers more than a week to send the completed document.

TASARIM YÖNERGESİ

Merhaba!

Kullanıcı odaklı tasarım anlayışı ile yapılan kullanıcı araştırmaları ve ortaya çıkan kullanıcı verisi tasarım süreçlerine ilham ve yön verebiliyor. Size iletmış olduğum bu doküman da bu bağlamda toplanmış **kullanıcı verisi** içermekte.

Toplanan veri **evden çalışma deneyimini** derinden anlamayı amaçlayarak "cultural probes" adlı yöntem ile yedi günlük bir süreç içinde toplandı ve on iki kişiyi kapsamakta. Gönüllü katılımcılar onlara gün be gün yöneltilen soruları yanıtladılar. Elinizdeki veri katılımcıların evden çalışırken kullandığı eşyalar, mekanlar, çalışma ve boş zaman aktivitelerine dair yanıtlar içermekte.

Lütfen bu dokümandaki yazılı ifadeleri **evden çalışma deneyimini iyileştirebilecek bir ürün, sistem, hizmet veya uygulamanın tasarımı için bir ilham kaynağı** olarak düşünün.

Bu çalışmada sizden beklediğim: okuduklarınızda yönergelere göre işaretleme yapmanız ve kullanıcı verisi ışığında **tasarım fikri üretmeniz**. Fakat sizden geliştirilmiş veya bitmiş bir tasarım beklenmiyor.

Figure 6.10: First part of the brief involved in the document given to designers.

Dokümanı incelerken lütfen:

- Size evden çalışma deneyimini ve kullanıcı verisinde okuduğunuz durumları iyileştirmek üzere bir **tasarım fikri veren** tüm bölümleri **sarı** renk ile işaretleyin.
- Kullanıcı verisi dokümanında ayrılmış alana aklınıza gelen tasarım fikirlerini yazabilir ve çizebilirsiniz. Bu alan yeterli olmazsa yanınızda bir not defteri bulundurup onu kullanabilirsiniz.

Sizden dokümanı geri aldıktan sonra uygun bir vakitte sizinle yüz yüze veya uzaktan bir **görüşme** yapmak isterim. Bu sayede kullanıcı verisini **ilham kaynağı** olarak nasıl ele aldığınızı anlamayı umuyorum.

Tekrar çok teşekkürler!

Rengin Gürel
rengurel@gmail.com

Figure 6.11: Second part of the brief involved in the document given to designers.

Merhaba!

Öncelikle çalışmaya katılmayı kabul ettiğiniz için teşekkür ederim. Bu araştırma İstanbul Teknik Üniversitesi Endüstriyel Tasarım bölümünde yürüttüğüm yüksek lisans çalışmasına büyük katkı sağlayacaktır.

Ekte size iletmış olduğum pdf dokümanını ilk sayfadaki yönergelere göre incelemenizi ve bir hafta içinde tamamlayıp bana iletmenizi rica etmekteyim. Çalışmayı bireysel olarak tamamlamanız gerekmekte. Bu egzersiz tahminen bir saatinizi alacaktır; fakat siz istediğiniz kadar vakit ayırabilirsiniz. Eğer isterseniz tüm veriyi poster gibi görebildiğiniz diğer pdf dosyasını da aynı yönergeye göre kullanabilirsiniz.

Keyifli bir süreç olmasını umuyorum. Kafanıza takılan herhangi bir şey olması halinde benimle iletişime geçebilirsiniz. Tekrar teşekkür ederim.

--

Rengin Gürel
rengurel@gmail.com

Figure 6.12: Invitation letter involved in the email that is sent to participant designers.

Returned documents included yellow-highlighted words/sentences from the narratives, and writings and drawings of the designer. The document was examined by the researcher, then the designers were asked to be interviewed to get more in-depth reasonings behind the design ideas and how they relate to the user data.

6.3 Phase III: Designers Responding to User Narratives

At this stage of the research, designers returned the documents sent to them after reading the narratives, reflecting on them, and finding design ideas. To understand how designers responded to the user data, the documents they sent back were analyzed, and semi-structured interviews were realized.

6.3.1 Designers returning the probe kit outcomes document

The prepared document of probe kit outcomes was sent to participant designers, and this document was received back with each designer's writings and sketches on it. The process of sending the documents to the participants and receiving them back took 2 months in total. Before sending the document, the study was explained to 27 designers that were potential participants. 18 of these potential participants ended up

contributing to this research by writing and sketching their design ideas on the sent document.

Most of the participating designers used the document with 42 pages rather than the comprehensive poster. 14 participants used the sent document in the digital pdf format, and the remaining 4 participants printed the document out to sketch and write by hand. Collected data on the returned documents were mostly in the form of written text, though 12 participants used sketches to explain their ideas. Also, 2 participants used mind maps, and 2 other participants used photos and photo collages.

Before the semi-structured interviews, each document the designers returned was examined. This was important to get familiar with designers' ideas to personalize some of the interview questions. Other than the main interview questions, participants were asked to elaborate on the ideas they mention and explain their thought processes related to the given user narratives.

6.3.2 Semi-structured interviews with designers

Semi-structured interviews were conducted with all participant designers. Interviews' length ranged between 30 to 100 minutes. All the interviews included the same main questions, but there were new questions in each interview depending on the participants' returned document and their answers throughout the interview.

Interviews were in the form of a conversation.

Semi-structured interviews served these purposes: it gave insight to their process of reflecting their ideas onto the finished probe kits, gaining feedback on the process and the followed methodology, understanding which narratives inspired which written or drawn ideas, understanding their thinking process when coming up with design ideas, encouraging designers to share more of their ideas that they did not include and the new ideas that arise when introduced to the data one more time.

The main interview questions are as the following:

- What did you pay attention to when reflecting on the narratives?
- How did you choose the phrases you highlighted?
- What was it about the narrative that gave you the design idea?
- Do you see a difference between the narratives you highlighted and those you didn't?

Also, additional questions regarding the process were included, such as:

- How did you find the process?
- Were the document, design brief, and explanations clear?
- How long did it take you to complete the procedure?
- How did you progress? How did the highlighting and ideation process develop?
- How did you look at the data? Did you read it like the flow in the document, or did you look at the sent poster?

In addition to these questions, each participant had personalized questions specific to their returned document. And the questions that arose in the process of interviewing were also included.

The responses from the interviews revealed that all designers read the entire probe kit outcomes document that was sent to them. Most of the designers spent between 1-3 hours on this study. Except for one designer who spent half an hour and two designers who spent close to 4 hours. On the other hand, all designers completed the document either at different times of the same day or in parts on different days during the week.



7. ANALYSIS OF DATA

This chapter of the thesis explains the analysis method and process of this research. During the study, three sets of data were collected: user data acquired with the cultural probes method, designer data collected through the ideation procedure of designers, and semi-structured interviews with designers. Because of that, the analysis of data is described in two chapters: 5.1 Analysis of User Narratives and 5.2 Analysis of Designer Responses. All of the collected data were subject to qualitative content analysis. The overall structure of the study including the data collection and analysis is summarized in Figure 7.1.

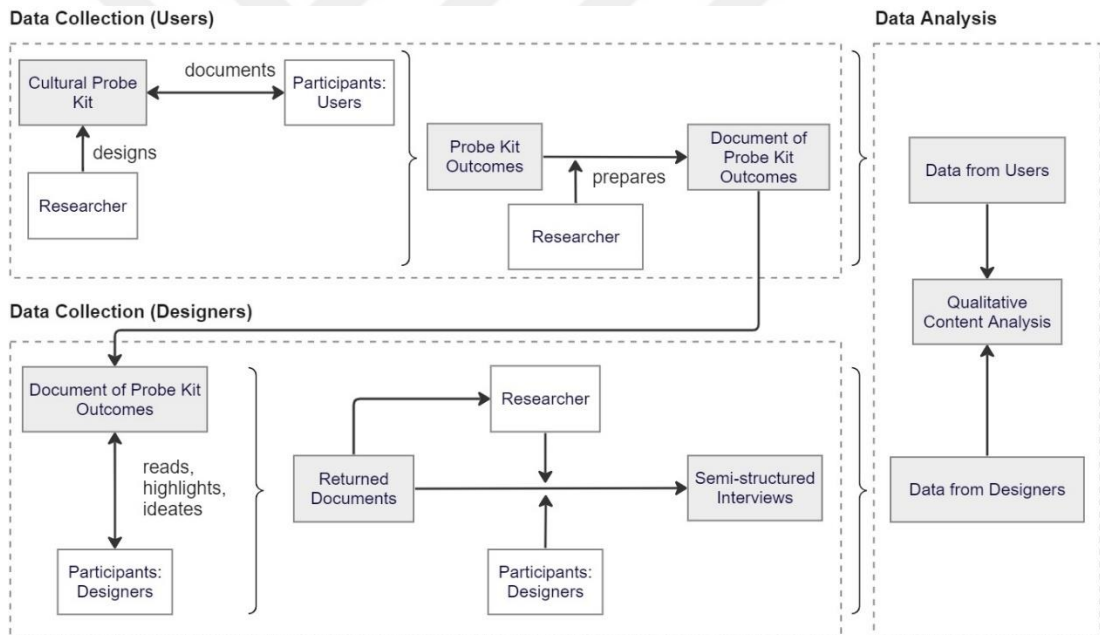


Figure 7.1: Diagram explaining the structure of the data collection and analysis.

7.1 Analysis of User Narratives

In this study, the first set of data, which was the user narratives collected with the cultural probes method, was analyzed with qualitative content analysis. Analyzing the user data was significant to familiarize the researcher with the users' narratives before introducing the collected data to designers. Furthermore, this process allowed a framework to examine the relations between what users express and what designers

suggest as design ideas. Finally, this part of the analysis aims to answer two of the three research questions of the thesis.

- How can the cultural probes method be utilized to collect metaphorical data from users?
- What kind of metaphorical data could be collected from users through cultural probes to stimulate idea generation?

The cultural probes method was utilized to collect both literal and metaphorical data by having at least two tasks for each task category. When determining the probe kit tasks, the tasks aimed to gather both literal and metaphorical data around that task's category. Thus, for each task category, one of the tasks focused on collecting literal data, and the other task aimed to gather metaphorical data. Chapter 4.1.2 Preparing and Sharing the Probe Kit explains the probe kit tasks in detail.

The study with the participating users lasted for 8 days, and there were 27 participants. Although only 12 participants remained active throughout the study. During the analysis of the user data, all the responses to probe kit tasks make up the user data and each of these responses was regarded as one unit. The responses to the first task from the testing day, "house party," are not included in the data set since the trial task did not aim to collect any significant information rather its purpose was to establish a joyful, interesting beginning to the cultural probe process.

In this research, user data were collected to be given to designers. Prior to that, user data were analyzed through qualitative content analysis to make sense of the user experience of working from home. Each user response to a given task was considered 1 unit, and the study collected 236 units of user data. Then, collected user responses were coded, and categorized. During this process, concept-driven and data-driven approaches were utilized. Main categories were implemented from earlier research. Categories environment, experience and practice were adopted from Çelikoğlu (2015, p. 52), and remaining two categories literal expressions and metaphorical expressions were adopted from Sen & Merzali Celikoglu (2019). And sub-categories emerged from the data set (Table 7.1).

Table 7.1: Relationship between user data categories, subcategories, informing tasks.

Category	Subcategory	Contents
Environment	Object	Type: electronics, furniture, domestic products. Use: work, leisure, personal, domestic, constant use Qualities Relationship with the user: emotional connection, addiction...
	Space	Use: work, leisure, sleep, living Qualities: functional, physical, favorite Relationship with the user: emotional connection, representing the user...
Experience	Emotions	Feeling of restriction, happiness, comfortable, frustration, emotional state, loneliness, difficulty
	User Character and Behavior	User Character and Behavior
	Work Experience	Work Experience
	Leisure Experience	Leisure Experience
	Problems & Concerns	Working for long hours, sitting for long periods, procrastination, overthinking, no time for leisure...
Practice	Opportunities	Healthy eating, saving time, flexibility
	Work Practice	Practices on Zoom (application), flexible work...
	Leisure Practice	Entertainment, physical activity, resting, trying new things...
	Routine	Routine
Literal	Literal	Literal
Metaphorical	Metaphorical	Metaphorical

During the analysis, user responses were coded by the information they give to the reader, and the type of content user responses have. During the coding and analysis process, the MAXQDA software was used (Figure 7.2). MAXQDA was helpful for the process by keeping the data and codes organized and allowing for a qualitative content analysis that is visual and systematic.

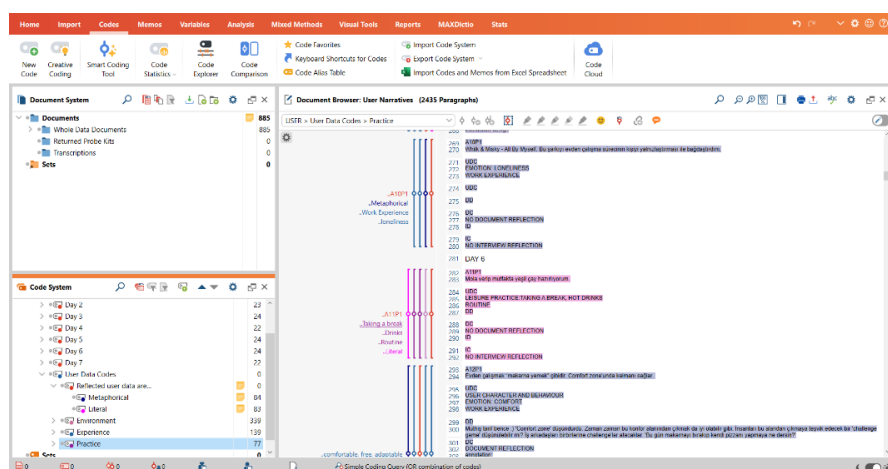


Figure 7.2: An instance of the coding process on MAXQDA.

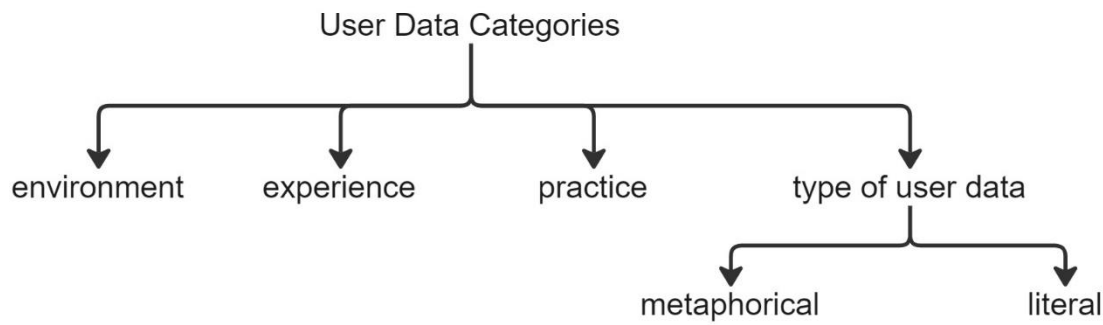


Figure 7.3: User data categories.

As a result of the coding process, five main categories emerged: environment, experience, practice, literal and metaphorical (Figure 7.3). Three of the main codes convey the information that user response gives to the reader: environment, experience, and practice. The remaining two main categories express that type of content the user response has: literal, metaphorical (Table 7.2). In the following paragraphs each of the main categories are explained.

Table 7.2: Main categories, subcategories, and sample quotations.

Category	Subcategory	Sample Quotations
Environment	Object	• <i>The chair, my study chair. I sat and worked. I worked for hours.</i> • <i>(My chair would tell me:) "You never get up and you don't sit properly most of the time." Because it is an ergonomic chair, but I don't behave accordingly.</i>
	Space	• <i>My room. Because it is the place I work and rest in.</i> • <i>(If my room was a person they would be) a bit of a maverick, a bit of an attention seeker, but a warm person who is always there when you need them. Because of the fact that I always tidy up during the day, but I can't understand how it falls apart and that it witnesses every moment, good and bad.</i>
Experience	Emotions	• <i>(The object I used the most is) my pair of slippers. (Because) I was happier when my feet were happy.</i> • <i>(Working from home is like) holding your breath underwater. (Because) endless work consumes one's breath.</i>
	User Character and Behavior	• <i>(The thing/s that is a must for me while working from home is/are:) a few things that make me feel good. If I don't do it every day, I definitely do at least one of these things during the day, even if I don't do it every day, such as changing into clothes that make me feel better when I'm bored, relaxing my back by lying down for a few minutes, preparing good meals instead of just passing them off.</i> • <i>(My yoga mat would tell this about me:) "She works very hard to lay me out, then she works very hard on top me (to perform the exercises). But after that she feels relieved." (Because) It's classic, it's all about getting dressed and pressing play on the video. It is always difficult for me to bring myself to that point (of starting), similarly it is difficult to exercise in the beginning of it.</i>

Table 7.3 (cont.): Main categories, subcategories, and sample quotations.

Category	Subcategory	Sample Quotations
Experience	Work Experience	● <i>Get up, work, have breakfast, brew a pot of tea, work all day, finish a pot of tea, go to sleep.</i> ● <i>(The word I would use to summarize my working from home experience is:) "painful". (Because) it was very difficult to sit at the desk, turn on the computer, and focus.</i>
	Leisure Experience	● <i>(During my leisure time I) mostly do things like cleaning, laundry... And then I enjoy my coffee and movie.</i> ● <i>(The TV show that represents my leisure experience at home is:) Friends. Especially the scenes including Joey and his armchair. (Because) When I think about the comfortable space and what I do when I am not working, I realize that they are similar.</i>
	Problems & Concerns	● <i>(The place I spend my most time in is:) the living room. (Because) it is a 1 living room plus 1 bedroom flat.</i> ● <i>(The word I would use to summarize my working from home experience is:) "working overtime". I can only remember endless shifts.</i>
	Opportunities	● <i>(Product I enjoyed using the most is:) the oven. (Because) I had time to try different dishes, and normally I would never use the oven because of the baking time.</i> ● <i>I use Ikea's klipsk bed-tray as a laptop stand when completing lighter tasks. Thanks to it, I can work in bed or on the sofa with my legs stretched out.</i>
Practice	Work Practice	● <i>(The object I used the most is:) my earphones. I attended online meetings, listened to music while working, sometimes took a break and watched TV shows.</i> ● <i>(Working from home is like) the proof that stereotypical work practices can change. We can get everything we need to move the work forward beyond the limits of space and time.</i>
	Leisure Practice	● <i>In my free time I usually watch TV series. If I don't want to watch a TV series, if I want to sit and it's messy, I clean up. I light candles after cleaning. I play music on the gramophone.</i> ● <i>(If my favorite place would give me advice, it would say:) "Turn your head and look at the birds."</i>
	Routine	● <i>Actually, I would say everything was routine. But the most essential thing was coffee breaks.</i> ● <i>I take a break and prepare green tea in the kitchen.</i>
Literal Expressions	Literal	● <i>(The place I spend the most of my time is:) my desk in my room. Because it's a quiet, isolated corner of the house.</i> ● <i>(In my leisure time...) in the evening I watch TV shows on the sofa and relax.</i>
Metaphorical Expressions	Metaphorical	● <i>(If the spot I spend most of my time was a person they would be:) someone who is mostly planned, orderly, organized, but occasionally someone who is scattered and crazy. Because I am like that. And the top of my desk is like my mind.</i> ● <i>Working from home is like "eating pasta". It keeps you in your comfort zone.</i>

7.1.1 Environment

Under the category environment, users narrated their used objects and spaces. This category revealed information about the types, qualities, and uses of these products and spaces. In addition to that, this category contains information about the relationship between the user and their used product or space. The types of objects users write about are electronics, furniture, and domestic products.

Users mentioned objects and spaces they used while working and relaxing at home. And they referred to some of these products they used constantly, either due to the functions they serve or the meaning they carry. Some of the products that are used the most were the things they could use for both working and relaxing. Examples of this are mostly their electronic products such as computers and headphones. For example, some of the participants explain this constant use of objects as: “My headphones would say that I am addicted to it. Because I cannot do without it.” (User 1) and “I used my cell phone until it became a limb.” (U4) These are examples of the constant use of a product due to its functionality for both work and leisure.

In their narratives, participating users mention the spaces they use for work and leisure, as well as explain the characteristics of these places. Some of the aspects they found important in general were natural sunlight, multiple “corners” they work from, and having their equipment such as computers ready in their workspace.

Corners, where participants spend their free time, had some connection to the outside. User 4 mentioned that she spent a lot of time on her balcony, because it gives them “the feeling of spending time outside in the comfort of home”. In addition, the spaces for leisure in users’ homes had some type of connection to the outside whether through a window or by having plants nearby. These findings are meaningful to learn about the users since it reveals what users value, and how these mentioned qualities influence the users’ experiences.

In some cases, the constant use of a product or space could be due to both functionality and emotional aspects. For example, one of the participants wrote that the product she used the most is her computer considering she could “watch TV shows and meetings, attend Zoom conferences, and draw”, indicating that the things she could do with it made it a constantly used product. However, her narratives indicate an emotional aspect: “(If my computer could speak) it would say that I spent too much time with her. She was the one who connected us with other things or other people when we couldn’t leave the house.” (U3) As a result, these narratives gave

insight into the relationship between the users and the products and spaces they use. Users mention their products as “making things enjoyable”, “comfortable”, and there is “emotional connection” towards certain objects.

How users described their objects and places helped them to understand what they liked and disliked about these products, therefore revealing users’ values. One of the participant users explained her analogy between her kitchenware and an octopus as: “If the kitchenware I use was a living creature, they would be an octopus. Because it is practical, functional, intelligent (I need interaction), and I think it is cute too.” (U7) Similarly, when another participant describes his favorite product to use, she narrates: “It is my earphones. Because I can manage the connection switching between different devices very well.” (U12) These examples give insight into the users’ values for the products and spaces they use such as practicality, functionality, interaction, and aesthetics.

7.1.2 Experience

The category of experience consists of the following subcategories: emotions, user character & behavior, work & leisure experience, problems & concerns, and opportunities. Subcategory emotions include both positive and negative emotions users experienced while working from home. Users’ narrations about their emotional state mostly consisted of negative emotions such as feeling restriction, frustration, tiredness, sadness, and loneliness. Though it should be noted that most of the participants of this study narrated their working from home experience during the COVID-19 pandemic. Therefore, some of these negative emotions could have been a result of the pandemic, and quarantines. On the other hand, participants expressed feelings of happiness, joy, calmness, and relaxation. These feelings were generally related to the flexibility they had with their time, clothing, and space when working from home.

The sub-category user character & behavior included users’ descriptions of their surroundings and possessions provided insight into the users’ personalities and behaviors. To illustrate that, participant User 2 narrates about her room, mostly used spot, at home. And she responds to the question “If this spot (you spent the most time in) was a person, how would you describe them to me?” as follows: “She’s calm and serene, but sometimes she’s also the one who gets off the leash and runs away. As much as I loved it (my room), sometimes working from the same place could get

boring and I wanted some movement.” Understanding the users’ character and behavior is crucial to know their potential needs, wishes, and problems. And these are important inputs for potential design ideas.

Users differ in the way they describe their work experience. Some of them mention working overtime, and others note how the flexibility of working from home was helpful to them. To give an illustration, participant User 2 writes: “Working from home is like holding your breath underwater. Endless work shifts consume one’s breath.” In contrast, some of the participants were pleased with the “calmness” of working from home. User 3 narrates: “If I were to summarize my working from home experience it would be “calm”. Because I think only the essential things have been done (in terms of work). There were clearer results. Since there was no concept of working hours, nobody made extra work for themselves to fill those hours.” But the difference in the experience is related to the type of work participants did. Since User 2 works in an academic position at a private university, and User 3 works in a model-making lab the way they operate differs. On the other hand, even the participants who have similar office jobs differed in the way they expressed their experience. User 12 likens working from home to “a utopia, an oasis in the desert” and mentions that she can “wake up five minutes before the work starts”.

Conversely, participant 8 summarizes her working from experience with the word “overtime”, and she says, “I worked a lot of overtime.” Finally, User 11 finds working from home experience is similar to “a glass half full/half empty” and explains “It depends a lot on how you look at it. But one thing is clear to me: it’s neither great nor terrible.” revealing the two sides of the experience.

In terms of leisure experience, participants describe their leisure time as usually intertwined with work time. This intersection sometimes occurs due to the limited space that needs to be used for both work and leisure activities, or due to the use of the same products for both activities (such as computers, and headphones). One important finding about the leisure experience is that users express their desire to have more leisure time. For example, answers to the task EM2 from the fourth day by writing advice their most used space would give them. A few of these pieces of advice are “spending more time” with the space they use for leisure.

User narratives reveal the problems they face while working from home. These problems include working for long hours, constantly sitting, having limited space, monotony, and finding it difficult to focus on work and manage time. User 5 shares

the problems she faces “The workload was a bit high, and I was asked for a solution without being given certain parameters.” And User 4 mentions her problem with concentration “If I were to summarize my working from home experience it would be ‘chaotic’. I am not skilled at controlling time.”

On the other hand, users also write about the opportunities that working from home offers them. Working from home enables users to have flexibility in the way they use their time and space. They also have flexibility in the way they dress. Some of the participating users mention saving time since they do not commute to work. And users could “eat healthy” since they could cook at home. User 9 shares the flexibility her home provides:

“If I were to summarize my working from home experience ‘comfortable’. I can use my workspace in a way that is comfortable.” She also mentions other opportunities that come with working from home “There are a few things that make me feel good, ... such as changing into clothes that make me feel better when I'm bored, relaxing my back by lying down for a few minutes, preparing good meals instead of just passing them off.” (U9)

7.1.3 Practice

One of the main categories, practice, covers the activities that users perform when working from home. These activities include work or leisure-related practices, and routines the users have. Unsurprisingly, one of the most common practices was being on Zoom, and users explained in which ways they could be flexible in their work. Also, this category revealed the kinds of work the participant users were involved in. For example, participant 5, who works in a hospital’s IT department, mentions: “I used to connect to my computer in the hospital and solve problems from there.” (U5). The type of work participant 5 allowed him to work completely from home, but that is not the case for all the participants. To give an illustration, User 3’s working from home practices include both digital work (preparing drawing for models) and hands-on work (modelmaking) meaning that she had to visit her workspace from time to time:

“Since I work in a modeling lab, I had to go to work when I had something to produce. Even though I did some of the drawings and preparations at home, I went to work when I had to. I had a work permit (during the quarantine). Sometimes I had to go to the model-making workshop even on days when no one was allowed to be

outside. ... I went at most 2 days a week and did other work from home. So, I didn't have a routine, I guess the hours were mixed up. ... Things would usually come to me by mail. When there was a job to be done, I was connected from zoom at 11 at night. It's more about finishing the models I have. The time was very relative.” (U3)

Also, users describe their leisure practices such as watching entertainment, doing physical activity, resting, cleaning, and self-care activities:

“I watched TV series, and movies, attended Zoom conferences, drew.” (U3)

“(I use) my yoga mat (to do) yoga, general cardio. Whatever I felt like that day on YouTube.” (U11)

“In my free time I usually watch TV series. If I don't want to watch a TV series and want to sit and it's messy, I clean up. I light candles after cleaning. I play music on the gramophone.” (U3)

“A little self-care, the flowers, the house.” (U11)

For some of the participants, leisure time included making connections with the outside of the home such as sitting by the window, or spending time on the balcony:

“I have a tiny square-shaped balcony, for a maximum of two people. It gives me the feeling of spending time outside in the comfort of home.” (U4)

“Relaxing in this corner by the window, next to the sofa, is my favorite.” (U2)

“We have a long balcony where there is a swing, and we drink something there. When I'm swinging, the wind blows, and I have my guitar in my hand and sometimes I lie down and it's fun.” (U5)

Routines were a part of users' working from home practice. They mention work routines such as airing the room before starting to work (U10), having breakfast in between teaching classes (U6) and making beverages (U1, U2, U4, U5). To give an illustration, User 4 describes her whole working from home experience as a routine: “Get up, work, have breakfast, brew a pot of tea, work all day, finish a pot of tea, go to sleep.” (U4)

7.1.4 Literal and metaphorical expressions

Within the scope of this thesis, it is important to understand how metaphorical narratives described the working from home experience of users. Code relations between the type of content the user narratives have (metaphorical, narrative) and user codes (environment, experience, and practice) were analyzed.

As shown in Figure 7.4, metaphorical narratives mostly describe users' environment, followed by the experience. And users mostly described their practices with literal narratives. When metaphorical and literal narratives are compared within the user codes, the biggest difference in unit size is in the code practice. When metaphorical expressions and literal expressions are compared in terms of the number of units, metaphors were least likely to describe practices. And metaphorical narratives were used to describe experiences more than literal narratives.

Code System	Metaphorical	Literal
USER		
User Data Codes		
Environment	188	166
Experience	87	55
Practice	9	68
Σ SUM	284	289

Figure 7.4: Code relations browser in MAXQDA showing number of units that are literal and metaphorical narratives.

Code System	Metaphorical	Literal
USER		
User Data Codes		
Environment		
Objects		
Type (Object)	28	28
Use (Object)	52	53
Qualities (Object)	10	6
Relationship with the user (Object)	18	4
Space		
Use (Space)	37	39
Qualities (Space)	22	36
Relationship with the user (Space)	21	
Experience		
Emotions	32	12
User Character and Behavior	8	
Work Experience	28	15
Leisure Experience	3	8
Problems & Concerns	15	11
Opportunities	1	9
Practice		
Work Practice	2	10
Leisure Practice	7	53
Routine		5
Σ SUM	284	289

Figure 7.5: Code relations browser in MAXQDA showing number of units in the user subcodes.

As shown in Figure 7.5, metaphorical narratives described the user's relationships with their objects and space more than the literal narratives did. Also, metaphors were preferred more to communicate emotions compared to literal expressions. And users narrated their leisure practices predominantly by using literal statements.

7.2 Analysis of Designer Responses

In this research, the second set of data includes designers' responses to presented probe kits. In this study, designers were tasked to read the user narratives from 12 probe kits and come up with initial design ideas. Probe kits were sent to designers in a pdf document along with a design brief. Then, designers returned the probe kits with their reflections in the form of text and sketches that communicate their initial design ideas. Lastly, semi-structured interviews were realized to understand how designers were inspired by the user narratives. Designers' highlights, writings and sketches on the pdf document, and the transcriptions of the semi-structured interviews make up the set of data. And this part of the analysis aims to answer the main research question of the thesis:

- How do metaphorical user data inspire designers?

Throughout the analysis, each response made by a designer was considered 1 unit, and 18 designers participated in the study. In total, there were 897 units. Collected designer data were analyzed through qualitative content analysis through a coding process to understand how designers were stimulated by user narratives with metaphors. The coding and analysis of the data were done by using the MAXQDA software. Building the coding frame for the designer data relied on both concept-driven and data-driven approaches. Relevant categories were implemented from earlier research. For analyzing the findings from the study with designers, the following categories were adopted from the study of Sen and Merzali Celikoglu (2019): annotations (including the subcategories questions regarding the narratives, identifying patterns, and summarizing), and idea notes (including the subcategories identifying opportunities, setting design criteria, improving existing products, and developing new ideas, concepts). And the category idea's specificity (brief, thorough) was adopted from Verhaegen et al. (2013) and the remaining categories emerged from the data set including the categories design idea's focus and utilizing metaphors (Table 7.3).

Table 7.4: Relationship between designer data categories, subcategories, and sample quotations.

Category	Subcategory	Sample Quotations
Annotations	Questions about narratives	User narrative: “(My headphones) would say that I am addicted to it.” (User 1, U1) Designer 1’s response: “The word addict also has negative connotations. Is there anything that the user finds negative about being an addict?”
	Summarizing	User narrative: “I used my cell phone until it became a limb.” (U4) Designer 8’s response: “One object, multiple functions.”
	Finding patterns	“I think other participants mentioned something similar to this too.” (Designer 1, D1) “Isn’t it the same person who said ‘I need interaction’?” (D5)
	Insights	User narrative: “Working from home is in one word ‘challenging’. Home should not be a place to work. There are too many distractions.” (U7) Designer 10’s response: “The user probably doesn’t want to work at home and alone. That’s a bit of what I get from that, that somehow the user wants to be part of a community”.
	Empathizing	“I wanted to highlight the ones whose habits are closest to me, the ones related to what I have experienced. That’s what I observed. I felt an emotional closeness.” (D16)
Idea Notes	Drawing from experience & knowledge	“Here, concerns about the pandemic process are again at the forefront. Production is at the forefront. This self-sufficiency has already increased a lot in the pandemic. People started to research how they could do everything at home. I think it is slowly melting now, something that started rapidly but is decreasing. Still, I think producing something at home is important in terms of sustainability.” (D2)
	Setting design criteria	“This is because it’s the search for respite and comfort that we always come across. The whole concept is to be domestic. The word cozy comes out of this. This can be a design criterion depending on the type of product” (D12)
	Identifying opportunities	“And here is an environment where independent activities are done together. is it better to separate them? Maybe separating them would improve the performance... It’s a good point to examine what happens when work and leisure go together? ... It seems like there is the potential for something that needs to be looked at.” (D17)
	Identifying needs & problems	“I highlighted socializing to see if it could be an outlet. Now that I think about it, I realize there is a need. We need this. Even if we achieved great success in a corner where we would be alone all day, it wouldn’t be enjoyable because we wouldn’t share anything.” (D11)

Table 7.3 (cont.): Relationship between designer data categories, subcategories, and sample quotations.

Category	Subcategory	Sample Quotations
Idea Notes	Type of Idea	Re-design Idea <i>"The idea of a product that senses the discomfort of the user and makes corrections to it, as someone who gives the patient a certain care and tries to keep him well, as a product, how can the product gain that feature, came to my mind a lot."</i> (D9)
		New Idea <i>"And I don't know the show that the user is talking about, but because of the analogy, could this go back to the playfulness within that household? I wondered if it could turn into a roleplaying game of partners or household members. ... I thought that maybe the materials, the food in that series, an activity in that series could be brought to the home environment."</i> (D7)
	Idea's Specificity	Brief Idea <i>"The bed and the desk are a very depressing combination. ... When I think about it, my mind goes back to dynamic furniture. Or if there is a window, putting a desk in front of it, making a reading corner."</i> (D6)
		Thorough Idea <i>"Different working modes, different needs... It is very good to be able to change the atmosphere and feel of the space without changing the space with lighting. Maybe various work from home modes can be added to smart lighting. 'Night owl', 'early bird', 'casual work', 'chill', 'coffee break', 'focus'... When it's like Spotify lists, it made me think that maybe the modes that come to my mind can work together with the speaker. Or this could be considered as a smart assistant."</i> (D1)
Design Idea's Focus	Domestic Products	<i>"A mobile work unit suitable for the home, where we can work standing up or sitting down."</i> (D6)
	Space	<i>"The general problem of small houses is that too many products are placed together in a way that creates chaos and disorder. What if we try to come up with a solution that can occasionally ignore them and provide a 'background'?"</i> (D3)
	Emotional State	<i>"Also, it's a classic statement, but having a '404 error' was quite inspiring in terms of being an interface. It really inspired me about the desk being an interface. I thought that when you can't work, the desk suddenly turns black and loses its meaning and you can't do anything. It can be a digital screen and its mode, its mood... Just as it lowers a person's mood, it can raise it. And in some cases, when the desk is organized, mood and motivation can rise."</i> (D5)

Table 7.3 (cont.): Relationship between designer data categories, subcategories, and sample quotations.

Category	Subcategory	Sample Quotations
Design Idea's Focus	Health	<i>"The user talks about working lying on a bed or chair, and her bed tray being a nurse - caregiver. Could there actually be something similar to a more ergonomic patient bed, similar to the one above? You know, we can put it in different positions when we work, or if I get tired of sitting upright, I can lie down. I can work lying down."</i> (D7)
	Interaction	<i>"I always think of a personal assistant. It will remind you of things at certain times when you get carried away. ... The user needs motivation, so she needs to be told something like that. It needs something to remind her that she is not alone. Either a virtual character or an interface where she can connect with a friend."</i> (D17)
Utilizing Metaphors	Understanding the user	<i>"Here when the user says 'It witnesses every moment of my life, good and bad' about her room, it means that she has a bond with it. That room is like her mother and father, it is always there and with him, and working there makes him happy. That's what I'm inferring now."</i> (D2)
	Applying metaphors to the design	User narrative: <i>"Working from home is like holding your breath underwater. Because endless work consumes one's breath."</i> (U2) Designer 7's response: <i>"What we're talking about is actually an obligation, that you're going to work that day, and if everybody has a daily. Let's call it working day, a working breath, and the moment we exhaust that breath, we have to get out of that bubble, for us the working day ends at that point, we can't work anymore. This is an obligation that was set for everyone long ago. So, if there is a clock, you can extend it, but when you run out of breath, you have to get out of that water."</i>

The coding frame helped to analyze the findings in a systematic way and resulted in four subcategories within the data gathered from designers (Figure 7.6). In the following chapters, these categories and their subcategories are explained.

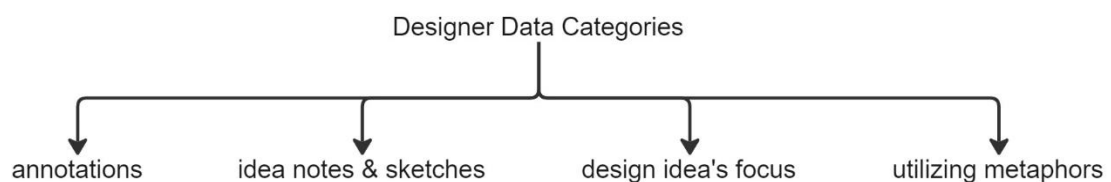


Figure 7.6: Designer data categories.

7.2.1 Annotations

The category annotations and a few of its subcodes are adopted from the study of Sen & Merzali Celikoglu (2019) and the segments coded in this category were designers' notes and reflections that are not related to design ideas. This category is comprised of designers' questions about the user narratives, finding patterns, summarizing, insights, and empathizing. The subcategories: summarizing, identifying patterns, and questions regarding the narratives are adopted (Sen & Merzali Celikoglu, 2019), and the subcategories insights and empathizing are derived from the designers' reflections (Figure 7.7, Figure 7.8).

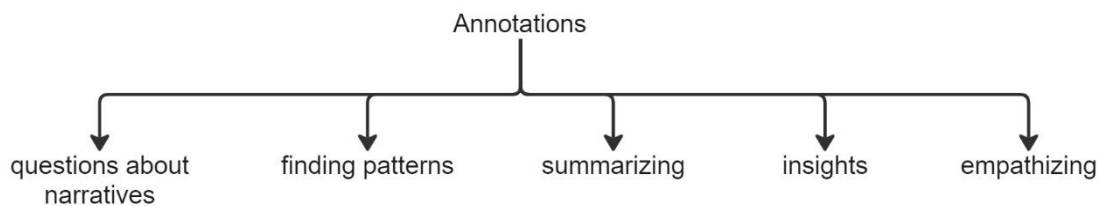


Figure 7.7: Subcategories of the category “annotations”.

Code System	Metaphorical	Literal
DESIGNER		
Annotations		
Questions about narratives	21	23
Finding patterns	111	101
Summarizing, rephrasing	16	13
Inference / Insight	89	54
Empathizing	82	51
SUM	319	242

Figure 7.8: Code relations browser in MAXQDA showing number of units in the annotation subcodes.

In the context of this study, the category of annotations, along with its subcategories, does not provide information about the initial ideas designers generate. Nevertheless, this category enlightens the way designers approach and engage with user narratives. Moreover, it helps to understand the way designers think and the tactics they use when generating design ideas.

7.2.1.1 Questions about the narratives

Throughout the study, participant designers raised questions about the user narratives. And some of the participants found the given user data insufficient. They

wanted to ask follow-up questions and learn more about the things users mention.

Examples of the narratives from this category are given below:

“Light work, heavy work... How does she define light work and heavy work?”

(Designer 1)

“The user says, ‘because there are fewer sleep-inducing factors’. I wonder what the sleep-inducing factors are. There is missing information here, I think we need to find out.” (D17)

“I found it interesting, and I highlighted it, but it didn't open up much space for me in terms of design ideas. If there is no problem, is there no need for design? Joking aside, if I were doing face-to-face research with this participant, I would probably ask more questions for needs analysis and problem definition.” (D18)

The existence of this category indicates that participant designers were engaged with the user narratives that they felt the need to ask more questions to understand the user experience better. Within the scope of this research, user narratives are collected through cultural probes therefore the user narratives are brief, short sentences. This reveals a limitation due to the data collection method.

7.2.1.2 Finding patterns

One of the common strategies participant designers employed was finding patterns and discovering relationships across user experiences. The study reveals that designers found patterns across multiple users' narratives. The reason for this sub-category being under the category "annotations" is that “finding patterns” are not necessarily directly linked to a design idea. But it should be noted that finding patterns may lead to other strategies designers employ such as “identifying needs”, and later on that could lead to a design idea. The patterns designers identified were mostly the common user experiences, wishes, needs, and problems. And sometimes these patterns included commonly used products, spaces, and done practices. For example, one of the designers finds a pattern between various users' leisure practices. And she suggests that it is a common user:

“I mean, the fact that they want to communicate with nature, people were watching the sky, there are trees here, people are watching the scenery, people are listening to the sound of birds... It's a human need, but it means that it has a positive contribution to these people, we see it directly here.” (D5)

In another example, one of the participants shared a pattern she noticed (Figure 7.9):

“Coffee and the sofa must be indispensable for working from home. With so much stuff at home, the fact that these two are the most common answers should be an important clue.” (D10)

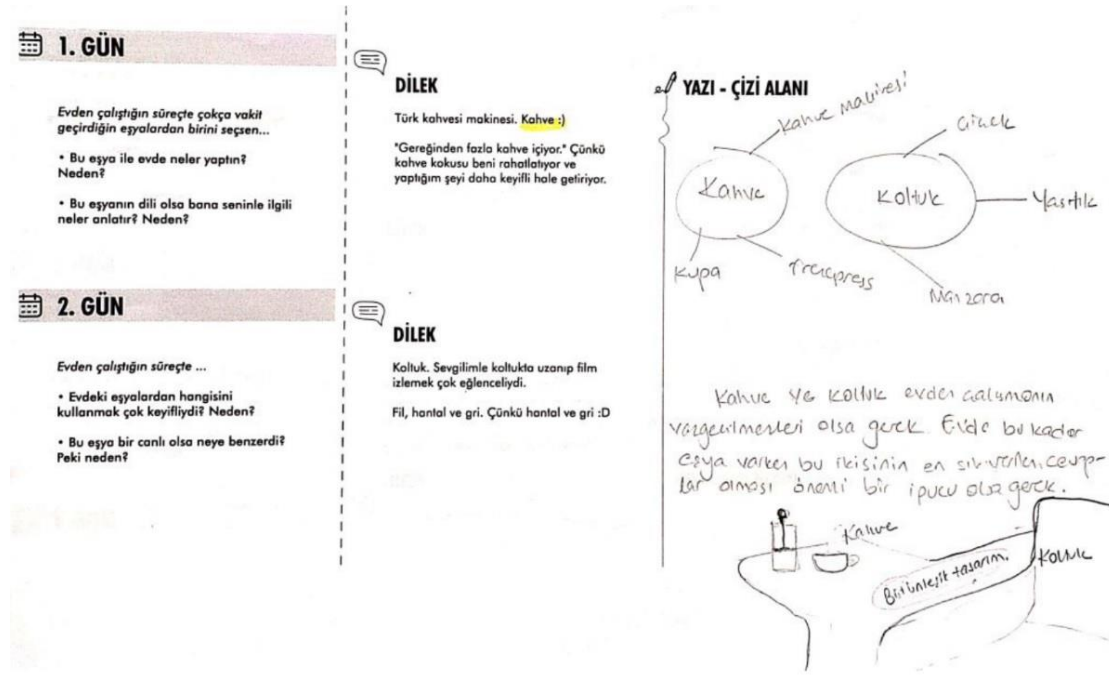


Figure 7.9: Annotations, idea notes and sketches of Designer 10.

Here, one of the participant designers explains how she identified a pattern that establishing routines improves users' wellbeing while working from home. And she considers this finding a way of confirming her previously mentioned idea:

“It was good to read this here because this user narrative confirmed my previous idea. There is always talk about routine. ‘Establishing a routine to protect both mental and physical health’, maybe this can be taken as an important output, but I realized that it positively affects working from home. When we look at the data of other users.” (D8)

Furthermore, designers identified patterns within each user. One example of that is the designer finding a contrast within a user's narrative. Designer explains:

“This person needs both a desire for relaxation and a need for discipline.” (D10)

In some cases, designers identified relationships between user experiences by comparing different users' narratives, such as:

“In contrast to the previous participant's emphasis on mental fatigue, this participant emphasized physiological fatigue.” (D18)

7.2.1.3 Summarizing

Another strategy applied by designers is summarizing the given user narratives. These summaries were the designer's notes on the given document. In these reflections, designers write about the existing situation of the user. This practice encourages them to find patterns and come up with insights later on. Examples of summarizing are given below:

“The user is looking for a quiet, comfortable place to work, where they can easily concentrate, with natural elements.” (D4)

When asked, one of the designers explained why she summarized the narratives they read by using keywords:

“I had left what I had in mind, what was left in that first stage, in parentheses, with question marks, in other words, with the idea that it could be revisited and looked at once more.” (D8) (Figure 7.10)

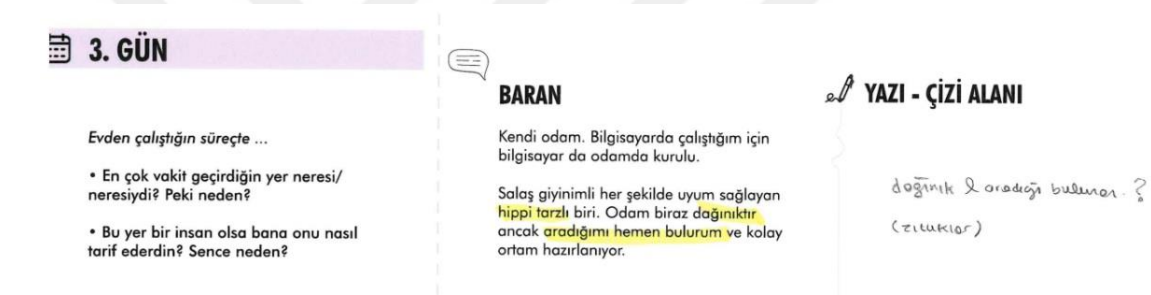


Figure 7.10: Annotations of Designer 8.

7.2.1.4 Insights

Participant designers inferred the user narratives they read and came up with insight into the user's experience. These insights include the designers' takeaways from what they have read and the guesses they make about the user and their experience. Some of these insights are:

“Even though the user is free in their own home, they feel imprisoned.” (D4)

“As a second criterion ... Whether it's a headset, a computer, clothes, a pouf, for example ... These products support more than one function, and enabling the user to do this provides sustainability in its use... At least it provides that comfort and routine at home. It seems like an important thing for that routine to continue.” (D8)

Although these inferences do not always lead the designer to an idea, in some cases they contribute to design ideas by helping them "identify needs", "identify opportunities" and "setting design criteria". To give an illustration, in the statement above, Designer 4 starts to identify the user problem by making an inference from

what she reads. Alternatively, Designer 8, on the other hand, makes inferences by comparing the many user expressions she reads, which leads her to recognize commonalities, i.e., patterns, and to identify design criteria.

In some cases, the designers assessed the severity of the user problems they read in the probe kits. To give an example, a participant commented on the seriousness of one of the user problems as follows:

"The need for a break is conveyed quite dramatically. It's terrible that she feels this way. Maybe a systemic and company culture change is needed." (D1)

On the other hand, Designer 6 questioned the suitability of the issue for a design solution by asking "is overtime something that requires a design solution?" in response to the problem of "working overtime" written by the users.

Occasionally, participant designers made guesses about the user which may or may not be true, with the limited information they have. Similar to the subcategory "questions about the narratives", the guesses made "insights" indicate the designers' search for more information about the users to form inferences and come up with design ideas. One of the participants explained this situation as:

"We get little data from this probe kit, but when the designer fills the gap, maybe she comes up with creative ideas. It doesn't have to be 'the user said something, let me do something directly in response'. Maybe something more creative can come out while we are writing scenarios and making things up, in that sense." (D18)

7.2.1.5 Empathizing

The empathy of the designers with the users whose narratives they read is evident from the notes they took on the given documents and their answers in the semi-structured interviews. The sub-category "empathizing" includes the designers' emotionally expressive reactions to what they read, their comments on the user narratives, and their sharing of the process of working from home.

In some cases, designers articulated emotions towards the user narratives they encountered, such as: "It's terrible that she feels this way." (D1), "I was upset when she compared her room to a person with a white-collar job." (D11), and "She had a lot of trouble. ... Actually, it's sad when you look at it. She obviously worked under a lot of pressure." (D14). And several participants highlighted the user accounts they found interesting. For instance, Participant 1 writes about her bed tray being a nurse or caregiver, and one of the designers found it intriguing:

“I found it interesting. However, I just marked it as a concept, then it didn't go to an idea.” (D10)

On occasion, user narratives urged designers to share their working experience and point of view, especially during the semi-structured interviews. For instance, one of the participants mentioned how she and her sisters used their house when working from home as:

“For example, in our house, everyone was in a corner, and we rarely saw each other. How can we break that? And for example, and this is also very important, how much do we live the space? You know, I'm inside the house, our house had four rooms, a big kitchen, and a big living room, but luckily, I had the smallest room. I never felt like I was living in a big house. I was spending a whole day in a tiny room like I was in a smaller house.” (D10)

In several instances, designers critiqued the users based on the accounts they have read. For example, one of the participants questions the relationship the user establishes between working from home and comfort:

“The user said, 'working from home is like eating pasta, it keeps you in your comfort zone'. Actually, there is an idea here. Working from home should not be a 'comfort zone'. You can't work in your comfort zone anyway. Or maybe this is a valid comment for me. For example, I can hardly work without sitting at the desk.” (D6)

7.2.2 Idea notes

The category idea notes consist of drawing from experience and knowledge, setting design criteria, identifying opportunities, identifying needs, type of idea, and the idea's specificity. The type of idea includes two codes: re-design idea and new idea. Similarly, an idea's specificity encompasses the idea being brief or thorough. The category idea notes and most of its subcategories (identifying opportunities, setting design criteria, improving existing products, and developing new ideas/ concepts) are adopted from previous studies (Çelikoğlu, 2015; Sen & Merzali Celikoglu, 2019) (Figure 7.11, Figure 7.12). The subcategory improving existing products is renamed as “redesign”.

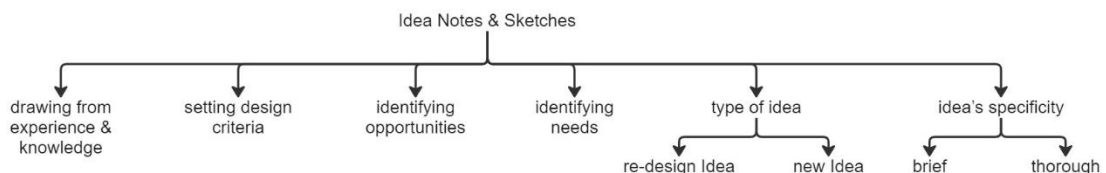


Figure 7.11: Subcategories of the category “idea notes & sketches”.

Code System	Metaphorical	Literal
DESIGNER		
Idea Notes & Sketches		
Drawing from experience & knowledge	30	24
Setting design criteria	161	143
Identifying opportunities	100	88
Identifying needs, wants and problems	121	102
Type of Idea		
Re-design	87	58
New ideas	99	47
Idea's specificity		
Brief Design Idea	65	51
Thorough Design Idea	127	63
Σ SUM	790	576

Figure 7.12: Code relations browser in MAXQDA showing number of units in the idea notes subcodes.

7.2.2.6 Drawing from experience & knowledge

When thinking of design ideas, participants relied on their everyday experience, observations, and knowledge. Most of the participant designers worked from home during the pandemic. Thus, designers compared their experience with users. Then, designers used their inferences to form their design ideas. For instance, Designer 1 finds the problems the user mentions in the probe kit “familiar”, and she explains: “These two extremes are quite familiar and can bring different needs.” (D1) Similarly, another participant thought the users’ expectations vary based on her daily observations:

“User expectations are very different. For example, I can't say ‘Yes, this is the problem’, or ‘Everyone expects the feeling of working outside’. I can’t say that because there are also people who enjoy working at home in the environment where they create that privacy.” (D2)

In some cases, the user narratives evoked user problems that the designers encountered in everyday life or the design field. For example, here the designer talks about the increased plant care in homes during the pandemic and the lack of related products:

“One of the most important issues among my observations during the pandemic period was about plants at homes. The habit of taking care of plants and people's interest in plants has increased. But there are not enough products that respond to this need.” (D6)

7.2.2.7 Setting design criteria

When examining the given probe kits, designers considered some of the narrative content as key design inputs, and they used these user accounts to set design criteria for their initial concepts. Designers set design criteria based on the narratives that give information about the users' lifestyles including their preferences and priorities. Therefore, these narratives were considered important to designers for their initial design suggestions. Designers highlighted the narratives that give information about their lifestyle including how many people live in their home, how users divide and spend their time when working from home etc.

Occasionally, designers made note of the user preferences regarding working from home. Though designers realized that there were many different user preferences, different modes, and needs, they interpreted user accounts to mean that there is an emphasis on flexibility and adaptability. Since users mention either their enjoyment of the flexibility working from home provides or their need for more adaptability, designers reflected on this matter:

“Again, flexibility... Working in different corners of the house may also point to a need for flexibility. Maybe this person doesn't want to be confined to a desk. With a different system, she can work more actively in different corners.” (D5)

Designers used “flexibility” as a design criterium for design ideas related to leisure. Another finding related to users' preferences that were considered to be included in the design criteria is users' need to be connected to outside, and nature. Designers focused on the narratives that mention spending time on the balcony, terrace, or in front of a window. By using these design criteria, Designer 16 suggested a piece of furniture for User 3, a flexible piece of furniture that allows her to watch the scenery on her balcony:

“This user spends long periods on the terrace, watching the view. Here I associated the view with the sky and thought of a telescope. What could this be? More circular, you can sit around it, and lean on it ... I think the user needs a more flexible piece of furniture. It can be sat on from every angle, it can be transformed and used. That's why such a round form. A useful, ... experimental and fun design.” (D16)

Similarly, some of the designers commented on the users highlighting the comfort their home brings. For instance, Designer 2 mentions this as a key input for design: “There is a constant search for respite and comfort. The whole concept is to be domestic. The word cozy comes out of this. This can be a design criterion depending on the type of product.” (D12)

To sum up, the user accounts under this category helped designers to come up with the features and qualities of their designs by informing them about users' lifestyle and preferences.

7.2.2.8 Identifying opportunities

Identifying opportunities category refers to the user narratives that seemed important, informative, and inspirational to the participant designers. While reading the probe kit, most of the designers highlighted the parts that they consider a "source of inspiration", "starting point of a design idea", "informing point", "can be used as an input", and "source of inspiration".

One of the designers explains why they found the user account inspirational with the following words:

"When the user says, 'working from home is like a glass half full and half empty', she is establishing a pro-con relationship. They all have their pros and cons. It's very stimulating to hear her say 'working from home is neither great nor disastrous'. Because that's what design is like, one person likes it a lot, another person doesn't like it at all. It changes a lot according to time, need, and purpose. That's actually why I found it inspiring and that's why I made a note of it." (D10)

These statements highlighted by the designers did not always lead them to a design idea. However, the designers interpreted the user expressions in this category as having a high potential to give ideas. For instance, one of the designers explains why she highlighted a part of the user narrative as:

"User's emphasis on 'working in the corners of the house' is also interesting. It is open to interpretation. ... I didn't think of anything too creative in terms of design ideas. It could be a piece of modular furniture, but there seems to be a potential there." (D5)

7.2.2.9 Identifying needs

One of the strategies designers employed was identifying the users' needs, wishes, and problems. Designers employed the user needs they identified to brainstorm initial design ideas. Occasionally, designers made note of the user narratives that they interpret as a problem user mentions. For instance, after User 3 described the space where she spends most of her time as a "plain, simple and white-collared person" and described the space as "not a very colorful place, but it is functional", Designer 15 identified a user need and mentioned the following:

"The fact that the space is functional... is a need. Her space should be functional rather than aesthetic. The user clearly stated her need." (D15)

Similarly, in response to User 4's narrative mentioning "I am not skilled at time management." Designer 2 points out this as a "need for something to assist and help her to use time efficiently". Additionally, designers state the specific user needs and problems, as well as "common" and "known" user problems. In one instance, Designer 3 recognized the "need for a background" as a common problem by saying "we have all experienced this". Similarly, designers found patterns of common user needs and/or combined the needs of multiple users mentioning the need for taking a break from work, interacting with others, breaking the monotony, and many more. To give an illustration, Designer 12 identified a need for interacting with others, as she mentions: "with the decrease in communication and interaction due to the pandemic there is a search for these practices", and designer suggests that this need for interaction can be fulfilled with inanimate things such as interactive and smart products with the help of light, sound, and visual cues on a screen. But in other cases, designers tried to find the untold and/or underlying user needs. Designers identified these untold needs by speculating on what is written by the user, making associations with what they have read, and thinking of possible scenarios with the limited information they had. For example, in his narrative User 12 likens his earphones, the product she uses the most, to "a cat or a dog" as she sees them "like a loyal friend". Though the user does not mention this as a need or a problem, Designer 2 interprets this statement as a need for "an environment where you have a supportive friend by your side". And she describes how this could turn into a design by saying:

"This can be a product she uses. Maybe she can talk to him, make her feel that she understands him, and share her feelings... Sometimes you just need to feel understood by someone else. I think maybe it would work if it was an inanimate object." (D2)

Similar to Designer 2, Designer 8 ponders on an untold but possible need of a user. In her narratives, User 9 mentions she works on her dining table, and her table tells her to be "more organized". In response to that, Designer 8 suggests that there could be a need for transforming the table that serves these two purposes: dining and working. She describes her thought process as:

"When I read this, ... it's as if we call it both a working desk and a dining table. When do we call it a work desk and when do we call it a dining table? Maybe it sounded like something that is requested. There is no direct demand for this, but I thought maybe there could be such a transformation to change the environment in that house. Since her table tells her to be more organized, there might be something about hiding that part." (D8)

When identifying needs, designers made note of the solutions users found to their problems. For instance, Designer 5 describes the routines users build to manage their time while working from home. She notices that multiple users make coffee or tea to start their work, and users take a break from home by refreshing their drinks.

Designer 5 takes this user solution into account when she brainstorms ideas:

“Suggestions about this can be thought of as developing a certain routine, whether with a desktop assistant or a desktop screen.” (D5)

7.2.2.10 Type of idea

Throughout the data set collected from the participant designers, there were two types of design ideas: improving existing products/ spaces & services (redesign) and coming up with new ideas and concepts.

Re-design idea

The subcategory re-design idea entails designing a product again, and/or improving an existing product. These include advancing the existing furniture, domestic products, space, and apps. These ideas include adding new features, changing some of the existing qualities of the design, etc.

In some instances, designers suggested adding features to the existing products and systems. When responding to User 1’s words, Designer 1 recommended adding a feature to whichever communication tool the user’s company uses to encourage socializing in working from home setting. Designer 1 proposes this feature as a way of transferring a characteristic of the face-to-face workplace:

“When we think about socializing at work, which is something that is lacking here, I think of the tea and coffee breaks. It is very relaxing to be able to get away from the place where you work, your desk, and talk about something independent of work or workplace gossip. Maybe an invitation to such a tea/ coffee break could be added to the communication platform used at work.” (D1)

In other cases, designers focused on the most commonly used products and spaces of users, and they came up with initial design ideas to make improvements to them. For example, Designer 3 identifies “french press” as a commonly used product among users. Therefore, he puts forward a design idea to improve the use and cleaning of this product as she explains (Figure 7.13):

“As I wrote here, the French press is a product that was created for coffee consumption, but because the coffee particles are so small, cleaning them is a problem and we tend to use more practical things when we work from home. ... We don't want to spend a lot of time using such things. (In the existing design of the french press) we have to disassemble the

mechanism to clean them. (In the recommended design) we don't need to disassemble the strainer to clean it. ... Also, if the strainer is not attached, the product can only be used as a thermos.” (D3)

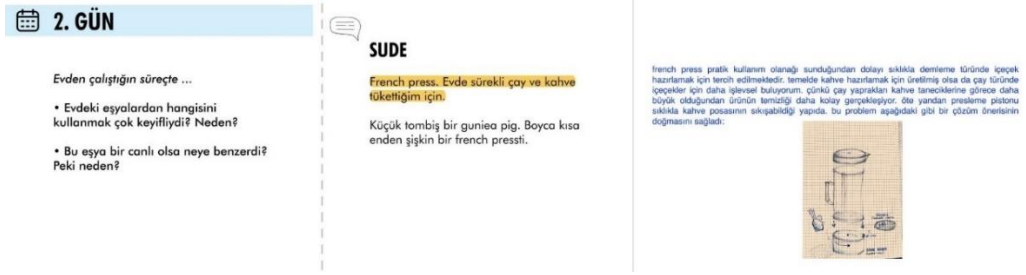


Figure 7.13: Design idea notes and sketches of Designer 3.

Another example of improving a product that the user uses frequently is the idea notes of Designer 15 responding to User 1. The user mentions she uses her bed tray as a laptop stand for “lighter tasks” so she can “work in bed or on the sofa”. The user also likens this product to a “nurse – caregiver”. After reading these expressions from the user, Designer 15 suggests improvements to this product. She mentioned using a bed tray as a laptop stand, the same as the user, and she brought up the problems she faces when using the tray. She says the tray shakes when the user makes a move, therefore not being able to have a drink on the tray. The designer related this problem to the user’s metaphor of “tray is a nurse-caregiver”, she said, “(If the bed tray is a nurse - caregiver) you're sick, you can't hold yourself, how will you hold the tray?”. She proposed an improved laptop stand that is “light, stable, and moveable with wheels” (Figure 7.14).



Figure 7.14: Design idea notes of Designer 15.

New idea

The initial design ideas that are considered in this category include new products that are not currently available, and existing products that have a novel concept. In some

instances, designers suggested novel products that can improve the working from home experience. For example, when User 1 mentions that she spends most of her time on her working desk because it is in a “silent, isolated corner of the home”, Designer 7 mentions a “wearable working desk”. She describes this product as “it could be something that can isolate you so you do not have to find the silent, isolated corner of the house”. The designer also responds to User 1 describing her working desk as:

“(My working desk would be) someone who is mostly planned, orderly, organized, but occasionally scattered and crazy. Because I am like that.” (U1)

And Designer 7 suggests the proposed “wearable working desk” as a product that can guide the user through her work and help her to relax by using colors and sounds”.

Similarly, Designer 2 proposes a new concept in response to the expressions of User 1. Designer 2 especially focuses on user’s phrase: “the top my desk is like my mind”. The designer’s suggested design is a table that can inform and guide the user when working at home, she describes (Figure 7.15):

“Could there be a table where the user can see the reflection of her mind if it is a smart product, maybe even integrated with artificial intelligence? If the top of the table is her mind, let it guide her to calm down and reduce her stress level. ... If we think of something that can be adapted in a real sense, there may be products that will create calmness and serenity while working, provide the comfort of the workspace, and relax the person emotionally.” (D2)

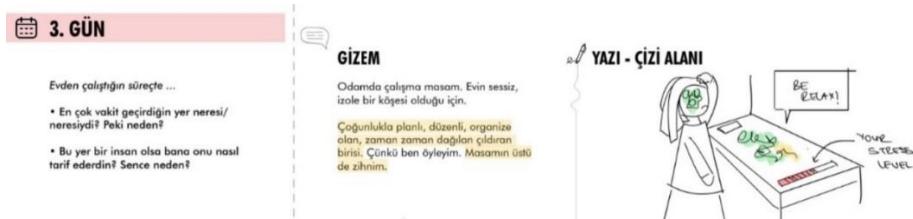


Figure 7.15: Design idea notes of Designer 2.

In other cases, the design ideas were based on existing products, but with a new concept and approach. An example of this was Designer 16's design proposal when she responds to User 3 mentioning spending time on the balcony watching the scenery. The user refers to her chair on the balcony as a “friend” and says she “did not feel alone”. In reaction to these expressions, Designer 16 suggested a piece of furniture that is inspired by “watching the scenery” (Figure 7.16):

“(After reading that) I thought of ‘observations on the balcony’ and ‘observations with a telescope’. ... Why does a telescope have that form? Cause you can observe the sky by rotating it at many angles. Then, could there be a chair in a telescopic form? Because the user

spends long periods on the terrace, watching the view. Here I associated the view with the sky and thought of a telescope. What could this be? More circular, you can sit around it, lean on it. ... A product that I can look at the scenery from many angles.” (D16)



Figure 7.16: Design idea notes of Designer 16.

7.2.2.11 Idea’s specificity

In this study, designers thought of initial design ideas by utilizing the user narratives in the probe kits. Although all of the ideas are in their initial stage of development, presented design ideas differed in their specificity. There were two different sorts of design ideas presented in the data set gathered from the participating designers: brief ideas and thorough ideas.

Brief Idea

In the context of this study, brief design ideas are, compared to thorough ideas, underdeveloped. And these ideas do not have any detailed descriptions, explanations, or sketches to suggest that the idea is thorough. For instance, Designer 6 proposes a brief design idea in response to User 1 mentioning she “participated in online meetings, listened to music while working, sometimes took a break and watched TV series”. The designer explains:

“It is not uncommon to change position while working from home or to take a break and move on to a different activity with the computer. ... These situations can change the sitting position. It would be a good design solution if the chair could adapt to this. A chair with legs that can be extended, a small coffee table that can be opened, a chair that allows for different positions and activities could be designed.” (D6)

In another case, User 11 narrates her living room is like a “grandmother” since “she provides everything: food, blankets, tea, and light while working”. And Designer 8 comes up with an initial design idea of a teapot with the “grandma concept” (Figure 7.17). She describes it briefly as:

“It can be something that you can be customized, something that reminds you of your grandmother. Maybe something different for everyone. Like how we can give the product that warm feeling. If I was going to design a teapot, it would be good to feed on those cultural things.” (D8)

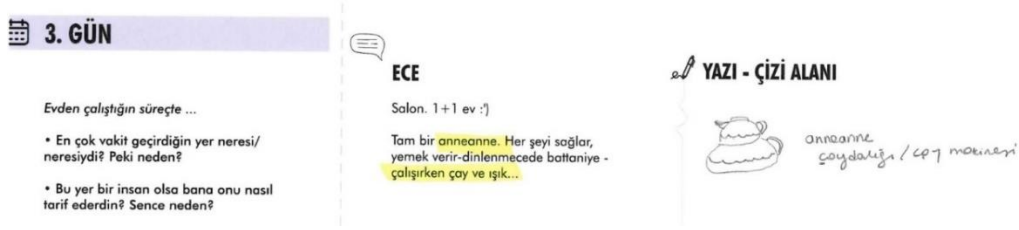


Figure 7.17: Design idea notes of Designer 8.

Thorough idea

Thorough design ideas include detailed descriptions of a product/ space/ system or service, including explanations of its form, function, and usage scenario. These ideas differ from the brief ideas by being more thought out and explained deliberately. One of the examples of thorough design ideas is the suggestion from Designer 3. She recommends a “background” that can help users “ignore the chaos in space”. Her idea is detailed in the way she sketched it on the document and explained it in the interviews (Figure 7.18). After reading the probe kits, Designer 3 identified that users need a “clean background” when working from home due to the virtual meetings they attend. She suggests:

“(When working from home) the environment can be messy. We may not see that background as appropriate, or it may distract us. The user said that they have a small home, and she uses different corners for working. ... 'Could there be a place that can be hidden when needed and provide a clean background?'. Again, similar to the cabinet door ... A surface that moves in the logic of a separator and slides with the rail system, hiding the kitchen when necessary.” (D3)



Figure 7.18: Design idea notes of Designer 3.

Similarly, Designer 15 comes up with an initial idea that manifests itself as thought through. She responds to the user narratives expressing “loneliness” with a “lonely

but not so lonely working concept” (Figure 7.19). Her initial design idea offers a working desk that allows the users to interact with co-workers through visual and tactile interfaces. Also, she points out that the tactile interface can work as a “fidget” to help with concentration while working. The way that the proposed idea includes detailed features that respond to multiple needs expressed by the users moves this idea under the category of “thorough ideas”.



Figure 7.19: Design idea notes of Designer 15.

7.2.3 Design idea's focus

Throughout the study, designers read the given user probe kits and they envisioned initial design ideas. In the collected data set, designers' initial ideas had different focuses. The category design idea's focus involves the main areas the ideas concentrate on. This category is data-driven, and it embodies the following subcodes: domestic products, space, emotional state, health, and interaction (Figure 7.20, Figure 7.21). Design ideas were towards improving working from home as well as advancing leisure time at home. Designers approached the case of working from home as a holistic experience, and they acknowledged that improving the users' leisure time can enhance the overall experience.

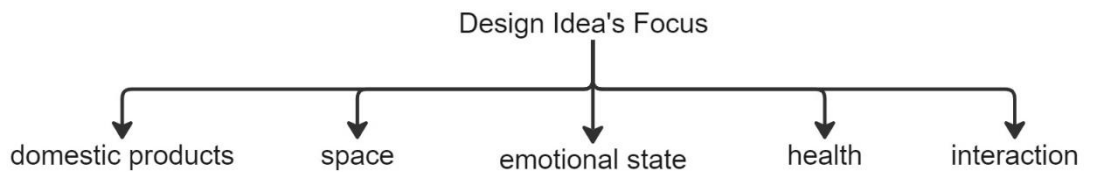


Figure 7.20: Subcategories of the category “design idea's focus”.

Code System	Metaphorical	Literal
DESIGNER		
Design idea focuses on...		
Domestic Products	89	44
Space	35	58
Emotional State	74	53
Health	38	17
Interaction	102	37
SUM	338	209

Figure 7.21: Code relations browser in MAXQDA showing number of units in the design idea's focus subcodes.

7.2.3.12 Domestic products

Unsurprisingly, one of the areas that design ideas focus on is domestic products. These products include seating elements, working desks, coffee makers, table lamps, and others. For example, when User 2 mentions her table lamp as the mostly used object, she points out that it “changes the atmosphere and makes her evening work happier”, Designer 13 offers a brief design idea and explains it as (Figure 7.22):

“A table lamp with lights that change according to the mood can evoke feelings of serenity and creativity. ... In different colors, so it could be a single lamp, it could be a combination of different lamps. I thought it could be a design that provides changing colors depending on our mood or what we are doing there.” (D13)

2. GÜN

Evden çalıştığın süreçte ...

- Evdeki eşyalardan hangisini kullanmak çok keyifliydi? Neden?
- Bu eşya bir canlı olsa neye benzerdi? Peki neden?

BİLGİ

Masa lambası. Çünkü atmosferi değiştirdiği ve akşam çalışmalarını daha mutlu kıldığı için.

Kuşu sanırım. Beyaz, uzun bir boynu var ve de biraz hassas.



hissedilen moda göre değişen ışıklara sahip bir masa lambası dinginlik, yaratıcılık gibi hisler uyandırabilir.

Figure 7.22: Design idea notes of Designer 13

After reading the expressions of User 5, Designer 8 responds with a brief design idea. The user speaks of his coffee machine as “must be ready to give a cup of coffee at all times”. Therefore, Designer 8 suggests a coffee maker the user can interact with by using his phone and explains it as (Figure 7.23):

“When I want coffee, I can send a notification to my coffee maker. Then it makes my coffee at the time I want.” (D8)

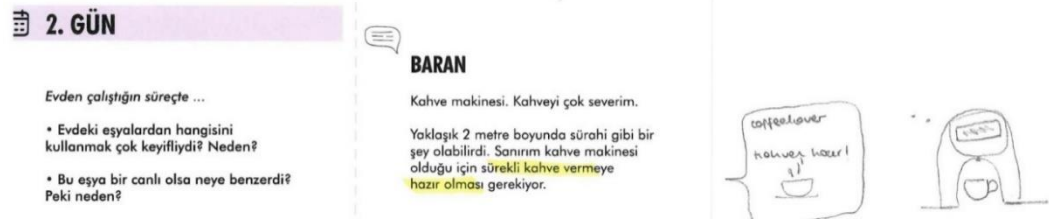


Figure 7.23: Idea notes of Designer 8.

7.2.3.13 Space

Another focus of the design ideas is space. This category employs the initial design ideas focused on the user problems and needs related to the spaces at home. In some instances, designers focused on how to encourage users to use multiple spaces in their homes while working from home. For example, Designer 10 suggests employing a usage scenario inside the home and explains her reasoning as:

“I think that the time for working/living at home should be divided into many places (in the home). In this way, we can expand our range of motion a little more and experience different spaces within the home.” (D10)

Similarly, Designer 4 focused on users “feeling overwhelmed by the constant routine at home” and suggested that if the space was designed to change and transform, the mood of the user could be improved. In another instance, focusing on a space-related idea, Designer 16 proposes a home that “sits on the slope by terracing and looks at green land” (Figure 7.24). And she explains that User 5’s words “(My balcony would advise me to) think less” was inspirational and reminded her of a previous architectural project she worked on. Designer 16 found it useful to ask, “What would this space tell its user?” when designing a space.



Figure 7.24: Idea notes of Designer 16.

7.2.3.14 Emotional State

Some of the design ideas responding to user narratives focused on the emotional state of the users. Through their initial design ideas, designers sought to improve the user’s emotional state. In one instance, User 2 wrote about “not sitting properly” on

her “ergonomic chair”. Designer 2 presents a solution that responds to this problem, and she combines this with the narratives of User 1 mentioning working from home is “lonely”. She ideates on a new chair design that can help the user to sit ergonomically and improve the user’s emotional state, and she describes her idea as (Figure 7.25):

“Can this chair, which will solve the user's problem with ergonomics, make the user feel like being hugged? Because hugging is an activity that releases certain chemicals, I thought that maybe there could be a chair that hugs him when she gets angry.” (D2)

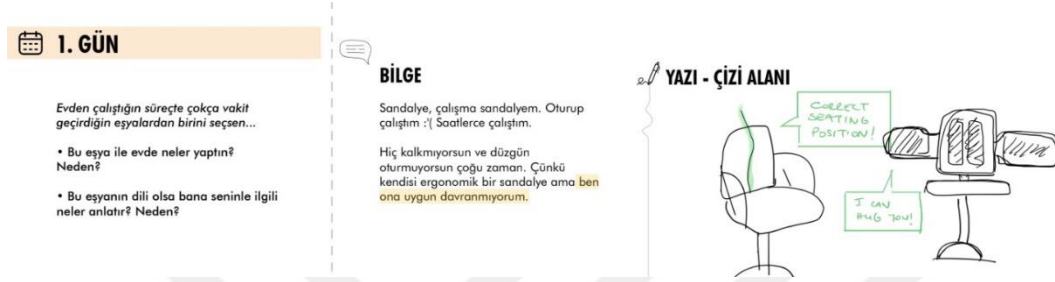


Figure 7.25: Idea notes of Designer 2.

In another example, Designer 4 reflects on the user’s feeling “lonely”, and she puts forward a few brief ideas to improve the user’s mood. She states that having online meetings on only work-related topics can “make users feel lonely and isolated”, and she recommends having “meetings for socialization and heart-to-heart talks”. Also, she puts forward the concept of a helpful house robot could become a “good friend” when working from home, “accompanying” the user’s “green tea breaks” (Figure 7.26).



Figure 7.26: Idea notes of Designer 4.

7.2.3.15 Health

Several design ideas focused on the user's health including their physical and mental wellbeing. In terms of physical health, many designers paid attention to problems with ergonomics. In one instance, Designer 8 suggested a working chair integrated with a desk lamp, that interacts and changes simultaneously. She recommends that the chair can detect when the user is sitting incorrectly, and the desk lamp can change its light to encourage them to sit in the correct positions or take a break from work.

Another idea focusing on improving the physical health of the user is presented by Designer 2. She recommended a yoga mat that can be given to employees of a workspace, and it can be used to improve their physical health (Figure 7.27). She describes it as: "Points accumulate as you do yoga, it creates competition at work. In the process, you see the effect of practicing yoga on your performance." (D2)



Figure 7.27: Idea notes of Designer 2.

In another instance, Designer 2 focused on improving the users' physical and mental health, and she introduced a bed tray that acts like a "caregiver/nurse" that can assist the user's work to remind her to take breaks and make relaxation a priority (Figure 7.28):

"Could the fact that the user likens the bed tray to a nurse be a concept of a 'work nurse'? Something that keeps track of your routines, checks your work health, or sounds an alarm when you work without getting up too much and it damages your health." (D2)



Figure 7.28: Idea notes of Designer 2.

7.2.3.16 Interaction

In the research, many designers paid attention to sustaining interaction between people through their design ideas. Some of the ideas under this subcategory focused on increasing and maintaining interaction between co-workers, and other concepts include designing interactive products to fulfill the users' need for connection. In one instance, Designer 17 suggests an interface that can increase interaction between co-workers when working from home (Figure 7.29):

“There is a digital screen, similar to opening Zoom in and working along with someone else, an interface that you and your friend can see each other. ... This is something that will make you feel like sitting on the other side of the table. ... It can also prevent loneliness. (Because) the user complains about not being able to find support, and not being able to socialize.”

(D17)

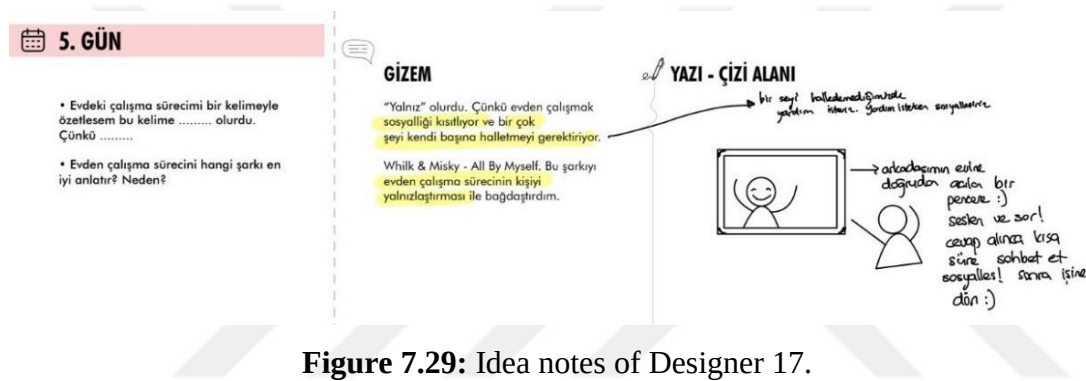


Figure 7.29: Idea notes of Designer 17.

Another common approach of designers was to ideate on products that “understand” the users' condition, respond, give feedback, and are interactive. These products were thought to detect the user's emotional state and respond accordingly. For example, Designer 1 suggests that such a product could “invite the user to take a break and relax”. Similarly, Designers 8, 11, and 17 recommended products that are personal assistants that respond to the users' needs such as taking frequent breaks, focusing, and organizing their time. Also, Designer 4 ideates a helpful and friendly robot to accompany the user, aiming to reduce the feeling of loneliness while working from home.

7.2.4 Utilizing metaphors

Within the scope of this study, designers showed a particular interest in metaphors, and they used them for different purposes. When doing this, designers either utilized a user metaphor from the given narratives without changing it or altered the given

user metaphor. In other instances, designers used a new metaphor they have constructed.

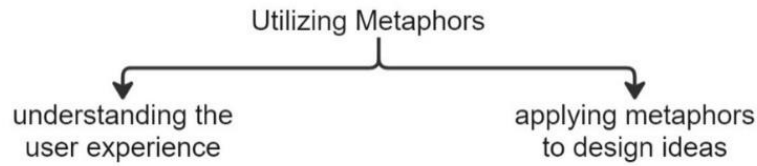


Figure 7.30: Subcategories of the category “utilizing metaphors”.

User metaphor: In some instances, designers employed metaphors as they are presented in the user narratives, without any changes.

Altered user metaphor: In other instances, designers changed the given user metaphor by changing the source or target in the mapping.

Designer metaphor: There are instances that, after reading the user narratives, designers constructed new metaphors themselves which they used in their design ideas.

Designers utilized metaphors to understand the users in depth and as inspiration for design ideas (Figure 7.30, Figure 7.31).

Code System	Metaphorical	Literal
DESIGNER		
Utilizing Metaphors		
Understanding the user experience	92	
Applying metaphors to design ideas	75	
SUM	167	0

Figure 7.31: Code relations browser in MAXQDA showing number of units in the utilizing metaphors subcodes.

7.2.4.17 Understanding the user experience

Metaphorical expressions were helpful to designers in understanding the user experience. Designers reflected on the user metaphors and their entailments.

For example, when User 1 constructs the metaphor “my bed tray is a caregiver-nurse”, Designer 17 dwells on this expression and says:

“What is a caregiver? It ‘helps you with something’. It always looks like something that ‘helps’, and ‘enables’ customization and modifies everything.” (D17)

Here, the designer thought of the metaphor, metaphor’s mapping, and entailments which gave her a better understanding of the user’s experience. Similarly, when User

3 mentioned her chair on the terrace being like a “friend”, Designer 8 claimed that, along with the rest of the narrative, it helped her understand the user need better:

“First, the user describes a place, the terrace. And she talks about a product, the chair on the terrace, and compares it to a friend. Then she talks about an action that is watching a view. There is a feeling there, a friend. Something she associates with it. What she associates with it shows her need.” (D8)

7.2.4.18 Applying metaphors to design ideas

When designers responded to the user narratives that have metaphorical content, some of them employed the presented metaphors in their design ideas. When doing this, designers used the mapped properties of a given source and applied them to their design ideas. So, adopted qualities from the source of the metaphor were introduced as the characteristics of the new design idea such as the appearance, the way it functions, and what extra features it has. For example, User 10 wrote “Working from home is a computer game. You just have to do some missions and meet deadlines. I think it makes you asocial.” When responding to it with a design idea, Designer 1 took a different approach to this metaphor and imagined working from home as a game that enables socialization rather than making the workers asocial. Here the designer keeps the user’s metaphor the same, but she maps the positive aspects (a game can be socializing) of the source (game) rather than the negative ones (playing games for a long period can make people asocial). Designer 1 explains her idea as:

“The user made a good analogy. ... She described it negatively, but I wonder if it would be possible to transfer something from a computer game that could relieve these negativities? I thought of games played together, such as 'online multiplayer games'. Doing something as a team while talking, maybe that could be adapted (to working from home).” (D1)

In another instance, as mentioned in the previous chapter, Designer 2 focused on User 1’s metaphor “My bed tray is like a caregiver/nurse”. Here, the designer proposed a bed tray that can be the user’s “work nurse” to keep track of the user’s routines, check the user’s “work health”, and sound an alarm when the user works for an extended period without taking a break. Here the designer takes the bed tray being a nurse as a concept of “work nurse” and applies it to her design idea. Now the mapped qualities from the source (nurse) such as “checking up on the patient” and “keeping them healthy” are emphasized and used as new product features.

Other examples of design ideas utilized metaphors as an inspiration for the look of a product. User 4's narrative "My French press is a chubby little guinea pig. It is short in height and bulging in width." prompted Designer 4 and Designer 8 to think of a french press design that is inspired by the physical appearance of a guinea pig.

Furthermore, designers utilized user metaphors as an inspiration for how their design functions. To give an illustration, User 2 wrote about her desk lamp as "(If it would be a living thing) it would be a swan. It is white, with a long neck, and a bit fragile." And, Designer 7 focused on the lamp being "fragile". Here, the designer proposed an "emotional lamp" that gets "tired" after "working" for a long time, and it can signal that to the user to help her finish the workday.

Another example is when Designer 8 finds inspiration in User 12's metaphorical expression: "(If the headphones that I use frequently was a living thing) it would be a cat or a dog. Because for me it's like a loyal friend." Designer 8 takes this narrative as a clue to think of "what makes a product loyal" and how could this reflect in the design's qualities:

"We are talking about the things we live with in our home. So, at the end of the day, it has to be really 'loyal' and not let us down, and what we mean by sustainability is that it has to be a loyal friend. I can use it to watch TV series when I need to, and it should not disturb my comfort while I am working. ... Maybe the product can afford it, and it can also be reflected in the product language (by asking) how do we define a loyal friend?" (D8)

Several designers were inspired by the metaphorical narratives that were personifications such as "product is a person". These personifications lead to product designs that are "interactive". To give an illustration, in response to User 3 writing "My chair on the terrace is like a friend. Because I didn't feel alone when I was there." made Designer 12 think of "interactivity" and "smart products".



8. INTERPRETATION OF FINDINGS

The main focus of this research is to understand how user narratives with metaphors can be gathered through the cultural probes method and utilized to inspire the design ideation process. Within this scope, this thesis aimed to answer the following research questions:

- How can the cultural probes method be utilized to collect metaphorical data from users?
- What kind of metaphorical data could be collected from users through cultural probes to stimulate idea generation?
- How can data on how metaphorical user data inspire the design idea generation process be collected from designers?
- How do metaphorical user data inspire designers?

The findings and interpretations of this research are presented under three sections responding to these research questions. To investigate how metaphorical narratives inspire design ideation a set of user data that include both literal and metaphorical user narratives was needed. Therefore, the user research was conducted with the method of cultural probes on the experience of working from home. In this section, findings on the collected user metaphors and their contributions to design ideation are explained.

8.1 Findings on Working from Home Experience

- According to the research findings, when working from home the products and spaces used for work and leisure become intertwined. This situation manifests itself in using smartphones or computers as both a work and leisure tool, sitting on the same chair, and being in front of the same desk for both working and spending free time. According to the user narratives, this led many participants to stay in the sitting position for too long and be inactive.
- When working from home, users tended to have two main preferences in terms of their working environments. First, some of them had multiple places

they use in the house for working such as the bedroom, living room, and kitchen. Some of these people did not have a workspace since they did not work from home before the pandemic. Therefore, they made use of the spaces available in their homes and created their workspaces. Then, some of the users had a dedicated space to work in which they set up their needed tools and equipment such as computers.

- Mostly used and enjoyed products of the users, other than the ones related to their work (computers, laptops, work desks, and working chairs), are the products include tools to make hot beverages (french press, coffee maker, teapot), and cook (kitchen tools, oven). Along with other findings, this suggests that users prioritized and enjoyed taking breaks when working from home and focused on making healthy meals since they were already at home.
- Overall, the data suggest that working from home was very difficult for certain users who are not used to this practice. In contrast, this experience was positive for several users who work in industries that were already adaptable to working from home conditions such as computer engineering. Although some participants mentioned feeling relaxed and free, many other participants claimed that they felt trapped, lonely, sad, and frustrated. Additionally, one of the main problems users faced during working from home was lack of socialization, and most of the participants narrated feeling lonely. However, it should be noted that in this research, participants narrated their working from home experience during the pandemic. This results in user data that are affected by both the effects of quarantines and stay-at-home regulations and work-from-home conditions. Therefore, the negative experiences participants had and the difficulties they faced during this could be due to the pandemic conditions. The fact they did not get a chance to have an adaptation period and were forced to work from home regardless of the job presented itself in the narratives of users.
- In terms of their practices, the findings suggest that users ended up working for long periods when working from home. Some of the participants were expected to work past their working hours since they were working from home. This can be interpreted as the lines between working hours and leisure hours becoming blurred.

- Although few users mentioned not having a routine, most of the users practiced certain routines such as taking regular breaks during work to make hot beverages and maintaining a visual and tactile connection to the outside (spending time in front of a window or on their balcony) and spending time with entertainment (i.e., watching tv shows). And some of the users also mentioned their cleaning practices.
- Users described their relationships with their objects and space and their emotions with metaphorical narratives. Since the metaphor tells the unknown through the known, it can be argued that users found it easier to communicate their emotions through metaphors.
- The study findings suggest that during working from home and the lack of social interaction, the relationships between users and their products and spaces become more prominent. In addition, most of the participants narrated their need for leisure and relaxation. They used various products to fulfill their needs. These findings can be important design criteria to consider when designing products, spaces, and systems for working from home practice.

8.2 Findings on Methodology

- When brainstorming on the given user narratives, some of the designers stated that they need more information about the users and wished they could “ask follow-up questions to users”. This indicates that designers were engaged with the written material, and they wanted to reach deeper insight into the users’ needs, problems, and lifestyles by asking the following questions. This finding is related to the methodology that is used to collect the user data.
 - The reason why designers needed more user data may be related to the platform on which user research was conducted. This study utilized Instagram since it is a platform that is potentially suitable for a cultural probes study (further explained in section 4.1.2 Preparing and Sharing the Probe Kit). Although, the platform has certain limitations such as allowing to write short responses on Instagram stories, sending photos disappearing after a certain amount of time has passed, and being a platform that encourages people to look at the shared content and pass

them quickly. These limitations of the platform potentially affected the way users completed certain tasks, and this may have resulted in shorter narratives. This finding was found important for future studies that could use social media platforms for cultural probes studies.

- In this study, the methodology followed allowed designers to have different ways to approach the presented user data because the given design brief was loosely structured. This revealed more insight into designers' various approaches to ideas with this type of user data. Most of the designers reflected on each user's response to a probe kit task individually. And a few of the participating designers opted for a user-specific approach, meaning that they evaluated responses from each user holistically, and came up with design ideas specific to each user.
- The tasks presented to the users in the cultural probe kit were specific enough not to deviate from the aim of "understanding the experience of working from home" and comprehensive enough to allow a broader understanding of the participants' daily lives and experiences. As a natural consequence of this, some designers were not inspired by user responses to tasks that they thought were off topic (e.g. tasks about leisure experience at home). On the other hand, most of the designers benefited from this wide range of user data, and many of them found this coverage to be encouraging to ideate on. The benefits of keeping this scope broad are also mentioned in the literature (Celikoglu et al., 2017; Visser et al., 2005). In conclusion, it can be said that keeping the scope of the cultural probes tasks broader than the specific topic of the research contributes to the designers being inspired by the probe data.
- In this research, user data collected on Instagram were anonymized and turned into two formats for designers to read and reflect on. Introducing the user data to designers in these different formats led to findings related to the visual presentation of this type of data.
 - The main format of the user data was a pdf document format consisting of 42 pages, which, as a number, overwhelmed most of the designers. Though, most of them mentioned that once they started looking through the document, it was easy to read, make notes, and sketch. On the other hand, a few of the designers were confused by the layout and gave feedback on how to improve it.

- Designers were also given a comprehensive poster format of the user data. According to the findings of the research, designers mainly preferred the paged document format rather than the poster format. Most of them mentioned finding it easier to read, navigate, and make notes on. Also, some of the designers mentioned that they could use the poster format if it was printed out rather than digital. They also pointed out that the poster format could be beneficial for them to have an overview of the user narratives.
- In this research, designers were free to use the given document in a digital or printed format. Since the sent document was digital, most of the designers read and took notes in digital format. Though, three designers printed out the sent document, then made notes and sketches on paper. Most of the participants mentioned having trouble using a digital format, but some of the designers found it challenging cause they could not easily make sketches on a computer. Some of the designers used different approaches such as writing and sketching on a separate notebook and sending pictures of the pages, using software they are familiar with (i.e., Photoshop) to put their hand-drawn sketches on the pdf document, etc. But in future studies, the choice of using a printed-out or digital version of the user data could be asked before the study to give them multiple choices.
- The findings suggest that all of the participating designers were engaged with the given user narratives, and they were able to summarize the user narratives and ideate design ideas. This indicates that the data collected by cultural probes by utilizing Instagram can be communicated to designers, give an overview of multiple user experiences, and can be used to inspire the initial ideation process.
- During this study, when designers reflected and brainstormed on the completed probe kits, they tended to speculate on what users meant and write user scenarios with the information presented to them. This can be interpreted as the user data collected with cultural probe kits giving a hint of user information to designers rather than giving comprehensive and generalizable user data, letting designers speculate with the limited but rich information they have. It can be argued that this is the reason cultural probes are a method

for giving design inspiration rather than design guidance. This is related to the intent behind the use of cultural probes. With the probes, rather than describing a group of problems, Gaver et al., (1999) aimed to collect “inspirational data” to stimulate creativity to expand the capabilities of existing technology. Moreover, this could indicate why this method is useful for the initial design ideation stage rather than the stages in the design process that require generalizable user data. Through the probes, Gaver et al. (1999) attempted to gain a more “impressionistic account” of the participants' beliefs and goals, as well as their aesthetic tastes and cultural concerns, rather than an objective understanding of their requirements. They designed the probes as interventions that would have an impact on the participants, in their case, the elders, while generating insightful replies from them to develop a position for designers as provocateurs.

8.3 Findings on Design Ideation with Metaphorical Narratives

- In this study, designers made more annotations when reflecting on metaphorical user narratives. Also, the analysis suggests that designers empathize more with the users through the metaphorical narratives than literal ones, and these narratives lead to more insights about the users (Figure 8.1).

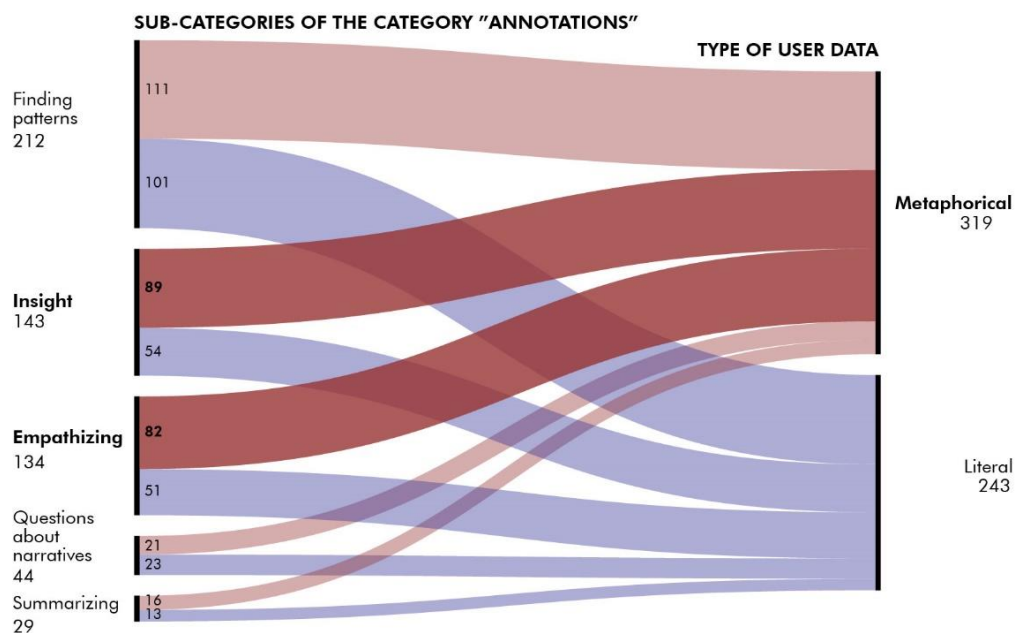


Figure 8.1: Diagram showing the relations between designers' annotations and the type of user narratives.

- Within the study, both metaphorical and literal narratives inspired new design ideas, ideating on a non-existing product or concept, and re-design ideas, improving existing products/ spaces/ services. Overall, metaphorical narratives prompted more design ideas (Figure 8.2). Furthermore, the participating designers mentioned that they were inspired by metaphorical narratives that were prompted by metaphorical tasks.

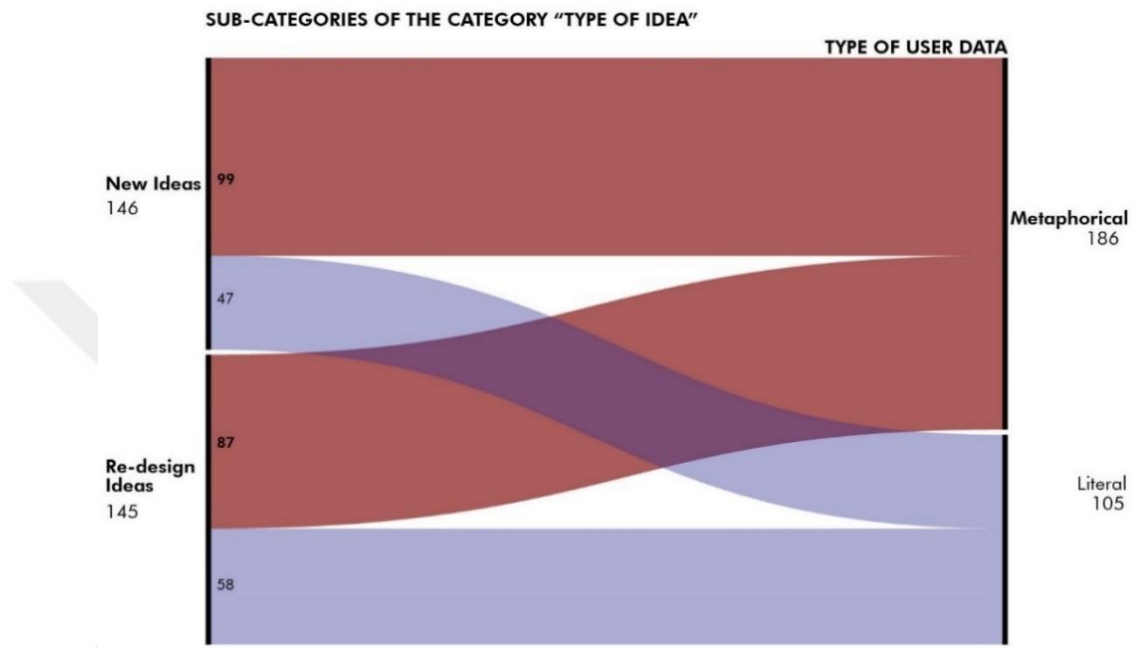


Figure 8.2: Diagram showing the relations between the type of design ideas and type of user narratives.

- Literal user narratives encouraged both brief and thorough design ideas. On the other hand, metaphorical narratives inspired more thorough design ideas than brief ones (Figure 8.3). This finding can be interpreted as metaphors and their entailments encouraging the designers to think more about the user narrative, resulting in a more detailed design idea. In addition, the entailments of metaphors may have helped designers to contemplate other features of a potential design solution. Alternatively, the thorough design ideas can be interpreted as “holistic design ideas”, supporting the finding of Sen and Merzali Celikoglu (2019), suggesting that metaphors can “change designers’ perspective towards more open, holistic approaches to design ideas” (p. 79).

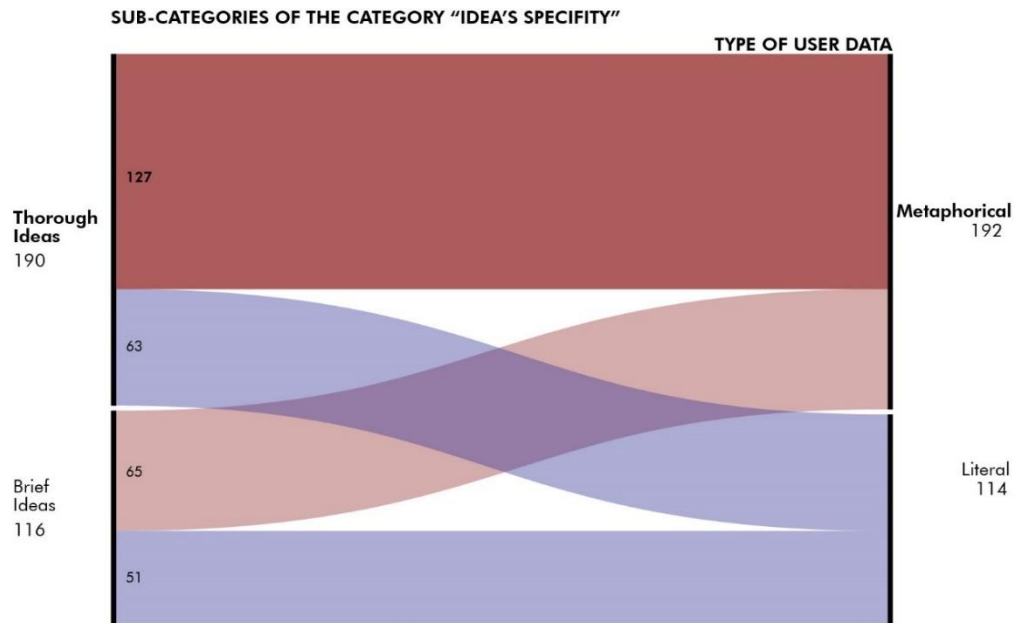


Figure 8.3: Diagram showing the relations between the specificity design ideas and type of user narratives.

- In this study, metaphorical user narratives inspired initial design ideas that focus primarily on “interaction”, and then on “domestic products” (Figure 8.4). The focus on “interaction” includes both interactions with other people and with things including smart products. Especially the user metaphor “product/space is a person” encouraged designers to ideate interactive, responsive products. This finding can be interpreted as user metaphors, such as personifications, can inspire ideas that focus on humane characteristics such as being interactive.
- The design ideas inspired by literal narratives were focused on “space”. And both metaphorical and literal narratives inspired design ideas that focus on “emotion” (improving emotional state) to a considerable count (Figure 8.4).

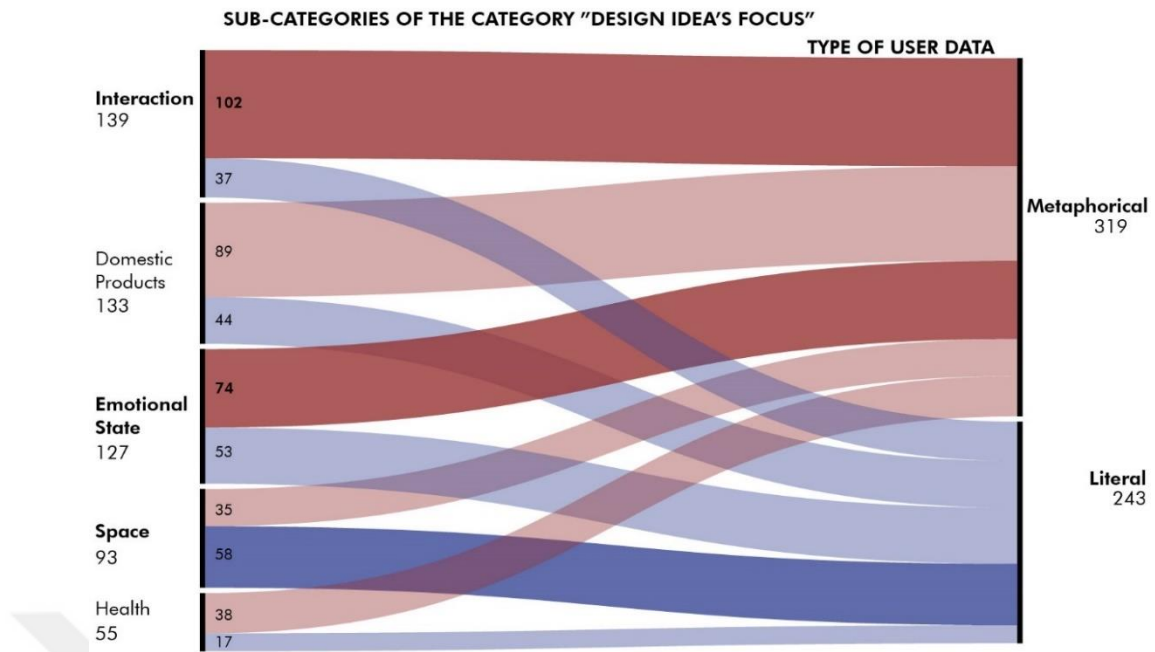


Figure 8.4: Diagram showing the relations between the focus of design ideas and type of user narratives.

- Using user narratives to ideate, designers employed various strategies that included drawing from experience & knowledge, setting design criteria, identifying opportunities, and identifying user needs & problems (Figure 8.5). In this research, the most prominent strategy for both literal and metaphorical narratives is “setting design criteria”. And other strategies were employed with similar frequency for both literal and metaphorical narratives. Following “setting design criteria”, “identifying needs and problems” was used more than “identifying opportunities”. This could be explained by the existing perspective on design that it is "problem solving", a concept initially presented by Herbert Simon in his book "The Sciences of the Artificial" (1970). The finding that “identifying needs and problems” is a prominent way designers ideated in this research shows this widely established perspective is at play. And the least used strategy was “drawing from experience and knowledge”. Overall, this could be interpreted as user narratives that were used to identify design criteria and user needs were more likely to encourage initial design ideas.

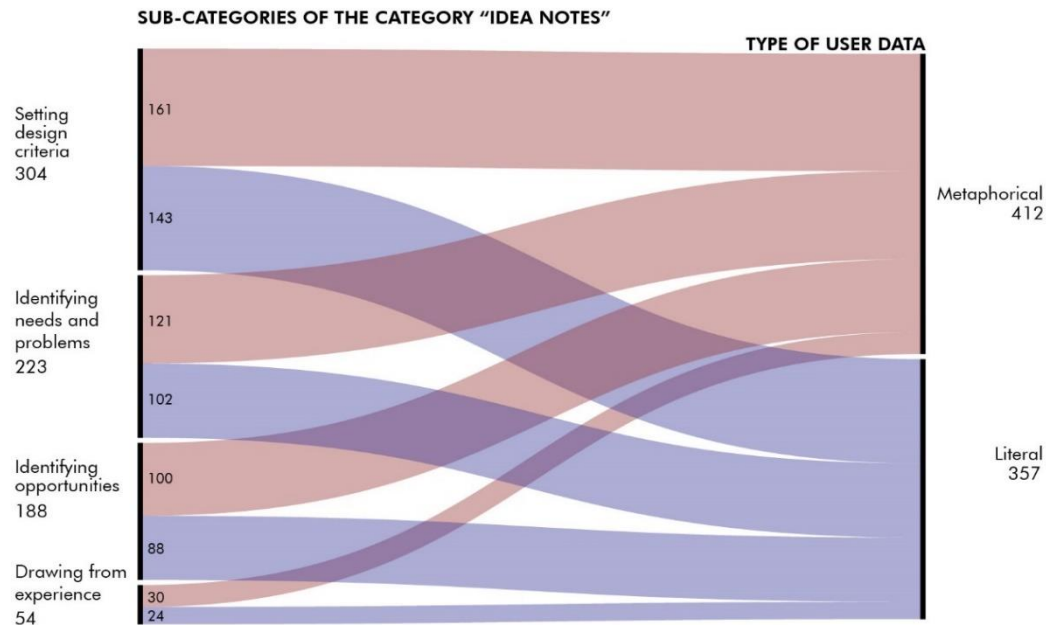


Figure 8.5: Diagram showing the relations between idea notes' categories and the type of user narratives.

- According to the findings of the study, the tasks that aimed to prompt metaphors by using songs and television shows as a “source” were not inspirational for designers. The study suggests that these metaphors were either not mapped meaningfully or lacked richness in terms of the meaning they gave to designers. Also, most of the designers mentioned that they were not familiar with the songs or tv shows mentioned by the users. Since metaphor is “a word for one thing is used to describe another” (Jaynes, 2000, p. 48) these metaphors ended up trying to explain something unfamiliar with another unfamiliar thing, making them not inspiring to the designers. These findings suggest that the metaphors uttered by users should be rich and mapped in a meaningful way, and the source of the metaphor should be familiar to inspire designers.
- Most of the user metaphors, especially personifications of objects and rooms, were inspirational to designers when coming up with design ideas. Participating designers suggest that these metaphors helped them “have a different perspective” to understand the user experience. The reason for that is the fact that users employed these metaphors to communicate how they feel and experience working from home including their wishes, needs, and problems. Overall, this study suggests that employing metaphors such as “an object is a person”, “room is a person who gives advice”, and “working from

is...” and many others can help users by encouraging them to have an outsider’s perspective on their lives to understand their daily experiences. Since “the essence of metaphor is understanding and experiencing one kind of thing in terms of another” (Lakoff & Johnson, 1980, p. 5), metaphors can have the potential to communicate the user experience effectively. This finding suggests that metaphors can be utilized in user research to gain deeper insight into users’ experiences.

- Designers utilized metaphorical narratives to inspire their design ideas by adopting qualities from the source of the metaphor that ended up becoming the characteristics of the proposed design such as the appearance, function, and extra features.





9. CONCLUSION

The cultural probes method is employed in this study to gather user data in the form of literal and metaphorical narratives to comprehend the users' experiences working from home. The study focused on how metaphorical speech might influence the ideation stage of the design process and reveal details about the user experience. From a user-centered design standpoint, this thesis was intended to investigate user metaphors to assist designers and researchers in better comprehending the user experience. The findings of this study suggest that user metaphors have the potential to improve design ideation during the initial stages of the design process and inform designers about the user experience.

For the purpose of understanding how metaphorical user narratives might inspire the design ideation process, the research includes a user study to collect user narratives with literal and metaphorical content and presents this set of user data to designers with a design brief. The purpose of this study is to provide information on the experience of working from home, the methodology used to gather user narratives with metaphors and how metaphorical user stories might stimulate design ideation. In Chapter 4, the study is explained in three phases. In phase I, a set of user data was collected with cultural probes. This set of data included literal and metaphorical user narratives about the working from home experience. Then, in phase II, the process of communicating the user narratives to designers is explained. Finally, in phase III the probe kits completed by users were given to designers to inspire them to come up with design ideas. And in Chapter 5, the analysis of the user narratives and designer responses is presented.

First, conducted qualitative content analysis on the user narratives revealed insights about users' environment, experience, and practice communicated with both literal and metaphorical speech. The findings suggest that metaphorical expressions may be effective for users in communicating their experience, especially their emotions, and relationships with their objects and space.

Then, findings on the methodology give information about how to collect metaphorical narratives and what kind of metaphors can be collected from users. The cultural probes method was useful to collect both literal and metaphorical narratives that inspire designers to come up with new design ideas.

The main findings of this thesis are the results of the qualitative content analysis of the designers' responses to the given user data. The study finds that narratives with metaphorical contents are capable of stimulating designers during their ideation process and encouraging designers to empathize with users. Also, the research suggests that metaphorical narratives lead to more thorough design ideas. Within this research, thorough design ideas were considered more developed compared to brief design ideas, since they included detailed descriptions of a product/ space/ system or service, and explanations of its form, function, and usage scenario. These ideas differ from the brief ideas by being more thought out and explained deliberately. These results can be explained by the fact that user metaphors and the entailments of these metaphors urge designers to consider the user stories more thoroughly, leading to more elaborate design ideas. To corroborate the findings of Sen and Merzali Celikoglu (2019), who claim that metaphors may "change designers' perspective towards more open, holistic approaches to design ideas" (p. 79), thorough design concepts might also be regarded as "holistic design ideas." Although this study claims that metaphors play a role in making a design idea more "thorough" and "holistic", there is a need for future studies to understand this phenomenon further. It should be noted that the time designers spent on the document, and the space they had for writing and sketching could have been factors that affect the specificity of the idea generated.

Within this study, metaphorical user tales served as the inspiration for the design concepts that heavily emphasize "interaction". Designers imagined interactions with other people and interactions with objects such as smart devices. This shows that concepts that emphasize humanistic traits like interaction were inspired by user metaphors, such as personifications of things. In light of this, metaphors can be employed in user research for products and systems that are closely related to interaction.

The study also finds that not every user metaphor is stimulating to designers. If the mapping of the metaphor is not rich, and not constructed well or the receivers of the metaphor are not familiar with the source the user metaphor fails to communicate the

user experience and encourage design ideas. However, metaphors that are correctly constructed with familiar sources can be useful in communicating the user experience. In this study, the metaphors that include personification, such as the metaphor “an object is a person”, were successful in communicating the user experience and encouraging design ideas.

In conclusion, the findings of this thesis contribute to the literature on working from home, exemplify a methodology for collecting metaphorical user data, and suggest that user metaphors are helpful to designers. The research indicates that metaphorical narratives help users to communicate otherwise complex experiences such as emotions. Also, these narratives encourage designers to empathize with the users, they stimulate design ideas that are thorough in the initial ideation process. Lastly, the study proposes that the cultural probes method is useful for collecting metaphorical narratives from users and encouraging designers to come up with design ideas.

In this research, designers were asked to follow a design ideation procedure along with a design brief. Though the study does not focus on the methodology of this procedure, it shows that there is potential for further research focusing on how this ideation procedure can be structured, improved, and utilized. In the scope of this study, the loosely structured design brief and procedure allowed participating designers to reflect on the given user narratives in different ways. Further research is needed to test how this approach can be improved for generating design concepts. Throughout this study, the focus was on how designers were inspired by user narratives that contain metaphors, and not on analyzing and interpreting the user narratives and the metaphors in them. There is potential for future research that explores how user metaphors are generated and the qualities of the user metaphors (such as aptness, comprehensibility, interpretability, and uniqueness).

The data collected from the designers in this research included both visual and literary elements and were analyzed holistically. Future studies can focus on the drawings produced by designers during the idea generation process and the metaphors contained therein, as well as semiotic and semantic approaches to these metaphors.



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APPENDICES

APPENDIX A: Sample interview transcription.

APPENDIX B: Sample document of probe kit outcomes with Designer 2's reflections.



APPENDIX A: Sample interview transcription.

DESIGNER: D12

DATE: 04.10.2022

DURATION: 72 minutes

R. G.: Sürece dair sorular sorarak başlayabilirim sanırım. Brief ve doküman açıklayıcı mıydı? Tamamlaman ne kadar sürdü? Zorlandın mı?

D12: Bence çok açıklayıcıydı. Ben zaten yönetime de böyle çalışmalara aşina olduğum için. Ama aşına olmayan biri için de açıklayıcıydı. O tümünü görebildiği poster halinde ve sayfa sayfa olan doküman şeklinde sunman çok iyiydi. Bence gayet iyiydi, yani anlamadığımı bir yer hiç olmadı.

R. G.: Peki dokümanın yoğunluğu nasıldı? Yaparken yordu mu seni? Yoksa rahat mı geçti?

D12: Bence herkesin cevabı böyle kısa kısa sorular-kısa kısa cevaplar olduğu için pek bir yorucu tarafı yoktu. Sayfa sayısına baktığında göz korkutucu görünüyor olabilir ama her bir cevap aslında üç-dört cümle, kısa kısa cümleler zaten. O sebeple bence hiç yorucu değildi.

R. G.: Anladım. Ne kadar sürdü peki tamamlaman?

D12: Ben şöyle yarı katılımcıları bir günde yaptım, diğer yarısını da sonra yaptım. İkisi de ayrı ayrı oturumlar şeklinde bir saat-bir saat on beş dakika falan sürdü.

R. G.: Anladım. Yani toplam iki-iki buçuk saate geldi.

D12: Evet evet. Ama o da galiba benden dolayı. Yani bir kere daha, haydi baştan bir şeyler çizeyim veya çeşitli cevaplar vermeye çalıştığım için olabilir.

R. G.: Bu arada aşağı yukarı benzer şeyler söyledi tasarımcılar vakit olarak. Ben yine fark edebileceğini düşünüyorum. Bir de şeyi merak ettim. Sen çıktı alıp çalıştın ya, o süreç pratik geldi mi? Doküman buna elverişli miydi?

D12: Bence baya elverişliydi buna. Çünkü bilgisayarda da highlight edebiliyoruz ama ben aklıma gelen şeyleri hemen ok çizerek yazmayı, geri dönmeyi falan daha çok tercih ediyorum. Dijitalde bunun için sürekli not kutusu açmak vs, yani çıktı üzerinde çalışmak bu anlamda daha pratik geliyor. Hem çizim de yapabilmek istediğim için çıktı alıp çalıştım. Ona da uygundu format bence.

R. G.: Bunu da duyduğuma sevindim. Şeyi de merak ediyorum, sen de az önce bahsettin ya. Ben iki formatta yolladım bu veriyi. Sen dokümanda çalışmışsın ama o poster formatı hiç işine yaradı mı? Baktın mı, ne düşündün onunla alakalı merak ettim.

D12: Onu aslında biraz check list gibi kullandım. İlk açtığımda her şey, işte kaç kişi varmış? Az çok ne ile uğraşacağımı anlamak için. Sonunda da gözden kaçırdığım bir şey var mı diye baktım.

R. G.: Anladım, enteresan olmuş, hoşuma gitti. Ufak ufak ben ekrana senin bana ilettiğin dokümanı yansıtacağım. Bunun üzerinden beraber gitmek hatırlatıcı ve keyifli oluyor. Girişte şeyi sormak istedim bir de post-it kullanmanda özel bir sebep var mıydı? Bunların renklerinin bir anlamı var mı?

D12: Post-itler aslında üzerine ikinci defa düşündüğümde ortaya çıkan kısımlar. Kâğıda yazdıklarım ilk bakış gibi. Sonra tekrar cevapların üzerinden geçerken burayı tekrar deşebilirim diye düşündüğüm alanlar.

R. G.: Anladım. İstiyorsan ufak ufak beraber bakabiliriz. İlk veri biraz tanıdık gelmiş olabilir. Bağımlı olmayı vurgulayıp onun üzerine bir şeyler düşünmüşsün sanırım.

D12: Aslında yazdığım şeyi söyleyecektim.

R. G.: Onu ben şey olarak açıyorum ki mesela yazdığın şey haricinde düşünme sürecine dair aklına bir şeyler gelirse diye. Genel olarak sen kavramlarla gitmişsin sanırım.

D12: Daha çok şey yapmaya çalışıyorum ben, Elif'in çalışmasında da öyle olmuştu, o kontekst bana yabancı gelen bir kelime, ya da bu eşyanın dili olsa bana seninle ilgili neler anlatır, hani orada çok vurucu olan kelimeleri bulmaya çalışıyorum. Belki onlar metaforik anlamlar taşıyordur diye düşünüyorum. Ya da belki tamamen metaforik olmasa bile mecazlı, dolaylı bir anlam... Onları bulmaya çalışıyorum. Daha sonra onları çekip, bir kontekste bir kavrama dönüştürmeye. İşte 'Bağımlı olduğumu söylerdi.' Onu oradan bağımlı olmak diye çekip, çünkü bir adım geri gidince biraz daha geniş bakabiliyorum gibi geliyor. Mesela bağımlı olmayı bağlı olmak olarak çevirmeseydim sonuca ulaşamazdım. Bağımlılıkla aslında giyilebilir olmak çok bağdaşmıyor. Ama bağımlılıkla bağdaşıyor.

R. G.: Anladım. Yani aslında onu oradan alıp da adım adım bağlantı kurmak olarak anladım.

D12: Belki kendi kafamda şey yapmaya çalışıyorumdur. İşte aldığım kelimenin, metaforik aktarımda vardı ya, aktarılanları bulmaya çalışıyorum gibi.

R. G.: Mesela bunları yazarken kafanda net bir ürün, bir sistem, herhangi bir şey canlandı mı? Canlanan olduysa onları işledin diye tahmin ediyorum.

D12: Yani aslında öyle bir önyargı ile başlamadım ama az-çok mobilya ve aydınlatma düşünceleri vardı. Okurken öyle de çıktı. Bir de çalışma molaları... Kendi gözlemlerimden de öyle bir kategorizasyon vardı ama okurken her şeyi 'aaa bu da buna oturur.' diye değil de daha serbest bir şekilde okumaya çalıştım.

R. G.: Fikrin somutlaşmasına özellikle mi gitmedin peki yoksa sadece not olarak mı gitmek istedin?

D12: Çok böyle sınırlandırmak istemedim. Ama direkt olarak bu bunu işaret ediyor diyen şeyleri de belirttim. Çok daha konsept olarak çıkanları bir ürüne atamak istemedim. Bir ürün özelliği olarak kalabilir diye düşündüm. Mesela konfor bir konsept olarak belirginleştiği zaman bu oturma elemanı olsun demedim de, konforlu herhangi bir ürün olabilir diye düşündüm.

R. G.: Anladım. Biraz daha netleşmiş oldu bende. Orada devam edecek olursak da yine bu hafif işler odağında bir yol haritası oluşmuş sanırım. Kendini çok anlatıyor ama eklemek istediğin bir şeyler var mı?

D12: Burada aslında hafif işler bir metafor değil tam olarak. Yine böyle mecaz bir anlam taşıdığı için, işleri niteliyor sonuçta. Oradan bir şeyler çıkar diye düşündüm. Çünkü burada aslında düzenlediğin bir şey. Evden çalışırken yaptığın işleri gruplara ayırmak, yorulduktan sonra daha hafif şeylere geçeyim falan gibi. O yüzden yararlı olabilir gibi geldi.

R. G.: Anladım. Şöyle ilerliyorum bir yandan da. Burada da izole bir köşe ve masanın üstü... Bunun üzerinden de aslında belli, yine kriterler belirlemişsin sanırım. Ürüne gider gibi olmuş. Onunla ilgili ne düşündün?

D12: Burada aslında çok kendi çevremizde de konuştuğumuz durumlardan yola çıkarak arka planı buğulaştırma ve göstermeme ihtiyacımız. Arkamızda bir şey olsa. Onu dijitalden seçebiliyoruz ama işte, somut da olsa ve onu değiştirebiliyor olsak. Bir gün gri olsa, bir gün texturelı bir şey olsa. Belki o alanı izole etse, soğursa. O yüzden ürün analizine gidebildim. Çok da nokta atışı ediyor gibi. Masa başında izolasyonu nasıl sağlayabilirsin? Ya masa ile ya masa elemanı ile sağlayacaksın. O şekilde çok alışılabilir bir dert olduğu için bu kadar somut bir öneri olmuş olabilir.

R. G.: Güzel, anladım. Burada izole köşe noktasından şu kişiselleştirilmiş ürünlerden bu masa üstünde olması ile mi ilgili?

D12: Evet, evet. Her biri birbirinden farklı olduğu için. Burada masanın üstü de onun zihninin bir yansıması olarak düşünürsek orada aslında masayı da kişiselleştiriyoruz. Kendi zihnini oraya aktarabilmek, yansıtabilmek diye düşündüm. Bu arada boş alanlardaki şeylerim karışıkça özür diliyorum. Oklarım falan.

R. G.: Yok yok, gayet anlaşılır. Ben sadece teyit etmek için soruyorum. Başlangıçta metaforik ve mecazi ifadelerin dikkatini çektiğini açıkladın ya. Okurken biraz daha o odakla mı gittin yoksa daha geniş bakıp onların mı seni çekmesi söz konusu oldu?

D12: İkisi de. Onları özellikle aradım ama geniş bakarken metaforik veya mecazi olmayan şeyleri de ihmal etmedim.

R. G.: Kişisel bir tercih olarak özellikle onlara bakıyorsun.

D12: Evet.

R. G.: Bir yandan da şeyi sorayım, böyle en son bir daha bunu sorarım ama, sende fikir uyandırmayan içeriklerde ne var? Onları niçin ilham vermediler diye arka planda bir soru gezebilir diye düşündüm. Devam ediyorum. Burada da mola ve konfor üzerine fikir uçuşmaları var galiba. Bir de şeyi merak ettim. Not alımlarında başta bir kare kutu var. O ne anlama geliyor?

D12: O mola anları. Mola çıktıkça onu işaretledim. Kendime hatırlatmak için.

R. G.: Anladım. Çok iyi. Şöyle devam ediyorum. Burada da atmosferi değiştiren masa lambası üzerinden yine aydınlatma ile ilgili bir şeyler düşünmüşsün. Bu aynı ürünün farklı modları olabilir ne düşündün?

D12: Burada aslında bir ürünün sağladığı ışık rengi ve miktarıyla, bir yandan da ışığın yönlendirilme biçimi ile farklılık yaratılabilir diye düşündüm. Belki direkt gelmiyordur, yansıyarak geliyordur. Belki tavana gidiyordur. Daha sarı bir ışıktır vs. Böyle birkaç kriter olabilir diye düşündüm.

R. G.: Yani aslında bunun mola vakti ile çalışma vakti arasında ayırıcı bir etki olmasını istedin. Anladım. Yine bir arka plan sorusu olarak sorayım, fikir bulduğun noktalarda acaba seni ne tetikledi? Mesela bir ihtiyaç-bir problem mi vardı? Ya da bu olsa iyi durur gibi fikirler mi düşündün? Biraz genel bir soru da uçuşabilir arka planda.

D12: Tamam, düşünüyim biraz.

R. G.: Bu arada bu çok karmaşık olmayabilir. Yani sadece bunu okudum ve aklıma bu geldi de diyebilirsin. İlla bunun bir problem olmasına gerek yok.

D12: Şöyle bir düşüncem var. İki soruna da cevap vermeye başlayabilirim unutmadan. Bana daha çok böyle ilham veren şeyler bir ürünün betimlenmesinden ziyade bir deneyimin, o işin tanımlanması gibi. Yani o işin gereklilikleri gibi. O iş ortamının nasıl olması gerektiği, nasıl hissettirmesi gerektiği, sonucunda ne hissettiğin, yaparken ne hissettiğin... Yani deneyimin tanımlanması ürünün tanımlanmasından daha faydalı geliyor. Tahmin ediyorum çok fikir bulamadığım kısımlarda bir ürünün tarif edildiği kısımlar. Çünkü o zaman çok sınırlanıyor gibi hissediyorum. Koltuğum ergonomik değildi dendiğinde koltuk ve ergonomik olmayışından başka bir şey çözüm üretemiyorum çünkü ürün net, sorun net. O yüzden çözüm de net, benim ekstra değer katabileceğim bir şey yok gibi geliyor. O yüzden deneyim tanımlandığında eksiklikleri ve iyileştirilebilir yönleri daha iyi bulabiliyorum gibi geldi.

R. G.: Bu güzel bir açıklama oldu. Mesela burada baktığımda da buna benzer parçalar görüyorum. O yüzden tamamdır. Şöyle ilerliyorum. Bilge'den devam ediyorum. Burada nasıl bir şey canlandı kafanda merak ettim. Biraz daha sorularla düşünmüşsün galiba.

D12: Burada evden çalışma konsepti olduğu için, egzersiz de evde, çalışmak da evde, dinlenmek de evde. Hepsi bir arada olduğu için her biri için farklı ürünler

edinmektense bunların bazılarının bir araya gelmesi... Aklıma sürekli dikiş makinası mantığı geliyor. Yukarıda bir şey yaparken aşağıda pedalla başka bir şey yapmak gibi. Oradan yola çıkarak vücudun farklı yerlerini kullanarak belki ben masada çalışıyorumdur ama aşağı takacağım farklı bir aparat ile orada pedal çeviririm vs. Aklıma sürekli pilates topu üzerinde oturarak çalışmak geliyor. Hem daha dinç tutan bir şey olduğu söyleniyor. Yani birebir böyle bir şey olmasa bile buradan yola çıkarak bir şeyler uyarlanabilir.

R. G.: Anladım. Bir yandan da ilerliyorum. Bak burada yine mola kodlaması var, evet. Okurken tekrarlayan şeyleri bir yandan da not alıyor oldun yani. Mesela burada mola olmuş oldu.

D12: Evden çalışma deyince hep çalışmaya odaklanıyoruz ya. Aslında molanın da ön plana çıkması, molanın da çalışmanın bir parçası olması iyi geldi bana. Çünkü böyle bir odağımız yok. Moladan anladığımız mutfağa gidip bir şeyler yapmak. Neden o molayı bulduğum alana da entegre etmeyeyim diye düşündüm bir an. Yahut evin başka bir yerine, mutfak olmak zorunda değil.

R. G.: Bir de şöyle bir soru sorayım. Bu veriyi okurken, mesela sen de kısmen evden çalışma dönemini yaşamış birisin diye tahmin ediyorum. Bunu okurken seni şaşırtan, bildiğini tekrar eden bilgiler ve tekrarlar var mıydı? Genel izlenimin nasıldı o anlamda?

D12: Tekrarlayan genellikle molalardı. Böyle bir konfor arayışındaydım. Bazen de hareketlilik arayışındaydım. Şaşırdığım şey ise bitmeyen mesaileriydi. Çünkü yarına bırakayım diyebiliyoruz. Ama belki onların çok daha koordine bir şey olduğu için, işlerinin çok daha hızlı gerçekleşiyor olması gerektiği için bu cevaplara şaşırmıştım.

R. G.: Anladım çok iyi. Bir yandan da devam ediyorum. Hah, buradaki çıkış noktaların ilginç gelmişti bana. Biraz bahsetmek ister misin? Evcil hayvandan evcillığe gidip, oradan da başka yerlere gitmişsin gibi geldi.

D12: Evet aslında “evcil”in kökü ev ya ve biz de evden çalışmayı inceliyoruz. O yüzden bana iyi bir bağlantı gibi geldi bana. Çünkü ev hayvanlar hep evde olan bir şey. O yüzden de onun hep evde olmasını destekleyen, yansıtan özelliklerle, domestik kesimler arasında bir bağdaştırma yapılırsa, buradaki sıfatlar şuraya yazdığım gibi; Sıcak, tanıdık ve güvenli olabilir. Evcil bir köpek sokak köpeğinden daha güvenli geliyor. Dışarıdan çalışma pratiğine kıyasla evden çalışmak daha güvenli geliyor. Burada da işte direkt olarak dokunma duyusuna odaklandım çünkü hayvanı da seviyoruz ve oradaki dokuyu alıp eve entegre ettiğimizde cozy adında bir kavram ortaya çıkıyor. Yorgan, battaniye gibi. Nedense çok iyi bir bağlantısı olabilir diye düşünmüştüm.

R. G.: Peki mesela bunun üzerine düşünürken aklına bir ürüne giden bir fikir geldi mi? Gerçi gelse yazardın diye düşünüyorum.

D12: Evet, sadece tekstilin ağırlıklı olarak hissedildiği bir ürün. Hiçbir şekilde tamamen plastik veya metal bir ürün bu hissi vermez bana. Deri, pamuklu dokular belki doğal dokular... Belki sadece ahşapla bile verilebilir bu sıcaklık hissi. Sıcak dokuların olduğu bir ürün olmalıymış gibi geldi.

R. G.: Aslında kafanda bir malzeme türüne götürdü olarak anladım.

D12: Evet.

R. G.: Çok güzel. Yapış şeklinde sonradan yazdıklarını post-it ile yazmıştın ya, onları ayrı görmenin sana bir katkısı oldu mu? Yoksa sana o ikinci tur bakmaya niçin ihtiyaç duydun?

D12: O biraz aslında böyle, ilk çok daha genişten bakıyorum, ikincide biraz daha tasarım kararlarının bulutuna iniyorum. Belki üçüncüde baksam tasarım kararı vereceğim. Biraz daha sürecin derinine inmek gibi o ikinci bakış.

R. G.: Peki ilerlerken nasıl ilerledin? İşte baştan sonra ilk birkaçına bakıp, sonraki ikinci gün bir daha mı baktın? Nasıl geçti o süreç?

D12: Yok, şöyleydi. Grubu ikiye böldüm. Birinci gruba tamamen baktım. Sonra aynı kişilere tasarım fikri bulduğum noktalara tekrar baktım. Bu pembeler orada çıktı. Sonra ikinci gruba tekrar baktım.

R. G.: Anladım şu an akışın çok netleşti. Çünkü ben yönlendirmeyi çok tanımlı yapmak istememiştim. O yüzden herkesin işleyişi, yapışı biraz farklılaşıyor. Onu da anlamaya çalışıyorum, o yüzden sordum. Şöyle ilerliyorum. Burada da ev konforunda dışarıda vakit geçiriyor olma hissini vermesine odaklanmışsın sanırım. Bir de sanırım balkonla ilişkilendirdiği için hem balkon ürünleri buna benzer başka balkon dışı neler olabilir diye gitmişsin. Doğru mu anladım?

D12: Evet. Arkadaşlarımdan birisi pandemi döneminde kışın çok sıkıldığında odasına çadır açmıştı. Yatağı onun içine koymuştu. Onun içinde uyuduğunu, bazen orada çalıştığını söylemişti. Neden böyle bir şey yaptın dediğimde, değişiklik oluyor demişti. Orada “değişiklik oluyor” ile kastı ortamı biraz değiştirmek, başka bir ortamda hissetmek. Çünkü çadırın içinde olduğunda odanın içinde olduğunu unutabilirsin gibi. Ya da mesela aklıma şey geliyor, şişme havuzu evin içinde kullanmak. Bunlardan yola çıkarak dışarıyı eve getiren ürünler denince aklıma ilk bitkiler geliyor tabi ki. Dışarıda daha çokça olan evi de bir ormana veya bahçeye dönüştürme fikri geliyor aklıma. Dolayısıyla balkon da geliyor. Genel olarak bunları düşünmüştüm.

R. G.: Çok iyi. Bu verdiğin örnek de çok enteresandı. Daha önce böyle bir örnek duymamıştım. Burada bir de şeyi merak ettim, genel bir soru olarak. Yazıları okurken molaları tekrarladığı için not düşmüşsün. Haricen de birine fikir üretirken aaa şurada da şöyle bir şey vardı, bu onunla da gidebilir gibi bağlantılar oldu mu? Yoksa daha böyle tek tek mi gitti bu fikirler.

D12: Oldu tabi ki bağlantılar. Mesela o cozy ürünle yine birkaç kere karşımıza çıkan konforu bağdaştırabilirim diye düşündüm. Ama çok tekrarlayan bir şey olmadığı için onları işaretlemedim. Hatta bir ara kaldım çalışırken, tekrar edebilecek şeyler diye. Kutu yapıp yanına mola falan yazdım. Ama tekrar edeceğini düşündüğüm diğer yerler o kadar tekrar etmedi. O sebeple en göze çarpan mola oluyor. Benim sonradan bağlayabileceğim şeyler fazlasıyla vardı.

R. G.: Anladım. Tamamdır. Şöyle yine ilerliyorum. Burada da insan olsa her yere uyum sağlayan salaş biri olurdu demiş. Sen de oradan farklı bir yere gitmişsin. Hani ürünün uyarlanabilir olması, ürünün uyum sağlaması gibi bir noktaya. Bir de orada şeyi merak ettim: Dağınık olsa bile cool görünen ürünler üzerine bir şey oluşmuş sende. Buralarda neler düşündün.

D12: Burada aslında salaş/hippi tarzında demiş ya. O da aslında havalı birini niteliyor. O yüzden salaşlık/dağınıklık hippie tarzında coolluk gibi düşünürsek, hani böyle İKEA dergilerindeki evler gibi. Orada bir yandan mısır gevreğini, kahvaltılıkları vs. görürsün ama ev yine de cooldur. Onun gibi yani.

R. G.: Bu bana şeyi düşündürdü, aslında alakasız bir şey söyleyeceğim ama. Cool tanımı aslında umursamıyormuşsun gibi görünmek. Ama bir yandan da onu yapmak da zor ve zahmetli bir şeydir ya. Aklıma o geldi. Dağınık olsa da cool görünen ürünler nasıl olurdu? Onu merak ettim kafamda. Devamında da yine bir balkon ve orada aslında salıncak üzerine bir şeyler vardı. Yine mola işaretlemiştin. Bu dinlenme opsiyonları farklı masalar olabilir gibi gitti. Doğru mu yorumladım?

D12: Evet, evet. Burada bir yandan da herkesin evinde kullanabileceği bir balkonu yok. Belki salıncakları da hep balkonda görmeye alışkınız. Son zamanlarda tavana asılan şeylerde de belki. Ama onlarda da gördüğüm kadarıyla böyle outdoor dilinden

çıkamamış durumda. Yine hasır-masır bir şey. O yüzden daha indoor dilinde ve sallanmaya yönelik ürünler olabilir belki.

R. G.: Anladım. Sadece balkonda olmak zorunda değil yani bu aktivite, mola aktivitesi. Şöyle devam ediyorum yine. Burada da bilgisayar başında bir şeyler içebilme üzerinden gitmişsin. Bu soruları da bunu okuduğunda böyle bir ihtiyaç var, ne olabilir gibi devamında senin kafanda oluşan sorular galiba. Değil mi?

D12: Evet, evet. Çünkü aslında masa başında sıcak içecek hazırlamak bir yandan hepimizin yapmak zorunda olduğu ama yaparken tedirgin olduğumuz bir şey bir yere bir şey dökülecek diye. Gidip bir yere kahve alamadığında veya uzun bir süre bir toplantıda kalkamayacağımız zamanlar oluyor. Bu bir gerçek. Ama neden böyle bir ihtiyaç var? Kalkamamaktan ötürü. Bunu inceleyip oluşabilecek problemleri düşünüp belki ona yönelik bir çözüm bulunabilir. Belki dökülme ihtimaline bir çözüm bulunabilir diye düşünüyorum. Bir de şunu ekleyebilirim aslında şimdi görünce aklıma geldi. Beni biraz çözümsüz bırakan verilere örnek olabilir. Hafif ve şeffaf yazıyor ya. Özellikle hafif ve metaforik olan sorularda açıklaması peki neden sorusunun cevabının materyale dair, forma biçime dair bir cevap olması beni çok sınırlandırıyor gibi geliyor. Ama yarattığı hissiyata veya onunla yaptığım bir pratiğe dair cevap aldığımda daha inspirational oluyor. Bu da hani belki bildiğim için contexti, hani daha zengin veya daha yüzeysel metaforlar var ya. Malzeme ataması olduğunda daha yüzeysel kalacağını bildiğim için belki oraları ellemek istemiyorum. Daha zengin metafor oluşturacak, deneyimin, hissiyatın tanımlanmasında, yan anlamların tanımlanması daha inspirational geliyor diyebilirim.

R. G.: Anladım. Bence bu da güzel bir açıklama oldu. Şöyle ilerlemeye devam ediyorum. Burada da kahve makinesiyle molayı eşleştirmişsin sanırım. Şöyle aşağı doğru devam ediyorum. Hah, burada da çok kollu, etkileşimli bir robot. Bunun pratik olması ama aynı zamanda sevimli de olması. Özellikle onları vurguladığın için. Orada sanırım bir ihtiyaç tespitin olmuş. Doğru mudur?

D12: Evet. Çünkü yine pandemiden dolayı iletişimin ve etkileşimin azalması ile bu etkileşim ihtiyacını cansız varlıklarda arama ve gidermeye yönelik bir pratik ortaya çıktığı için oradan oraya vardım diyebilirim.

R. G.: Onun dışında da interaktif ve akıllı ürünlere doğru gidiyor. Buradaki etkileşim tanımını geniş anlayan da ilgimi çekti. Etkileşim denince illa sözle olmak zorunda değil, aslında ekran, ses vs. gibi bir sürü öge var gibi. Şöyle devam ediyorum bir yandan da. Burada da farklı amaçlar için farklı çalışma alanlarının olması konusu. Bunun üzerinden neler düşündün? Kafanda buraya yazmadığın bir şeyler canlandı mı?

D12: Burada aslında başta hafif işler kısmı vardı ya, belki orayla bağdaşabilir. Çünkü üç farklı çalışma noktası var. Biri belki rahattır, yatakta bilgisayarı çekiyorsundur kucağına daha hafif bir iş yapıyorsundur. Ama biri masa başıdır ve saatlerce modelleme yapıyordur, ya da başka bir şey. Ya da yataktan toplantıya giremeyeceği için bambaşka alan atıyor gibi. Yine belki bu çalışma noktaları neden bağdaşıyor? Çünkü işlerin tanımı ve nasıl yapabileceği değişiyor. Birini uzanırken yapabilirken, diğerini otururken ve odaklanırken yapmalı. Yine farklı cevaplar ile bağlayabiliriz burada.

R. G.: Anladım, çok iyi. Burada da yine şey genel olarak ilgimi çeken bir şey. Bir şeylerin aslında nedenini merak edip onu bir soru olarak yazıyor olmak. Bu böyle senin için bir yöntem mi? O soruyu kullanıcıya sormak ister miydin?

D12: Evet, öyle. Evde üç farklı çalışma noktası var yazıyor. Ya benim de tecrübe ettiğim bir şey oluyor. Ya da benim hiç tecrübe etmediğim bir şey oluyor. O sebeple aklıma direkt neden sorusu geliyor. Neden böyle: Tahminlerimi doğrulamak için. Ya

da neden böyle: Ben bunu neden tam olarak anlamadım. Yani hep aslında üç farklı çalışma noktam var, bunun nereler olduğunu ve oralarda ne yaptığını öğrenmek istiyorum.

R. G.: O sorulara cevap gelse tasarıma gidebilirdin gibi bir durum oldu mu peki?

D12: Evet, kesinlikle öyleydi.

R. G.: Bu noktada şeyi de sorayım. Genel itibarıyla veriyi o anlamda yeterli buldun mu? Yoksa birazcık yüzeyde kaldı ve yeterince bilgi vermediği için tasarıma gidemediğin izlenimine kapıldın mı?

D12: Bence tam inspiration için iyi bir noktada. Artık buradan bir şeyler çıkar, yüzeysel de değil. Ama tasarım kararları vermemiz gerekirse ikincil soruları sormamız gerekir. Hani konsepti biraz daha derinleştirmek için değil, çünkü onlar çıkıyor bence yeterince. Daha nokta atışı şeyleri sormak için ikinci görüşme olabilir.

R. G.: Anladım, tamamdır. Bir yandan da ilerliyorum. Burada da sandalyeyi arkadaş olarak tanımlayan katılımcımız var. Bunun üzerinden de aslında yukarıdaki interaktivite ile bağladın. Doğru mu anladım?

D12: Evet, yine smart ürünlere gittim. Çünkü arkadaşla kurulan etkileşimin bir benzerini ürünle de kurabilmesi için.

R. G.: Anladım, şöyle devam ettim yine. Kedimle oynamak... Bunda da yine etkileşime bağladığın bir nokta yakaladın değil mi?

D12: Evet. Yine evcil hayvan konsepti ile birleştirilebilir. Çünkü orada bir evi paylaşıyoruz. Ama evden çalışma sürecinde aynı alanda farklı şeyler yapıyoruz. Onlar hiçbir zaman çalışmayacağı için. Belki işte, onların çalışmaları ne olabilir şeklinde düşünülüp oradan bir şeyler yapılabilir.

R. G.: Oradaki co-working co-living'ten kafanda canlanan şey nasıl bir şey?

D12: Mesela belki hani, köpek için söylüyorum, onun workingi evi korumaksa ya da işte kedininki kendini yalamaksa, o esnada ben çalışıyorsam atmosferik bir şey olabilir. İkimizin için de uygun ortamı yaratacak. İkimiz de oturarak yapıyorsak beraber oturacağımız bir şey. İkimiz de çalışırsak onun benim masama entegre, onun da resident olarak var olabileceği bir yapı olabilir diye düşündüm. Çünkü çok da fazla onlara atanmış alanlar oluyor, ama o alanlar sadece onların uzanması için oluyor ya. Belki onların farklı aktiviteleri için de illeştirilmiş bir şeyler olabilir.

R. G.: Şey gibi anladım. Onların da bizim gibi ihtiyaçları olabilir biz evden çalışırken, onları kesiştirebiliriz. ... Yani mesela mola anlarımda biraz stres atmak istiyorsam onun da mola anı oyun oynamaksa. Ben kendi mola anımda hem mola verirken hem onunla oyun oynayabilirim gibi. Ya da o uyuyorsa, ben sallanan koltuğumda dinleniyorsam onun uyuduğu ürünle sallanan koltuk bir şekilde ortak olabilir.

R. G.: Kesişimi arttırmak gibi. Çok güzel, tamam. Burada da yine aslında atmosfer oluşturma ile ilişkilendirdin. Bunun farklı öğelerine böyle dağıttığın bir şey var sanırım. Burada yukarıda bir şeylerle ilişkilendirdiğin oldu mu yoksa kendi başına mı baktığın bir veriydi.

D12: Burada aslında atmosferi değiştirmek veya yenilemek herkesin ara sıra bahsettiği bir şey olarak karşıma çıktı. Hatta bazen şey birisi kahve içiyorum çünkü yaptığım işi daha çekilebilir kılıyor demişti. O da aslında atmosferin bir parçası yani, tat ve koku ile. Oradan da hani diğer yerlerde de bunların izlerini bulabiliriz bence. İşte arkada müzik açmak, dinlenme anında loş bir ışık gibi.

R. G.: Buradan peki kafanda canlanan bir fikir oldu mu? Yoksa biraz daha bunlara bakılabilir gibi bir not mu düşmeydi?

D12: Aslında bunlara bakılabilir anlamında bir not düşmeydi. Ama aklıma da sürekli şey geliyor, belki bizde var diyedir. Philips'in top şeklinde lambaları. Çaldığın

müzikle beraber renk değiştiriyor. Orada belki renk paleti seçebiliyorsun. Belki orada işte istediğin atmosfere göre bir renk paleti oluşturmak, istediğim çalma listesine göre o renk paletinin değişmesi... Demeye çalıştığım burada işte ses-koku-renk-doku var ya, onun kombinasyonunu yaratan ürünler de olabilir.

R. G.: Anladım. Yani aslında o atmosferi değiştiren öğeleri tanımlamışsın ve bunları değiştiren-kurgulayan ürünler olabilir diye bir fikir geliyor. Burada yine bir mola notu düşülmüş. Bir de o yukarıda bahsettiğin cozy kavramı ile ilişkilendi sanırım. Doğru mu anladım?

D12: Evet, evet. Bu çünkü hep karşımıza çıkan mola ve konfor arayışı. Zaten tüm konsept domestik olmak. Bunun üzerine cozy kelimesi çıkıyor. Ürünün türüne göre bir tasarım kriteri olabilir bu. Onun beğenilmediğini istenmediğini de hissediyorum. Evin içinde gerçekten ofiste duruyor gibi bir çalışma sandalyesi değil de, insanlar daha çok yine biraz evimin rengine uysun, biraz daha görseli bana hitap etsin, biraz daha rahat olsun, çok “ofis ofis” olmasın diye bir arayışta olduğu için ne kadar çalışma sandalyesi ve masası da olsa çok soğuk durmayan ürünlere gidiş fark ettiğim için cozy kelimesi doğru gibi geldi.

R. G.: Bu son sandalye ile alakalı bahsettiğin senin daha gündelik hayatta gözlemlediğin bir şey sanırım. Doğru mu anladım?

D12: Evet, evet. Burada da aslında doğrulanmış gibi oldu. Konfor, tanıdıklık ve sıcaklık arayışı ile.

R. G.: Onlar da o şekilde ilişkilendi. Tamamdır, çok iyi. Son sayfalara doğru geliyoruz. Burada da Melih’in geçişleri iyi olan kulaklığı ve ona sadık bir dost olarak tanımladığı kısma geldik. Orada da yine bunu bir tasarım kriteri olarak belirlemiştin. Sonra da sadık olmasını nasıl sağlayabiliriz diye fikir üretmişsin. Peki aklında canlanan bir şey oldu mu bunun üzerinden? Ekleyeceğin bir şey var mı?

D12: Yani aslında sadık olarak net bir şey canlanmadı kafamda. Sadece kaybolmama ile alakalı, yani evde bir şeyleri kaybetmemiz zor aslında. Sürekli kullandığımız şeylerse, kupamı kaybetmem mesela. Dışarı çıkan veya dışarıdan gelen bir şeyi kaybedebilirim. Küpe olur, İstanbul kart olur. Ama sürekli evde olan şeyleri kaybetmem gibi geldi. O sebeple kaybolmama durumunu eleayabiliriz. Hep aynı fonksiyonu aynı düzeyde sağlaması ve her aksiyonuma aynı yanıtı almak, dolayısıyla her seferinde aynı cevabı alacağımı sadık olmayla bağdaştırabileceğimi düşündüm. O yüzden daha durable ve ömürlük ürünler olabilir diye düşündüm.

R. G.: Yani sadık kelimesi bir ürüne dönüşseydi bu böyle bir ürün olurdu diye bir tarif anlıyorum buradan. Bu zaten son sayfaymış. Ben şimdi bir de boş olanın üzerinden geçmeyi öneriyorum. Orada sende bir şey uyandırmayanlara göz atabiliriz. Ben genel baktığımda bir tane kişiden pek fazla şey yoktu. Gerçi hepsinden var da, bir tanesinden tek bir tane var diye hatırlıyorum. Deniz’di galiba. Burada mesela ergonomik sandalye örneğinden kastın buydu değil mi?

D12: Yani böyle ürünün fiziksel özelliklerine dair kötü yorumlar sınırlandırıyor beni gibi, çünkü onlar çok obvious bir şey zaten. Yani sandalyenin ergonomik olması gerektiği için oralara çok dokunmuyorum. Ha bir de var mıydı öyle bir şey hatırlamıyorum ama, evden çalışma sürecini en iyi hangi şarkı anlatır? İşte bir tane şarkı söyleyip, çünkü en çok bunu dinliyordu, soruyla match etmiyor aslında. Şarkı ve hissiyat olarak anlatmasını bekliyorsun sen. Ama onlar en çok dinlediğim şarkı buydu.

R. G.: Anladım. Evet, öyle bir veri vardı. Bir yandan da spesifik yakaladığım bir şey olursa onu soracağım.

D12: Bir de şey olabilir belki. Herkes için çok ortak olan cevaplar. En çok vakit geçirdiği ürün bilgisayar. Hepimizin öyle aslında. Orada biraz daha detay inceleyip,

biraz daha kulaklık-termos... Mouse bile daha doğru belki. Hani jenerik olmayan cevaplar daha inspiration sağladı diyebilirim. Çünkü hani bilgisayarda ne değiştirebilirsin ki?

R. G.: Anladım. Mesela buralarda seni yakalayan bir şey olmamıştı. Buralarda bir highlight yoktu. Sanıyorum burada da yoktu. Ben genel bir gösteriyorum, sen zaten aklına geldikçe söylüyorsun. Benim de net bir şey gelirse soracağım.

D12: Mesela bak bu da öyle bir cevap. Friends, evde geçirdiğim zamanlarda en çok izlediğim şey. Ama o dizideki akış senin evden geçirdiğin zamana en çok benziyor olmalı.

R. G.: Evet, doğru. Soru öyle bir soruydu ama cevapların bazıları öyle değildi. Ben bunu da önemli bulduğum için dahil ettim aslında. Çünkü bu veriyi toplarken soruyu yanlış anlayabiliyor katılımcılar veya tam anlamayabiliyor. Bu da bir veri. O yüzden onu ben ayırmadım. O da bir parça gibi geldi. Onun fark edilmesi de önemli. Senin gibi bunu belirten bir iki kişi daha vardı. Şöyle devam ediyorum. Burada mesela, biraz spekülatif soracağım, örnek üzerinden... Bu evden çalışma sürecini kaotik olarak tanımlamış. Sonra zamanı kontrol konusunda da yetenekli olmadığını söylemiş. Şarkı ile bunu anlatmış falan. Burada aslında deneyimine dair bir şey söylemiş. Onu bir sıfat ile nitelendirmiş. Çok böyle fiziksel bir şeyler yok. Ama bu yine de seni ilhama sürüklememiş. Onunla ilgili gözüne çarpan aklına gelen bir şey var mı?

D12: Burada aslında problem de çok somut olduğu için olabilir belki. Zamanı çok kontrol edebilmek biraz daha kişisel bir beceri ya. Bir ürünle bunu nasıl destekleyebilirsin? Ajanda ile, ya da belki akıllı saat ile. Ama onların da bir numaralı fonksiyonu değil ya. Belki hani öyle, insan fonksiyonu olduğu için bir şey bulamamış olabilirim.

R. G.: Şey gibi anladım, tasarımla senin çözebileceğin bir problem gibi gelmedi sanırım.

D12: Zamanı kontrol edemeyen birinin... Yani bu kişisel beceri diye düşündüm.

R. G.: Kişinin kendisi ile alakalı bu, benim kategorim değil gibi. Anladım. Güzel bir açıklama oldu bence bu. Şöyle devam ediyorum. Ha bir de belki genel olarak senin aklında kaldıysa, şu sorunun cevapları işime yaradı, şu soru hiçbir işime yaramadı dediğin, aklında kalan bir yer var mı?

D12: Sanırım, şarkı sorusu işime yaramamış olabilir. Çünkü ciddi bir açıklama gerekiyor orada neden öyle olduğuna dair. Onun dışında eşyaların hangisini kullanmak keyifliydi sorusunun işime yaradığını düşünüyorum. Çünkü burada pek çok insanın neden keyif aldığını çıkarabiliyorsun, anlatıyorlar onu. Mekanı veya canlıyı dillendirip, ondan bir ifade istediğimiz sorulardan çok katılımcının kendi deneyimini anlattığı, neden-sonuç vere vere, o sorular daha çok işime yaradı. Mesela en çok vakit geçirdiğin yer neresi? Neden? Baya işime yaradı. Bu yer bir insan olsaydı nasıl tarif ederdi? Bu da işime yaradı.

R. G.: Mekânın tavsiye vermesi. Anladım. Şöyle gene bir göstermiş olayım.

D12: Mesela işte buradaki şarkı cevabı çok şey olmayabilir. Modunu yükselten ve eğlence sağlayan. Ama evden çalışma süreci ile tam uyuşmuyor aslında. Evden çalıştıgımda modumun yükselmesi için bir şarkı, buradan da belki üçüncü bir çalışma yaparsak, evden çalışırken sürekli modunun yükselmesine ihtiyaç duyduğunu okuyabiliriz ama onun için de üçüncü defa üzerinden geçmek gerekiyor. Haydi şimdi de alt anlamları arayalım gibi.

R. G.: İyice derine inmek gerekiyor gibi. Anladım. Doğru. Baran'da mesela genelde daha az highlight vardı. Mesela şu balkondaki, hah şurası bir de şurası highlightlıydı.

D12: Ya ben böyle genel olarak, insanların cevaplarında bol bol sıfat kullandığı cümleleri daha verimli bulduğumu fark ettim. Tam olarak uzun uzun betimlemeler bana iyi geliyor. Bu betimlemeler de işte deneyimi betimliyor olabilir. Ürünü beyazdı, şeffaftı vs gibi betimlemek yerine, yumuşak olduğu için. Yani daha hissiyatına dair cümleler daha ilham verici oluyor.

R. G.: Yine aklıma geldiği için bir yandan geçerken genel bir şey daha sorayım. Mesela veriye bakarken kişi bazında baktığın oldu mu? Veya şu soruya şu cevaplar verilmiş gibi baktığın? Yoksa her birini tek tek akıtarak ayrı ayrı mı gittin?

D12: Soru soru değil de aslında tek tek başladım. Ama okumaya devam ettikçe sorular da tekrar ediyor ya, öyle bir patern oluşuyor gibi oldu kafamda. Mmm, şimdi mola cevabı gelebilir gibi. Öyle bir farkındalık başlıyor. Kişi özelinde olmadı ama. Öyle bir kodlama olmadı.

R. G.: Anladım. Şöyle yine ilerliyorum. Burada da yine, mesela şuralar boştu. Şu sayfa, bir sonraki. Evet bu Ayla'da sanırım bir şey yaparken bir yandan sıcak bir şey içme. Onun dışında hiç highlight yoktu bunda.

D12: Çünkü tekrar okuduğumda çok doğru gelen anlamlar. İşte ders notu hazırladım, gibi. Hani öyle olunca yüzeysel bir şekilde direkt deneyimini anlattığı için derinine inip bir şey çıkaramadım.

R. G.: Anladım. Seni yakalayan bir ifade olmamış. Buralarda da şu vardı. Yine mola konusunda kahve vardı. Ezgi'de baya vardı. Buralarda çok bir şey yoktu diye hatırlıyorum. Ekleyeceğin bir şey olursa durdurabilirsin beni.

D12: Ya mesela şey, aşağıda hantal ve gri yazmış ya, orada mesela yine gri biraz yüzeysel bir cevap ama hantal olması yine bence derin bir metafor sağlıyor. Çünkü işte hantallıkta ben geri çekilip büyük olmaya bakıyorum. Belki yumuşak olmaya bakıyorum. Öyle olunca büyük ve yumuşak koltuk imajı geliyor gözümün önüne. Hani dediğim gibi çok dış görünüşe yönelik cam, uzun gibi şeyler dışında daha insana yönelik özelliklerin aktarılması. File hantal demeyiz ilk bakışta, büyük deriz, gri deriz. Direkt görülebilen özelliklerin değil de, hissiyata dair özelliklerin iletilmesi daha iyi geliyor.

R. G.: Yani aslında hantal olması biraz da deneyimlenen bir şey sanki. Bakıp bu hantaldır gibi değil de onu itmeye çalışmak gibi.

D12: Aynen öyle. Koltuk da zor hareket eder, fil de zor hareket eder. Onun gibi. Bir etkileşim sonucu edinilen bir izlenim gibi.

R. G.: Anladım. Çok iyi. Buralarda bir şey yoktu. Yani mesela bu dizi sorusu da bir şey uyandırmamış gibi. O soruya paralel bir cevap verdi belki oradaki karakterin yaptıklarını yapıyorum. Hem izliyorum evdeyken hem de o karakterle bir bağlantı kurmuş. Yine de bunun benzeri başka cevaplar da vardı. Yine de o bir şey uyandırmamış sende değil mi?

D12: Evet, çünkü o çok nokta atışı ve hem cevaplanırken çok iyi düşünülmesi gereken, hem de çok iyi açıklanması gereken bir soru bence. Ben baya düşünmüştüm bunun üzerine. Cevabı anlayabilmek için diziyi de biraz araştırmak gerekiyor. O yüzden galiba. ... Belki hani şey olabilir, evde geçirdiğim boş zamanları hangi dizi en iyi anlatır değil de evde geçirdiğim boş zamanlarda hangi dizi karakterisin gibi belki. Onedio testi gibi.

R. G.: Aslında evet, ileriye dönük olarak bu enteresan olabilir. Böyle bir not düşeyim. O soru daha bir açabilir.

D12: Evet. Neden? İşte o da çok sinirli, ben de gibi. Bu ikinci sorumuza alacağımız cevap da gelebilir bence.

R. G.: Dizi yukarıdan değil de içeriden soruyor olduk aslında.

D12: Kendimde de onu verdiğim için, bu cevapta da onu gördüğüm için bu dizi çünkü ben oradaki şu gibiyim. Direkt aslında ikinci sorunun cevabını veriyor.

R. G.: Doğru, çok mantıklı. Bu çok hoşuma gitti. Melis'te de mesela çok fazla işaretlediğin şey olmadığını hatırlıyorum. Şuraya da geleyim hızlıca. Evet, Melis yok mesela. Hiç işaretlemediğin bir kişiyi buldum, Melis'miş o.

D12: Burada atıyorum, niçin dışarı çıkmamış olabilir. Atıyorum çokça vakit geçirdiğin eşyalardan birini seç, sana ne söylerdi. Onu çok sevdiğimi. Soruyu tekrar söylemiş ya cevap olarak. Oradan bir şey çıkmamış aslında.

R. G.: Sana yeni bir bilgi vermemiş oldu aslında. Anladım.

D12: Cevaplar biraz yüzeysel olduğu için olabilir.

R. G.: Burada da mesela senin bahsettiğin şey. Direkt bir karakter söylemiş. Hatta eşya ile söylemiş, Joey ve koltuğu. Biraz daha hızlı hızlı geçiyorum. Genel itibariyle aslında bir çıkarım da yapmış olduk.

D12: Burada öyle bir dizi bulamadım çünkü çok boş bir aktivite ya, yani evde geçirdiği boş zamanlara boş dediği için bir dizi bulamamış.

R. G.: Kafanı karıştırdı ama değil mi oradaki cevap?

D12: Evet, dizi izlemeyi kötülüyor falan sandım. Çok boş bir aktivite falan diye.

R. G.: Ben de anlamamıştım onu ilk seferinde. Sonra soruyu bir daha okudum falan. Ben de aynı şeyi yaşamıştım. Çünkü yazmamış yani neyin boş bir aktivite olduğunu. Şöyle ilerliyorum. Burada mesela şarkıyı diğerlerine kıyasla açıklamış. İsminden yola çıktığını ve bizim o ortama bağlı kalmamızla bağdaştırdığını. Şöyle devam ettim. Hah bak mesela bunu çizmiştin, hatırlıyorum. Ece'de, sıcacık.

D12: Bu da aslında dizi sorusunda bambaşka bir cevap. Bu isteyeceği bir ortamı tarif ettiği için.

R. G.: Aslında teknik olarak bu da doğru bir cevap. Sorunun sorduğu değil ama sana bir şey uyandıran bir cevap vermiş gibi anladım bunu. Melih'te zaten işaretlediğin birkaç yer vardı. Kulaklık, sadık olma... Burada mesela pek de açıklamamış yani.

D12: Ben de onu diyecektim, aynen.

R. G.: Çok iyi, hepsinin üzerinden geçtik. Ben son olarak sorularına bir göz atayım. Genel bir kapanış sorusu sorayım. Senin eklemek istediğin, aklında kalan herhangi bir izlenimin var mı diye sorayım.

D12: Yok, bence her şey çok anlaşılır ve güzeldi. Veriler de bence bu cultural probe'dan net bir ürün fikri çıkacağını beklemiyorum, olması da gerekmiyor. Ama çok güzel konseptler uyandırabiliyor. Bize dümdüz bir brief verilse ve evden çalışma pratiğine yönelik ürünler... Belki mola pratiğini düşünmeyeceğiz, evcil hayvanlar aklımıza hiç gelmeyecek. Genel olarak inspirational ve metaforik sorular olduğu için biraz daha saçaklanan sorular olduğu için direkt evden çalışmanın o tüm evrensel kümesini anlıyoruz gibi gözüküyor. O yüzden çok daha iyi çözüm önerileri ve konsept fikirleri çıkabiliyor bence. Bu da baya onu gösteren bir veri setiydi. Baya iyiydi. Dizi sorusunda da ben öyle bir şey düşünmemiştim, beraber düşündük. Hangi dizi karakterisin diye sorulabilir diye. Bence baya iyiydi, ellerine sağlık.

R. G.: Ben de katılımın ve bu görüşme için çok teşekkür ederim.

APPENDIX B: Sample document of probe kit outcomes with Designer 2's reflections.

TASARIM YÖNERGESİ

Merhaba!

Kullanıcı odaklı tasarım anlayışı ile yapılan kullanıcı araştırmaları ve ortaya çıkan kullanıcı verisi tasarım süreçlerine ilham ve yön verebiliyor. Size iletmış olduğum bu doküman da bu bağlamda toplanmış **kullanıcı verisi** içermekte.

Toplanan veri **evden çalışma deneyimini** derinden anlamayı amaçlayarak "cultural probes" adlı yöntem ile yedi günlük bir süreç içinde toplandı ve on iki kişiyi kapsamakta. Gönüllü katılımcılar onlara gün be gün yöneltilen soruları yanıtladılar. Elinizdeki veri katılımcıların evden çalışırken kullandığı eşyalar, mekanlar, çalışma ve boş zaman aktivitelerine dair yanıtlar içermekte.

*Lütfen bu dokümandaki yazılı ifadeleri **evden çalışma deneyimini iyileştirebilecek bir ürün, sistem, hizmet veya uygulamanın tasarımı için bir ilham kaynağı** olarak düşünün.*

Bu çalışmada sizden beklediğim: okuduklarınızda yönergeler göre işaretleme yapmanız ve kullanıcı verisi ışığında **tasarım fikri üretmeniz**. Fakat sizden geliştirilmiş veya bitmiş bir tasarım beklenmiyor.

Dokümanı incelerken lütfen:

- Size evden çalışma deneyimini ve kullanıcı verisinde okuduğunuz durumları iyileştirmek üzere bir **tasarım fikri veren** tüm bölümleri **sarı** renk ile işaretleyin.
- Kullanıcı verisi dokümanında ayrılmış alana aklınıza gelen tasarım fikirlerini yazabilir ve çizebilirsiniz. Bu alan yeterli olmazsa yanınızda bir not defteri bulundurup onu kullanabilirsiniz.

Sizden dokümanı geri aldıktan sonra uygun bir vakitte sizinle yüz yüze veya uzaktan bir **görüşme** yapmak isterim. Bu sayede kullanıcı verisini **ilham kaynağı** olarak nasıl ele aldığınızı anlamayı umuyorum.

Tekrar çok teşekkürler!

Rengin Gürel
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1. GÜN

Evden çalıştığın süreçte çokça vakit geçirdiğin eşyalardan birini seçsen...

- Bu eşya ile evde neler yaptın? Neden?
- Bu eşyanın dili olsa bana seninle ilgili neler anlatır? Neden?



2. GÜN

Evden çalıştığın süreçte ...

- Evdeki eşyalardan hangisini kullanmak çok keyifliydi? Neden?
- Bu eşya bir canlı olsa neye benzerdi? Peki neden?



GİZEM

Kulaklığım. Online toplantılara katıldım, çalışırken müzik dinledim, bazen ara verip dizi izledim.

Ona bağımlı olduğumu söyledim, çünkü onsuz yapamam.



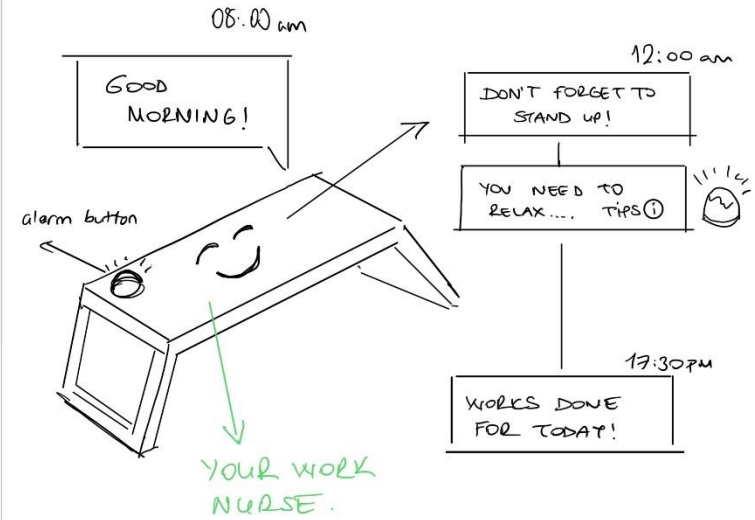
GİZEM

Ikea'nın klipsk tepsisini daha hafif işleri tamamlarken laptop sehpa olarak kullanıyorum. Sayesinde yatakta, koltukta bacaklarımı uzatarak çalışabiliyorum.

Hemşireye ya da hasta bakıcıya benzerdi. Çünkü kullanma biçimi hasta yatağında yemek yemeyi anımsatıyor.



YAZI - ÇİZİ ALANI



3. GÜN

Evden çalıştığın süreçte ...

- En çok vakit geçirdiğin yer neresi/ neresiydi? Peki neden?
- Bu yer bir insan olsa bana onu nasıl tarif ederdin? Sence neden?

4. GÜN

Evden çalıştığın süreçte ...

- Favori mekanın neresi, bana fotoğrafını gönderir misin? Fotoğraf gönderemesen de bu mekanı tarif etmeni çok isterim. Sence neden en çok burayı seviyorsun?
- Bu mekan sana bir tavsiye verecek olsa bu ne olurdu? Neden?

GİZEM

Odamda çalışma masam. Evin sessiz, izole bir köşesi olduğu için.

Çoğunlukla planlı, düzenli, organize olan, zaman zaman dağılan çıldıran birisi. Çünkü ben öyleyim. Masamın üstü de zihnim.



En sevdiğim şeyler bir arada - hediye gelen **bitkim** ve aşırı **rahat koltuğum**.

"Sakin ol, halledersin." :D
Evde huzur isterler diye tahmin ediyorum.

YAZI - ÇİZİ ALANI



SAKİNLİK VE DİNGİNLİK YARATAN ÜRÜNLER.

↳ Çalışma alanının rahat /ergonomik /konforlu olması
Duygusal bağ yaratan ürünler içermesi.



5. GÜN

- Evdeki çalışma sürecimi bir kelimeyle özetlesem bu kelime olurdu. Çünkü
- Evden çalışma sürecini hangi şarkı en iyi anlatır? Neden?



GİZEM

"Yalnız" olurdu. Çünkü evden çalışmak sosyalliği kısıtlıyor ve bir çok şeyi kendi başına halletmeyi gerektiriyor.

Whilk & Misky - All By Myself. Bu şarkıyı evden çalışma sürecinin kişiyi yalnızlaştırması ile bağdaştırdım.



YAZI - ÇİZİ ALANI



6. GÜN

- Evden çalıştığın bir gündeki "olmazsa olmaz" bir anın veya rutinin nedir? Tarif eder misin?
- Evden çalışmak gibidir. Çünkü



GİZEM

Mola verip mutfakta yeşil çay hazırlıyorum.

Evden çalışmak "makarna yemek" gibidir. Comfort zone'unda kalmanı sağlar.



7. GÜN

- Evde boş zaman geçirdiğin bir anı düşün. Neler olduğunu tarif eder misin?
- Evde geçirdiğin boş zamanları... Hangi dizi en iyi anlatır? Neden?



GİZEM

Akşam koltukta dizi izleyerek dinleniyorum.

"New Girl" anlatır. Kardeşim ve ben aynı evi paylaşan Nick ve Schmidt'e çok benziyoruz.



YAZI - ÇİZİ ALANI



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2. GÜN

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BİLGE

Sandalye, çalışma sandalyem. Oturup çalıştım :(Saatlerce çalıştım.

Hiç kalkmıyorsun ve düzgün oturmuyorsun çoğu zaman. Çünkü kendisi ergonomik bir sandalye ama ben ona uygun davranmıyorum.



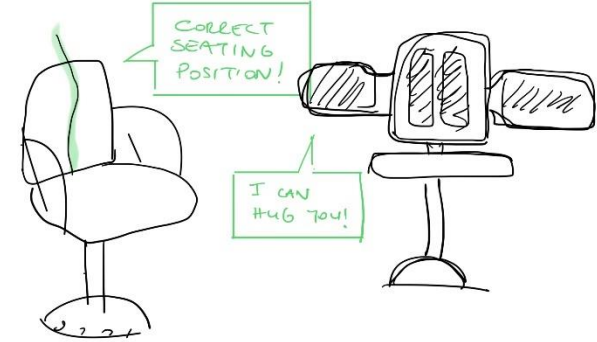
BİLGE

Masa lambası. Çünkü atmosferi değiştirdiği ve akşam çalışmalarını daha mutlu kıldığı için.

Kuşu sanırım. Beyaz, uzun bir boynu var ve de biraz hassas.



YAZI - ÇİZİ ALANI



3. GÜN

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- Bu mekan sana bir tavsiye verecek olsa bu ne olurdu? Neden?

BİLGE

Odam. Çalışmaya daha iyi odaklandığım için.

Sakin ve dingin biri ancak bazen kayışı kopup alıp başını giden biri de... Ne kadar **sevsem de bazen aynı yerden çalışmak sıkabiliyordum hareket istiyordum.**

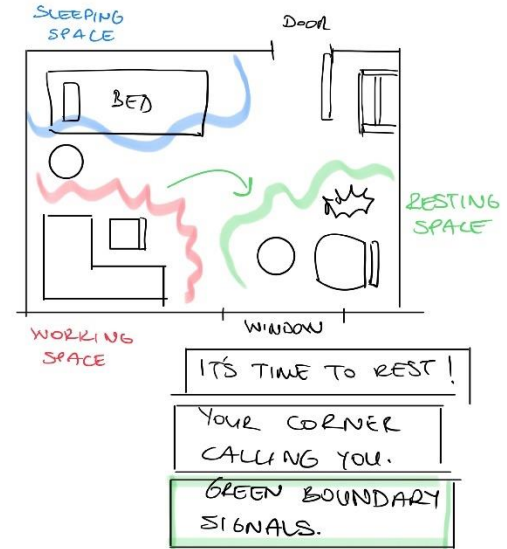


BİLGE

Camın kenarında, koltuğun yanında olan bu köşede dinlenmek favorim.

Biraz daha çok vakit ayır diyebilirdi.

YAZI - ÇİZİ ALANI





5. GÜN

- Evdeki çalışma sürecimi bir kelimeyle özetlesem bu kelime olurdu. Çünkü
- Evden çalışma sürecini hangi şarkı en iyi anlatır? Neden?



BİLGE

"Mesai" Tek hatırladığım bitmeyen mesailer olabilir :'(

Error 404 - L'Imperatrice. Çoğunlukla 404 siyah ekran veriyordum. :')



YAZI - ÇİZİ ALANI



6. GÜN

- Evden çalıştığın bir gündeki "olmazsa olmaz" bir anın veya rutinin nedir? Tarif eder misin?
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BİLGE

Su altında nefesini tutmak (gibidir). Bitmeyen mesailer insanın nefesini tüketir.

Aslında her şey rutindi diyebilirim. :) Ama en olmazsa olmazı kahve molaları.



1. GÜN

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DENİZ

Bilgisayar. Dizi film izledim. Zoom konferanslarına katıldım. Çizim yaptım.

Benim onunla çok vakit geçirdiğimi anlatırdı bence. Evden çıkamadığımız süreçte bizi başka şeylerle veya başkalarıyla bağlayan o vardı en çok.



DENİZ

Terastaki sandalye. Manzara izledim bol bol.

Bir arkadaş olabilir. Yalnız hissetmediğim bir yerd pandemi.



YAZI - ÇİZİ ALANI

3. GÜN

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DENİZ

En çok vakit geçirdiğim yer odamdı. Çalışma masamın ve yatağımın olduğu yer. Vaktimin çoğu bu ikisinde geçti.

Düz ve sade biri. Beyaz yakalı olabilir. Çok renkli bir yer değil. Fonksiyonel.



DENİZ

Güneşin batışını izlediğim bir yer :) Her gün farklı olan bir gökyüzünü izlemek güzel.

Hayat çok güzel. Kendini üzdüğün ve seni durduran şeyler çok önemsiz, derdi bence. :')



YAZI - ÇİZİ ALANI



5. GÜN

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- Evden çalışma sürecini hangi şarkı en iyi anlatır? Neden?



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- Evden çalışmak gibidir. Çünkü



DENİZ



"Sakin" Bence işle alakalı yapılması yalnızca zoruri şeyler yapıldı. Daha net sonuçlar alındı. Mesai saati kavramı olmadığı için kimse kendine o saati doldurmak için ekstra iş çıkarmadı."

Serdar Ortaç - Mesafe. Yüreğinden yaralı bizim hikayemiz. Kaderimden kalanı silsem de geçmiyor. İki sohbet aralı bütün mesafemiz. Sevdim anlamıyor. (Evet ezbere yazdım.)



DENİZ

Çalışmak gibidir; ama tam değildir.

Laboratuvarda çalıştığım için üretim yapmam gereken bir şey olduğunda işe gitmem gerekiyordu. Kısmen çizimleri ve ya hazırlıkları evde yapsam da zorunlu olduğumda işe gidiyordum. Çalışma izin kağıdım vardı. Herkesin çıkmadığı günlerde bile bazen atölyeye gitmem gerekti ama tabi tam mesai gibi değil. Haftada en fazla 2 gün gidip diğer işleri evden yaptım. Yani bir rutinin olmadı sanırım saatler birbirine karışmıştı. Sabah 8.30 da işimin başında olmam gereken gibi bir süreç yaşamadım. Zoom konferansı da çok yapmadım. Bana işler maille gelirdi genelde. Yapılacak bir iş olduğunda bana gece 11de zoomdan bağlanan olmuştu. Daha çok elimdeki işleri ve üretimleri yapmak bitirmek üzerine. Saat çok göreceli idi.



YAZI - ÇİZİ ALANI



7. GÜN

- Evde boş zaman geçirdiğin bir anı düşün. Neler olduğunu tarif eder misin?
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DENİZ

Boş zamanda genelde dizi izlerim. Dizi izlemek istemezsem oturmak istersem ve ortalık dağınıksa toplarım. Temizlikten sonra mum yakarım. Gramafondan müzik açarım.

Friends. Evde geçirdiğim zamanda en çok izlediğim şeydi.



YAZI - ÇİZİ ALANI

CURRICULUM VITAE

PHOTO

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Place and Date of Birth :

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EDUCATION :

- **B.Sc.** : 2020, Istanbul Technical University, Faculty of Architecture, Department of Interior Architecture

PROFESSIONAL EXPERIENCE AND REWARDS:

- 2021 – (ongoing) Research Assistant at the Department of Interior Architecture, Fatih Sultan Mehmet Vakif University
- 2021: Interior Architect, VEN Architecture

PUBLICATIONS, PRESENTATIONS AND PATENTS ON THE THESIS:

- **Gurel, R.,** Merzali Çelikoğlu, O. (2022, June 1-3). *Exploring Metaphorical and Literal Contents Through Cultural Probes*. [Conference presentation]. International Graduate Research Symposium (IGRS'22), İstanbul, Türkiye.

OTHER PUBLICATIONS, PRESENTATIONS AND PATENTS:

- **Gurel, R.** 2021. MMORPG Games as a Way of Coping During the Pandemic: A Study on World of Warcraft. *Proceedings of the Barcelona Conference on Arts, Media & Culture (BAMC21)*. 8-10 December 2021, Barcelona, Spain.
- **Gurel, R.,** Merzali Celikoglu, O. 2022. Products that Age with Us: Carpet in the Turkish Household, *Proceedings of the Design Society*, 2, 1011-1020.
- **Gurel, R.,** Merzalı Çelikoğlu, Ö. 2022. “Atsan Atılmaz Satsan Satılmaz”: Evdeki Vazgeçilmez Nesneleri Keşfetmek, *UTAK 2022 Bildiri Kitabı: Tasarım ve Çoğulculuk*, Ankara, Türkiye.