

THE RELATION BETWEEN THE PROFESSIONAL CULTURE OF
INDUSTRIAL DESIGNERS AND THEIR EXPERIENCES IN PROFESSIONAL
LIFE

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DOĞAN CAN HATUNOĞLU

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PROFESSIONAL LIFE**

submitted by **DOĞAN CAN HATUNOĞLU** in partial fulfillment of the requirements for the degree of **Master of Science in Industrial Design Department, Middle East Technical University** by,

Prof. Dr. Halil Kalıpçılar
Dean, Graduate School of **Natural and Applied Sciences**

Prof. Dr. Gülay Hasdoğan
Head of Department, **Industrial Design**

Assoc. Prof. Dr. Pınar Kaygan
Supervisor, **Industrial Design, METU**

Examining Committee Members:

Assoc. Prof. Dr. Çağla Doğan
Industrial Design, METU

Assoc. Prof. Dr. Pınar Kaygan
Industrial Design, METU

Prof. Dr. Azize Ergeneli
Management, Hacettepe University

Date: 31.01.2019

I hereby declare that all information in this document has been obtained and presented in accordance with academic rules and ethical conduct. I also declare that, as required by these rules and conduct, I have fully cited and referenced all material and results that are not original to this work.

Name, Surname: Doğan Can Hatunoğlu

Signature:

ABSTRACT

THE RELATION BETWEEN THE PROFESSIONAL CULTURE OF INDUSTRIAL DESIGNERS AND THEIR EXPERIENCES IN PROFESSIONAL LIFE

Hatunoğlu, Doğan Can
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With the global developments in the fields of innovation and technology, the industrial design profession is continuously expanding its definition. By not only creating or enhancing products but also services, and systems; industrial design operates in mostly manufacturing related industries such as; furniture, white goods, and electronic appliances. Today, the profession's continuously increasing importance and place in the market attract the attention of these companies. Because manufacturing companies are mainly engineer-oriented, various variables emerge in the adaptation of industrial designers to the professional environment. Thus, differences appear in the professional culture of industrial designers which acquired in the undergraduate education. This situation shapes the definition and culture of the profession. In the literature, there are many sources on the descriptions and the cultures of many professions. However, there is a gap in the literature about the professional culture of the industrial design profession. The thesis aims to explore the relation between the professional culture of industrial designers and their experiences in professional life. While doing so, the thesis also reveals industrial designers' adaptation to professional life, their interactions with other professions, and organizational cultures of manufacturing companies that industrial designers work in. In the field study, data were collected

through 15 semi-structured interviews with industrial designers who were working in large scale manufacturing companies. After a qualitative approached data analysis, concerning the professional culture of industrial designers, this thesis reveals that there are three main conclusions regarding the importance of being a community, the importance of having flexibility in space and time, and definition of industrial design profession.

Keywords: Design Management, Cultural Studies, Organizational Studies, Industrial Design Culture, Industrial Design Education

ÖZ

ENDÜSTRİYEL TASARIMCILARIN MESLEK KÜLTÜRÜ VE MESLEKİ YAŞAMLARINDAKİ DENEYİMLERİ ARASINDAKİ İLİŞKİ

Hatunoğlu, Doğan Can
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Yenilik ve teknoloji alanındaki küresel gelişmelerle birlikte, endüstriyel tasarım mesleğinin tanımı sürekli genişlemektedir. Endüstriyel tasarım sadece ürün değil, aynı zamanda servis eşyalar aletler gibi üretim faaliyetli sanayilerde çalışmaktadır. Günümüzde mesleğin sürekli artan önemi ve pazardaki yeri de bu tip firmaların dikkatini çekmektedir. Üretim firmaları şirketleri ağırlıklı olarak mühendis odaklı olduğu için, endüstriyel tasarımcıların profesyonel çevreye adapte olmalarında çeşitli değişkenler ortaya çıkmaktadır. Dolayısıyla, endüstriyel tasarımcıların lisans eğitimini yıllarında edindikleri meslek kültürlerinde farklılıklar ortaya çıkmaktadır. Bu durum, mesleğin tanımını ve kültürünü şekillendirmektedir. Literatürde birçok mesleğin tanımına ve kültürüne ilişkin birçok kaynak bulunmaktadır. Fakat literatürde endüstriyel tasarımın meslek kültürüne ilişkin bir boşluk bulunmaktadır. Tez, endüstriyel tasarımcıların meslek kültürü ile meslek hayatındaki deneyimleri arasındaki ilişkiyi incelemeyi amaçlamaktadır. Bunu yaparken, tez aynı zamanda endüstriyel tasarımcıların meslek hayatına uyumlarını, diğer mesleklerle etkileşimlerini ve endüstriyel tasarımcıların çalıştığı üretim şirketlerinin örgütsel kültürlerini ortaya koymaktadır. Saha çalışmasında, büyük ölçekli üretim firmalarında çalışan 15 endüstriyel tasarımcı ile yapılan yarı yapılandırılmış görüşme ile veri toplanmıştır. Nitel bir yaklaşımla yapılan veri analizinden sonra, endüstriyel

tasarımcıların profesyonel kültürleriyle ilgili olarak, bu tez, endüstriyel tasarımcıların meslek kültürüne dair üç ana çıkarımın olduğunu ortaya koymaktadır. Bu çıkarımlar; topluluk olmanın önemine, esnek bir çalışma ortamına sahip olmanın önemine ve endüstriyel tasarım mesleğinin tanımına yöneliktir.

Anahtar Kelimeler: Tasarım Yönetimi, Kültürel Çalışmalar, Örgütsel Çalışmalar, Endüstriyel Tasarım Kültürü, Endüstriyel Tasarım Eğitimi

“Design creates culture. Culture shapes values. Values determine the future.”

Robert L. Peters

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LIST OF ABBREVIATIONS

ABBREVIATIONS

ITU: Istanbul Technical University

METU: Middle East Technical University

R&D: Research and Development

WDO: World Design Organization

UX: User Experience

UI: User Interface

CAQDAS: Computer Assisted Qualitative Data Analysis Software

CHAPTER 1

INTRODUCTION

In this chapter, firstly, background information about the thesis is presented with the definitions and explanations of the main concepts to have a better understanding of the scope of the research. To provide background information on the given subject, the following section provides information on the definition of the industrial design profession, its members' professional profile, the profiles and cultures of manufacturing companies and the description and importance of professional and organizational cultures. The section concludes with the problem statement of the research. Later on, the chapter continues with the explanation of the aim and scope of the research and research questions. Lastly, the chapter explains the structure of the thesis.

1.1. Background

The global developments in the fields of innovation and technology have also led to developments in the industrial design profession (Tovey, 1997). Now, the industrial designers not only design consumer goods, but also rearrange and enhance the existing products in the market and offers system and service designs as well (WDO, n.d.). Industrial design plays an active role in areas such as new product development, research, and development (R&D), marketing, and manufacturing (Herstein, Platt, and Veryzer, 2005).

Korkut and Hasdoğ'an's (1998) work on the industrial designers' professional profiles in Turkey provides important information. Examining the professional profiles of industrial designers who have job opportunities in various fields, they show that industrial design graduates in Turkey mostly work in furniture and interior architecture industries with 28%; secondly, they choose to work in industrial design's white goods

and electrical household appliances industries with 24%. Their data shows that the majority of industrial designers work in cooperation with the manufacturing in their professional lives. While Korkut and Hasdoğan's (1998) research provides information on the professional profiles of industrial designers in the last 20 years, Hasdoğan's (2011) research on industrial design profession reveals the updates in the professional profile of industrial designers. According to Hasdoğan (2011), furniture, white goods, and electrical household industries are still the preferred industries among industrial designers.

Herstein et al. (2005) reveal the reason why a large percentage of industrial designers work in manufacturing companies as; the profession's continuously increasing importance and place in the market have been attracting the attention of organizations and companies. In their professional life, industrial designers who work in manufacturing companies interact with more people than their colleagues in design offices who work within their community. Since manufacturing is generally an engineering-oriented industry, industrial designers who work in these companies generally work and collaborate with engineers (Kim and Lee, 2014). According to Korkut and Hasdoğan (1998), industrial design is a profession which has emerged later than engineering, and has become a field firstly in the academy and then in industries. Therefore, professional culture of industrial design involve in manufacturing later than engineering culture.

In manufacturing companies, engineers form the majority of the employees, and therefore companies' organizational cultures become more engineer-oriented. Kim and Lee (2014) explain this as reason why most companies are not familiar with the design, and especially the industrial design culture (Kim and Lee, 2014). They also stated that, in manufacturing companies, a different kind of culture appears, and they are never expected to have a majority of industrial designer employees. The fact that engineers and industrial designers have different professional cultures create differences among these groups of people. These differences are not matched with the

industrial designers' professional cultures which were acquired in the undergraduate education (Johnson, Koh, and Killough, 2009).

In the research of the professional lives of industrial designers in manufacturing companies, professional and organizational cultures form the focal points. Dryburgh (1999) stated that every profession has its own professional culture. Professional culture contains shared knowledge, ways or systems of meanings, values, norms, symbols, and underlying assumptions among a group of people. Johnson et al. (2009) indicate that members of a professional culture are people who share the same profession, so, they share the same educational background with common professional interests, goals, and problems.

Just like professional culture, organizational culture also contains shared values, belief, and assumptions that guide members of a group within an organization (Schein, 2010; Schneider, Ehrhart, and Macey, 2013; Costanza, Blacksmith, Coats, Severt, and DeCostanza, 2016). Bloor and Dawson (1994) studied professional culture in organizations. According to their research, because of its place in forming an organizational culture, professional culture is vital in organizations. Members of an organization bring along their professional culture and their past professional experiences with themselves. When all different groups of people share their own professional cultures, professional experiences, belief, and knowledge with others within the organization, organizational culture starts to be formed.

In literature, there are sources on a number of professions' professional culture such as; architecture (Abdullah, Beh, Tahir, Ani, and Tawil, 2011), engineering (Dryburgh, 1999), human resources management (Hansen, Kahnweiler, and Wilensky, 1994), and accounting (Johnson et al., 2009). However, there is a gap in the literature about the professional culture of industrial designers. The thesis aims to contribute to this gap by exploring the professional practice of the industrial design profession, its relationship with other professions, and the organizational culture of companies.

1.2. Aim and Scope of the Research

The research explores the relationship between the professional culture of industrial designers and their experiences in professional life. It considers the foundation of the professional culture of industrial designers that which they start learning from the beginning of their undergraduate education. Additionally, in professional life, organizational cultures of the companies they work for, and other professional cultures of people that they work together shape industrial designers' professional culture. Industrial designers adapt to the both organizational culture and the dominant professional culture of the companies they work for, because their job description could change according to the companies point of view towards industrial designers and their culture.

The research aims to explore what are the impacts of the professional culture that industrial designers acquire in their undergraduate education on their experiences in professional life. In order to do so, first, research explains the perception of the industrial design profession by its members; second, investigates the experiences of industrial design education and professional life of industrial design where professional and organizational cultural elements are visible; and third, analyzes and discusses the aspects of professional culture of industrial design from educational life to professional life.

1.3. Research Questions

To successfully reach the aim above, this thesis will seek the answers to the questions below.

Main research question:

- How does the professional culture that is acquired in industrial design education affect work experiences of industrial designers?

Sub-questions:

- What are the aspects of the professional culture of industrial design that comes from undergraduate education?
- How do industrial designers define their profession and its professional culture?
- How are industrial designers' professional cultures shaped in the companies' organizational cultures?

1.4. Structure of the Thesis

The thesis consists of a total of five chapters. Its first chapter, introduction, presents brief background information on the topic of the research while it provides the aim and research questions. In the end, before passing to the literature review, the chapter demonstrates the structure of the thesis.

Chapter two presents the literature review of the thesis. The chapter starts with the definitions of culture, professional culture, and organizational culture and their relations with each other from a broad range of sources. Later on, cultural forms in professions and organizations are explored in five headings; stories, language, social relations, physical space and artifacts, and dress and appearance norms. All entries demonstrate how culture is perceived in professions and organizations with examples from different literature fields such as; industrial design, creative industries, and management. At the end of the chapter, the contribution of the thesis to the current literature is discussed.

Chapter three displays the research design of the thesis. It states its research approach and explains its data collection method; semi-structured interviews. How the sample group is formed and how the interviews are conducted are all explored deeply. Later on, the chapter explains its data analysis phase of the interviews in detail, starting from its transcribing stage to the coding phase. The methodological challenges are also presented in the chapter.

Chapter four of the thesis presents and discusses deeply the findings of the analysis of the interviews that are aimed to understand the relationship between the professional culture and the professional experiences of industrial designers. Results are discussed in three main headings; industrial design profession, education process of industrial design, and industrial design work experiences.

Lastly, chapter five explains the overall conclusions of the thesis. While it demonstrates the limitations of the research, it also presents suggestions for further studies.

CHAPTER 2

LITERATURE REVIEW

This chapter displays a review of the literature on the research topic of this thesis utilizing various sources. The most prominent areas used in the literature search were; design management, organizational studies, organizational culture, professional culture, creative industries, and cultural studies. While making research on the areas listed above, keywords such as; organizational culture, professional culture, corporate culture, design culture collaborative design, professional language, organizational communication were used.

This review begins with the definitions of culture, professional culture, and organizational culture that are all considered as focal points of the thesis. Later on, the review explores how culture becomes visible in professions and organizations with the help of examples from various fields of literature. In this part, culture is explored in professions and organizations through stories, language, social relations, physical space and artifacts, and dress and appearance norms. Lastly, the chapter concludes with a summary of the literature review.

2.1. Culture, Professional Culture, and Organizational Culture

The literature on culture is scattered in different fields such as; management, education, and design. Considering that the focus of this thesis is on professions and organizations, the review presented here in the first section of the literature review is mainly based on the field of management. This section starts with various definitions of culture, professional culture, and organizational culture. It then moves to how culture is created in professions and organizations. Later on, the relationship between professional culture and organizational culture is discussed.

2.1.1. Definition of Culture

Culture is a term used in many different fields of social sciences. Since every track has its point of view and definition of culture, it is not possible to offer a single definition. Still, definitions made in various areas are commonly based on the definition of the culture by Hofstede, Neuijen, Ohayv, and Sanders (1990), who identify some essential and definitive features of culture.

According to Hofstede et al. (1990), first of all, culture is a holistic phenomenon. It has multiple characteristics such as; being history related and having a hard to change nature. Additionally, rather than referring to a single individual, it consists of a broader group of people. So, it could be said that the first definitive feature of culture is its comprehensive nature.

The second feature is about culture's relation with past. Traditions and customs from history are two focal points of culture. Culture manifests in traditions and customs. While traditions and customs of a defined group create the foundation of culture, they are also critical in transmitting culture through generations because they are both verbally and non-verbally conveyed elements from generation to generation. So another definitive feature of culture is its relation to history.

Thirdly, culture is a phenomenon that is inactive and difficult to change. The reason for this inactivity lies in the traditions and customs. Transmission of culture is affected by individuals' ideas, history, customs, traditions, and values. For instance, when people own their beliefs or customs, this creates a slow and relatively rigid culture.

Fourthly, culture is a human product. People socially and collectively structure groups. Later on, every group of people creates their own culture. An individual's nature does not affect culture, but a group of people creates and affects culture. So, being a human product as well as multiplicities is another definitive feature of culture.

Fifthly, culture is a softly constructed phenomenon filled with obscured elements. Because of its qualitative nature, culture is not easily measured or classified. So, culture's subjective view is one of its definitive features.

Sixthly, culture has terms that define and represent itself, such as; rite, ritual, ceremony, and myth. Culture becomes visible in these forms in groups, networks, and organizations. These terms add essential values and meanings to culture. They all will be examined in the next sections of this chapter.

Lastly, culture consists of the hidden meanings and rules of groups of people and therefore has a problematic nature to be seen by people. It is almost invisible. Ways of behavior and thinking are its essential features. It has a somewhat subjective view than an objective one.

According to these features, culture is defined as; shared knowledge between a group of people, ways or systems of meanings, values, norms, and underlying assumptions that guide people (Alvesson and Sveningsson, 2015). Thus, culture focuses on what guides a defined group's behaviors, rather than focusing on the group's status and its members' actions. Formal and informal groups of people, professions, organizations, and networks perform and behave in some specific forms, and culture refers to the nature of these actions.

2.1.2. Definition of Professional Culture

According to Dryburgh (1999), every profession has its own professional culture, which refers to a specific sub-culture. Similar to the generic definition of culture, professional culture also comprises shared knowledge, ways or systems of meanings, values, norms, symbols, and underlying assumptions among a group of people. Members of professional culture are well-defined because they are individuals who have studied together and share common interests and problems in their professional lives. Johnson, Koh, and Killough (2009) state that social interaction, joint training,

and educational background of the members of a group create the foundation of their professional culture.

Professionalization is an essential element in the creation of professional culture. According to Greenwood (1966; cited in Dryburgh, 1999); professionalization requires learning proper theories of ethics related with the profession as well as embodying the values, norms, and symbols of the professional culture. Individuals meet and internalize professional culture first in their undergraduate education. Various theory-based courses, practice-based courses, and internships make them learn about the culture of their professions and train them for professionalization. They are mainly meaningful and understandable for the people from the same profession.

As mentioned earlier in this chapter, in their study on culture Hofstede et al. (1990) stated that every group of people create their own culture. Multiplicity is vital in shaping culture. Because culture is defined as shared knowledge between a group of people, ways or systems of meanings, values, norms, and underlying assumptions that guide people (Alvesson and Sveningsson, 2015), people who are members of professions, form their professional culture together with their shared educational and professional experiences and knowledge. As the numbers of these experiences and information increase, their place in the professional culture is strengthened.

Professional culture is critical in forming an organizational culture. According to Bloor and Dawson (1994), when individuals become part of an organization, they bring along cultural knowledge that comes from their professional education and their past work experiences. When individuals share their experiences, beliefs, and bits of knowledge with others within the organization, they start to form small portions of organizational culture.

2.1.3. Definition of Organizational Culture

Just like terms culture and professional culture, the term organizational culture is explored in various fields of social sciences (Naicker, 2008). As a result, in the

literature, there are different points of views and definitions about the concept of organizational culture. Cohen (1993), for example, explores organizational culture through formal and informal systems and interactions. In addition to Cohen (1993), Rai (2011) studies organizational culture through leadership, socialization, reward systems, and decision-making. All those works emphasize various features of organizational culture. Yet, from a general point of view, organizational culture can be defined as the shared values, beliefs, and implicit assumptions that guide member actions as well as rituals and pattern of behaviors within the organization (Schein, 2010; Schneider, Ehrhart, and Macey, 2013; Costanza, Blacksmith, Coats, Severt, and DeCostanza, 2016).

Every establishment and organization has its own culture. Professional culture has an essential role in forming an organization's culture. Hofstede (1998) states that organizations contain professional culture on their own. Different groups of professions and their professional cultures result in the creation of unique organizational culture, which has many unique features that are understandable only within that specific organization.

Regarding learning about an organization's culture, formal and informal relations between organization's members are very important. While the term's dedication and collaboration cover a large part of learning an organizational culture, the more important term in learning organizational culture is sharing knowledge (Sun, 2008). Learning process of organizational culture starts with being a member of an organization. According to Palos and Veres Stancovici (2016), learning organizational culture takes place in the organizational environment. As mentioned earlier, Bloor and Dawson (1994) state how professional culture affects organizational culture. In addition to individuals' professional culture, there are also rules, symbols, and values of the organization. When an individual takes place in an organization, s/he learns its rules, symbols, and values. Later on, the relationship between an individual's professional culture and organizational culture affects the existing culture and culture

becomes visible in some forms in professions and organizations as will be explained below (see Section 2.2).

2.1.4. The Relationship between Professional and Organizational Culture

Although both professional and organizational culture are two different types of cultures, they share similarities. Both terms contain shared knowledge, values, beliefs, and systems. Social interaction, background, and behaviors are all critical regarding defining. They all have unique features that are meaningful to their members (Schein, 2010; Schneider et al., 2013; Costanza et al., 2016; Dryburgh, 1999; Johnson et al., 2009). Although there is a considerable number of similarities, there are two main differences between them.

The first one is, organizational culture is the way that things are done, or problems are handled within an organization (Sun, 2008). Its values and beliefs are universal among the working staff of the organization. So, it could be said that organizational culture belongs to a specific organization. Professional culture, on the other hand, is a little bit different than organizational culture. Hollifield, Kosicki, and Becker (2001) stated that professional culture is formed by individuals who work in the same profession and it exists as a sub-group within organizations (Hofstede, 1998).

The second difference appears in the learning phase of culture. While people start to learn about professional culture during their professional education (Johnson et al., 2009), people learn about organizational culture in their workplace (Palos and Veres Stancovici, 2016).

2.2. Cultural Forms in Professions and Organizations

As mentioned earlier in this chapter, culture becomes visible in some forms in professions and organizations. Beyer and Trice's (1984; cited in Beyer and Trice, 1987, p. 6) list of definitions of frequently studied cultural forms provides us with a list of primary cultural forms in organizations. These are defined as; rite, ritual, myth,

saga, legend, story, folktale, symbol, language, gesture, physical setting, and artifact. In the figure below, the definitions of these terms are given.

Table 2.1. A List of Definitions of Frequently Studied Cultural Forms (Adapted from Beyer and Trice, 1987)

Exhibit 1
A LIST OF DEFINITIONS OF FREQUENTLY STUDIED CULTURAL FORMS*

Rite	A relatively elaborate, dramatic, planned set of activities that combines various forms of cultural expressions and that often has both practical and expressive consequences.
Ritual	A standardized, detailed set of techniques and behaviors that manages anxieties but seldom produces intended, practical consequences of any importance.
Myth	A dramatic narrative of imagined events, usually used to explain origins of transformations of something. Also, an unquestioned belief about the practical benefits of certain techniques and behaviors that is not supported by demonstrated facts.
Saga	An historical narrative describing (usually in heroic terms) the unique accomplishments of a group and its leaders.
Legend	A handed-down narrative of some wonderful event that has a historical basis but has been embellished with fictional details.
Story	A narrative based on true events – often a combination of truth and fiction.
Folklore	A completely fictional narrative.
Symbol	Any object, act, event, quality, or relation that serves as a vehicle for conveying meaning, usually by representing another thing.
Language	A particular manner in which members of a group use vocal sounds and written signs to convey meanings to each other.
Gesture	Movements of parts of the body used to express meanings.
Physical Setting	Those things that physically surround people and provide them with immediate sensory stimuli as they carry out culturally expressive activities.
Artifact	Material objects manufactured by people to facilitate culturally expressive activities.

* Adapted from Janice M. Beyer and Harrison M. Trice, "Studying Organizational Cultures Through Rites and Ceremonials" (*Academy of Management Review*, October 1984).

Some of the terms in the list have frequently been used over the years. In recent studies, while some of them stand still, others either unified or disappeared. I created an updated list of cultural forms for this thesis reviewing the current studies that focus on professional and organizational culture. Considering sources conducted in the 2000s and especially in the 2010s, it is observed that many of the terms given in the above table are considered together. For example; rite and ritual, or, physical setting and artifact are all paired and are considered accordingly. According to this review, culture frequently takes form in professions and organizations through;

- Stories,
- Language,
- Social relations,
- Physical space and artifacts, and
- Dress and appearance norms.

2.2.1. Stories

According to Beyer and Trice (1984; cited in Beyer and Trice, 1987), stories are based on myths and real events, the narration is their method, and they are the combination of both truth and fiction. Beyer and Trice (1987) state that a story is a well-known form of organizational culture. Stories demonstrate many details about an organization's norms and values and they have a crucial place in culture. Stories function in culture in three ways; they transmit culture through generations, they describe it to outsiders, and they enable cultural changes.

Firstly, stories transmit culture through an organization's members for generations. An influential and essential story serves to establish a strong culture. They could also demonstrate rules and regulations of the given profession or organization and show what is acceptable or appropriate or not for its members. While in the fields of design and creative industries there are not many sources about stories on professions or organizations, other areas offer various examples. As mentioned earlier, Beyer and Trice (1987) have explored organizational stories and cultural forms. One example

from their research shows a well-known story among the IBM company employees about rules and regulations of the company. It is indicated that IBM president Thomas Watson Jr. was not allowed to a restricted area in his company by an employee; because he did not wear a badge. This example's power and uniqueness made it unforgettable not only between employees but also in literature as it implies how employees should act in the company and it concludes that even the president of the company was not exempt from any rule. This story not only transmits culture through generations but also it gives an example of how strict the rules were in the company, and it also demonstrates the organizational dynamics and organizational culture. As can be seen in these examples, stories are crucial features that transmit culture between groups, networks, and generations within and without an organization.

Secondly, stories all have different and unique qualities, and because of their features, they play a very active role while introducing culture to the outside world. Beyer and Trice's (1987) examples which were explored in the previous section also describe the culture of their organizations to outsiders. Those examples gave information on the organizational structure by demonstrating employer-employee communication.

Abdullah et al.'s (2011) study reveals the characteristics of architectural design studio culture. In this process, it is observed that myths have a pivotal role in the characterization of design studio culture. Design studio myths such as; living in the studio 24/7 or the most successful students are the ones who spent most of their lives in the studio are the most known ones that are describing the culture of design studios to people who are not familiar with design education, people from other disciplines. The idea of working for long hours in studios spreads to all other departments through myths and stories and reveals the cultural aspects and dynamics in the design and architecture departments to other departments.

Lastly, culture and culture change in profession and organizations could be monitored and also expressed with stories. According to Hansen, Kahnweiler, and Wilensky (1994), all cultural stories manage cultural change. According to Martin et al. (1983),

while stories cause changes in organizations, they also reverse changes in organizations. In all these examples, given organizations' cultures and their aspects become visible through stories. They provide information on their past and present organizational environment, behavior, and their changes, as well as they, proved that their culture transmits through generations by its members verbally and informally.

2.2.2. Language

In an organization, everyday language and gestures are formative features of organizational culture. As Beyer and Trice (1987) state, language is an element which members of organization use as vocal or written to transfer information to each other and gestures are ways of physical expression of things and meanings. Language, like stories, is another way of expressing culture.

2.2.2.1. Professional Vocabulary and Jargon

A word may have multiple meanings between different groups, networks or organizations. The words used by various professions housed in the organization play an active role in forming a common language used in the organization. Different cultures add different meanings to common terms and words (Alvesson and Seveningsson, 2015). According to the literature, regarding professional language, individuals from different disciplines either use different terms for similar things, or they use the same terms for different things which depend on the disciplines.

Dannels' (2005) work on design rituals provides many words with meanings specific to designers. While, people from accounting, marketing, engineering and so on use the term "oral presentation", designers use "critique" or "jury" depending on the scale of the presentation.

While this example demonstrates different professional vocabularies within the professions or departments of organizations, other studies have also provided examples regarding how the same concepts have a different meaning in various professional cultures. According to Kaygan and Demir (2017), for example, industrial

design students and engineering students who work together as a team, use the same terms but refer different points of it. Terms such as model, mock-up, and prototype are understood differently between design and engineering students. As seen in these examples, groups with different educational cultures assign different meanings to a common term. Regarding language, culture becomes visible while assigning meanings to words. An individual with no knowledge could not understand general cultural aspects of the group or organization. Different departments that are housed in an organization play a significant role in cultural development. While all of the people could use the same words, their meanings can change as a result of different experiences and professions (Houghton, 1987).

Mutual communication problems arise from the different use of language in professional lives where people from different professions work together. Eckert, Cross, and Johnson (2000) worked on the communication problems between designers and technicians within 20 knitwear companies in Britain and Germany. On one side designers state that designs which they gave to technicians are not created, while on the other side technicians report that they think designers do not know to design a technically feasible product. This problem caused because of the different design ideas and knowledge, jargons, the impact of automated production systems and most importantly lack of communication which was started from the conceptual phase of the design between designers and technicians.

In addition to the design field, accounting has also got a similar example. A defined professional language and vocabulary could also be used differently among the members of a given group. According to Belkaoui (1980), accounting language varied across groups. For example, it is stated that in the accounting profession, academicians used a formal language, while professionals used a public one. This difference is caused because of the differences in designers' job descriptions. Academics use a more formal language because of their work assignments, while professionals who work in the industry, as Eckert et al.'s (2000) research also emphasized, work with people from different professions and so with different professional cultures. To

sustain a better understanding, better communication, and work properly, professional language of people from the same profession can vary.

2.2.2.2. Implicit Hierarchical Relations

Language is an active element that defines an organization's structure. It makes it easy for others to observe how an organization is managed and if it has gotten a horizontal or hierarchical work environment. Morisawa (2015), for example, shows that in the Japanese animation industry, the hierarchy is an essential part of its organization. The majority of the operators quit their job within two years because of mistreats and poor communication. Employees work for very long hours while their supervisors leave earlier. One operator stated that his supervisor once told him that he should forget about his pride in that profession. Some cultural features of the company are revealed with communication. Mistreats and misunderstandings show the hierarchical relations of the organization.

Johansson and Woodilla (2008), researched on hierarchy and power relations on organizations within the industrial design field. While Johansson was working on interviews with about 40 Swedish designers, it is stated that designers' ideas were not taken into consideration, designers were not considered to fit into the corporate culture, and they were not communicating successfully with the managers. Because of the different professions, designers and managers have different types of professional language. Both groups use the same professional terms with different meanings. This difference creates obstacles in communication. Additionally, having different professional cultures can cause misunderstanding among designers and managers which establishes an unbalanced communication and collaboration between designers and individuals within organizations.

In the literature, address forms have an essential place in groups, networks, and organizations. In organizations and networks, address styles give information about the profession, surrounding environment, and working system. For example, address forms are significant among officers (van Wijk and Finchilescu, 2008). Their address

forms indicate respect, hierarchy, authority, and status among individuals. Without looking to rank or gender the term, “Sir” is used for every officer.

Professional groups’ and organizations’ languages demonstrate hierarchy by stating that their jargon is special to its members. In addition to van Wijk and Finchilescu’s (2008) work on officers and address forms, Morand (1995) and Morand (1996), worked on address forms and status leveling in organizations. Both sources explored different types of working environment regarding organizational language, hierarchy, and culture. According to Morand (1995), it is becoming common to use first names when addressing people in organizations without considering any status differences. While it is expected to decentralize in organizations, it also explores the name avoidance. Address forms like titles, first names, or last names could indicate equality, formality, or social distance. However, all these forms demonstrate hierarchy in organizations in some sort, and their types are good examples in reporting organizational culture.

2.2.3. Social Relations

Formal and informal relations in networks, professions, and organizations are crucial elements to obtain a successful and long-lasting culture. According to Beyer and Trice (1987), social relations contain rites, rituals, ceremonies, and reward systems. This thesis combines these terms under the title social relations, where culture becomes visible through formal relations, informal relations, rites, rituals, and ceremonies respectively. In social relations, formal and informal relationships are separated according to whether or not they have a hierarchy within.

2.2.3.1. Formal Relations among Members of Professions/Organizations

Formal relations can provide crucial information about the structure and culture of an organization or company. Formal activities, especially meetings, offer an essential setting for the establishment and maintenance of formal relations and hierarchy among professional workers (Sculley, 1987; cited in Alvesson, 2012; Alvesson and

Sveningsson, 2015). SkillMaker (2013) notes that formal meetings help members to understand the organizational culture while encourage them to participate in and discuss the organization's goal and structure.

Sculley (1987; cited in Alvesson, 2012; Alvesson and Sveningsson, 2015), demonstrated that Pepsi meetings were very ritualistic. There was a reverse hierarchical entrance order in meetings. People enter meetings with a hierarchical order, from the marketing analysts to the vice president who finally brings chairman to the meeting. This example from Pepsi Company suggests that while some meetings seem more informal, some have a rigorous formal ritual.

In a different example, Sutton and Hargadon (1996) explored design meetings of IDEO Company concerning the effectiveness of brainstorming method in design. Contrary to Sculley's example that demonstrates hierarchical features of meetings, Sutton and Hargadon's (1996) example does not cover explicit hierarchy in formal meetings. In their study, they attend a series of engineering design meetings in the company that is also known as "Monday morning meetings" (p. 692) where engineers sit on the floor in a circle with CEO and discuss current and potential projects. While both examples provide formal meetings, IDEO example presents a case which is the opposite of the case above. While this meeting is also formal, it has an approach in which the hierarchy has been demolished, and an informal approach has been brought to formal relations.

2.2.3.2. Informal Relations among Members of Professions/Organizations

While culture could be visible in the formal relations of organizations, it could also be visible in their informal relations. There are various gatherings in organizations and companies without any regards to the hierarchy. Beyer and Trice (1987) state that organizational rites such as; company Christmas parties and picnics are common informal gatherings in organizations. All type of workers from highest-ranked to lowest-ranked gather, interact and set activities together without emphasizing any status. This gathering symbolizes shared values favoring community. All statuses are

temporarily diminished. In addition to that, non-verbal communication is achieved by using body language such as; hugging and kissing. Additionally, these gatherings provide some closeness that specifies the organization.

Creative arts field is an area where culture becomes visible mainly through informal relations. Dannels' (2005) work on design studio critics demonstrates the dynamics of the design studio systems. According to field notes of the research, design studio considered as a flexible space. People talk, participate, or leave when they want to. Even after the class starts, an outsider can come in and talk to the people from the studio. This example is a part of the design studio, and informal relations is where culture is visible. The informal relation is an integral part of design collaboration. Craig and Zimring's (2000) and Chiu's (2002) works are about collaboration and interpersonal relations in design studios. Collaboration in design is often used to find better design solutions (Chiu, 2002). To find better design solutions, well-structured information flow is a must. They emphasize informal relations in design studios, and additionally they discuss whether design studios need a structured collaboration to obtain better design results by providing an open exchange of ideas.

Additionally, peers and tutors also affect the profession while making culture visible in professions and organizations. In literature, there are sources of interdisciplinary interactions, collaboration, and peering and tutor systems, especially in the educational background. Just like Dannels' (2005) work on learning in design studios, Kaygan and Demir (2017) also researched on learning in design studios. They explored interdisciplinary teamwork and collaboration in interdisciplinary design studios context. Seminars, workshops, and student teamwork are valuable in learning about other disciplines. They explain that students' interactions with peers, tutors, and academics in flexible learning environments, like design studios, create a different, more flexible learning experience. Every learning environment creates a different learning experience which becomes a vital part of the professional culture.

In the education field, organizational culture could be visible through the mentor-protégé relationship (Datta, 2007; Özkalp, Kirel, Sungur, and Cengiz, 2006). Every educational establishment's culture, as well as their internal relations, are different and unique. One of the most critical headings when examining professional and organizational culture is undoubtedly formal and informal relations among members of an organization or profession. Datta's (2007) study on architectural schools' studio culture reveals that every school promotes a different learning model that vary from formal to informal where communication is a crucial element to sustain the culture.

2.2.3.3. Professional/Organizational Rites, Rituals, and Ceremonies

Rites and rituals are two of the primary cultural forms in organizations. According to Beyer and Trice (1987), rites are prepared set of activities that are a combination of numerous forms of cultural remarks with practical and striking consequences. For example; as rites, organizational seminars, annual picnics, and office Christmas parties strengthen social identities and cultures of individuals in an organization (Trice and Beyer, 1984; Beyer and Trice, 1987). On the other hand, rituals are more detailed and more regulated set of actions and behaviors that produce intended and practical consequences. According to Trice and Beyer (1984), well-defined set of activities in offices such as exchanging gifts in office Christmas parties is an example of organizational rituals. Both of the terms have essential places in professions and organizations as they are proved to be some of the most critical elements to demonstrate culture within a group (Beyer and Trice, 1987).

As mentioned above, Beyer, and Trice (1987), suggested that there are rituals within informal gatherings in organizations. Office Christmas parties, company picnics, and barbeques make culture visible in organizations by sustaining strong communication between employer, and employees and also they demonstrate socialization and sharing within the organization. With such activities, members of an organization or group of profession see themselves as part of a community and strengthen the sense of belonging to their organization.

Education literature provides crucial information on design education by containing useful examples of professional and organizational rites and rituals (Knuf, 1989; Dannels, 2005). Critics, pin-ups, and juries are considered as rituals, and they are also part of the design education system. They are “oral presentations” of designers. Students and academics gather and discuss the design process and design project. These rituals are some of the critical elements of design culture (Dannels, 2005).

Award ceremonies, reward systems are other examples where professional and organizational culture become visible (Hanks, n.d.). These ceremonies and awards make people feel as a part of a community unified and appreciated. Teacher of the year awards from educational establishments, well-known awards, and ceremonies such as; Annual Academy Awards, Tony Awards, and Nobel Prizes are some examples of rewarding systems from everyday life (Trice and Beyer, 1984). All of them are for a selected group of professions and organizations which celebrate achievements and recognition of their members.

2.2.4. Physical Space and Artifacts

According to Beyer and Trice (1987), artifacts are human-made objects to provide culturally vivid activities. They also state that physical setting is something that surrounds individuals and provides them with immediate reactions while individuals do culturally rich activities. In the literature, physical space and artifacts are generally approached together. The physically surrounding environment contains many artifacts that are influential in creating a particular meaning.

Kallio, Kallio, and Bloomberg (2015) state that social interaction and collaboration are some of the founding features of modern organizations. According to them, working environment where members of organization collaborate and interact is crucial in forming organizational culture by providing cultural, hierarchical elements, and as well as identity. For example, open-office plans, despite their lack of privacy, strengthen communication and collaboration among workers (Kaarlela-Tuomaala, Helenius, Keskinen, and Hongisto, 2009). Vischer (1999) finds out that the

performance and satisfaction rates of both employees and executives can significantly be influenced by the implementation of non-territorial offices in a negative way. Changes in physical space cause changes in performance and satisfaction in an organization.

Exploring the nature and culture of design studios, Vyas, van der Veer, and Nijholt (2013) indicate that are material filled in collaborative work environments. In design studios, people need to socialize with fellow students and academics at the same time to interact and use group-oriented design methods like brainstorming. These material artifacts and materials such as post-it notes, prototypes, and physical models can be used collaboratively. The collaboration between co-designers is also instrumental in design studio's creativity. Physical settings of design studios and material artifacts are both have crucial parts in forming both professional and organizational culture of an educational establishment. Artifacts are generally served as the words in design studios. Design sketches (Vyas, 2009) and architectural models (Schmidt and Wagner, 2002) are some artifacts examples from design studios. All these artifacts positively affect collaboration which is very important to establish creativity. Much of the assignments in the design studios are group-oriented and collaborative. It is expected that the physical setting and artifacts of a design studio must encourage students to communicate, collaborate and share.

Abdullah et al. (2011) studied on design studio culture as well. They mention that architecture students choose to work in design studios especially in design development and design production phases. Design studio's large and open plan sustains collaboration, fast and easy information flow between large groups of students. Additionally, in these defined spaces; students work for long hours among their communities. These are essential features of the design studios' environment. Their cultures appear with its physical features. Kaygan's (2018) research on collaboration between industrial design students also reveals cultural aspects of design studios. Industrial design students prefer to work in the design studios among their communities because of its flexible working environment. All of the members of the

design studios share values, culture, problems and so on. Design studios' aspects like flexibility, working hours, and community reveal essential elements of the professional cultures of design related professions.

Shortt (2015) studied hair salons' and hairdressers' physical space definitions. According to its findings, there are hidden places in the hair salon where hairdressers socialize and spend time together without considering anything about their works. Steps and stairways are considered as places where hairdressers spend some time alone or with their colleagues. Hair salon's pavement and informal staffrooms are some other places where hairdressers get away from everyone and socialize. Hairdressers stated that informal staffrooms are like meeting rooms to them.

Mills and Hoeber (2013) study physical space through ice skating clubs. Ice skating dressing rooms have multiple meanings and functions. They are not counted only as some spaces for changing clothes, but also they are defined areas for socialization. They found out that people not only dress in there but even they socialize with a significant amount of time. Athletes eat, store their equipment, and train in there. With all these meanings and functions, dressing rooms become places where culture sustains.

Just like Mills and Hobber's (2013) study, Mair's (2009) study explores sports clubs and their culture. A curling club where people practically live in, however different from the figure skating club example this example, where people develop a distinct sense of belonging which includes control and help. This sense of belonging add additional elements to the club' culture, make it different from the others. While Mills and Hobber's (2013), Shortt's (2015), and Mair's (2009) works demonstrate socialization, gathering, and sharing within physical space, the term "sense of belonging" appears in all of them through both physical space and artifacts.

In addition to Vyas et al. (2013), Vischer's (1999) study also deals with physical space and artifacts in office spaces as cultural elements. Vischer (1999) states in an example that a wall of a conference room is covered with pin drawing to strengthen interactivity

and collaboration in office by the CEO. In this example, while artifacts like pin drawings are expected to provide a healthier and collaborative working environment, they are also expected to have an active role in sustaining the organizational culture.

2.2.5. Dress and Appearance Norms

Dresses and uniforms might be the most visible forms of culture in professions or organizations. When people see a uniform, they could define what it symbolizes or represents. Many groups or organizations have distinct clothing sets and rules. Rafaeli and Pratt (1993) state that dress is very useful in creating both organizational and professional cultures and image. In the literature, dress and appearance norms have two kinds of relations with culture; to demonstrate the power relations within the organization, and to help define and symbolize the organization.

2.2.5.1. Power Relations

Regarding power relations, creative industries and design literature do not contain as many examples as the other fields such as; military or education. Dress code is used to giving a sense of belonging, show status as well as qualifications. The military is one of the most distinct fields that demonstrates a sense of belonging and hierarchy through dress codes. According to van Wijk and Finchilescu (2008), navy officers show status, rank, and qualifications with their badges. Dress codes also gave a sense of belonging to navy officers by defining their sub-groups in their community.

While dress codes provide a sense of belonging they can also demonstrate a hierarchy or a ranking order. For example, military uniforms both create a sense of belonging to their owners and show a ranking system with the help of their artifacts such as badges or ceremonial swords at the same time (van Wijk and Finchilescu, 2008). These dress and appearance norms examples reveal power relations in and between professions.

Rafaeli and Pratt (1993) worked on organizational dresses in multiple fields. In universities where people dress more freely, homogeneity is low. Although there are sets of dress codes in universities, they do not provide a proper hierarchical feature to

its group. On the other hand, doctors, athletes, or people who work in a corporate company dress uniform or at least a selected set of dresses. This situation creates homogeneity in the working environment which makes the hierarchy less visible within the organization. However, no matter what the examples are, dress codes always make the culture visible through its group or organization.

2.2.5.2. Define and Symbolize Profession/Organization

Dress and appearance norms of professions and organizations are compelling elements that define culture to its members and outsiders. Joseph (1986; cited in Pratt and Rafaeli, 1997) uniforms in organizations and networks, flight attendants uniforms, and research on communes demonstrate a rigid relation between dress code and organization's sets of rules.

Sculley (1987; cited in Alvesson and Sveningsson, 2015), states that at the meetings at Pepsi company people are not allowed to take off their jackets no matter what happened. Example like this demonstrates a little portion of organizational culture by providing a defined set of rules within the organizational structure. Rafaeli and Pratt (1993) state that dress codes give information on organizations' structures. Different types of uniforms within one particular organization demonstrate that there are different sub-groups with different tasks. While demonstrating organizational structure this situation is also demonstrating sub-groups' division of work. People could understand every single person's task from their dresses while exploring the organization's working mechanism.

Dellinger's (2002) research on two different magazines shows since accounting is considered as a business department, men in these departments usually prefer to wear a suit and tie, and women, business attire. These dress codes leave the corporate impression. People in the other departments find accounting department as more conservative than the other departments, such as editorial, or art departments. In accounting, people know that in other departments, people dress more freely.

Kaygan's (2013) work on industrial designers' dress codes provides another example of dress code differences between departments within an organization. An industrial designer stated that while the company s/he is working in, have distinct dress codes such as jeans not allowed, managers do not say anything to designers when they wear jeans. However, if a person from marketing wears jeans, a problem may occur. As these examples show, in organizations, there are different symbolic values attributed to professions, and concerning these, differences in dress and appearance norms between professions emerge.

Rafaeli and Pratt (1993) stated that organization' or professional group' defined dress colors might contain valuable information about themselves. Colors have symbolic meanings. Rafaeli and Pratt (1993) stated that the color brown in UPS uniforms might symbolize trust. Jabbal's (2014) study on medical students and their uniforms stated that patients prefer medical students with white coats. It is stated that white coats symbolize trust, confidence, and professionalism. All these examples state that dress colors have specific meanings and symbols and they provide valuable information about their profession group's or organization's culture.

2.3. Summary

This literature review's purpose is to aid readers to understand what culture is, how professional and organizational cultures are formed and how culture becomes visible in organizations. At this point using various examples strengthens the understanding of the main idea of this research. While there are many examples of culture, professional culture, and organizational culture in the context of this thesis, there are not many cultural examples in design and especially industrial design literature about this thesis. However, exploring examples from various fields makes it easier to understand the general idea.

This literature review was conducted in two main sections. While the first section was based on the introduction of the specific terms that were required to understand this thesis, the second section was based on exploring the topics of the thesis through

sources from various fields. The first section of the chapter, the definition of the primary keywords (culture, professional culture, and organizational culture) of this thesis was covered to provide background information on the professional culture of industrial designers. Hofstede et al.'s (1990) definition of culture and its features were used as a guideline to understand what culture is in this thesis. Later on, professional culture and organizational culture were observed through various sources from different kinds of literature to understand what they were and how they came up. At that point, the nature of professional groups and organizations were explored. This section lastly dealt with was the relationship between professional culture and organizational culture. In this part, it was investigated how people approached professional and organizational culture. The definitive features of these terms were stated in multiple studies (Sun, 2008; Hollifield et al., 2001; Hofstede, 1998). Their similar and different features were explored, and finally, it was revealed how people learned and became a part of both of these cultures were stated (Johnson et al., 2009; Palos and Veres Stancovici, 2016).

The second section of the chapter was about how culture became visible in professions, groups, networks, and organizations. Janice M. Beyer and Harrison M. Trice researched on cultural forms in organizations and their table "A List of Definitions of Frequently Studied Cultural Forms" which was adapted from Beyer and Trice (1987) guided this thesis in forming the aspects of cultural forms in professions and organizations. Beyer and Trice categorized cultural forms into twelve titles which were; rite, ritual, myth, saga, legend, story, folktale, symbol, language, gesture, physical setting, and artifact. According to this table and new sources, culture became visible in organizations in five forms; stories, language, social relations, physical space and artifacts, and dress norms and appearances. These aspects of cultural forms were explored gradually from the abstract (stories) to the concrete (dress norms and appearances). This chapter studied related works of literature of this thesis through multiple examples. Next chapter will cover the research method of this thesis.

CHAPTER 3

METHODOLOGY

This chapter presents the design of the research by discussing the data collection method, research stages, challenges that were encountered, and finally data analysis. First of all, this chapter will explain the interviews by exploring the reasons behind choosing the interview method, the forming process of the sample group and conduction of the interviews. Later on, this chapter will present the research stage. Then, the challenges that were encountered while doing the research will be explored. Finally, this chapter will explain the data analysis process of this research. Transcription, analysis method, coding process, and translating the quotations will all be intensely discussed.

3.1. Data Collection Method

A qualitative approach is chosen to explore the research questions in the research. To reach the aims and goal of this research, semi-structured interviewing is selected as the research method. The next section explains how the sample group is formed and presents how the interviews are conducted.

3.1.1. Semi Structured Interviews

In this research, all qualitative data were gathered through semi-structured interviews. Merriam and Tisdell (2016) state that in qualitative research most of the information and in many cases all of the information is gathered by using interviews. As this research investigates the impact of the professional culture that industrial designers acquire in their undergraduate education on their experiences in professional life, past life experiences play a pivotal role in the research. This is why this research deals with participants' personal experiences, behaviors, and points of view. Since people's

behaviors, interpretations, feelings, and past experiences are not observable or reproducible (Merriam and Tisdell, 2016), in the studies that focus on people's experiences, behaviors, and understandings, semi-structured interviews are used instead of observations (Matthews and Ross, 2010). In the following sections, I will present design process of the interviews by explaining how I formed, conducted, and analyzed the 15 interviews in details.

3.1.1.1. Forming the Sample Group

From October 2017 to February 2018, I conducted semi-structured interviews with industrial design graduates. Considering the aim of the research, I made three main selection criteria while choosing interview participants. The aim of the research is to explore what are the impacts of the professional culture that industrial designers acquire in their undergraduate education on their experiences in professional life. To explore the dynamics of professional culture, I researched on industrial designers' relationship and collaboration with other professions in work environment.

First of all, while I was choosing participants, I prioritized to capture the diversity of city and university. To do so, I contacted with graduates of six universities' industrial design departments. I tried to choose both public and foundation universities from different cities and I aimed to conduct 15 to 18 interviews in total with three participants each from six different universities. Finally, I interviewed 17 people from 30 people with whom I requested an interview. However, due to technical difficulties two of the 17 interviews could not be used in this research.

Secondly, I selected participants who graduated from universities' industrial design departments at least two years and at most six years ago. To obtain updated and clear information, participants have to remember their undergraduate years clearly. Their fresh memories of experiences at school is vital for this research. This year limitation was set to do so.

Lastly, since academia and design firms, especially industrial design firms, are containing mostly and in many cases only industrial designers, I set a criterion that participants need to have at least a year of work experience in large-scale manufacturing companies. While this selection criteria aims to provide essential information by providing information on the relationship between different professional cultures in the work environment, it also aims to provide information on companies' organizational cultures and their dynamics with industrial design profession. Collaboration of industrial designers and other professions is expected to be explored, as well as, the relationship between the professional culture of industrial design and the professional culture of other professions. This criterion brought in to enable participants to observe and analyze the work environment and culture of the company.

Initially, I contacted industrial designers whom I know from before. They and their friends from social networks such as; Facebook and LinkedIn formed my first possible interview participants list. I talked face-to-face with a few possible candidates whom I could meet in person. At the same time, I prepared an e-mail template with an informed consent form (see Appendix A – Informed Consent Form) which begins by introducing myself, goes on explaining the aim of my research and my expectations from the participants. I explained that participation in the interviews would be voluntary and the data collected through interviews would be used only for academic purposes after being anonymized (Glesne, 2011). I conducted my first interview as a pilot study to test the interview questions with one volunteer. The participant was friendly and accepted to take part in the research.

In this qualitative research, purposeful sampling was chosen. In purposeful sampling, while forming a sample group, the aim and selection criteria of the participants must be very clear to obtain healthy results (Merriam and Tisdell, 2016). So, because of the clarity of the criterion and their reasons in this research, purposeful sampling was considered as the best option for sampling. After the interviews with voluntary participants, they were asked whether they knew suitable candidates who could be

participants in the interviews. So, to expand the sample group, snowball sampling was chosen to be used. According to Merriam and Tisdell (2016), snowball sampling is one of the most common sampling methods in qualitative research. As a result, the remaining 10 participants were found through snowball sampling. Overall, I conducted interviews with 15 industrial designers from multiple industries; defense, furniture, mechanics, consumer goods and electronics. Details of the participants are shown in Table 3.1 below.

Table 3.1. Detailed Participant List

#	Gender	Industry	Work Experience
1	Woman	Consumer Electronics	1,5 years
2	Woman	Defense	1 year
3	Woman	Automotive	3,5 years
4	Man	Defense	2,5 years
5	Man	Automotive	4 years
6	Man	Urban Equipment	3 years
7	Man	Consumer Electronics	3 years
8	Woman	Automotive Equipment	4 years
9	Man	Building Materials	2 years
10	Woman	Furniture	1,5 years
11	Woman	Glassware	3,5 years
12	Man	Furniture	6,5 years
13	Man	Automotive Equipment	2 years
14	Woman	Yacht Design	1,5 years
15	Woman	Furniture	3 years

As it can be seen in the table above, there are 15 participants which consists of eight women and seven men. These participants are graduated from six universities' industrial design departments; six of them are from METU, four from Izmir Economy University, two from Anadolu University, and one from each ITU, TOBB, and Atilim

University. In terms of the cities participants live and work in, while Ankara and Izmir lead, participants also work in Istanbul, Kütahya, Eskişehir, and Kırşehir.

In general, among all industries, furniture industry is the most common among the participants. Five out of 15 industrial designers I interviewed have worked in the furniture industry in Turkey. Their job definitions vary as sales, design, and production in those companies. Automotive and automotive equipment is the second most common industry among participants. As the Table 3.1 shows, other participants work in the industries such as; defense, consumer electronics, urban equipment, building materials, glassware, and yacht design. However, these industries are not the only areas where participants work. Because there is at least one year of work experience restriction in the participation in the research, Table 3.1 indicates areas where participants have the most experience. For example, though not mentioned above in Table 3.1, five of the 15 participants also worked in the industrial design offices apart from working in manufacturing companies.

3.1.1.2. Conducting Interviews

Before starting the interviews, I prepared an interview guide (see Appendix C – Interview Guide) that contains and categorizes all the questions of the interviews. Interview guide consists of three sets of questions that are about industrial design profession, industrial design education, and industrial design work experiences. All questions are about exploring the personal experiences and the professional knowledge of the participants. In the first set, questions were asked to investigate the perception of industrial designers on their profession. In this same set, being an industrial designer in Turkey was also explored. In the second set, questions were about industrial design education. The reasons to study industrial design, first encounters with the profession, and professional experiences in their undergraduate education were all revealed. In the last set of questions, industrial designers' professional experiences were examined with comparisons with their educational lives.

All of the interviews were conducted either face-to-face or online using video conference. Seven interviews were conducted face-to-face with the participants in multiple places around Ankara. The remaining ten interviews were conducted online, using Skype or Facebook Chat, with participants living in other cities. Both face-to-face and online interviews had their pros and cons. Because of its nature, face-to-face interviews were more personal and have better sound quality regarding voice recording. On the other hand, online interviews were easier to arrange and saved any travelling costs (Glesne, 2011). However, in some cases, poor internet reception affected the quality of the interviews.

All interviews lasted min 40 minutes and maximum 100 minutes. During the interviews, most of the time, the interviews guide was followed. However, in some cases the questions were rearranged to get better answers. For example, if a participant stated that they did not have an answer or they did not remember the answer, the question was reformed and was asked again differently. In many cases, participants were encouraged to give examples to reflect on their accounts and to provide real life examples beyond mere opinions. Both face-to-face and online interviews were audio recorded as it was stated in the informed consent form. All of the interviews were transcribed afterwards to prepare for the analysis phase which will be presented in the following sections of the chapter.

3.2. The Challenges Encountered

In the research process, I have encountered four challenges, which are related to the difference in my undergraduate education, communication and technical problems and difficulties.

The first challenge was caused because of my undergraduate education. While most graduate students in the department have a bachelor's degree in industrial design, I have a bachelor's degree in interior architecture and environmental design. This difference in disciplines affects the forming phase of my sample group. My lack of familiarity with industrial designers led to a small number of participants that I initially

had for research. So, as mentioned earlier, first I interviewed with the eligible industrial designers that I know in person from department. Then, I expanded my sample group with snowball sampling; by suggestions and guidance from my friends and participants. This situation, however, caused the research process to take longer than any researcher from the industrial design discipline.

The second challenge in the research process emerged during communication with the potential participants. As mentioned above, the fact that I came from a different discipline created a challenge when I was searching for participants in the beginning. However, I was able to have put out a list of possible participants about 35-40 people as a result of the guidance and help of the industrial designers from my friend circle, and my searches through social media such as; LinkedIn, Facebook and so on. After I found potential participants, I sent them an e-mail inviting to the research by attaching the informed consent form (see Appendix A). I believe, if I had studied industrial design in undergraduate education, I could find more potential participants for my research.

Another challenge that I encountered unexpectedly in the process is caused because of the high number of selection criteria that I have set for the participants. I thought this would not be a problem when I started to research; but as I interviewed with the first few participants and got informed about the companies they were working at, I realized that my criteria reduced a significant amount of the number of potential participants. As mentioned earlier, there are two limitations in the selection criteria of the participants. Participants need to have at least a year of work experience in large-scale manufacturing companies, and they just had to graduate from university between two and six years ago. However, industrial designers who work for such companies are generally senior designers who do not match with the selection criteria, or they are just graduated from universities and do not have enough experiences. Additionally, because large-scaled manufacturing companies are mostly engineering-led companies, the number of their industrial design graduated employees is very small. As it will be explained in the following chapter of this thesis, most industrial designers

prefer to work in design companies among their communities rather than engineering-led manufacturing companies because of the differences in their professional cultures. All of these problems caused a challenge in the research process.

Lastly, I encountered a technical challenge in the transcription phase of the research. Two of the seventeen participants were not using Skype for the online interview. Companies that they work did not let them use Skype on their computer. So, two interviews were conducted in Facebook Chat software. Even though there was no problem during interviews, I noticed in the transcription phase that the voices were recorded unilaterally and that I only heard my voice. As I did not receive a backup voice recording with the help of a second recorder during the interviews, unfortunately, of the 17 interviews I conducted, two were not used in the research. I contacted these two participants; however, the fact that they did not make positive approaches reduced the participant number of the research to 15.

3.3. Data Analysis

After the semi-structured interviews were completed, the data analysis process started. At this stage, initially, 15 interviews were transcribed to allow qualitative data analysis. In the research, template analysis method was carried out. During this process, first, transcribed interviews were coded to see the relevance of interviews to the aim of the research. Then, according to the meanings and interconnections of the codes, an outline was formed to understand and present the qualitative data from the research. The findings were organized, and then quotations were selected from semi-structured interviews to strengthen the findings. Lastly, selected quotations were translated into English. Sections below present the detailed process of the data analysis, starting with the transcription phase.

3.3.1. Transcribing the Interviews

As the fieldwork of the research is entirely made up of online or face-to-face semi-structured interviews, the first step of the data analysis is transcription. In qualitative

research, transcription has a vital role. Given (2008) states that transcription is an interpretative process in analysis and it is considered as the primary data source if the researcher is not working with the direct audio recording. So, to successfully interpret the interview data, transcription has to be done correctly. However, transcription of the interviews was a challenging task in data analysis because of its time-consuming process. For instance, an average of an hour interview takes about four hours to transcribe if the audio recording is clear.

In the transcription process, I used two software to make my job easier; one for audio recording and the other for transcribing. All of the online interviews were audio recorded with software called Amolto Call Recorder. Its user-friendly interface and high recording quality helped me in the process. In all of the face-to-face interviews, I used iPhone's "Voice Memos" application, and it was also beneficial for the same reasons as Amolto Call Recorder.

After I got the audio recording of the interviews, I prepared a document for each interview in the Microsoft Word to do the transcription (see Appendix E – Transcribing the Interviews). Then, I transcribed by listening to each interview through software called Express Scribe in which users could use hotkeys to change the speed of the voice recordings, as well as, rewind, play, forward and so on while writing on the Microsoft Word document.

In this process, I tried to do the transcripts immediately after each interview, to prevent the interviews from piling up and compressing the process. Doing this reduced my time in transcription. Moreover, because the memories were fresh when the interviews were over, it was easier to remember the notes that I took during them.

Additionally, after each transcription, I realized some flaws such as, forming long sentences and not asking again when not get an answer. This realization helped me to improve myself in the following interviews.

3.3.2. Data Analysis Method

In the data analysis phase, a qualitative approach was chosen, and the data was analyzed by template analysis method. King (2012) defines template analysis as a technique in qualitative research that has flexibility while analyzing data according to the research's needs. To put it more precisely; in qualitative research, template analysis usually refers to individual interview; it is frequently used because it works on the previously established themes, uses existing templates, and progresses more efficiently in the following phase; coding (King, 2012). Template analysis method was preferred to be used because, as a result of a long literature search, research started with a pre-created template and its primary themes were determined in advance. I started to form the template with a guidance of Beyer's (1984) (as cited in Beyer and Trice, 1987) "List of Definitions of Frequently Studied Cultural Forms" (see Section 2.2). As I mentioned in Literature Review section, after a careful examination of their list with 12 headings, according to a more detailed and updated literature research, I remade the list with five headings which are; stories, language, social relations, physical space and artifacts, and dress and appearance norms. While forming the first template, I used these five headings as main topics. To make obtain the goal of the research I aimed to explored these heading in three areas which are; "Industrial Design Profession", "Industrial Design Education", "Industrial Design Work Experiences". According these two groups of headings I formed the Interview Guide (see Appendix C).

After forming the template, I started coding while I was reading the transcripts of the interviews. Since the questions of the interviews are formed and grouped according to the outcome of the literature search, the main codes were as generic as there such as; "Industrial Design Profession", "Industrial Design Education", and "Industrial Design Work Experiences". However, according to the answers, the pre-existing template began to be reformed gradually by the arrival of multiple new codes.

3.3.3. Coding Process

As mentioned above; in the data analysis of the research, template analysis method was used to analyze the interviews. The coding process continued in the same way. Merriam and Tisdell (2016) state that coding is about content classifying and organizing of sections in a given text. These actions provide vital information on the analysis. When the enhanced point of today's technology and the complex, tedious and time-consuming nature of coding come together, computers and their software make the coding process much more manageable. Merriam and Tisdell (2016) explain in a descriptive way that computers and their software help research groups at many stages of coding in qualitative researches. Additionally, Miles, Huberman, and Saldaña (2014) also emphasize the importance of computer use in qualitative research and provide a table that shows the roles of computer software in qualitative researches such as; making and editing notes, coding, storage, search, data linking and displaying, content analysis, graphic mapping and so on. These clarifications enabled me to use a software in the coding phase of my research. During this process, a total of 222 pages of interview transcripts were coded multiple times. So, as the coding process was complicated, tedious, and time-consuming, I used the computer coding software "ATLAS.ti" which is one of the Computer Assisted Qualitative Data Analysis Software (CAQDAS) that Miles, Huberman, and Saldaña (2014) stated.

At first, I read each dialogue carefully and assigned codes to the quotations in ATLAS.ti software (see Appendix F – Coding). At the end of the first set of coding, I checked the codes and their relations with each other. Some of them intersected, while others formed a new group of codes. The software I have used gave me a helping hand by providing the exact location of codes in the transcripts and their use counts. Later on, I formed an outline of the original codes according to the aim of the research. In this outline that I have set up, I passed through the codes a second time to create sub-categories and reveal a more detailed data analysis which can be seen in the Figure F.3.1. In the ATLAS.ti software, while one section shows all the codes and sub-codes

in a hierarchical order, another one shows the quotations in the selected code. In the same time, codes' and sub-codes' relation can be seen within the transcription text.

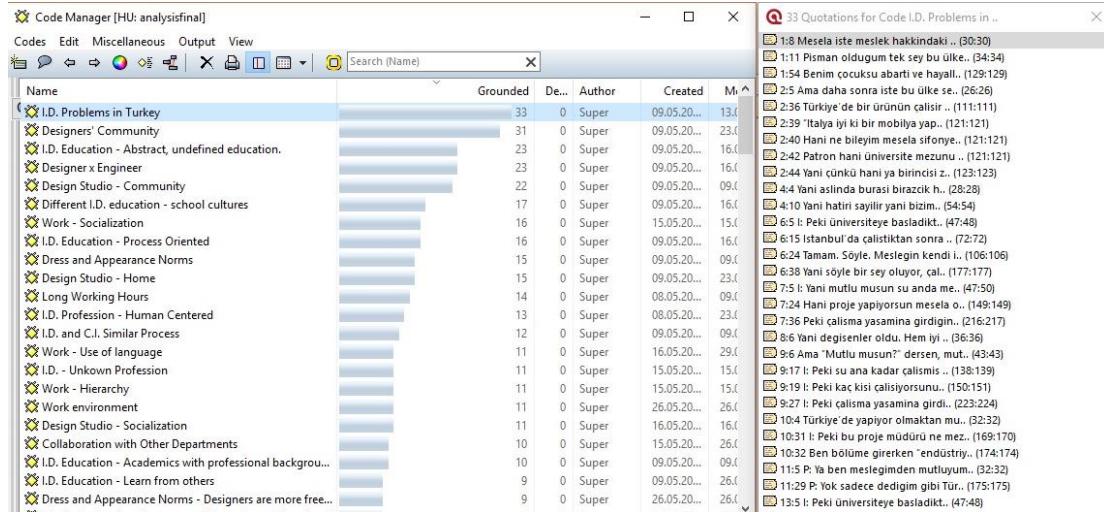


Figure 3.1. Codes and Sub-Codes in ATLAS.ti

Next, I organized codes and created sub-categories according to their themes systematically. In this process, modifications on the codes were made to sustain the information flow in the analysis chapter in general. Transcripts were interpreted, and while some codes disappeared, others were modified and were rearranged. In the end, the previously prepared main categories of the analysis were fortified by codes. They have collected under the same three headings; “Industrial Design Profession”, “Industrial Design Education”, and “Industrial Design Work Experiences”. However, in the coding process, according to the personal points of views of participants, there were also some new categories and sub-categories emerged. Lastly, after setting up the final outline, selected quotations and conversations were translated into English.

3.3.4. Translating the Quotations

All of the interviews were conducted in Turkish. During coding phase, the Turkish quotations were selected and were translated into English to provide meaningful integrity. Additionally, at the end of each quotation, its participant number was added. Because Turkish and English are two different languages, some words and sentences

could not be translated directly in this process. So, the translations were not verbatim, however, with an accurate translation, their closest meanings to the quotations are presented. Additionally, the original, Turkish version of the quotations are presented in the Appendix G of this research.

3.4. Summary

This chapter presented the research approach, data collection method, and data analysis technique of the thesis. The chapter also explained the challenges that were encountered during the research process. A qualitative approach was chosen to collect and analyze the data in the research.

The data collection method of this research is semi-structured interviews that were conducted with 15 industrial designers either face-to-face or online. Participants selected as the ones who graduated at least two at most six years ago and who work in a large scale manufacturing company for at least a year. Participants were from various industries such as; automotive, consumer electronics, furniture, defense and so on. However, while all of them have experience in the manufacturing, most of them also have experience in industrial design offices as well. All of the interviews were the voluntary basis and all them of were audio recorded to be transcribed.

Data gathered from the semi-structured interviews were analyzed with template analysis method. Transcripts were thematically coded multiple times. Categories and sub-categories were formed with codes according to the relevance of the aim of the research. Later on, relevant conversations and quotations were selected, translated, and added to the analysis to strengthen its themes.

The findings of the research that were collected through semi-structured interviews will be presented in the next chapter.

CHAPTER 4

ANALYSIS OF THE INTERVIEWS

This chapter presents the analysis of the data gathered through semi-structured interviews that were conducted with 15 industrial design graduates who graduated between 2011 and 2016, and who have work experiences in large-scale manufacturing companies for at least a year. The sampling criteria were identified to ensure that participants would have a chance to observe and analyze their working environment and the culture of their company more clearly. To capture the diversity of different points of views of industrial designers on research, participants were selected from various universities. Total of 28 questions in three sets were asked all participants to explore and understand the impacts of the professional culture, which industrial designers acquire in their undergraduate education, on their experiences in professional life.

In this chapter, findings of the interviews are presented under three main sections; perception of the industrial design profession by its members, industrial design education, and industrial designers' work experiences. Before exploring the aspects of industrial design education and working life in interviews, the industrial design profession will be examined.

4.1. Perception of Industrial Design Profession by Its Members

In the interviews, all participants were asked first to define how they perceive their professions. Later on, questions about the industrial design profession and its relation with other professions were asked. Finally, industrial designers were asked to describe their working conditions.

According to the interview data, participants first defined the industrial design profession by stating its main aspects. At various parts of the interviews, participants

compared industrial design with engineering and other creative industries. Comparison with engineering was especially common in the responses. Finally, participants described their working conditions, considering the profession definitions and comparisons they had previously stated and gave information on their satisfaction levels in the work life.

4.1.1. Definition of Industrial Design Profession

As mentioned above, interviews were conducted with industrial designers who were selected under some criteria. The participants who graduated from different universities of different genders, ages, and workplaces and different levels of work experiences provided data from different perspectives. Having different views, participants have made it possible to develop different characteristics of industrial design profession definition. However, there are some characteristics that most participants agreed upon, which identified industrial design profession as; human-centered, production-based, creative and abstract, critical thinking-focused, broad-scoped, and built with experience.

Human-Centered. The participants commonly agreed that industrial design is a profession that focuses on human, and human needs. The instance below demonstrates how an industrial designer defined profession with a focus on human needs.

- [1] The most important thing that an industrial designer needs to do is... If we define the [industrial design] profession, there is a product that will fulfil a specific function, and the purpose of this product is somewhere that needs to meet with the human. At this point, the designer intends that the person who will perform that function will be able to provide that function with ease, that is to say. So naturally, when I work with a mechanical engineer, I'm especially aware of this, but there is a particular work that needs to be done. We're trying to connect it with the user, but the designer is trying to design the product by thinking "*How the consumer uses the product, how the consumer benefits from the product, and how to get the best result from the function.*" I can sum it up like that. (P6)

As this account illustrates, industrial designers tend to define their profession from the usability and human interaction perspectives. Besides the initial creation stage, the improvement of a product according to human needs is also a vital aspect of the industrial design profession. The conversation below provides another example of how an industrial designer not only designs a product but also offers potential improvements through system design perspective.

- [2] **Researcher:** First of all, I would like to ask you a few questions related to the [industrial design] profession. How do you define industrial designer?
Participant: Industrial designer doesn't have to be a product designer, s/he can be a process or system designer. [Industrial designer] is someone who reorganizes something that is or isn't available, says something new, or provides a new idea. (P10)

With the words above, industrial designers emphasize that they are not only focused on physical products, but also design processes or systems. However, no matter what the design covers, the vital point here is that human and human needs are the focus of the industrial design profession.

Production-Based. In the interviews, industrial design's production-based nature was expressed in three perspectives; producibility, mass production, and focus on the market. It is essential for industrial designers to put forth a producible design because the industrial design profession covers the whole design process from the conceptual to the final stage. In the conversation below, one participant indicated that:

- [3] How do I define [an industrial designer]? Let's say that any sector of production has entered if we take any product... First, consider the path with an idea, the idea must be a value-added, that is, it must be a different product than the other products. It has to be functional at the same time, it must be producible, and it must be sustainable where there is production. In this way, it is the job of the industrial designer to prepare the product appropriately for production. At the same time, it is the task of the industrial designer to design products that are functional, aesthetic, and attractive, which is essential for the design of the material and which should also be user-friendly. Sometimes the job can be designing a product from scratch, but often it can be product development or product differentiation. At the same time, we can find solutions for production. Many issues are intertwined in design. (P9)

The statement above emphasized the requirement of producibility, sustainability, and functionality in industrial design as the human-centered approach. Because designing products used in everyday life is a branch of the industrial design profession, collaboration with the industry, producibility of the product, and practice in a human-centered design process are also very crucial in the definition of the industrial design profession. Similarly, while describing an industrial designer, another participant stated:

- [4] How do I explain [my profession]? Indeed, as it is evident from its name, the design of everything which can be produced industrially. However, I think each designer touches at different points to make differences in design. For me, also, [industrial design] is to design products which contribute to people's experiences. (P15)

These two detailed descriptions, not just emphasize the importance of producibility in profession among industrial designers, but also pointed out industrial design's other features such as; functionality, creativity, and aesthetic. In addition to producibility, mass production was also widespread among participants' definition of production aspects of the industrial design profession. Some of the participants pointed out that mass production is an integral part of the industrial design profession. In an interview, one participant who was working in the production industry described how they defined the industrial design profession and stated:

- [5] (...) I can say that [industrial design] is to provide the service that product requires or the most optimized solution for [the product] which is suitable for mass production. (P7)

Working in specific sectors has caused the participant to add terms such as optimization and mass production to the definition of the industrial design profession. At this point, while defining the industrial design profession, information was given about the place and the importance of individual experiences in professional life. Based on their professional work experiences, another participant who saw mass production as a crucial part of the industrial design profession stated:

- [6] (...) For example, something is designed, and 10K pieces will be produced. My best experience at [company name] is; I was considering myself as an industrial designer a bit while working there. My design will be mass-produced, I mean at least 10K pieces will be produced. Moreover, you have the responsibility of [mass-production], if you make a mistake, the 10K pieces will be faulty. I mean, you can see the TV you designed [in different places]. I don't know, it can go to Cuba, or it can go to Bursa. It can go anywhere, and anybody can use it. In that sense, [company name] is very instructive indeed. There are some situations that they say "*You will take the decisions.*" However, they also direct me by saying "Ok, do this in this way, do it like this" when I say "*I can't do it anymore.*" (P1)

Unlike the accounts made before, the statement above discusses the relationship between professional responsibility and mass-production. Industrial designers are aware of the crucial place and the importance of mass-production in their profession. Additionally, industrial designers also aware of their duty while working in design that will be mass-produced.

Lastly, most participants emphasized the focus on market and sales of the profession when defining a production-based industrial design. In the conversation below one participant stated:

- [7] **Researcher:** Now a few questions will be about the [industrial design] profession. First, how do you define an industrial designer?
Participant: It's a definition that I've done by adding my experiences, my experiences in the industry. An industrial designer is a creator who designs a product that can be sold, has commercial concerns, and says something new on the market. (P12)

Because of the importance of production in industrial design profession, areas such as; marketing and sales are emphasized among the industrial designers. Additionally, the phrase "saying something new" was common among industrial designers and it confirms the awareness of the importance of creativity in the industrial design profession.

Creative and Abstract. A profession like industrial design where creating and enhancing our main activities; the word creativity has a crucial place. So, it was common among participants to use the word creativity while defining the industrial

design profession in their interviews. In the conversation below, one participant stated the importance of creativity in the industrial design profession.

- [8] **Researcher:** From whom did you learn to be a designer in this process? How did the people you mentioned describe the industrial designer?

Participant: It was like this... For example, there are 100 kinds of chairs and why do we produce the 101st one? It is an example that we talked, and I will remember with this example. While producing the 101st chair, whom you address different from the 100 chairs and what experiences you would like to offer [to the users]. In fact, what makes your product different than the ones before? I mean, creating difference and positioning your product into a different point and addressing different audience [is important.] (P15)

While this conversation pointed out the importance of creativity in the industrial design profession, it also strengthened the profession's close relation with human and human needs. This conversation also shows that adding a novel aspect to existing designs when making a new one is vital for the industrial design profession. When a participant was comparing industrial design profession with others, the word "creativity" has appeared as "seeing things differently."

- [9] **Researcher:** What is it that you think distinguishes industrial designers from other professions?

Participant: What separates? I think industrial designer might be able to see things that are invisible to others. I mean, everyone sees things, but the industrial designer sees it differently. (P15)

Both examples present how seeing and looking at things differently are what industrial design consider when creating a design. In the conversation below a participant mentioned how creativity and seeing things differently were used in the industrial design profession.

- [10] **Researcher:** How did the people around you, for example the academics, describe the industrial designer to you?

Participant: They talked about being a creative profession all the time, and about that there is not a single, constant truth. That's why we were diversifying the work that we have done all the time. We were also looking at our work critically. Of course, our approaches have improved thanks to that training. (P12)

While academics use creativity while defining the industrial design profession, this example stated that in addition to creativity, abstract and critical thinking are also some of the definitive aspects of the industrial design profession.

Have Critical Thinking. As conversation above shows, critical thinking is one of the characteristic features of the industrial design profession defined in the undergraduate education by academics. The fact of design has an abstract and subjective nature, makes the activity of design open to critical thinking. While having pivotal roles in design activity, ways of thinking and seeing, creativity and so on have emerged as crucial professional features in almost all of the interviews. While defining the industrial design profession, one participant stated:

[11] (...) but what must be the characteristic features [among industrial designers]; to be open to learning, to be in search of new knowledge, to be able to think alternatively or critically, to be prone to critical thinking, to believe in creativity or its techniques, to be people who benefit from creativity while doing their jobs. (P13)

Industrial designers are not only aware of the importance of critical thinking in the profession, but also, they are mindful of the importance of being eager to learn in their business. Again, because of the abstract nature of design activity, there is not any definitive true or false. This situation encourages continuous research and promotes the need for constant self-improvement to solve given design problems. Consequently, self-improvement can be considered as one of the main requirements to pursue industrial design profession.

Have a Broad Scope. Industrial design is a profession with a wide range of fields such as; product design, transportation, defense, and UX/UI. This means that industrial designers create new designs, enhance products, and try to solve various design problems in a variety of multidisciplinary areas. The following account provides evidence to problem-solving is part of the industrial design profession.

[12] Personally, if an industrial designer touches upon one place, s/he needs to create a difference in it. I mean, if the case is a product, for the product; if it is

an operation, for operation, if it is an organization, for organization... For me, an industrial designer is a person who observes and analyses the problems in the cases and changes them. (P10)

To fulfil all their job requirements, designers start to research from the conceptual design phase to the production phase. In this long research process, they gather information from different fields. One participant who works in an engineer-based company while defining the industrial design profession stated that:

- [13] In general, I think other professions are very specialized in one subject, but the industrial designer has to know a little bit of everything. Have a little knowledge of everything... We know, but how do I say it? We don't have any particular expertise in engineering here, but we have much knowledge about it. That's why we're not foreigners to their work. That's why I imagine industrial designer as a human being who is someone with a broader horizon and who has something to say in every subject. (P2)

Interview data confirm that industrial designers who work in manufacturing companies require engineering knowledge at a certain level besides industrial design knowledge. Additionally, participants believe that industrial designer needs to know a little bit of everything, along with having a broad perspective. In a different interview, another participant supported this statement by saying:

- [14] (...) To know a little bit of everything is expanding your perceptions as you make another product, do something else. Moreover, it increases your general culture, improves your view of life. I mean, this is something cyclical, the time your life changes, the more you get back, focus on your job, and make it better. (P3)

During the interviews, the ability to seek and gain knowledge from various sources was considered by industrial designers as one of the definitive aspects of their profession. Other than its importance in professional life, constant self-improvement has significance in the personal life of industrial designers because of its contributions to their general knowledge. As mentioned earlier, because of the industrial design profession's abstract nature and long process cycles, any new piece of information can inspire new design approaches.

Built with Experience. Not to be able to mention an absolute truth or false in the profession, its abstract nature and its long process cycles provide new insights in defining the practice of industrial design profession. Some of the interviews showed that the industrial design is addressed as a profession that was built with experiences. Industrial designers' experiences and ideas form and guide them while practicing their jobs. In an interview, while talking about how the profession is practiced, one participant referred to one of his/her tutors at university:

[15] (...) For example, this teacher was telling it in the beginning. "*Look, this thing [industrial design] is not something to be done as a profession, it [industrial design] is something to be done by experience. If you don't pay attention to people, if you don't pay attention to the environment... This tires you, you can't do this job [industrial design].*" (P1)

Interview data confirms that the idea of practicing industrial design profession by sharing experiences is spread among different generations of industrial designers. Personal experiences, and interactions with others and the environment play a pivotal role in creativity and the practice of the industrial design.

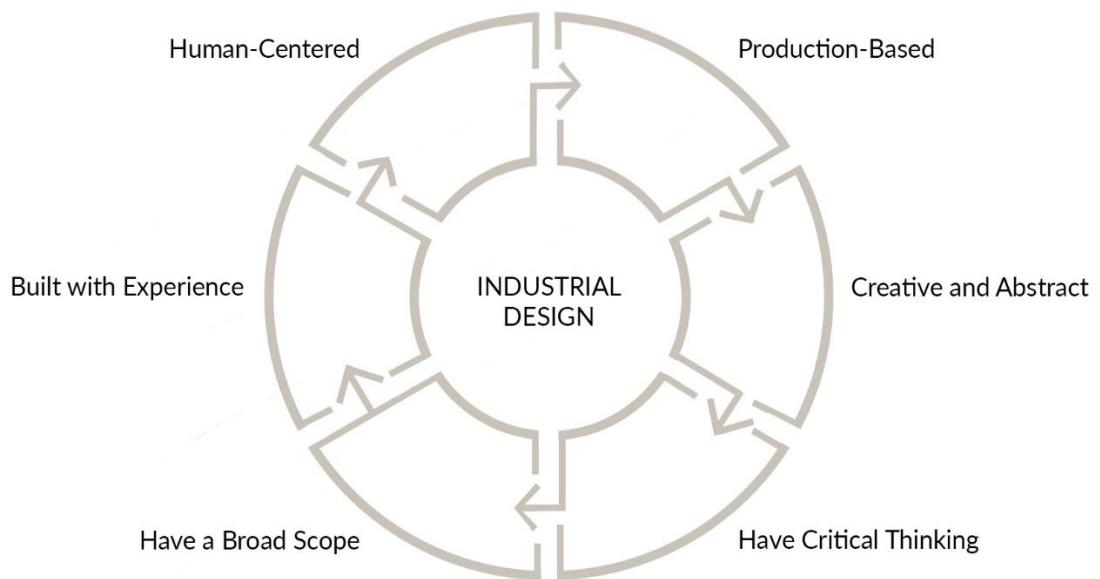


Figure 4.1. Aspects of Industrial Design Profession

This section, until now, has explained the aspects of how industrial design profession is perceived by its members. According to my findings, most of the participants agreed on some essential features which industrial designers should possess:

- Industrial design profession is human-centered. Their work revolves around humans, their needs, and their experiences. As in the definition of industrial design profession of WDO (n.d.), industrial designers can design, rearrange, and enhance a product, service, and system.
- Industrial design profession is production-based. Human-centered designs must be producible, commercial, saleable, mass-producible and compatible with the market.
- Industrial design profession is creative and abstract. To make designs, a designer must have a conceptual mind and original ideas. In this way, a designer can contribute to the design field by pushing the boundaries of known design approaches.
- Industrial design profession must contain critical thinking. To survive in abstract process of design, an industrial designer must be open to criticism and critical thinking.
- Industrial design profession contains knowledge from various other subjects because of its excellent working environment from engineering to graphic design.
- Industrial design profession must be built with experience. Industrial design is a living and breathing area of study, and those who take inspiration from their life experiences in their work may have a better chance to create original ideas.

In many instances, while describing themselves and their profession, most of the participants referred to comparisons. They compared themselves with people from other professions such as; engineers, and designers from other creative industries. Next section will cover and explore the industrial design profession by these comparisons.

4.1.2. Profession Comparison with Other Professions

While defining the industrial design profession, comparison with various professions provides some significant findings to the research. In the first set of questions, there were questions on the comparison of professions; however, even before asking those questions, most participants compared their profession with others to define industrial design profession. Engineering and creative industries are the two primary fields that industrial designers compared their profession during interviews.

4.1.2.1. Comparison with Engineers

In this research, engineering emerged as the profession that industrial designers compared themselves the most, in some instances even without being asked. Almost all the participants have current or previous work experiences where they all worked with engineers in manufacturing or engineering companies. This is most likely one of the primary reasons behind their approach. One of the focal points of industrial design and engineering comparison is the differences in professional culture. It was common among participants to state that industrial design is more abstract and process oriented, while engineering is more rigid and product oriented. While defining industrial designer, one participant who works in an engineering company pointed out that:

- [16] So, as I say, a profession group [industrial design] that should be leader, especially if we talk about the profession [industrial design], engineers are people who are thinking straight, they are going to focus on solutions, and many details can be overlooked or ignored. The person who can successfully lead the work from the outside, like the third eye, the third eye in production is an essential actor in the correct formation of the details and the logic of the production. (P4)

Industrial designers' abstract thinking and nature differ themselves from straightforward engineers who were mentioned earlier. However, as the response above shows industrial designers consider themselves leaders in the working environment; in this case, a large-scale manufacturing company. As mentioned earlier, industrial designers are defined as members of a professional group who possess knowledge from various areas, are active in the field of production, are able to think

abstractly and critically, and provide solutions which are human-centered to the products to be used in everyday life. All these professional features push the industrial designers who work with engineers in the field of manufacturing to make comparisons with the engineers because of their massive amount of work experiences with them. Definition of industrial design profession that industrial designers acquired in their education, abstract and human-centered nature of design and production processes, and negative experiences with engineers in these processes at work, make most industrial designers consider themselves leaders in a working environment. Another participant confirmed the difference between abstract and straightforward thinking between industrial designers and engineers by stating that:

- [17] As I work in the R&D department, I can tell our [industrial designers'] differences from engineers. Of course, it varies from one person to another, but... When we [industrial designers] come up with an idea, we are thinking, and we are eliminating many things from the beginning. We are passing the idea through a test as; "*This is the end of idea, this is its problem, this is its good side*" and "*Does the user want to get it or not?*" but engineers are getting a bit more "*Let's do it, then we'll see*". Of course, it would be wrong to generalize them all, but as far as I can tell. So I think we [industrial designers] have a more detailed way of thinking. (P9)

Creativity was one of the aspects that participants stated while were defining their profession. In those definitions, participants also compared themselves with engineers in the workplace regarding leadership. One participant who works on the same project with engineers stated:

- [18] Some minor differences appear when we are working with engineers. Because, although the function is essential, the [industrial] designer is not entirely cut off from the form. While working with the engineer, support is needed for the product to be able to self-stand. At that point, if you aren't leading, guiding, compressing, or providing alternatives to and say "*There is this, or that*" to engineer, instead of providing ideas, s/he calculates, looks at its books, says "*This is the best option, that's why we should do it. Why would we do the other ones? Others are worse*" and provide an only solution. If you don't like that option, you try to find a middle solution. You try to save the design by saying "*Ok, let's do this, but we should not give up so much from its look,*" but it creates some minor discussions [with engineers]. (P6)

The account above also shows that, in the work environment, industrial designers see themselves as leaders and they have adopted the idea that engineers should be directed or guided which was mentioned earlier in this section. In addition to the notion of leadership, creativity also constitutes a place where industrial designers and engineers are becoming more prominent in their professional diversity.

As all previous quotations in this section pointed out, participants suggested that while approaching a problem, industrial designers tend to look at the process as a whole. On the other hand, engineers look for instant results. According to the interviews, this difference between industrial designers and engineers appeared to have begun to emerge in the industrial design undergraduate education was introduced, before the transition to work experience.

Industrial design education, which has an interdisciplinary nature, offers courses from many different areas and subjects such as; manufacturing, marketing and so on. Designers' collaboration with other disciplines starts in undergraduate education. In the interviews, most participants stated that they attended these courses with various students from different disciplines such as; engineering, management, interior architecture and so on. Additionally, in some of the interviews, it was stated that these courses were taught by the academics from the same industry. So, this interaction in the courses strengthens the "knowledge from everything" aspect of the industrial design profession that was mentioned in the interviews. In one of the interviews, when a participant was asked whether s/he worked with people from different departments during undergraduate years, s/he mentioned manufacturing course with industrial engineering students and replied:

- [19] They [industrial engineering students] were considering manufacturing course in this way; "*It's a course. I must focus on this course. This course provides returns...*" (...) I mean, grades do not matter to us. For example, our people [industrial design students] including myself, listened to the lesson as; "*Such things are being told... It's interesting...*" Because, I can say things like; "*In [design] jury, I couldn't answer when they said how to produce this. It could be produced in this way.*" They [industrial engineering students] were looking at the manufacturing course a bit more. Ours [approach] might be something

more like designer's impertinence. We were looking at something a little bit more; "*This could be beneficial for me, or this couldn't.*" It is more pleasure oriented rather than grade oriented. (P1)

Following statement from a participant who minored in engineering in the undergraduate education, also compares industrial design students and engineering students in the shared classes.

- [20] (...) They [engineering students] don't have the habit of doing things together. Moreover, also, they listen to the courses, but the important thing for them is the grades and afterward. They are more theoretical, or eventually, work continues just like in high school. We [industrial design students] are practical, we have to listen to the courses, and in fact, we have to do it [assignment] during the course. (P3)

Both accounts show that even in the undergraduate education while taking the same courses together, industrial designers and engineers approach the topic differently. While industrial designers work on a problem, they think multidirectional. They stated that they attend classes not only for grades but also for learning. The questions that will be asked in the juries is influential on industrial design students. According to these accounts, while engineers work on the same problem, they feel about the output only. Both engineering students and industrial design students have outputs on their minds, however, they are different from each other. Additionally, the second account emphasized the idea of being a community in industrial design culture which will be explored in detail in the following sections in this chapter.

Unlike the previous two accounts; the account below shows a possible reason on why industrial design students' and engineering students' perceptions are different on courses by making a statement of the differences between courses' credits.

- [21] **Researcher:** Well, when you took this course, with whom did you make it? Did you take the class with people from which departments?
Participant: So, it was very confusing... There were students from engineering, humanities...
Researcher: What differences did you see between industrial designers and them?

Participant: We didn't care about the other courses [other than design studio courses], especially electives. Because everything was studio-focused, you come in, get out, it was like "*the sooner you finish, the better.*" I don't think that other students have such a concern. So, since the course credit difference is not as apparent to us as it is, their interest is probably more evenly distributed. (P11)

The account above mentions that there is a hierarchy between courses. The differences in the number of credits of the courses constitute the basis of the students' stress level caused by the grades and juries. Industrial design students mostly worry about their design studio courses, which have the highest credits in their curriculum. That is the reason of why they pay most of their attention to these courses other than the others.

So, with all the accounts in this section, it was stated that industrial design and engineering, in general, are two entirely different professions with different dynamics, supplies, and demands. However, during the interviews, industrial designers stated some professional feature differences that were mentioned above, when they noticed while working on the same project in work collaboratively, and these different features played a pivotal role while industrial designers define their profession in the interview.

As a result, in this research, participants were chosen from industrial designers who have work experiences in large-scale manufacturing companies. So, in addition to the reasons above, working environment almost full of engineers led participants to compare themselves with engineers. At the beginning of the research, it was expected that in addition to engineering, various fields such as; management, and social sciences would also be compared.

4.1.2.2. Comparison with Creative Industries

In the interviews, comparison with creative industries was also explored. Regarding the definition of industrial design profession within creative industries, participants were asked to compare their profession with design professions within other creative industries such as; interior design, graphic design, and visual design. While most participants compared themselves with engineers without any questions, none of them

compared themselves with designers from other creative industries before any question was asked. However, when participants compared professions, three main findings appeared, which were having similar processes, having a different relationship with production, and having identical working conditions and similar professional problems in Turkey.

Industrial design students and students from other creative industries have a typical life in their educational life, in multiple universities they attend their first-year courses together, and they start to learn about the design together (Akbulut, 2014). The specialization of departments and then in work life and specialization of working areas make their professional culture more prominent. There are some main differences between the professions of industrial design and other creative industries. First, most of the participants stated that the industrial design and creative industries share a similar design process. In many universities, departments like industrial design, interior or graphic designers are parts of the same faculty. Students take the same studios and courses. However, while comparing these professions, outputs become the definitive point. In the interviews, almost all of the participants pointed out that while industrial design and creative industries share a similar process, outputs of their design projects define their profession. When the difference between industrial design and other creative industries was asked, a participant said:

- [22] I don't think there is so much difference between them [industrial design and other creative industries], they both have very similar processes. Only the work industrial designers do, the product they produce, the result and the effect are different. So, let's say that the final work of the visual communication designer affects people differently. An architect's work affects differently so that work's results affect differently. However, I think there is not much difference between [industrial design] and architecture, especially interior architecture. (P13)

This quotation above confirms that even if they address diverse needs of people with their designs, industrial designers and designers from other creative industries walk a similar path in their design processes.

Secondly, as mentioned, one of the definitive aspects of industrial design is its relation to production. Some of the participants emphasized the different production techniques while comparing the industrial design profession with other creative industries. In one of the interviews, when the difference between industrial design and creative industries (e.g. interior and graphic design), one participant said:

- [23] As a result, here in the industrial design profession too, the product we [industrial designers] design is produced which is mass-produced. So I think that things like production methods and material knowledge separate us [from other creative industries]. (P15)

The data collected from the interviews suggest that industrial designers and designers from other creative industries mainly focus on outputs which are mass-produced and custom-made, respectively. Although industrial designers have indicated that they are going through similar design processes to the different results, they offer information on the differentiation of their design process from the other creative industries' through the production methods, material diversity, and areas of knowledge used. Similarly, another participant confirms the account above by stating:

- [24] We can separate the other professions [from creative industries] as 2D and 3D. Graphic design and visual arts are a bit more graphic-intensive in design, and they stay on a 2D medium. What I see at least, architect and interior architect are a bit more in technical details of the job. If you look at it now, industrial design and architecture are the same, but a difference in industrial design is that it can directly manage [the job] and it is a product of mass-production. It is not a custom thing, but it's a well-resolved, mass-produced product. That's why we can say that it [industrial design] is a profession that has more disassociation from other professions, a bit more planned, a little more mass produced, or more professionally, a little more different, and contains human factors more. (P4)

The statement above strengthens the previous comment by providing how industrial designers perceive and compare different outputs of other creative industries such as; graphic design, visual arts, architecture, and interior architecture. According to industrial designers, working with different types of mediums, production techniques, and points of view form the main differences between industrial design profession and

professions from other creative industries. While comparing the industrial design profession with other creative industries, the conversation below describes how industrial designers distinguish their output from others.

- [25] **Researcher:** Well, for example, if we consider other creative professions such as; graphic design, architecture, interior architecture and so on, how can you separate the industrial design profession from them?

Participant: 3D and product. So, as a tangible product. What I see in architecture is a structure, construction, and building. In graphic design, you're dealing with 2D objects. The 3D objects, the things we can hold by hand, and the things you can see are the things that industrial design deals. It is my opinion. (P5)

In almost all of the interviews conducted in the research, industrial designers mostly provided information on their differences when they were comparing themselves with engineers. However, most of the participants stated that industrial design and creative industries while having differences, they also share similar processes, working conditions, and professional problems in Turkey. One participant reported that:

- [26] Currently, there is a graphic designer where I work, but I can't tell you exactly what s/he does... Because I don't work in a design office where everyone does what their profession requires, I don't think I can say as an industrial designer, and we differ from graphic designers at that point. I think we're [industrial and graphic designers] experiencing the same little things. For example, I can't distinguish between our negative thoughts about our professions [industrial and graphic design], most of which stem from this country, the conditions or the point of views of this country. Maybe our thoughts can be separated from engineers'; however, I think that what I feel professional is more or less the same with an architect. (P1)

This account provides a significant finding regarding the definition of the industrial design profession. In interviews, while most participants describe their profession and the work they do, they state that they are different from any profession; creative or not. Nevertheless, most of them likewise indicate that their profession is not recognized in the companies they work, and they often do the work of other professions from creative industries according to the sector of the company they are working. While this account provides an example of a shared problem between

industrial designers and designers from other creative industries, many other statements on working conditions of industrial designers in Turkey will be further explored in the next section.

4.1.3. Being an Industrial Designer in Turkey

As mentioned earlier in this chapter, one of the selection criteria of the participants was the type of industry and scale of the companies they work. Interviews were conducted with industrial designers who have working experience in large-scale manufacturing companies.

Most of the participants stated that they were currently working or worked in engineer-based companies. The critical information came across while comparing industrial design with creative industries. Almost all of the participants stated that they love their jobs, but the deteriorating working conditions in Turkey make their life harder. This problem demonstrated some aspects of the working conditions of the industrial designer. First of all, the industrial design as a profession is not widely known among workers. Engineers either have from little to no knowledge regarding or underestimate the role of industrial designers in the workplace. On the topic of working conditions, one female participant who was working in an engineering-based large-scale manufacturing company said:

[27] Firstly, the dominant culture there [company] is software. Because the company is a software engineering company because most of its members are software engineers... There were a lot of male employees in the company. I mean, they don't even know my profession... Some people said that they heard someone who is an industrial designer for the first time. I've encountered with sad things. I knew I couldn't be involved with that culture at all and I could never be involved. (P1)

This account shows industrial designers' opinions on working in engineering companies where design culture is not prioritized among its members. In that case, the organizational culture of the company becomes important. If the company or organization does not recognize or have previous experience of working with

designers, profession and professional culture of industrial design tend to underplay design-related approaches. Another negative point in working conditions comes from underestimating industrial design profession. Almost all of the participants who work with engineers stated that engineers constantly underestimate their profession. One participant provides an example by stating:

- [28] (...) “*Your profession [industrial design] ...*” he [electrical and electronics engineer] says. He says; “*Many people can do it, and many people may aspire to it*”. For example; “*If you give me a paper and pen, I can design a phone too*” he says. One guy who works at the same company as I am recently told us that. He still has no idea what your profession is, and he still addresses you “*Industrial engineer.*” He doesn’t even know what you’re doing in the company. I had an electrician [electrical and electronics engineer] friend who was two years older than me, on my first day at work, he came and asked “*What are you doing [as job]?*” and added, “*We have an industrial designer, but we are giving him graphic works and stuff*”. Even though we are almost the same generation, he does not even know what we [industrial designers] are doing. That’s why you’re in a constant struggle at work, and this can sometimes be tiring. (P2)

As both of the previous two accounts show, the industrial design profession is either not recognized or underestimated in large scaled manufacturing companies. Unfortunately, these problems are not the only ones according to industrial designers. As the example above demonstrates, companies which perceive the industrial design profession as visualization are another problem in the working conditions of the industrial designer in Turkey. Additionally, there are some other cases where the industrial design profession cannot find its rightful place in the work environment. While describing office spaces, one participant stated:

- [29] We are currently five people in the R&D department. We have a manager, two mechanical engineer colleagues, an industrial designer, and another colleague who has studied technical art [technician] who is also considered an industrial designer in the company. For example, he examines technical drawing, but he has got the same status as me. (P9)

In such workplaces where designers, engineers, technicians, craftsmen, and people from other professions work together, problems like the ones above have a negative

impact on working conditions of industrial designers by causing demotivation and alienation. In engineering-based large-scaled manufacturing companies, salary inequality was another issue that affects the working conditions of industrial designers. When salary-related topics were discussed, many participants compared their situation with engineers. The following two accounts provide two different participants' opinions on the salary and working conditions of industrial designers in Turkey.

- [30] **Participant:** Unfortunately, concerning salary, industrial designers should go to companies that suit industrial designers, because here, they [managers] don't know the salary of industrial designers.

Researcher: Are we talking about [Company name]?

Participant: Yes, [Company name]... They [managers] keep us [industrial designers] apart from engineers, obviously concerning salary and status. They see us lower. They don't understand; they don't know... (P9)

- [31] When I started university, we were saying "*Industrial design is the future profession.*" We still do. Maybe it will be, but not in Turkey; this is my point of view. In Industry in Turkey, people are looking for industrial design graduates who studied for two years. So, that's what people want, what they desire but we're more. Therefore, they are calling us to do our jobs at lower prices, and we don't accept them. I think the trouble is here. Then, most of us do interior architecture work without knowledge, or unfortunately, they have to do it. (P10)

Both accounts present the position of industrial design profession in the industry by comparing it with the engineering profession. According to the interviews, industrial designers are well-aware of the inequality between them and engineers in manufacturing companies. Differences and biases in the working conditions may cause demotivation and unwillingness to work as an industrial designer in Turkey.

Apart from these conditions, interview data also presents additional aspects of industrial designers' working conditions such as; working hours, dress code and appearance norms, and interpersonal relations. Those findings provide essential information about forming the professional culture of industrial design and will be explored later in the sections of this chapter (See sections 4.2.3 and 4.3).

It is crucial to understand how industrial design profession is defined to realize its professional culture. This section talked about definitions that cover both the different aspects and working conditions of the industrial design profession. In participants' explanations, comparing was used as a technique provided vital information about the industrial design profession. As well as the description of the profession, undergraduate years when the designers get familiar with their profession, and the work life which comes after it are also very significant in the formation of the professional culture. The following sections will provide insight into the professional culture of industrial design by exploring the effects of industrial design education and work-life experiences.

4.2. Education Process of Industrial Design

Interview questions consist of three sets of questions which are about the industrial design profession, education, and work life. After the first set of questions, questions about industrial design education were asked. In this set of questions, participants were asked to define their undergraduate education in detail. Questions on the reasons for study industrial design, positive and negative aspects of this education, the characteristics, and the acquisition of the professional culture of industrial design were all asked.

Participants first explained the reasons for choosing to study industrial design. Secondly, they described their first encounters with the industrial design education. They illustrated their first-year courses and especially their first-year industrial design studio course: "Basic Design". At this point, they compared industrial design education with the high school education that they had acquired earlier. Later, they described their undergraduate education, and while doing so, the aspects of professional culture started to appear. Describing and comparing undergraduate education provided many essential findings on the professional culture and how they began to acquire it in the first place. Finally, participants made evaluations of

industrial design education starting from their departments to the multiple industrial design departments in Turkey.

4.2.1. Reasons for Choosing to Study Industrial Design

Participants had many distinct reasons for choosing studying industrial design. Although, most of them said that they intentionally decided to study industrial design, others said that they chose to study industrial design unintentionally without having strong opinions about the department. Consciously or unconsciously, the point where most participants agreed was that they chose to study industrial design because they like creating things. The following two accounts explain the reasons for choosing to study industrial design.

- [32] I didn't have much knowledge [about industrial design profession]. I chose a little blindly; I entered the department without knowledge. It starts with something like; you're drawing, so you do this profession. It seems interesting from the outside, but it's a bit different when you get inside. The idea of creating something new or designing something new has come to my mind when it comes to choosing it [industrial design profession]. (P7)
- [33] This [profession] was my childhood dream. (...) I wanted to do something graphic based. I was someone with the ability to draw and who was moving in that direction. However, a few economic conditions in Turkey and so on... Professions [from creative industries] are a little bit more abstract in Turkey, the most embodied profession among them is industrial design. It all started with the interest of drawing, but later, before I approached the university, as I saw it in more detail, I said "*This [industrial design] is the profession of my dreams,*" and I took a step in. (P4)

According to their accounts, the characteristic feature of industrial designers who both know or do not know about the profession before, is that they are people who ultimately like to create, design or draw. They are also people who want to work in this way in their professional lives. However, there are also other reasons influential while choosing to study industrial design. In most interviews, participants stated that the education system of Turkey does not do a good job in guiding students to study

creative industries which is a factor that has shaped the choice of the industrial design department. Another participant strengthens the idea by stating:

- [34] So, I liked drawing very much. I always do drawings in elementary school. There was a time when I thought "*Should I study fine arts?*" but then, this country [Turkey] does not guide you that way, it does not direct much to study fine arts. Anyway, in 10th grade, I heard and learned industrial design department from a brother who was studying here by chance, and I have been investigating since then. Drawing together with a product, I liked to improve myself this way. (P2)

Society's general opinion on creative industries as a whole seems to shape students' choice of profession. In addition to the general views on creative industries, according to the interview data, university entrance exam system shapes the decision of the profession as well. One participant stated:

- [35] (...) however, if you ask; "*Why don't you go to interior architecture or architecture?*" In my times, interior architecture was entered from a different area, I remember it as TM [Turkish-Mathematics], but I could study architecture. If you ask; "*Why did you not chose architecture?*" I think that industrial design is more fun, more enjoyable regarding dealing with everyday objects, things that you can pass on to ideas. (P9)

As this account shows, industrial designers are also influenced by the high school education system and university selection criteria in the country they live in, apart from their wishes.

Additionally, the popularity of the profession is also among the factors that influence the selection of profession. The following example describes a situation that one participant encountered during the choice of profession.

- [36] My industrial design curiosity started because of my drawing habit. I was also thinking about studying architecture, but the industrial design had just begun to become famous when I was in university. Its name had not been heard as much as today. (P5)

Almost all of the participants stated their interest in drawing and creating even before starting to study industrial design. At that moment, while most of them could give the

reason why they chose industrial design over other creative industries, some had different and unusual ideas. The country of residence and the society are important factors which influence career choices, and the account above emphasized it. As mentioned in multiple interviews, industrial design is relatively new among creative industries and is called by the society as the future profession. People might be choosing industrial design as a profession of the future, thinking that they will make a reasonable profit and successful career. This approach of the society is also mentioned to be influential on the selection of profession.

As mentioned earlier in this chapter, the industrial design profession has often been identified as a combination of mechanics and artistic. One participant whose family members are engineers stated that engineering is very straightforward and explained the industrial design profession selection phase by saying:

[37] (...) My father and my brother are both engineers. So I saw their work, I didn't want something that much practical, or rather this much $2+2=4$. I have always had an artistic direction since childhood. I said; "*If I am going to study, there is such a department, industrial design. It is different, I am going to have fun, and I can do something with it.*" They [academics] were telling us that they combine the perception of creativity and engineering. (P3)

This statement suggests that industrial designers perceive their profession as a combination of mechanics and artistic. Participant emphasizes the aspects of funny and creativity of the profession. Another participant also strengthens the idea above by providing the account below.

[38] (...) I'm also interested in a little bit of art... Because I studied Mathematics in high school, I didn't take any aptitude test while I was applying for university. I didn't have much drawing knowledge; but because it's based on numerical data and at the same time it contains artistic stuff... (P15)

In general, to study industrial design in Turkey, people have to study mathematics and science in high school, and at the university exam, they need to score high on the questions from these areas (YÖK, n.d.). Another participant stated:

- [39] About the [industrial design] profession... At first, I thought it was very cool. Because it was reflected as what we saw in movies or commercials, I didn't know that it was a huge market. I didn't know precisely what industrial design was. That is why it was only a cool job. Besides that, I was searching something that was not based on computation or calculating, because I studied science and mathematics in high school. So, I wanted to get a little away from a mathematics based education. It was also useful when I chose to study industrial design. (P5)

This account combines both the importance of society's idea on the profession and the importance of high school education while choosing a profession. As the statements prove, industrial designers come from straightforward high school education and in some cases, students want to get away from this education. As a result of this straightforward science and mathematics based high school education, industrial designers start their professional education with limited professional knowledge, which in turn creates some outcomes while forming a professional culture which will be addressed in the following sections of this chapter.

4.2.2. First Encounter with Industrial Design Education

In the interviews, participants provided various information on their industrial design education. Differences in participants' individual experiences and education has enriched the diversity of the acquired data. In education-related questions when asked about the first thing they remember about the industrial design education, the standard answer of almost all participants was the difficulty of the education at early stages.

The following account shows a possible reason for this difficulty.

- [40] (...) A little later [at the end of the 3rd year] I perceived it [the idea of design] correctly. Until then I suffered so much in what design was... Moreover, this is precisely the same with the high school education... If I studied TM [Turkish-Mathematics], I would still be the same. I think it is relevant that high school education doesn't encourage versatility. Not just a high school education, but the logic of the exam is changing every day, year, teaching people to think one-way. The decisive point of the design is precisely the opposite of what I have been saying, is to show people to be versatile. (P3)

Industrial designers considered high school education straightforward. The account above suggests that they think their professional education is multidirectional and because of the one-directional high school education they acquired without knowledge on design, they suffered at first in industrial design education. Another participant also stated:

- [41] When I first came to the university, I said "*Oh my god, it's ridiculous. I should go from here.*" It didn't seem like I could ever do anything. Because they were saying "*We believe this is something that can be taught.*" I didn't think creativity was teachable, because my mind seemed to be a little more analytical. My mind was like; "*That's the problem, it's the solution. You get it from here. In the end, you get this.*" However, of course, what we have been taught in design education is what you experienced on the road. It shows you something that you live on that road. (P1)

In the two accounts presented above, the difficulty experienced at the beginning of industrial design education is related to the fact that the previous high school education is one dimensional. Additionally, as mentioned, the process-oriented nature of the industrial design profession started to appear at the beginning of the education. As it could be seen in the account above; it is one of the very first things that were taught in industrial design education, and it is beneficial in the formation of the professional culture of the industrial design profession.

Industrial design is considered by industrial designers as multidirectional and have an abstract and unidentified educational system. This abstract education system also provides a lot of vital data on the nature and professional culture of the industrial design profession. While defining the first year of industrial design education, two different participants stated:

- [42] We were doing many things like contrast, balance, symmetry, and so on; but, I didn't understand why we did it. I was enjoying doing these things, and I was drawing a lot. We had a drawing class, we were drawing so much, and we were doing 3D models from these papers, probably that was the most time we made models. I was enjoying doing and dealing with them. However, I didn't know why I did them. It was always a question mark, and sometimes you got a good grade, other times you didn't. You said "*Why did that happen?*" or something.

You were trying to figure that out. So, I remember that from the 1st year. I could never guess what grade I will take. (P2)

- [43] (...) The most challenging course was first year Basic Design. What were we doing; we cut cardboard, we painted it, and so on... I might have underestimated it, maybe I didn't perceive it, but now; it is so much fun. (P3)

Both accounts show that first year courses in industrial design education are considered very abstract and hard to understand at first. Not knowing how and why they get their grades, and not being able to fully understand the nature of the work they do in the design courses are why industrial design students continually experiment with trial and error.

- [44] (...) In the first and second year, I made something to be done. When you did something, you thought it would be good. I don't know why but well it's always trying to understand the [industrial design] profession; you do trial and error. You don't even question why you did things. [Academic Name] was always like; "*Why are you doing this? Why are you doing that? What is the reason you did it?*" S/he continually taught me to question. (P2)

As the account above also states, poor understanding of the methods they use and constant struggle with trial and error push industrial designers to take inspiration from their life experiences. Participants suggest that industrial designers' frequently questioning and criticizing character emerges as a consequence of their educational life with trial and error system.

Additionally, the absence of an absolute right and wrong in education is one of the first things that industrial designers encounter in the first year of their education. The more result-oriented education in departments like engineering indicates that participants were challenged in their early years as education is different in the department of industrial design. One participant stated:

- [45] (...) In the first and second year, I made something to be done. When you did something, you thought it would be good. I don't know why but well it's always trying to understand the [industrial design] profession; you do trial and error. You don't even question why you did things. [Academic Name] was always like; "*Why are you doing this? Why are you doing that? What is the reason you did it?*" S/he continually taught me to question. (P6)

Industrial design education's subjective nature gives crucial information on the professional culture. The abstract education triggers students to learn from each other and forces them to create a community from the very beginning of their profession. Additionally, the subjective nature of design, and trial and error system in the education push industrial designers to become perfectionists in their professional lives. One participant pointed out:

- [46] It [industrial design education] teaches to think in detail and to look at things from different angles and increases the ability of empathy. Indeed, in everyday life, you're thoroughly examining the consequences of things. It makes you a perfectionist; you have to be a perfectionist. You need to look over a job, you don't need to be quick, and you need to search for something different. (P9)

The design process continuously seeks better methods and outcomes, and pushes industrial design students to constantly self-criticize themselves. This design process with a subjective education method makes industrial designers to become perfectionists. Another participant while strengthening the idea of perfectionist industrial designers in education, also provides an important link between perfectionism and work satisfaction of industrial designers.

- [47] (...) They [senior industrial design students] came and said, "*Say goodbye, farewell to sleep.*" I was very determined, "*No, no, I'm going to sleep.*" Then; I was... I wasn't daunted, I would never imagine that it could be changed. I was saying; "*I'll go to sleep.*" Then I realized that it wasn't like that. Because of the satisfaction... If I could already do something okay, if there is such a thing as reaching the best, our profession won't exist. Then the best of everything will be designed, and everything will be done. (P1)

As described in previous examples; the lack of abstract design process and absolute truths also affect the satisfaction levels of industrial design students. Industrial designers who adopt this reality as a working principle make it part of their profession by linking their perfectionism to work satisfaction.

As mentioned above; the abstract nature of industrial design education, the lack of an absolute right or wrong in design, and the trial and error method in the design phase

constitute significant features of the professional culture of industrial design. In the following section, these features will be explained thoroughly.

4.2.3. Experiences in Undergraduate Education

According to the interviews, the professional culture of industrial designers has begun to emerge in their educational life in multiple forms. The findings suggest that the professional culture of industrial designers emerges in three main features that are; being a community, flexible work nature, and working for long hours.

4.2.3.1. Being a Community

In the research, the most significant finding emerging under the name of the professional culture of industrial designers has been the formation of a community of designers. Industrial designers tend to form communities both in their early education stages and professional careers. In the interviews, industrial designers stated three main aspects of creating a community among themselves.

First, industrial design is a relatively new department and has fewer students than most other fields. The low student count in industrial design departments is one of the main reasons why students tend to establish special communities. While probably not unique to industrial designers, this situation is more seldom seen in most other departments with higher student numbers. When a question on the communication between academics and students in the department is asked, one participant responded as follows:

- [48] [Different interpersonal relations] may also be due to the small size of our group [industrial design department]. Because, for example, if you're an engineer, you'll graduate and you won't see that academic again for the rest of your life. We don't have anything like that. So, it is not just about the university that you graduated... It would be a small community, even if people graduated from various universities. (...) We're a little more human-centered, we care a bit more about relationships. Also, our [student] count is lesser compared to other departments. (P1)

Industrial design departments have fewer students than departments such as engineering, which is the profession compared with industrial design the most. Initially, having fewer students restricts the frequency of student interaction. However, in this case, the participant emphasizes the human-centered nature of the industrial design and relates this feature to form a community in industrial design education.

In addition to the student count, the abstract nature of industrial design is another aspect of forming a community. As mentioned multiple times in the Section 4.1.2.1 while making comparisons with engineers, the industrial design profession has an abstract character, it has not have a manual book, and in the first encounters of industrial designers' with it, they consider this abstract nature as a challenge. While talking about the early years and challenges of their industrial design education, one participant stated:

- [49] (...) People are designing products but according to what? There is no book, and there is no truth. "*How will I do? Am I going to be creative enough?*" I was worried. But once I got here, I saw that there was nothing to worry about, because here, as I said, we were 30 people. 30 of us are doing different projects, and we all had different ways to talk. Nobody says to anyone; "*You did it wrong, you did it right.*" That is why, there was something we would all get from each other, and we could somehow advance our profession. (P2)

As this account shows, at the beginning of their undergraduate education, most of the industrial designers worry about the assignments they did since there are no established rights or wrongs. However, small class sizes compared to other departments has increased the interaction between industrial design students. In this case, challenging, indefinite, and abstract design education has led students to form groups and overcome barriers together. The fact that everyone is looking at design problems from a different point of view and that there is no absolute truth or false in design also improves the creativity of the students. Below, there is an account of an industrial designer on the reason of study at the design studio.

- [50] I thought my house was more comfortable [than design studio]. But then I realized something; design can't be done on your own. (...) When I faced a challenge or obstacle in the studio, I ask [to my classmates]; "*How is this? Is it like this? Is that better?*" I am a very hesitant person, the most undecided person in the world. But, even the smallest guiding word has broadened my horizon. So I started to find it more useful to study in the design studio. (P1)

This account demonstrates that while studying industrial design, students constantly question and criticize their works. However, by studying together, students become a community, and besides learning from academics and reference books, they start to learn from other students as well. In interviews, when asked about how to learn to be an industrial designer, a participant responded as follows.

- [51] Somehow people develop skills in specific directions, and because everyone can't learn a lot at the same time, when someone discovers a piece of information or when s/he develops themselves, they transfer what they have learned to others. And this is more efficient. I learned a lot more from my friend than I learned from academics and courses at the university. And this information sharing was much more useful. (P11)

When asked how they learn to be an industrial designer, as mentioned, the respondent has revealed the features of collaborative work, learning, and sharing that exist in the professional culture of the industrial design profession, and suggested that the industrial designers have started to act as a community in their undergraduate education.

According to the participants' accounts, design studios play a pivotal role in pushing students to form communities. Professional culture of industrial design profession comes to life in design studios. In creative industries departments, most courses are held in design studios instead of classes or lecture halls. In most classes, which include industrial design studios, only industrial design students study. While describing undergraduate education, a participant stated:

- [52] (...) We don't know what it means to reserve a seat in the library. We always had our design studios, plus we wanted the studio not to be crowded, and we were more flexible. And also, we are more together because of the studio culture, and that formed our class culture. (...) In our department, we had a

studio and class culture, so we were very close in the university years. While we were doing a project, we did it all together. When we were bored we took breaks together, we had fun together, we came [to the studio] together, and we studied until morning together. We had this difference. (P3)

Considering the design studios as their homes plays an essential part in the formation of the professional culture of industrial designers. However, this feature of design studios will be reviewed in detail in the following section of this chapter. Industrial designers spend time together in the design studio and start to become a community. The role of interpersonal relations in the growing a community is stated in the account above. Another participant reported:

- [53] I only remember [design] studio, I don't know anything else as space. Others [departments] always had such a lot of places. One of the engineer friends in the studio said; "*Are you always here? Are you not going? Look we're going.*" I said; "*No, we've got a course to attend.*" He answered; "*Is it here too?*" Yeah, of course, it's here because this is the studio. All of our classes are in the studio. Although not all of our classes held in here, we have attended our eight-credits course [industrial design studio course] here. We were sleeping here, and we were eating all our food here. That's why the studio was like our home. We wouldn't take many courses from other departments. (P2)

This account shows that most industrial design students are not able to take courses from other departments due to the intensive training of the design studio. This situation led them to spend more time together and socialize among the studios. The following two accounts are examples of industrial designers' point of views on this issue.

- [54] (...) I don't remember people from other departments that I took the same course. That's why we haven't met a lot of people from other departments. For example; our class had something I liked very much. We were all hanging out together; if we were 30 people, we were hanging out 30 people together. But we didn't have so many friends from the outside. (P2)

- [55] Because we had very intensive assignments, we couldn't spend a lot of time out of the classes, and we would usually socialize within the [industrial design] department. For example, in our department, in other departments as well, most people get married to people within the department. Girlfriends, boyfriends are always the people from the department. There was an antisocial environment. (P12)

Both accounts above provide information on the interpersonal relations of the industrial designers in the undergraduate education by stating the introvert nature of their community. In the undergraduate education, most industrial designers act together and work as a whole in the design studios, and they are not taking many courses from outside of their department. Therefore, while their interpersonal relations become stronger, they may ultimately become a self-enclosed community.

All the findings presented in this section demonstrate the importance of communities in the professional culture of the industrial design profession. Most of the industrial designers have come up with multiple ideas about their respective communities in undergraduate education, and that they continue to be part of others in their professional lives. Being a community is not only one of the major features of professional culture, but it also pioneers other features that make up the professional culture.

4.2.3.2. Flexibility in Space and Time

After community-forming tendencies, the second finding uncovered about the professional culture of industrial designers is the emphasis on flexibility. According to the statements of the industrial designers, the general concept of flexibility starts in undergraduate education just like community-forming. The fact that industrial designers form a community that have common stakes, and togetherness make them better understand each other and lay the groundwork for being more flexible around each other. One participant stated:

- [56] (...) It's [design studio] a beautiful socializing environment. In fact, regarding interpersonal relations, design students are generally better than other departments because if there are 30 people in the department, 25 of them act as a group. This rate decreases in other departments. Design students are generally more social and sharing among themselves because they share labor and they work on team projects. It [design studio] has a beautiful environment, so it isn't very stylish. It's also fun because there is a creative environment. (P9)

As this account presents, flexibility is generally described by references to the industrial design studio. Firstly, as mentioned, industrial designers spend most of their time in undergraduate education in design studios where they feel like it is home. This mindset creates a sense of comfort and flexibility in and between industrial designers. One participant stated:

- [57] (...) Studios were open 24/7, so we could go and use whenever we wanted. They were beautiful as well; because of the high ceiling. Our stools were terrible, but we still loved them. Studying was enjoyable because our project classes [design studios] were exclusively for us, so they were the places that belonged to us at school. So we had a connection [with design studios], we could go in and out whenever we wanted, and we could study comfortably. (...) Also, there wasn't much difference between the grades; all students from all grades were working together, so it wasn't a problem. (P5)

As this account demonstrates, unlike the students from other departments, industrial design students have well-defined design studios where they can get in and out anytime they want. Additionally, they can study in studios with their well-defined community. Combination of these two features creates a sense of belonging and flexibility in industrial designers, hence forms an essential part of the professional culture of industrial design. In the following account, another participant strengthens the idea of the design studios as homes and its crucial place in the professional culture of industrial design profession by stating:

- [58] The living space [design studio] is a living space... It can be filthy, but it's a place where you're incredibly spiritually devoted. We had a bed, and we could sleep in it. The sink was already there in every studio, and it was your bathroom. I mean the home, a vast space, a place where you can study at any desk, where you can be as free as you want, your living area. It's a big plus... (P3)

Students feel than they can complete assignments easier in the studio environment, which causes them to do most of their study time in studios. This situation creates a sense of belonging to studios. While talking about industrial design studio a participant stated:

- [59] The design studio is critical because you start a project, you draw it in 2D and 3D. Then you're modeling and prototyping which is not things that you can do at home. You usually need large areas because there are many team projects. So the studio is critical. (...) In the finals, because most of the courses are due, you can be stuck and spend two days there. So it has to be comfortable. The table should be significant because, you will work on your computer, your drawing, and your sketch... (P9)

The account above demonstrates that in industrial design education, students mostly need to work on multiple mediums at the same time which requires flexible, comfortable and large areas. In that sense, design studios provide industrial designers with what they need and become a vital part of their professional culture. Additionally, another participant stated:

- [60] (...) We don't have an assignment at the computer, we also make models and so on. So we need to be able to spread, distribute, and work freely... There are study halls in the dorms too, but it isn't enough. And [in design studios] you can make music, you can sleep, and you can do all kinds of things unless you bother each other... (P10)

As it can be seen in the accounts, in design studios, industrial designers tend to become more flexible as they see the studios as their homes, and they start to give multiple functions to them. The account above gives brief information on the rules and regulations in design studios. Rules are vital to sustain flexibility in the professional culture of industrial designers. The following account provides information on how industrial design students use design studios.

- [61] The people who come there [design studios] are the ones who will work until morning with an already defined assignment. Their work, research, and sketch all are pre-defined. That's why I think people are motivating each other in that environment where there is no written rule, but perhaps something more disciplined is emerging unexpectedly. Even if everyone tries to work tiredly at that late hours, they see each other and encouraging themselves to work harder. So a disciplined environment sustains. We also listen to music and watch videos to refresh our minds from work. For me to be in the studio environment instead of working at home was much more disciplined. (P6)

The abstract and multifaceted nature of industrial design education makes it possible for its students to work as a community and on mutual respect through unwritten

verbal rules. In the account above, while talking about flexibility participant comments on the space and time relationship and makes a connection between flexibility and working hours. Designers add flexibility to their professional culture by creating a more subjective and comfortable work environment in their own ways via discipline.

Flexibility created by industrial designers in their community is also reflected in dress and appearance norms. In an interview, when asked if they had experienced any comments from academics for their dresses and appearances, one participant explained:

[62] (...) Some people wear various kinds of dresses. I don't remember hearing that kind [negative] of comments [from academics]. Because I remember juries... I remember when I went out with my tracksuit covered with paints because I didn't have any time to dress appropriately. There were also the times that I dress appropriately. I don't remember ever hearing such negative comments. (P7)

The flexible working conditions of students in industrial design education also affect the dress and appearances. As seen in the account above, attending design juries with shabby clothes is considered as an ordinary situation by students and also accepted by academics.

The accounts that presented in this section indicate the foundation and role of flexibility in the industrial design profession and its culture. The flexibility starts during the undergraduate education continues and evolves in work life. Both the features of "being a community" and "flexibility in space and time" are connected to a third feature named "working for long hours" and all three of them are crucial in forming the professional culture of industrial designers in the undergraduate education.

4.2.3.3. Working for Long Hours

In the interviews, another point that almost all of the participants agreed on was the long and uncertain working hours of the industrial design profession. It starts in

undergraduate education years, persists in the work life and becomes a vital part of the professional culture of the industrial design profession.

As mentioned; in my findings industrial design profession is suggested to be built with experiences and has an abstract and creative nature. According to the interviews, these aspects of the industrial design affect the working hours of designers starting from undergraduate education years. While describing positive and negative sides of undergraduate education; one of the participants stated:

- [63] Design education has widened our horizons a bit. The positive outcome was; we started to approach differently to our projects. We saw that there wasn't an absolute right. The downside was that we had to work a lot while learning. (P12)

As this account demonstrates, the lack of a strict right or wrong in the design field is one of the factors that cause industrial design students to work for long hours during their undergraduate education. Industrial design profession's being built with experiences forms an element that creates long working hours in industrial design. According to some participants, this aspect, which is established in industrial design education, is transferred to the students from some academics and has an essential place in the professional culture of the industrial design. The following two accounts inform about the impact of experiencing on long working hours in industrial design education.

- [64] There was a say in the undergraduate education; "*Let's throw the child into the sea. Either s/he'll drown or learn to swim.*" (...) You're so frustrated at that time. (P11)

With this account, industrial designers have been asked by academics from the beginning of their education to work on their design assignments and problems by experiencing them which was hard for students because they were not accustomed to the design field. Experiencing in design is vital to working for long hours. Another participant stated:

[65] (...) There is a feeling that being in the loop. This is something I usually observe in the people from creative industries. That's why we can't leave our project... When I say, we can't leave our project, its shift... It ends at 5 P.M. for office staff after then, those people can live their lives; however, we cannot finish our work and go, work continues continuously. (P1)

According to the interviews, industrial designers are aware that their profession is process oriented and their work is in a cycle, and that is why they have long and irregular working hours than other disciplines.

Another factor that enables long working hours to occur in the industrial design profession is being perfectionists and having low rates of satisfaction among the designers. Origins of this situation start in undergraduate education. The fact that design projects do not have explicit rights or wrongs, and that it is always possible to get better is causing the working hours to lengthen. In interviews, one participant while presenting an academic who is influenced in his/her undergraduate education, commented:

[66] At first, although we didn't get along... Because of s/he was a bit more authoritarian, and his/her expectations from homework were high that at first, I had great difficulty in courses. His/her contribution was even more significant; s/he headed towards me to drawing and so on. S/he didn't like the projects that we designed, so we were trying to do better. (P7)

The subjective nature of industrial design makes projects open to criticism and affects working hours. At this point, without making any generalization, attitude of an academic provides a small example of the importance of criticism in working for long hours in industrial design education. The possibility of always doing a better job in the educational setting makes young designers perfectionists and lowers their satisfaction levels. All these factors cause the design to be done in a prolonged period and affects the professional culture of the industrial design profession. Some industrial designers even consider working until dawn as a regular part of their work. While describing design studios a participant stated:

- [67] It [design studio] has the possibilities that a designer can fully expect; for example, the studio was a place where you could sleep. I mean, I think that I'm lucky enough to have a studio that has all the possibilities under it. (P4)

The expectation of having a possible sleeping environment in design studios show that industrial designers accept to work in their studios until the morning. Additionally, even students from other departments sometimes accept that students from creative industries have long working hours. Following two accounts provide additional information on that argument.

- [68] (...) we were working until morning in the jury weeks; this was something everyone knew. (P10)

- [69] (...) We were very slack, compared to students from other departments. I think we had an image of people who were so tired, who worked all night and day, went home during the day for two hours to sleep. We were wandering around in sweatpants and pajamas, but there was no such judgment. Maybe they [people from other departments] had some opinion like; "*They [industrial designers] work at night.*" (P2)

As it could be seen in the accounts, there is an idea that people from other departments might connect the designers' dresses and appearances to their long working hours. Even though the dress and appearance norms of industrial designers are examined under the title of flexibility, its effects could also be combined with long working hours. Regarding this issue; another participant made the following statement.

- [70] [In other departments] boys, girls, everyone come to school with more formal clothes while I can say that you [industrial designer] can start to wear more comfortably at school by working until mornings with the students from your department because you have reached that sincerity... (P6)

When industrial designers work together for long hours as a community, they become comfortable around each other. This account suggests that these terms do not just work alone, but mostly they become essential in forming the professional culture when combined.

In this section, professional culture of industrial design was investigated in three main aspects; “being a community”, “flexibility in space and time”, and “working for long hours”. Although these aspects are different from each other, especially as it could be seen in the last account, they are essentially interconnected and provide crucial information on the professional culture of industrial design which has been acquired in the undergraduate education. In the following section, the relationship between industrial design work experiences and professional culture will be examined in depth.

4.3. Industrial Design Work Experiences

Aspects of professional culture in industrial design education were explained in detail in the previous section. Third and the last set of the interview questions are about industrial design work life and experiences. In this set, questions are similar to the ones in the second set of questions. Participants were asked to describe their work life in detail. While interview questions (see Appendix C – Interview Guide) are provided, in general, these questions are about working environment, interpersonal relations and collaboration in the workspace, culture, and positive/negative aspects of the companies that participants work.

Industrial designers, while providing information on their professional culture, indicate that professional culture becomes visible under the following aspects in work life and experiences; interpersonal relations, communication and language, and physical working space. First, they explained what they did when they first graduated. They illustrated their adaption period, and while doing so, they compared their work-life experiences to their undergraduate educational experiences. At that point, industrial designers provided vital information on how their current professional culture was formed with the examples from their work experiences and in some cases with organizational culture features of the companies that they worked.

4.3.1. Interpersonal Relations

According to the interviews; the professional culture of industrial design becomes visible multiple times in interpersonal relations of the industrial designers in the work environment. Just as in the definition of the profession and the educational life, being a community in work life have a pivotal role in the context of the professional life of industrial designers. While giving information on their workplace and work experiences, participants continued to provide examples by comparing themselves with mostly engineers.

In the work life, unlike their undergraduate education, industrial designers interact more with people from other professions. Because the participants in this research are selected from large-scale manufacturing companies, they are generally more engaged with engineers, technicians and sometimes other creative professionals. For this reason, the aspect of being a “community” that they acquired in the undergraduate education can create differences in the work experiences.

Most participants stated that they work in a more flexible way among themselves. However, while they are working with engineers, project is approached differently and the disagreements are revealed between these two profession groups. One participant pointed out:

- [71] As [industrial] designers, we've got a very different points of view between ourselves... Perhaps only approaches to the style or form can be changed. (...) Apart from that, it's not too much of a problem as everyone agrees with the process of the work or the progress of the projects. When we work with engineers, some minor differences occur. Because the designer, although the function is vital, it can't be completely separated from the form. For example, at the point where the engineer is working, a support must be given to the product for self-standing. The engineer can't do things at that point, for example, if you don't constrain or guide him/her, or if you don't give alternative solutions, s/he calculates and thinks that "*This is the best solution, so let's do this. Why we choose other options? This is the best one.*" Then, s/he offers you a single solution. (P6)

As the account above shows, industrial designers are more comfortable with working with their communities in the work environments as they have lived through similar training and experiences. As noted earlier, industrial designers see themselves more of pioneers in projects because of their different work dynamics with the engineers. Disagreements arise, and professional cultures become clearer in collaborating with engineers who are more result-oriented and are working with different principles. Following two statements reinforces this argument on workplace collaboration by stating:

- [72] For example, our mechanical engineer friend and [industrial] designers are working to improve [projects]. Sometimes I contact more with a technician who also has the attitude of "*That's life. It's inevitable.*" (P8)
- [73] If s/he [engineer] wants to, s/he might screw the most beautiful, the middle part of your design. It doesn't matter for him/her; the structure is the only thing necessary for them. (P4)

Just as in the definition of the profession and the educational life, in the industrial designers' work experiences, their process-oriented abstract nature conflicts with the straightforward and result oriented mindset of engineers and makes the cultural differences of their professions visible. Unlike education, it is also seen as an advantage not only working with industrial designers but also with other professions in work life. Following statement presents a participant's comment on collaboration with other departments in work life.

- [74] Working with people from different professions is very difficult, but it is also lovely. It isn't right to work with only designers. It is nice to work with people from electronics, mechanics and so on. There are things you learned from them, and you're giving them something to learn too... (P2)

The accounts suggest that industrial designers define themselves as being eager to learn and have knowledge from different fields in work life, just like in their undergraduate education. The concept of flexibility, which is mentioned within the context of the industrial designers' professional culture, becomes another point just like being a community where professional culture becomes visible in the work

experiences. In that context, dress and appearance norms in the workplace become a part where the differences in professional culture among the departments are most prominent. When it was asked whether it is required to suit-up in R&D meetings, a participant stated:

[75] No, because they're something we do only among designers, we can dress usual. (P4)

According to industrial designers, because these meetings are held only among themselves, they enjoy the convenience of attending meetings with casual clothes. As this example demonstrates, the aspect of being a community in the professional culture of industrial design profession creates a situation in the workplace which enables industrial designers to be more flexible than other departments regarding dress and appearance norms. Additionally, another participant stated:

[76] (...) Especially people in the marketing or export departments are expected to come in the suits; they can't wear anything else anyway, we [industrial designers] don't have that obligation. If necessary, you can go in jeans and t-shirts in summer. If you need, you're wearing your jacket. It's up to you. They [people from administration] got used to it in a little bit like this; "*Okay, they're designers, so let's not say too much to them.*" So they don't mess with our clothes. For example, they don't mess with our hair and beard also. It's a comfort for us. As I mentioned, while in the departments like marketing which are mostly connected with the customers, rules on dress and appearances are written, we have a little more freedom. (P6)

According to the interviews, industrial designers' flexible nature and convenient work rules are observed in their undergraduate education. At this point, as well as the professional culture of industrial designers, the organizational cultures of the companies they work with also gain importance. Companies' dynamics, attitudes, and perspectives towards design and designers influence interpersonal relations and provide crucial information on the professional culture that is developed in the work life. When companies know industrial designers' professional culture, they treat them how they wanted to be treated.

Because large manufacturing companies have many employees, they implement familiar rules and regulations for industrial designers. These rules that industrial designers have never encountered before have become influential in their professional cultures. The following example presents a participant's argument on this subject.

- [77] What I can say about [Company Name]; it is hard to find balance. Like I said, blue collar, white collar, and everyone works in the same factory. So there are people from all strata. And you need to be able to manage them all together which of course is a compelling thing to do. That's why there are strict rules in the company. (P1)

Because manufacturing companies have high numbers of employees and departments, interpersonal relations have a pivotal role in sustaining organizational culture. As it can be seen in the account above, the strict corporate rules do not share any features with the professional culture of industrial designers and cause them to evolve accordingly.

At this point, it becomes essential that companies that industrial designers work for must recognize design culture. Since the manufacturing companies are usually established and sustained not by design culture but with engineering culture, industrial designers who work in these companies experience some problems which occur due to cultural differences. The following two examples illustrate the problems posed by the lack of recognition of design culture in engineer-oriented companies.

- [78] Unfortunately, because they [engineer-oriented manufacturing companies] don't know who industrial designers are, they don't have any knowledge of their salaries as well. So, industrial designers should work in a company that is suitable for them. (P9)
- [79] We [industrial designers] don't have a lot of conflicts with the mechanical engineers we work with, because the other two industrial designers I work with are in the company for 18-20 years and since then they have been teaching others how to work together. These mechanical engineers know what industrial design means, but some departments don't work with us that often such as; electrical and electronics engineers. For example, the other day, there was an incident... There's a radio project and electronics department is working on its software. But we think that the industrial designer should do that because there is something called "User Interface" and "User Experience."

We say “*We have something to say*” and electronics engineer responds “*No, that’s not industrial designer’s job, its electronics engineer’s.*” Just because they know how to code something, that doesn’t mean it’s their job. But when the customer uses it, s/he won’t be satisfied and s/he’ll say “*We are using that other brand’s radio more comfortably.*” That’s because there is a design behind, there is user experience, something is researched, discussed, and things are decided. Which is why we’re trying to explain the role of the industrial designer, however sometimes you can’t. (P2)

Both accounts mention the conflicts that industrial designers experienced in the manufacturing companies that they work due to the various professional cultures. Interpersonal and even inter-departmental conflicts are caused by people having different professional cultures and dynamics. Both industrial design and engineering professional cultures are different from each other. When they do not mesh together, conflicts become visible. Just like in their educational life, industrial designers still see themselves as pioneers in the projects, but they still experience misunderstandings with engineers.

Companies’ points of view towards industrial designers, organizational cultures, and hierarchical dynamics, which are not seen during the undergraduate education affect previously established nature of the professional culture of industrial designers in their careers. Having a supervisor from a different department is a common concern for industrial designers who work in manufacturing companies. The following statement provides a participant’s experiences on working with supervisors from other departments.

- [80] Because they’re [supervisors] mechanical engineers, it’s easier for them to evaluate mechanical engineers and say them “*Look, here you’re doing it wrong.*” But when they say this to an industrial designer, they may not be right, but how you’re going to tell them what you’re thinking is right? You can’t say “*No, you think wrong. I’m right.*” Because they’re your supervisors, you have to express it in another way. Sometimes you can’t do it, sometimes it can be seen as irritability, or they can give it to your lack of experience. In other words, because we’re from different disciplines, there are such problems. (P2)

In interpersonal relations, as the account above shows, the hierarchy has a very crucial place where there is a disciplinary difference between the employee and the manager.

It shapes the working environment and makes the professional culture of different professions visible. In the interviews, apart from industrial designers who have supervisors from different disciplines, industrial designers who have bosses with different educational background provide additional information on the interpersonal relations in work experiences. One participant stated:

- [81] Boss wasn't even a college graduate, but because s/he was so incredibly aware of the market, s/he can come to you and says "*Let's do it, let's do that.*" (P2)

As well as having supervisors from different disciplines, industrial designers are also prone to having bosses with different educational backgrounds. Industrial designers who study only among their colleagues, work collaboratively with people with different educational backgrounds in their work life. Hierarchical company dynamics might cause distress among industrial designers.

Regarding interpersonal relations, companies' attitudes towards industrial designers are vital. Industrial designers seek a working environment where their professional culture is meshed or at least accepted by the organizational culture of the company. Otherwise, they suffer while trying to adapt to the environment. While summarizing his/her past experiences, a participant presented the following account.

- [82] Back there [in the software company], the dominant culture was software engineering. There were more male employees. They didn't even know my profession. Some people said that they heard someone called industrial designer for the first time. I've had sad experiences. I knew that I wasn't involved in that culture and I could never be involved. Because I'm too far away from the software. They're too far away [from industrial design]. There were many different people from different socio-cultural backgrounds. (...) Because they [companies] are large, people say something like; "*You can adapt to this culture, or you'll be lost here.*" And I was saying something like; "*I can't take part in this place, I can't take part in these people.*" I couldn't stay away, but I was like a guest there, like a tourist. It was something like; I don't need to adapt to this culture, I'll go anyway. (P1)

As shown by all the accounts presented in this section above; concerning interpersonal relations, if their professional culture is not in a compliance with the organizational culture of the company, or if their community and their flexible work environment are

absent, industrial designers experience adaptation problems in their work environments. According to the interviews, industrial designers have a very well defined professional culture. In this research, they were selected as participants under the criteria of work experiences in manufacturing companies which are mostly have engineer employees, and thus a dominant engineering based organizational culture. Therefore, the professional culture of industrial designers and engineering based organizational culture of the companies do not work harmoniously which creates adaptation challenges for industrial designers. This situation contradicts the professional cultures acquired in education and causes industrial designers to gain experience in the opposite direction of their education. Therefore, it is observed that the workplace socialization has a pivotal role in the professional culture of the industrial design profession. Following two accounts emphasizes the importance of social activities among industrial designers in work environments.

- [83] We make our designs [in the company]. Then we work with engineers. Then our projects go to production. They're going to the metal department. Later on, the metal department delivers the products to the woodshop. There's a chain that is continuously running within the company. For this chain to become a little firm, it is essential for people to communicate with each other in a way. Empathy is important. Because you can't say; "*I'm a designer. I drew this. Produce it somehow.*" You have some restrictions on production that the project brings, and you have to understand them. You can't enhance the project when you only go and talk to the people you have no communication at all. If we look at it in that sense, if it is possible to establish a sincerity with everyone, if this communication increases through social activities, I think it will be useful for us to improve ourselves and our company. (P6)
- [84] I think there should be social activities without forcing people to increase motivation. Because the work we do is creative, something that should not be approached with the concept of overtime. (P12)

According to industrial designers, socializing among departments increases motivation of people who work in those departments. In the interviews, industrial designers state that with the help of social activities they know better each other, and they are able to work collaboratively. Since there is a strong possibility of creating

high-quality products when the socialization level in the company is high, job satisfaction of the industrial designer increase. So, industrial designers see the collaborative and perfectionist characteristics of their professional culture in their interpersonal relations in work life and provide information on the importance of communication in their work experiences.

4.3.2. Communication and Common Language

In work life, communication and common language are other areas where industrial designers' professional culture becomes visible. In the interviews, although communication and common language were asked on different questions, the answers to both types of questions have overlapped. Thus, the importance of communication and the language used in the work life of industrial designers has been suggested. Vital differences appear between the communication and common language in educational and professional lives. Business sectors of the companies where industrial designers work, and the interactions of them with the people from other disciplines in work environment are the two main areas where professional culture appears clearly.

While most industrial designers answer the questions about communication and collaboration in the work environment, they are doing so through comparison with their educational lives. There are significant differences between the communication encountered in their education and the interaction in their work. A participant explains this as follows:

[85] No, of course, the work environment is very formal. Everybody's buried in their own business, so there's no chattering. Even if some of them is your roommates, some people talk and don't... I find people more boring at work. It's not like school. So because it [work environment] is not designer-led, you are not in the same mindset with others in work. (P9)

As seen in the account above, industrial designers feel tense in the work environments when they are not within their community. Designers who are educated mostly among their colleagues in their four-year undergraduate education are accustomed to a comfortable work environment. Since they have a common processes and common

problems and work collectively, industrial designers observe professional differences in communication, apart from personal differences in communication whey they start working with people from different professions in work life. Another participant has the following description on the same subject.

- [86] It's [work] very comfortable in your department, so you can even go against it. I mean, if you say "*I won't do this project*" if you insist you don't. So if you don't believe in a project, they [supervisors] don't do anything; communication with administrators is a little similar with communication with friends. I can say a bit like friends, and it's more like a brother-sister. Of course, there is a need to provide some authority but not too tight... It's probably also different in other departments as well. (P7)

Industrial designers find communication within their communities more casual, and they connect this argument to the establishment of a more comfortable and communicable work environment. At this point, unlike the years of education, another element that emerged is the hierarchy. Interviews show that the hierarchical order is a vital factor affecting communication in the work environment. A participant who quit from an engineer-oriented manufacturing company and started to work in a design-oriented company stated the following about the hierarchical order and communication in the work environment.

- [87] For example, [company x] and [company y] was crowded and there was a more visible hierarchical structure. And people would address each other with respect. The first example is from when I went to [design company name] from [manufacturing company name]. I was saying people "Mr.," like "Mr. [...]" as a way of address form. Then I first encountered with this reaction; "*Why do you call me Mr. [...]?*" There was a friendlier environment since there isn't a strict hierarchical order. I don't know if it's good or bad, but there was something different about it. There, the structure, the strict rules changed utterly. Everyone there was clearer. Everyone could comment more on everyone's work. (P12)

The industrial designer who changes jobs from an engineer-oriented company to a design-oriented company shows that the hierarchy is less in his/her community and this situation is reflected in the style of address forms and the spoken language. Since the culture of most manufacturing companies is dominated by engineering culture,

industrial designers who are working in those companies generally encounter a different culture in terms of communication and the language because of the dominant engineering culture. The following account provided an example.

[88] (...) Address forms may change slightly within the profession group. Because, for example, people call each other "Mr. /Mrs." in 90% of the company. But within the design center, we can call our manager "Brother." Our manager doesn't insist that we call him "Mr.," rather he likes it that we call him "Brother." So, it's a bit more than you've done work together... After all, some [managers] are aware of the fact that everyone is working hard, rather than the idea of "*I gave this job, then do it.*" Everyone focuses on finishing the projects while thinking "*How can we do it? How can we work on it?*" We critic each other, if it is needed, we tell our manager and his critics. You know, the way it works is also changing because it's a bit of work together, and it's a bit different for the rest of the company. (P6)

As the account shows, in the work environment under the design culture hegemony, the communication, jargon, and address forms of industrial designers have a more casual structure. Most participants, especially who work in the R&D departments stated that; it is sufficient for them to have a department that recognizes the design culture in which they work to ensure their sense of belonging and comfort. Companies that have senior industrial designers are familiar with the designers and their professional cultures that is why newly graduated designers who work in those companies state that they have a properly functioning working environment. The fact that industrial designers go through almost the same paths from their educational lives to their professional lives with sharing the same professional culture also clarifies this situation.

Since industrial designers do not have the common ground as with other professions they work together, the language they use at work varies in and is influenced by various professional and organizational cultures. It is stated multiple times in the interviews that each profession has its own terms and jargon which are not acquired during education but they are mostly learnt during practices in professional lives. These terms can be completely technical words that are exclusively for to product, but also they can be terms that are formed by changing the existing words according to

the spoken languages and accents. In the following account, a participant shared his/her thoughts on using common language with other designers while working in a design-oriented company.

- [89] For example, while working in [design-oriented company name], there was no such thing like, “*Will they understand if I'll use that term?*” Of course, they'll understand. We all use the same, common language. But as I said in [manufacturing company], people don't even have to know the point of my job; it's an entirely different project for them. For example, they studied economics or engineering, so we have nothing in common. (P1)

While giving information on the language that they are using in their work life, industrial designers compared that language with the one that they used in their undergraduate years. Almost all of the terms that are used in education life have equivalent in professional life. A participant stated:

- [90] For example; the term modeling became prototyping. Model and mock-up became prototype. (...) Later on, taking critiques became project presentations, drafts, and draft designs. Group studies transformed into brainstorming. People love to say brainstorming. It [language] became a little more tangible. But our work is not so different from the thing we did in school. (P1)

As it the account above shows, professional terms are adapted the formal professional life, they can become understandable for people from other professions as well. The organizational culture and inner dynamics of the companies they work in, the projects carried out in those companies, and the people who are communicating, all affect the common language used.

The professional jargon and language of industrial designers learned in the educational life are shaped according to the characteristics of the companies where they work. The fields of work and the branches of their employees create a language different from that is learned and used by industrial designers. One of the points where professional culture becomes evident is the language used. The dialogue below shows the views of a participant on the professional language used in work life.

[91] **Researcher:** So, how was this language in the work environment? Was it familiar to you? Or was it a foreign language you encountered when you started working?

Participant: Actually, more superficial, there was a more superficial approach. I can't say that was a foreign language but, when I describe my profession, my work is something I'm unfamiliar with. Because you couldn't explain the professionalism of your work with that approach. It is necessary to do show business; it's a persuasion work, deception work. So we have provided that adaptation in a way that we had to provide.

Researcher: Is there any specific example that you can give as an example?

Participant: For example, you can't say something like, "*It's a good product*" at school, right? For example; "*This [product] was very nice.*" They [academics] ask the reason, they ask "*Why?*" So, it's a false expression but, if you're talking to your boss in work life, for example, if you start presentation something like; "*It's very beautiful,*" your boss might be impressed because that's the jargon. (P12)

Participants indicate that industrial designers use a much simpler, result-oriented, and money-oriented jargon after they graduate. Since industrial design education is more process-oriented, and financial aspects of designing are not realistically reflected in their education, industrial designers do not fully classify this new language they encounter in their work life. As the interviews in this research are conducted with industrial designers working in large-scale manufacturing companies, the marketability of products and the more straightforward point of view of engineering are reflected in the professional language used by designers. Thus, the existing professional culture of industrial designers is combined with the organizational cultures of the companies and is started to evolve into a new specialized version of their professional cultures.

As noted above, the fields of the companies and departments where industrial designers work is influential on the shaping and specialization of the language used by industrial designers in work life. In one of the interviews, when asked whether the language in work was a foreign language or a familiar language, the participant who works in defense industry explained:

[92] It's familiar. I mean, in work life, because I already have an infrastructure, what I'm talking about is very familiar. Only when I first started to work in

the defense industry, I encountered many foreign concepts, terms, and abbreviations. But these were all things that were related to the nature of work, rather than design. (P5)

The wide range of working area of the industrial design profession provides the expansion of the professional language. There are changes in the terminology and language used in the work environment. Another participant explained:

- [93] The product has its vocabulary. So, naturally, it is widely used. It is the most commonly used thing but, this is not only among the designers but also for all R&D, product development, and design departments. In other words, this common language stems from the terminology of the product, or it originates from the vocabulary of production. Since we aren't a design office, since we aren't an institution that provides design consultancy, we usually have all our business talks through the product. Therefore, this language determines the product and the production methods. (P13)

Another reason for the formation of the professional language used in manufacturing companies is; communication between white and blue collar employees. Just as companies' working fields, organizational cultures, and terminologies, the jargon used among the white and blue collar employees affects the common language and creates a point where professional cultures become visible between employees. The following two examples provide information on the white and blue collar employees' communication and the jargon they use at work.

- [94] (...) There is a language that the craftsmen understand in the production section. If something is done about the production that is the way the people spoke in the room. (P10)
- [95] **Participant:** So, you prefer "*Mr. /Mrs.*" As much as possible. Mr. [...] or Mrs. [...] and so on. I think that "*Mr. /Mrs.*" Is important and should be used regularly in work life. When I first started to work, I was the youngest person in the department. It's not nice to address people, especially to white collars as; "*Brother/Sister.*" However, blue collars love to be addressed as "*Brother/Sister.*" They prefer "*Brother/Sister*" rather than "*[...] craftsman*". For example; I go to the wood workshop and say; "*How are you [...] brother?*" or "*What are you working on [...] brother?*" They love it. There is a situation where age is not matters.
Researcher: Like respect?

Participant: Address form like craftsman is showing respect. It helps you to position them; “*You’re my craftsman. You’re my big brother.*” I had an attitude like that. If the person I’m talking to is blue collar, I prefer “*Brother*,” if not “*Mr. /Mrs.*” But in the personal, one-to-one conversations I could easily address people with their first names. However, at work when I’m talking to you, I use your name while when I’m talking about you, I use “*Mr. [...]*”. This is my approach. (P10)

The communication between the white collar and the blue collar is a phenomenon that industrial designers do not encounter in their undergraduate education. Up to this point, the collaboration of industrial designers with people from different professions, such as engineers, has been explored. The account above shows important information on the communication and language that is used between industrial designers and blue-collar employees. In the industrial design profession, designers work in the workshops for manufacturing as much as they work in the offices for designing. Industrial designers prepare design among themselves in offices for production. At that moment, blue-collar employees start to involve in the process. To successfully produce the given design, the communication between the designer and the blue-collar employee is very important. While working with blue-collar employees, industrial designers stated that they were interested in using a common language to produce the designs successfully. Apart from age and professional seniority, respect is another important point in this communication between these groups. As the account below demonstrates, more informal address forms like “brother/sister” are helpful to achieve a respectful and successful communication between two professions with different professional cultures. The following explanation on the workplace language shows the variation of industrial designers' professional language in work experiences.

[96] As I said, at school, there was no particular use [of language]. But, we didn’t use any academic terms such as; sitting unit, in work. Everything is more evident in work. Usually [in the past company], we talked to our managers as if we were talking to craftsmen because our managers were not very educated. They would have approached us that way, and we would have to act that way as well. (P12)

As shown in the example above, industrial designers in work life tend to use a simpler language in contrast to what they are used to. In educational life, while defining products industrial designers tend to use terms according to their function such as; sitting unit, eating unit, and shelving unit; in professional life, they start to use the exact name of the products such as; chair, table, and shelf. The aim of it is to enable people with other professional cultures to adapt professional conversations more easily. This distinctive jargon among many white and blue collar employees has also changed according to the level of education and expectations of the managers and owners of the companies. Even though industrial designers have sufficient professional knowledge, this different language they encounter in work life changes their habits and acquisitions from education.

This section examines the communication and common language aspects of professional culture of industrial designers under two main headings; the business sectors of the companies where industrial designers work, and the interactions of them with the people from other disciplines in work environment. Because every industry has its own language and terminology, business sectors of the companies that industrial designers work, affect their professional language. These terminologies add new terms to the professional language of industrial designers. Business sectors have an influence on the professional culture of industrial designers in terms of communication and common language. Because industrial designers have common professional culture and jargon, they communicate and work more free and successful among their community. Participants of this research work in large-scaled manufacturing companies where engineering is the dominant profession group among its employees. So, the organizational cultures of these companies are closer to the professional culture of engineers rather than industrial designers. This difference between disciplines also shapes the professional culture. Industrial designers develop their communication skills according to the people from different disciplines that they work together. According to the interviews, engineers and blue-collar employees are

the two main profession groups that industrial designers work in manufacturing companies.

4.3.3. Physical Working Space

Physical working space has an essential place in the professional culture of industrial designers. The working routines and dynamics of industrial designers who spend all their time in a particular place affect the professional culture. In this part of the research, it is examined how industrial designers who defined their design studios as “homes”, define their physical working space in their work life.

In the interviews, as seen in the previous sections, industrial designers made comparisons with their educational lives while defining their working environment in their work lives. The concepts of “Community” and “Flexibility”, which were mentioned as the elements constitute professional culture, are expected in the physical working space. While comparing office with a design studio, a participant who was working in the open office, made the following statement:

- [97] My previous office was not an open office. We had our place. So, it was more comfortable. Then I would have said it was almost the same with the design studio because it was closed. You could've turned on the music that you wanted in the back. Sometimes we would watch even Cem Yilmaz. But right now it's a little limited than before because you know, project development department is near us. It's open office after all. On the other side, there is a project planning department. (P11)

The accounts of the participants show that usually industrial designers consider that working in their community is more flexible than working with other departments. Industrial designers who are accustomed to the environments in which they study with their colleagues only for all their undergraduate education prefer the same type of settings in work life, and when they are so, they say that their comfort zones are higher. However, when working in open office systems, the use of shared space with multiple profession groups causes to see different professional cultures. A participant who has

work experience in both the open office and the private room has made the statement below:

- [98] (...) My work environment in [first company name] was more comfortable because the office belonged entirely to us [industrial designers]. In the [second company name], there were cubicles... I think cubicle is a rather unfortunate design and a structure that negatively affects the performance of the employee. (P5)

The example above shows that industrial designers prefer to be in their community at work. In the definition of the industrial design profession, the outward-facing feature is also seen here. When the physical working space belongs entirely to industrial designers, it is stated that a more flexible working environment is provided where comfort and efficiency rates are high. In addition to working in their community, the account above also provided information on the preferences on working units. Because industrial designers are used to work in large open spaces, working in small cubicles is something that they do not prefer. In addition to the concepts of community and flexibility, industrial designers noted that the organizational dynamics of the companies they work in had an impact on physical working space. In the following dialogue, a participant makes the following statements on physical working space.

- [99] **Participant:** Our cubic has a standard working environment for six people. It doesn't have an environment similar to school, it doesn't trigger creativity, or it doesn't have a very different architecture. (...)

Researcher: Are you able to act more flexible in office like design studio?

Participant: No, I mean in the work environment... After all, design is already a very different concept in school. In work, it's a little more than the design or school culture; it's more about organizational culture.

Researcher: How does the company look at the industrial designer? How does it offer a difference regarding comfort?

Participant: Company doesn't offer any difference. Since it's an engineering-based company, I don't think that they understand the industrial design concept. Or, even if they understand, generally they ignore. It doesn't offer anything but, there is an advantage for being corporate, that is material, concerning self-development, when you demand something, and they respond easily. (P4)

Large-scale manufacturing companies which employ a large number of employees tend to use open office systems to use their ground plans more efficiently. Besides, since the companies are not design-oriented and most of their employees are engineers, designers work in open office spaces in standard-sized tables or cubicles with them. Companies that know the industrial design profession and its needs provide design departments with a fully working environment similar to the design studios from undergraduate education. While open office areas are open to interpersonal and cultural interaction, they also contain other features that may affect working conditions. The physical working space description of another participant who works in an engineer-oriented manufacturing company also provides information on the given subject.

[100] I don't mind working in an open office. I mean, we've been studying in the design studio, with some light music in the back. Here, there might be someone's problem, they might be discussing something. We turn our backs on the corridor. Anyone passing through the hallway can see my computer screen, so they can see what I'm doing. If there's a conversation there, sound can go up. (...) I mean, in the design studio, if I want to sit in the chair, I'll sit in the chair. I sit at the table if I want to. (...) Maybe it would be more comfortable if it is a design office because of the fewer people. Also if all the 70 people in the office were industrial designers, it could be a more comfortable environment. It's a little tense. I need to pay attention to my actions. I've never encountered something like; "*You'll behave like that, that's wrong. You did do that yesterday.*" But you can feel that tension. You shouldn't be so comfortable. They [managers] make you think that. (P1)

In a company that is not design-oriented, industrial designers indicate that their work environment is tenser. Industrial designers have a flexible design environment in school while most of them cannot sustain this environment in their professional lives. Companies' characteristics and dynamics affect the working standards and practices of industrial designers at work. The physical working space of industrial designers who work in companies where there is lack of a strict corporate structure but only a hegemony of bosses also changes. In work life, forming physical working spaces according to an unfamiliar professional or organizational culture affects the work

efficiency and adaptation of industrial designers. Following account shows a participant's comments on the given subject.

[101] You're more comfortable at school, there's a relatively open office system at school, and here there isn't. Here, you're under the supervision of a regular person. There's a chef in your room, and you're under his/her control. It's not comfortable. For example, after sitting in a chair for a long time, I slip through, and that was something not welcomed for a woman. Especially boss hated that and even he fired someone for sitting like that. At work, I'm rendering, then I'm modeling, and I get relaxed... Suddenly, I realize my sitting position and I have to get back together. You have to behave in a way that is considered as usual from the outside, not how comfortable you are. (P10)

In non-design-oriented companies, the lack of familiar professional cultures and its requirements reduces the job satisfaction of industrial designers. In the above example, a very formal company's which is dominated with an unfamiliar professional culture, attitudes and rules cause high stress level on the designer. Thus, the designer is forced to think and look cautiously in the manner in how s/he seems. This situation reduces the sense of belonging to the work environment and also changes the view about the profession negatively.

In the work environment, the given assignments and projects of industrial designers influence and make changes in their physical working space. In the following two accounts, participants compare their physical working spaces in education and work environments.

[102] It [office] doesn't look like a design studio. It isn't messy like a studio but, we don't have the design studio's large tables which is terrible. My desk isn't enough for me; I want to have a big table where I can make drawings on A3 papers, but it's not. So, tables can grow. (...) I wear my headphones, I draw all by myself, I make models, and I exchange ideas. (P2)

[103] Does it [office] look like school? It does but, we can't make models, and it's a place that you need to keep a little cleaner. (...) We have a table that looks like it's from the accounting department, it's more like an officer's table. We can make drawings on it at most. What should I say? It's an environment that should be kept clean and be a little quieter or something. We're careful, so we

weren't that careful at school because this is the kind of a place that is being controlled. You can get a warning from the staff. (P7)

Both participants emphasized the importance of tidiness and cleanliness in the work environment. As the interviews stated, there are no written studio rules in the undergraduate education, nor is there any specific set of rules in work life. Nevertheless, although industrial designers form a more comfortable working environment among their community, they work with many unwritten rules in the companies they work. While making models in education life has an essential place in design studios, in work-life 2D and 3D drawing replace models. So physical working spaces are shaped according to the drawings. At this point, non-design-oriented companies also make use of standard cubicles and table layouts to industrial designers and change the physical working space idea from undergraduate education. In the following two examples, a participant describes an office type that s/he would like to work within.

[104] (...) Have you seen that [company name] had something on the internet? Their office system... They say that "*No one has a personal table instead we have project desks. If you're going to work on a project, you go to that project's desk and work together with others, or if you work alone, we have a fully enclosed room. You go in there, and you work in that room, and nobody's going to bother you.*" I think this is the most ideal; it's very logical because there are times that you want to work in a quiet environment far from everyone. I said that it's nice to work with people but sometimes the noise is so disturbing that you need to be isolated. I want a working environment with both options. (P3)

Flexible working spaces are actively sought out by industrial designers in their work life. This type of office design above matches with the aspects of the industrial design profession and culture that emerged in this research and stated by participants.

As a result, professional culture of industrial design in the physical working spaces depending on the concepts of community and flexibility. According to the interviews, industrial designers passing from design studios to office areas stated that large-scale manufacturing companies did not recognize their profession and the offices were

different from their expectations. In those offices, the professional culture acquired by the industrial designers in their undergraduate education is changing with the various professions they work within their work life and the organizational cultures of the companies they work in.

4.4. Summary

This chapter has presented the analysis of the data obtained from 15 semi-structured interviews with industrial designers. As mentioned in the methodology chapter, the interview guide consists of three sets of questions (see Appendix C – Interview Guide). The first set of questions were asked to explore the perception of industrial design profession by its members, the second one was to investigate industrial design education and the foundation of professional culture, and the last one was to explore industrial design work life and experiences.

In the field research, interviews were conducted with industrial designers from different sectors. However, although there are participants from different sectors, their perception and problems about the profession do not differ much. In general, industrial designers' views on this issue are common. The findings of the research have revealed that industrial designers define their profession in five aspects; "human-centered", "production-based", "creative and abstract", "have critical thinking", "have a broad scope", and "built with experience" (see Section 4.1.1). While making this inference on the profession, the most common method used by industrial designers has been to make comparisons. To define their profession, industrial designers compare themselves with the people they work with, and in this case, these people are mostly engineers and designers from other creative industries. While comparing themselves with engineers, industrial designers expressed the different point of view and different focal points between them. Engineers' product-oriented nature differs their professional culture from industrial designers'.

In the same way, industrial designers state that they and designers from other creative industries both share the same processes, problems, and point of views but, their

outputs are different. With the additional information that was revealed in the education section, these comparisons formed the definition of the industrial design profession. Industrial designers while comparing professions provide information on being an industrial designer in Turkey. It is stated that most manufacturing companies mainly have engineer employees, so their organizational culture is based on their professional culture. Industrial designers have difficulties while adapting to those companies and their organizational culture. Their work hours and salaries are not balanced and low level concerning engineers'.

Industrial designers also revealed their process of choosing to study industrial design profession and their first encounters with the profession in undergraduate education. For most of them, urges to create something is considered as the main reason behind. In Turkey, industrial design departments mostly accept students with mathematics/science degrees from high school. However, these areas' straightforward and technic dynamics draw away some part of the student from the engineering profession. With interest in creative industries, these students choose to study industrial design as, according to them, it was between creative arts and engineering. The first challenge that industrial designers encountered was in the "Basic Design" course. The aspects that were also mentioned in the definition of the profession such as; abstract nature and having long working hours appeared in the professional culture of the industrial design profession. Multidirectional and creativity based nature of profession pushes industrial design to work hard and long at first. But after a while, industrial designers accept this situation and consider it as a part of the requirement of the profession and its culture. According to the interview data, in undergraduate education, "being a community", "flexibility in time and space", and "working for long hours" form the three main elements that create the professional culture of the industrial design profession (see Figure 4.2.). Because industrial designers spend long hours at design studios only with their colleagues, and not able to attend courses because of the design studio courses' high credits, they get used to working in their community. Industrial design education abstract and creative nature creates multiple

answers in projects, and that situation creates the reason of working for long hours. Working for long hours in a clear space with only their community requires certain flexibility.



Figure 4.2. Aspects of Professional Culture in Industrial Design Education

In the “Literature Review” chapter, it was revealed that there are five aspects of cultural forms which are; “interpersonal relations”, “stories”, “language”, “physical space and artifacts”, and “dress and appearance norms” (see Section 2.2). Because in industrial design education, industrial designers studied mostly among in their community, they did not learn other departments’ communities and cultures. As a result, while talking about undergraduate education, they refer to the aspects above indirectly. However, they provided information on these aspects while talking about being a community, have flexibility in time and space, and working for long hours. In the industrial design education part of the interviews, while industrial designers talk about their professional culture and past experiences, they combine interpersonal relations, language, and partly stories. Concerning physical space and artifacts, they emphasized on industrial design studio and its surroundings. Dress and appearance norms were mentioned under the title of flexibility. Additionally, in this part of the interview, industrial designers made comparisons again but, this time they compared their department with other industrial design departments from Turkey and also the ones who participated Erasmus exchange program compared their departments with the ones they studied for a semester or an academic year. However, the findings of these comparisons were not sufficient because of the limited time of their experiences.

In the last set of questions, industrial designers were asked on their work life and experiences. They compared their experiences on the undergraduate education with past and present experiences on their work lives. In this part, industrial designers compared their professional cultures with other professional cultures of the people they work with who mostly are engineers. Participants are all work in large-scale manufacturing companies, so their companies are mostly engineering based companies. This situation caused the organizational culture of the companies they work for start to appear in their professional cultures.

Regarding the aspects of cultural forms, industrial designers referred three of them in general; “interpersonal relations”, “language”, and “physical space and artifacts”. Industrial designers used the terms community and flexibility as the pivotal element while explaining their professional culture and work experiences. In interpersonal relations, industrial designers explained how they socialize, the attitudes of companies and colleagues and the hierarchical dynamics of the companies by comparisons. The problems of being an industrial designer in Turkey which were explained in the Section 4.1.3, explored deeply. It is proved with examples that the problems are mostly caused because of the dominant professional cultures of the companies and their organizational cultures as well. Industrial designers stated that they prefer to work either in the design companies or the manufacturing companies that recognize the design culture. In language, industrial designers explained the formation of common language and jargon at work. Because they mostly spent their time with colleagues in their educational lives, their common language changes when they start to work with people from other professions. They emphasized that their language became simpler because of the communication with blue-collar employees. Also terminologies of the industries they work in making changes in the common language they use. In physical working space, they compared industrial design studios with mostly open office layouts. In this part, collaboration with other professions and the rules and regulations of companies affect and make changes in their professional culture. Industrial

designers while not at all complaining from their office experiences, they still state that they prefer to work in their communities because of their old experiences.

This chapter of the thesis has explained the findings of the semi-structured interviews in detail. The next chapter will introduce and discuss the main conclusions.

CHAPTER 5

CONCLUSIONS

This chapter summarizes the thesis, reveals its main conclusions, and discusses its limitations and further research possibilities. Firstly, the chapter explains the overall the research with the research questions and their answers. Later on, its main conclusions are explored with references from literature review and findings from analysis of the interviews. In the end, the chapter discusses its limitations with the encountered challenges during the research. Finally, possible future studies of the thesis are presented.

5.1. Overview of the Study

In this thesis, first, the background information on the research was presented to provide a better understanding of the scope. Industrial design profession's definition from various sources in the literature was stated. Additionally, information on the industrial designers' professional preferences, profiles, and culture of the manufacturing companies and the importance of the research were all explored in the introduction chapter of the thesis. Problem definition, aim, and scope of the research and research questions were presented and were all related to the gap in the literature.

Following the introduction, the literature review was presented. Focal points of the research; culture, professional culture, and organizational culture were all explored and were compared with examples from various sources from literature to improve an understanding of the given subject. Later on, cultural forms in professions and organizations were stated under the guidance of Beyer and Trice's (1987) work. Cultural forms in professions and organizations were reorganized according to the more updated sources form literature. However, because there are only a few sources

in the industrial design literature, sources from different fields were reviewed such as; creative industries, education, management, and accounting.

Next, the research design was explained. The research aims to explore what are the impacts of the professional culture that industrial designers acquire in their undergraduate education on their experiences in professional life. To do so, a qualitative approach was adopted; and semi-structured interviews were selected as the research method. 15 semi-structured interviews were conducted with industrial designers working in large scale manufacturing companies.

The findings of the conducted interviews were analyzed in the fourth chapter. Industrial designers' points of view on their profession, educational lives, and professional experiences were presented in the analyze chapter.

Finally, in the last chapter, three main conclusions of the thesis are presented. Limitations and possible further researches are discussed.

5.2. Main Conclusions

This thesis investigates the reflections of the professional culture of industrial designers that they acquired in undergraduate education, in their professional lives. In literature; rites, rituals, myths, and saga are considered as some of the multiple forms of culture in professions and organizations (Beyer and Trice, 1987). However, in this thesis, these forms of culture are rearranged with more detailed research to have a better understanding of the professional culture of industrial design. According to this arrangement, culture becomes visible in five forms in professions and organizations; stories, language, social relations, physical space and artifacts, and dress and appearance norms.

Stories are considered one of the five cultural forms in professions and organizations. They function in three ways; firstly, they transmit culture through generations (Martin, Feldman, Hatch, and Sitkin, 1983). Secondly, they describe a profession's or organization's culture to the outsiders who are the unfamiliar people to it (Martin et

al., 1983; Kaygan, 2014; Abdullah, Beh, Tahir, Ani, and Tawil, 2011). Lastly, stories enable cultural changes within the organization (Hansen, Kahnweiler, and Wilensky, 1994; Martin et al., 1983). The findings of the thesis reveal that; stories are essential in both the educational and professional lives of industrial designers. Graduates of the same university's department of industrial design mentioned similar stories. As specified in Section 2.1.2., every profession has its own professional culture (Dryburgh, 1999), and every one of them has its personal, subjective stories. These stories demonstrate the differences between educational establishments.

Language is a way of expressing culture in professions and organizations just like stories. According to the literature, they provide professional vocabulary and jargon (Alvesson and Sveningsson, 2015; Dannels, 2005; Kaygan and Demir, 2017; Houghton, 1987; Eckert, Cross, and Johnson, 2000; Belkaoui, 1980) and they implicit hierarchical relations within an organization (Morisawa, 2015; Johansson and Woodilla, 2008; van Wijk and Finchilescu, 2008; Morand, 1995; Morand, 1996). The findings of the thesis revealed that industrial designers use a common language among their community starting from undergraduate education. They all use similar catchphrases or give a similar meaning to the terms among themselves no matter to the differences in the universities. However, just like in the stories, these catchphrases, terms, or language are all subjective, and according to the literature, every profession has them on their own professional culture.

Social relations are another form of culture from the literature review. They demonstrate culture in both formal relations (Alvesson, 2012; Alvesson and Sveningsson, 2015; Sutton and Hargadon, 1996) and informal relations (Trice and Beyer, 1984; Dannels, 2005; Craig and Zimring, 2000; Chiu, 2002; Kaygan and Demir, 2017; Datta, 2007; Özkalp, Kirel, Sungur, and Cengiz, 2006) among members of a profession or an organization. They could also be visible in organization's rites, rituals, and ceremonies (Trice and Beyer, 1984; Beyer and Trice, 1987; Knuf, 1989; Dannels, 2005; Hanks, n.d.). Social relations of industrial designers are explored in Section 4.3.1. of the thesis. Regarding professional life, the findings of the research

reveal the importance of being a community in interpersonal relations of industrial designers. Social relations shape culture both in educational life and professional life. Because this topic is considered as one of the main conclusions, it will be presented in the following two sections.

Another cultural form in professions and organizations are physical space and artifacts. In literature, both of these terms are considered as a whole. Well defined spaces with close boundaries within an organization and the artifacts within are the points where culture becomes evident. Office spaces (Vischer, 1999; Kaarlela-Tuomaala, Helenius, Keskinen, and Hongisto, 2009; Vyas, van der Veer, and Nijholt, 2013), design studios (Abdullah et al., 2011; Vyas et al., 2013; Kaygan, 2018), hair salons (Shortt, 2015), and sports centers (Mair, 2009; Mills and Hoeber, 2013) are some of the physical spaces that demonstrate culture of a well-defined group of people or an organization. Physical space and artifacts are essential points in both education and professional lives of industrial designers. The findings of the thesis reveal that industrial designers' professional culture's aspects of being a community and having flexibility both are started to appear in design studios. In their professional lives, industrial designers seek working environments just like their design studios. Just like social relations, physical space and artifacts cover an essential aspect of professional culture, and they will be presented in the following two sections as parts of the main conclusions.

Lastly, dress and appearance norms are considered cultural forms in professions and organizations. In literature, dress and appearance norms present power relations (Rafaeli and Pratt, 1993; van Wijk and Finchilescu, 2008) and they define and symbolize its profession or organization (Rafaeli and Pratt, 1993; Pratt and Rafaeli, 1997; Dellinger, 2002; Kaygan, 2013; Jabbal, 2014; Alvesson and Sveningsson, 2015). According to the findings of the thesis, dress and appearance norms are some parts of the flexibility aspect of the professional culture of industrial design and they will be explored in the following sections of the chapter.

Within the scope of the thesis, one of the most important findings is that educational and professional lives of industrial designers are intersected with each other. In the context of professional culture and professional experiences of industrial designers, the impact of this finding reveals in three main conclusions regarding the importance of being a community, the importance of having flexibility in space and time, and the perception of industrial design profession.

5.2.1. Importance of Being a Community

The first main conclusion of the research provided detailed information on the community of industrial designers within its professional culture. As explored deeply in Section 4.2.3.1., industrial designers' community is an essential point where professional culture becomes visible.

Industrial design is a relatively new profession; it has fewer students than most other departments such as; engineering and management. Low student number creates a closeness among students. Practice-based industrial design studio courses are longer than regular lecture-based courses, so this small group of students spends most of their times studying for long hours and learning from each other in design studios. As mentioned in Section 4.2.2., abstract nature of industrial design education creates a challenge for students. Not knowing what to do in assignments pushes students to experiment with trial and error for long hours in their design studios where they also socialize with each other and because of the high credits of the design studios and working for long hours, they are mostly spending time with their fellow industrial design students. That situation strengthens the social bonds among industrial designers and sustains a strong community in undergraduate education. Foundation of the professional culture is formed in the undergraduate education.

In professional life, industrial designers prefer to work with their community. However, unlike the industrial design education, in manufacturing companies, industrial designers start to interact and collaborate with much more people from different professions. While working with these people from different professions,

their own professional culture becomes evident. As mentioned in the previous chapters, manufacturing companies are mostly led by engineers and have an organizational culture based on the engineering profession and its culture (Kim and Lee, 2014). Both professions have very different cultures, and they do not match (Johnson, Koh, and Killough, 2009). Both of them have different natures, and different professional vocabulary and jargon, so communication and collaboration are not similar to the one in the industrial design education. These differences cause adaptation problems in industrial designers. While some of them adapt to the culture and develop new aspects of their professional culture, the others prefer to work in design offices where they mostly work with specifically their colleagues. So, findings of the analysis reveal that industrial designers are accustomed to working within their communities in their educational lives. The community aspect of their professional culture starts to appear in their educational lives and its importance continues in their professional lives.

5.2.2. Importance of Having Flexibility in Space and Time

Having flexibility in space and time is considered to be the second conclusion of the thesis. Just like the community, flexibility is also an essential aspect of the professional culture of industrial designers, and it also is formed in undergraduate education (see Section 4.2.3.2.).

As mentioned in the previous section, industrial designers study for long hours together as a small community mostly in design studios. Design studios are only for industrial designers and not accessible for other departments' students like libraries. In a way, being a community brings having flexibility in space and time. According to the interview data, industrial designers spend many days and nights in their design studios in their communities for multiple reasons; not knowing what to do, learning from others, and difficulties to make models or drawing at home are some of them. Because of these challenges in their education, they see their design studios as their "homes." They do not just study in studios but, they also socialize, watch movies, eat,

and sleep. That is why they are flexible in space and time. Their physical surroundings provide them a sense of belonging. Their dresses and appearances change in time since they do not have a regular study plan or hours. In undergraduate education, industrial designers mostly work on models and drawings which are messy activities that require certain space. Dress and appearance norms shape according to their education. Then, flexibility in dresses becomes a part of their professional culture. People from other departments have seen the nature and working conditions of industrial designers and recognize their professional culture in undergraduate education.

Flexibility continues to appear in the professional lives of industrial designers. The findings of the thesis reveal that industrial designers seek the flexibility from undergraduate education in their professional lives. Manufacturing companies do not have flexible working environments like design studios. This difference in the physical space also creates an adaptation problem in the adaptation of industrial designers to the professional life. However, companies who have experiences with industrial designers know the flexibility aspect of the industrial design's professional culture and provide a slightly flexible working environment to the industrial designers. In professional life, dress and appearance norms of industrial designers are also important concerning professional life. When compare departments of industrial design and others, there is a significant difference in dress and appearance norms. Industrial designers state that while they could dress more freely, other departments like accounting, or marketing dress more formal than industrial designers. In the findings, it is explained that companies are aware of the difference between the works and cultures of the different professions and they try to sustain an appropriate working environment to the industrial designers within the organization's rules and regulations.

Both of these main conclusions and all of the findings reveal that industrial designers' could not separate their educational life experiences with professional life experiences regarding their professional culture. The foundation of professional culture laid in the educational life. Industrial designers' experiences in undergraduate education shape their professional culture, and in the professional life, their professional culture

develops according to the organizational cultures of the companies and professional cultures of the other professions that they work together.

5.2.3. Perception of the Industrial Design Profession

The last conclusion of the thesis is based on the understanding of the industrial design profession. As explored deeply in the Section 4.1.1., while defining their profession, industrial designers commonly stated its five main features which are; human-centered, production-based, creative and abstract, have critical thinking, have a broad scope, and built with experiences. Profession's relation with product, system, and service design or enhancements, as well as its relationship with the human scale, production, and market, were all mentioned under these five features.

Participants' perception of industrial design profession matches with the WDO's (n.d.) renewed definition of industrial design. Both definitions mention industrial design's relation with economy and innovations, its problem-solving nature, and its goal to provide a better quality of life to people. However, when the WDO's (n.d.) extended version of its industrial design definition is revealed, industrial design has also some characteristics that participants did not mention in the interviews. According to the findings, industrial designers are aware of the importance of innovation, technology, research, business, and customers in their profession. Additionally, in the extended edition of the profession, the effects of economic, social, and environmental spheres of the profession are also mentioned. Although the economic impact of the profession was commonly referenced in the interviews, participants did not regard the social and environmental effects of the profession as strong as the economic effects.

As mentioned in previous chapters, the sample group of the thesis consists of industrial designers who work in the manufacturing companies. Cultural differences between industrial designers and the manufacturing companies are considered crucial in terms of professional and organizational culture. The difference mentioned above might have created because of a cultural mismatch or a gap between industrial design education and professional life in the manufacturing companies. Different focuses and

cultures approach different characteristics of the professions. That might be the reason for this difference and might be valuable as further research.

5.3. Limitations of the Research

As described in detail in previous chapters, semi-structured interviews were chosen to be used as the sole data collection method. There were small challenges in this process; however, there was a relatively more significant challenge which becomes the limitation of the research. Since the research was within the scope of a master's thesis, it was decided to conduct interviews with between 15 to 20 participants. To achieve the aim of the research, several selection criteria were used in the formation of the sample group (see Section 3.1.1.1.). As mentioned, participants needed to have at least a year of work experience in large-scale manufacturing companies, and they just had to graduate from university between two and six years ago.

After interviewing and analyzing processes, it was revealed that this criterion created a smaller sample group due to the finding that newly graduated industrial designers prefer to work in design offices rather than manufacturing companies. According to the findings, industrial designers' professional culture does not match with the organizational culture of the manufacturing companies because of the engineering culture oriented nature of the manufacturing companies. Additionally, at the time of the interviews, industrial designers who were working in the manufacturing companies were all senior designers and naturally did not match with the age criteria of the participation to the research. So, these challenges in the sample group created the limitations of the research.

5.4. Recommendations for Further Researchs

This thesis was mainly focused on to explore the relation between the professional culture of industrial designers and their experiences in professional life. To do so, semi-structured interviews were conducted with industrial designers who were working in large scaled manufacturing companies. Industrial designers' perceptions

and point of views on their profession, education, and professional lives were all revealed in this thesis (see Chapter 4 – Analysis of the Interviews). Regarding this, as future research, I believe, exploring organizations' and people from other disciplines' points of view on industrial designers and their professional culture would be relevant regarding design and manufacturing processes in the industrial design profession. This type of further research could expand my current thesis by providing additional information from the people who are not familiar with the industrial design profession and culture.

Additionally, as this research was conducted within the scope of a master's thesis, 15 different industrial designers were interviewed. As further research, interviews could be performed with industrial design students and could be continued with the same students in their professional lives. Thus, participants could remember every detail of their experiences. In a longitudinal and more detailed further research, multiple interviews with the same participants over the years could be conducted and also observations in educational and profession live could be made.

Finally, all of the participants in the research have received their bachelor's degree from universities in Turkey, and they were people who were continuing their professional lives in Turkey. Interaction with people from other countries could benefit the research by providing information on different industrial design education and work experiences. To have a more detailed understanding on the professional culture, I think, observing how the industrial design profession is perceived in other countries and how the industrial designers have moved to professional life after their undergraduate education could be helpful and could be studied in the future.

REFERENCES

- Abdullah, N. A. G., Beh, S. C., Tahir, M. M., Ani, A. C., & Tawil, N. M. (2011). Architecture design studio culture and learning spaces: a holistic approach to the design and planning of learning facilities. *Procedia-Social and Behavioral Sciences*, 15, 27-32.
- Akbulut, D. (2014). Tasarımda Temel Etkileşim: Temel Tasarım Eğitiminde Bütünleşik Ortak Zemin. *Sanat ve Tasarım Dergisi*, 1(13).
- Alvesson, M. (2012). *Understanding organizational culture*. Sage.
- Alvesson, M., & Sveningsson, S. (2015). *Changing organizational culture: Cultural change work in progress*. Routledge.
- Belkaoui, A. (1980). The interprofessional linguistic communication of accounting concepts: an experiment in sociolinguistics. *Journal of Accounting Research*, 362-374.
- Beyer, J. M., & Trice, H. M. (1987). How an organization's rites reveal its culture. *Organizational Dynamics*, 15(4), 5-24.
- Bloor, G., & Dawson, P. (1994). Understanding professional culture in organizational context. *Organization Studies*, 15(2), 275-295.
- Chiu, M. L. (2002). An organizational view of design communication in design collaboration. *Design studies*, 23(2), 187-210.
- Cohen, D. V. (1993). Creating and maintaining ethical work climates: Anomie in the workplace and implications for managing change. *Business Ethics Quarterly*, 3(4), 343- 358.
- Costanza, D. P., Blacksmith, N., Coats, M. R., Severt, J. B., & DeCostanza, A. H. (2016). The effect of adaptive organizational culture on long-term survival. *Journal of Business and Psychology*, 31(3), 361-381.
- Craig, D. L., & Zimring, C. (2000). Supporting collaborative design groups as design communities. *Design Studies*, 21(2), 187-204.
- Dannels, D. P. (2005). Performing tribal rituals: A genre analysis of “crits” in design studios. *Communication Education*, 54(2), 136-160.

- Datta, A. (2007). Gender and learning in the design studio. *Journal for Education in the Built Environment*, 2(2), 21-35.
- Dellinger, K. (2002). Wearing gender and sexuality “on your sleeve”: Dress norms and the importance of occupational and organizational culture at work. *Gender Issues*, 20(1), 3-25.
- Dryburgh, H. (1999). WORK HARD, PLAY HARD Women and Professionalization in Engineering—Adapting to the Culture. *Gender & Society*, 13(5), 664-682.
- Eckert, C. M., Cross, N., & Johnson, J. H. (2000). Intelligent support for communication in design teams: garment shape specifications in the knitwear industry. *Design studies*, 21(1), 99-112.
- Given, L. M. (Ed.). (2008). *The Sage encyclopedia of qualitative research methods* (Vols. 1-2). Sage Publications.
- Glesne, C. (2011). *Becoming Qualitative Researchers: An Introduction* (4th Ed.). Boston, MA: Pearson Education.
- Hanks, G. (n.d.). Examples of Company Rites & Rituals. Retrieved January 21, 2018, from <http://smallbusiness.chron.com/examples-company-rites-rituals-66258.html>
- Hansen, C. D., Kahnweiler, W. M., & Wilensky, A. S. (1994). Human resource development as an occupational culture through organizational stories. *Human Resource Development Quarterly*, 5(3), 253-268.
- Hasdoğan, G. (2011). Türkiye'de endüstriyel tasarım sektörünün gelişme trendleri ve İstanbul'un konumu [Development trends of the industrial design sector in Turkey and the status of Istanbul]. In *Yaratıcı İstanbul - Yaratıcı Sektörler ve Kent*, edited by Z. Enlil and Y. Evren, 57–86. İstanbul: İstanbul Bilgi Üniversitesi Yayımları.
- Hertenstein, J. H., Platt, M. B., and Veryzer, R. W. (2005). The impact of industrial design effectiveness on corporate financial performance. *Journal of Product Innovation Management*, 22(1), 3-21.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative science quarterly*, 286-316.
- Hofstede, G. (1998). Attitudes, values and organizational culture: Disentangling the concepts. *Organization studies*, 19(3), 477-493.

- Hollifield, C. A., Kosicki, G. M., & Becker, L. B. (2001). Organizational vs. professional culture in the newsroom: Television news directors' and newspaper editors' hiring decisions. *Journal of Broadcasting & Electronic Media*, 45(1), 92-117.
- Houghton, K. A. (1987). The development of meaning in accounting: An intertemporal study. *Accounting & Finance*, 27(2), 25-40.
- Jabbal, A. (2014). Medical student dress code in the orthopaedic out-patient department. *The clinical teacher*, 11(7), 507-511.
- Johnson, S. D., Koh, H. C., & Killough, L. N. (2009). Organizational and occupational culture and the perception of managerial accounting terms: an exploratory study using perceptual mapping techniques. *Contemporary Management Research*, 5(4).
- Johansson, U., & Woodilla, J. (2008). Designers dancing within hierarchies: the importance of non-hierarchical power for design integration and implementation. *The Design Journal*, 11(2), 95-117.
- Kaarlela-Tuomaala, A., Helenius, R., Keskinen, E., & Hongisto, V. (2009). Effects of acoustic environment on work in private office rooms and open-plan offices-longitudinal study during relocation. *Ergonomics*, 52(11), 1423-1444.
- Kallio, T. J., Kallio, K. M., & Blomberg, A. J. (2015). Physical space, culture and organisational creativity-a longitudinal study. *Facilities*, 33(5/6), 389-411.
- Kaygan, P. (2013). Understanding the Role of Organizations in the Occupational Status of Industrial Designers through the Exploration of Dress and Appearance Norms. *METU Journal of the Faculty of Architecture*, 30(2), 35-53.
- Kaygan, P. (2014). "The Shop Floor is not for Every Woman": Narratives on Women Industrial Designers' Relationships with Shop Floor Workers. *International Journal of Gender, Science and Technology*, 6(1), 55-80.
- Kaygan, P. & Demir, Ö. (2017). Learning about others: Developing an interdisciplinary approach in design education. *Design Management Academy Conference 2017*, 6-9 June 2017.
- Kaygan, P. (2018). Collaboration and Self-Exploitation in the Shared Discourse of Profession among Industrial Design Students. *Anadolu University Journal of Art & Design*, 8(1), 2-19.

- Kim, K., and Lee, K. P. (2014, June). Industrial designers and engineering designers; causes of conflicts, resolving strategies, and perceived image of each other. *Design Research Society Conference, Umeå, Sweden*.
- King, N. (2012). Doing Template Analysis. In G. Symon & C. Cassell (Eds.), *Qualitative Organizational Research: Core Methods and Current Challenges* (pp. 426-450). Sage.
- Knuf, J. (1989). Where cultures meet: Ritual code and organizational boundary management. *Research on Language & Social Interaction*, 23(1-4), 109-138.
- Korkut, F., and Hasdogan, G. (1998). The profession of industrial design in Turkey: the correspondence between education and practice. *IDATER 1998 Conference, Loughborough: Loughborough University*.
- Mair, H. (2009). Club life: Third place and shared leisure in rural Canada. *Leisure Sciences*, 31(5), 450-465.
- Martin, J., Feldman, M., Hatch, M., & Sitkin, S. (1983). The Uniqueness Paradox in Organizational Stories. *Administrative Science Quarterly*, 28(3), 438-453.
- Matthews, B., & Ross, L. (2010). *Research methods: a practical guide for the social sciences*. New York, NY: Pearson Longman, 2010.
- Merriam, S. B., & Tisdell, E. J. (2016). *Qualitative research: A guide to design and implementation* (4th Ed.). San Francisco, CA: Jossey-Bass.
- Miles, M. B., Huberman, A. M., & Saldaña, J. (2014). *Qualitative data analysis: A method sourcebook* (3rd Ed.). CA, US: Sage Publications.
- Mills, C., & Hoeber, L. (2013). Exploring organizational culture through artifacts in a community figure skating club. *Journal of Sport Management*, 27(6), 482-496.
- Morand, D. (1995). Forms of address and status leveling in organizations. *Business Horizons*, 38(6), 34-39.
- Morand, D. (1996). What's in a name?: An exploration of the social dynamics of forms of address in organizations. *Management Communication Quarterly*, 9(4), 422-451.
- Morisawa, T. (2015). Managing the unmanageable: Emotional labour and creative hierarchy in the Japanese animation industry. *Ethnography*, 16(2), 262-284.

- Naicker, N. (2008). *Organizational culture and employee commitment: A case study* (Doctoral dissertation).
- Özkalp, E., Kirel, C., Sungur, Z., & Cengiz, A. A. (2006). The importance of mentoring on organizational socialization of the research assistants in Anadolu University. *Anadolu University Journal of Social Sciences*, 6(2), 55-70.
- Palos, R., & Veres Stancovici, V. (2016). Learning in organization. *Learning Organization*, 23(1), 2-22.
- Pratt, M. G., & Rafaeli, A. (1997). Organizational dress as a symbol of multilayered social identities. *Academy of management journal*, 40(4), 862-898.
- Rafaeli, A., & Pratt, M. G. (1993). Tailored meanings: On the meaning and impact of organizational dress. *Academy of Management Review*, 18(1), 32-55.
- Rai, R. K. (2011). Knowledge management and organizational culture: a theoretical integrative framework. *Journal of Knowledge Management*, 15(5), 779-801.
- Schein, E. H. (2010). *Organizational culture and leadership* (Vol. 2). John Wiley & Sons.
- Schmidt K, Wagner I (2002) Coordinative artefacts in architectural practice. In: Blay-Fornarino M et al. (eds) *Proceedings of the fifth international conference on the design of cooperative systems (COOP 2002)*. IOS Press, Amsterdam, pp 257–274.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual review of psychology*, 64, 361-388.
- Shortt, H. (2015). Liminality, space and the importance of ‘transitory dwelling places’ at work. *Human Relations*, 68(4), 633-658.
- SkillMaker (2013). Formal Meeting. (August, 2013). Retrieved January 22, 2018, from <http://www.skillmaker.edu.au/formal-meeting>
- Sun, S. (2009). Organizational culture and its themes. *International Journal of Business and Management*, 3(12), 137-141.
- Sutton, R. I., & Hargadon, A. (1996). Brainstorming groups in context: Effectiveness in a product design firm. *Administrative Science Quarterly*, 685-718.

- Tovey, M. (1997). Styling and design: intuition and analysis in industrial design. *Design studies*, 18(1), 5-31.
- Trice, H. M., & Beyer, J. M. (1984). Studying organizational cultures through rites and ceremonials. *Academy of management review*, 9(4), 653-669.
- Vischer, J. (1999). Will this open space work?. *Harvard Business Review*, 77(3), 28-40.
- Vyas, D. (2009, April). Artful surfaces in design practices. In *CHI'09 Extended Abstracts on Human Factors in Computing Systems* (pp. 2691-2694). ACM.
- Vyas, D., van der Veer, G., & Nijholt, A. (2013). Creative practices in the design studio culture: collaboration and communication. *Cognition, Technology & Work*, 15(4), 415-443.
- van Wijk, C. H., & Finchilescu, G. (2008). Symbols of organisational culture: describing and prescribing gender integration of navy ships. *Journal of gender studies*, 17(3), 237-249.
- WDO. (n.d.). Definition of Industrial Design. Retrieved January 3, 2019, from <http://wdo.org/about/definiton/>
- YÖK. (n.d.). Lisans Tercih Sihirbazı. Retrieved December 24, 2018, from <https://yokatlas.yok.gov.tr/tercih-sihirbazi-t4-tablo.php?p=say>

APPENDICES

A. INFORMED CONSENT FORM (TURKISH)

Araştırmacı:

Doğan Can Hatunoğlu
Yüksek Lisans, Endüstri Ürünleri Tasarımı
Orta Doğu Teknik Üniversitesi

Tez Konusu:

Endüstri Ürünleri Tasarımcılarının Meslek Kültürü ve Mesleki Yaşamdaki Deneyimleri Arasındaki İlişki

Çalışmanın Amacı

Bu çalışmanın amacı; endüstri ürünleri tasarımcılarının lisans eğitimlerinde edindikleri meslek kültürünün, profesyonel yaşamlarındaki deneyimleri üzerine etkilerinin neler olduğunu keşfetmektir. Çalışma, ilk olarak endüstri ürünleri tasarımcılarının mesleklerini nasıl tanımladıklarını araştırmak ile başlayacaktır. Daha sonra çalışma, çeşitli okullarda edinilen meslek kültürünün profesyonel ortamda (kurum içi ve kurumlar arası düzeyde) yarattığı iletişim farklılıklarını, işbirliği ve grup dinamiklerini araştırmayı hedeflemektedir.

Araştırma Yöntemi

Araştırma tek aşamadan oluşmaktadır. Araştırmacı, üniversitelerin Endüstri Ürünleri Tasarımı bölümlerinden en az 2, en fazla 6 yıl önce mezun olmuş ve en az 1 yıllık iş deneyimine sahip gönüllüler ile görüşmeler yapacaktır. Görüşmelerde sorulacak sorular katılımcının endüstri ürünleri tasarımcı lisans eğitimi ve iş yaşantısındaki deneyimleri hakkındadır. Katılımcının mesleki eğitiminde edindiği meslek kültürünün, katılımcının iş yaşantısındaki deneyimleriyle ilişkileri inceleneciktir.

Görüşmeler esnasında konuşulanları daha sonra hatırlayabilmek için ses kaydı alınacaktır. Ses kayıtları analiz edilerek anonimleştirildikten sonra yalnızca bu yüksek lisans tezinde ve akademik amaçlı yaynlarda kullanılacaktır. Bunların dışında başka amaçlarla kullanılmayacak olup, araştırmacı dışında kişilerle paylaşılmayacaktır. Elde edilen bilgiler kullanılırken katılımcıların kimlikleri ve verdikleri bilgiler (kurum, firma, isim vb.) gizli tutulacak, kişilerin verdikleri bilgilerle kimliklerinin eşleştirilmemesine özen gösterilecektir. Görüşmelerin yeri ve zamanı katılımcı ve araştırmacı tarafından, katılımcıların uygun olduğu gün ve saatler göz önünde bulundurularak belirlenecektir. Görüşmelerin uzunluğu katılımcının ayıabileceği zamana göre ayarlanacak, ancak tahmini olarak 1 saat civarında sürecektir.

Bu çalışmaya katılmak tamamen gönüllülük esasına dayanmaktadır. Bu formu okuyup onaylamanız, araştırmaya katılmayı kabul ettiğiniz anlamına gelir. Ancak, çalışmaya katılmama veya katıldıkten sonra herhangi bir anda vazgeçme hakkına sahipsiniz. Çalışmaya katılmayı kabul ettiğiniz takdirde izin formunu karşılıklı olarak imzalayacağınız ve birer kopyasını saklayacağınız.

Bu araştırma, Orta Doğu Teknik Üniversitesi Endüstri Ürünleri Tasarımı bölümünde yürütülmekte olan bir yüksek lisans tezi kapsamındadır. Araştırma süresince herhangi bir şikayetiniz olursa, bu çalışmanın danışmanı olan Yard. Doç. Dr. Pınar Kaygan ile iletişime geçebilirsiniz. İletişim bilgilerini aşağıda bulabilirsiniz.

Zaman ayırdığınız için teşekkür ederim.

Doğan Can Hatunoğlu (Yüksek Lisans Öğrencisi)

canhatunoglu@gmail.com

+90 (536) 365 99 99

Tez Danışmanı:

Yard. Doç. Dr. Pınar Kaygan

pkaygan@metu.edu.tr

Yukarıda yer alan ve araştırmadan önce verilmesi gereken bilgileri okudum ve çalışmanın kapsamını ve amacını, gönüllü olarak üzerime düşen sorumlulukları anladım. Çalışma hakkında yazılı ve sözlü açıklama aşağıda adı belirtilen araştırmacı tarafından yapıldı. Görüşmeler sırasında alınan ses kayıtları ancak anonimleştirildikten sonra ve yalnızca bu yüksek lisans tezinde ve akademik amaçlı yaynlarda kullanılacak. Bunların dışında, katılımcının yazılı izni olmadan başka hiç bir amaç için kullanılmayacak ve araştırmacı ve tarafım dışında kimsenin orijinal kayıtlara erişimi olmayacak. Kimliğim ve verdiğim tüm bilgiler gizli tutulacak ve belirli anonimleştirme süreçleri doğrultusunda tarafımla eşleştirilemez ve ilişkilendirilemez hale getirilecek. Bu koşullarda söz konusu araştırmaya kendi isteğimle katılmayı kabul ediyorum.

Katılımcının Adı Soyadı

Tarih

Katılımcının İmzası

___ / ___ / ___

Araştırmacıının Adı Soyadı

Tarih

Araştırmacıının İmzası

___ / ___ / ___

B. INFORMED CONSENT FORM (ENGLISH)

Researcher:

Doğan Can Hatunoğlu
Master of Science, Industrial Design
Middle East Technical University

Thesis Subject:

The Relation between the Professional Culture of Industrial Designers and Their Experiences in Professional Life

Purpose of the Study

The aim of this study is to explore what are the impacts of professional culture that industrial designers acquire in their undergraduate education on their experiences in professional life. The study will begin with investigating how industrial designers have identified their professions and their professional cultures. Later, the study aims to explore the communication differences, collaboration and group dynamics created by different professional cultures acquired in various schools and universities in the professional setting.

Method of the Study

The study consists of a single phase. The researcher will interview the volunteers who have graduated from the Industrial Design departments of the universities for at least 2, at most 6 years and have at least 1 year of work experience. Questions to be asked at the interviews are about the participant's experience in industrial design undergraduate education and industrial design work experience. The relation between the professional cultures acquired in participants' undergraduate education and participants' experiences in the work life will be examined.

Sound recordings will be taken in order to remember the conversations later. Once sound recordings are analyzed and anonymized, they will only be used in this master's

thesis and in academic publications. They will not be used for any purpose other than these and will not be shared with anyone other than the researcher. While using the obtained information, the identity of the participants and the information they give (institution, firm, name etc.) will be kept confidential and it will be paid attention not to match the identities with their information. The location and the time of the interviews will be determined by the participant and the researcher, taking into account days and times the participants are eligible. The length of the interviews will be adjusted according to the time the participant is able to dismiss, but it will take an estimated 1 hour.

Participation in this study is entirely voluntary. By reading and confirming this form, you agree to participate in the study. However, you have the right to not participate in the study or to give up any time after you join. If you agree to participate in the study, we will sign the authorization form mutually and keep a copy of it.

This study is a part of a graduate thesis under the direction of Middle East Technical University department of Industrial Design. If you have any complaints during the course of the study, please contact Assist. Prof. Dr. Pınar Kaygan. You can find contact information below.

Thank you for your time.

Doğan Can Hatunoğlu (Graduate Student)

canhatunoglu@gmail.com

+90 (536) 365 99 99

Thesis Advisor:

Assist. Prof. Dr. Pınar Kaygan

pkaygan@metu.edu.tr

I have read the information given above, which should be given before the research, and I have understood the scope and purpose of the study and I have also understood the responsibility on me as a volunteer. Written and oral explanations about the study were made by the researcher named below. Voice recordings taken during the interviews will only be used after anonymization and only in this master's thesis and in academic publications. Apart from these, it will not be used for any other purpose without the written consent of the participant, and no one other than the researcher and myself will have access to the original records. All information I and my ID will be kept confidential and cannot be paired and associated with me in the direction of certain anonymization processes. I agree to voluntarily participate in the research under these circumstances.

Participant's Name and Surname

Date

Participant's Signature

__ / __ / __

Researcher's Name and Surname

Date

Researcher's Signature

__ / __ / __

C. INTERVIEW GUIDE (TURKISH)

Meslek hakkında

- Endüstri ürünleri tasarımcısını nasıl tanımlarsınız?
- Sizce endüstri ürünleri tasarımcısı diğer (yaratıcı veya değil) meslek gruplarından nasıl ayrılır?
- Neden endüstri ürünleri tasarımcısı olmak istediniz? Üniversiteye başlamadan önce bu meslek hakkındaki düşünceleriniz nelerdi?
- Üniversiteye başladıkten sonra (eğitim hayatı boyunca) bu düşünceleriniz değişti mi? Ne yönde ve ne kadar? Şu an mesleğinizi yapıyor olmaktan memnun musunuz?

Eğitim hakkında

- Lisans yıllarınıza dair neler hatırlıyorsunuz? (Olumlu ya da olumsuz tarafları)
- Tasarımcı olmayı bu süreçte nasıl ve kimlerden öğrendiniz? Etrafindaki kişiler tasarımcıyı nasıl anlatıyordu?
- Lisanslarınızda sıkça karşılaşığınız birtakım terimler, söz kalıpları veya hitap biçimleri var mıydı?
- Bölümünüz ya da mesleğiniz hakkında, üst sınıflarda okuyan öğrencilerden veya akademisyenlerden duyduğunuz en etkili hikayeler nelerdi?
- Okuduğunuz okulda tasarımcının nasıl görünmesi gereği hakkında genel bir görüş var mıydı?
- Lisans eğitimi boyunca eğitim mekanı olan tasarım stüdyosu hakkında neler söyleyebilirsiniz (yazılı/sözlü kurallar, mekan algısı, kullanım biçimi, ritüeller)?
- Eğitim boyunca akademisyenler ve asistanlar ile iletişiminiz hakkında neler söyleyebilirsiniz? Özellikle etkilendiginiz birisi var mıydı? Neden ve nasıl?
- Eğitim yıllarda diğer bölümülerin ya da okulların öğrencilerinden farklı olarak böyle yapardık, şuraya giderdik diye anlatabileceğiniz bir şeyler var mı?
- Eğitim yıllarda başka bölümlerden kişilerle beraber çalışınız mı, çalıştışanız kendinizden farklı olarak ne gibi özellikler gördünüz?
- Eğitim aldığıınız kurumun size aşıladığı meslek kültürü hakkında neler düşünüyorsunuz?
- Diğer okullardaki endüstri ürünleri tasarımcıları bölümleri hakkında neler düşünüyorsunuz, kendinizi onlardan farklı görüyor musunuz?

İş hayatı hakkında

- Mezun olunca ne yaptınız? (Nerelerde iş aradınız, aradınız mı? Nasıl bir kariyer düşündünüz?)
- Şu ana kadar çalışmış olduğunuz şirket veya şirketlerin kurumsal kültürü hakkında neler söyleyebilirsiniz?
- Çalışma ortamınızda daha çok bireysel mi çalışıyorsunuz yoksa grup çalışması daha mı etkin bir rol oynuyor?
 - Takımda kimler yer alıyor? Bu kişiler hangi okul/alanlardan?
 - Bu kişilerle bakış açılarınızda farklılıklar var mı? Varsa nasıl? Bunların iş deneyiminize nasıl etkisi oluyor?
- Az önce size eğitim ortamında edindiğiniz meslek kültürüne dair bazı sorular sormuştum. Örneğin, tasarımcı nasıl görünür, nasıl konuşur, nasıl sosyallaşır vb. Bunları bir de çalışığınızı kurumdaki yaygın kültür bağlamında düşünseniz;
 - Çalışma ortamınızda sıkılıkla kullandığınız sözcükler veya hitap biçimleri nelerdir ve bunları okul ortamında kullandığınız sözcükler veya hitap biçimleriyle nasıl karşılaştırırsınız?
 - Çalışma ortamında nasıl bir dil kullanılır? Sizin için tanındık mı, yabancı mı?
 - İş yerinde nasıl giyinirsiniz, okul yıllarından farklı mı? Neden?
 - Nasıl bir çalışma ortamınız var? (Okuldaki stüdyo ortamına benziyor mu?)
 - İş arkadaşlarınızla ilişkileriniz nasıl? Sosyal bir ortam var mı? Çalışığınız bölüme veya kuruma özel sosyal etkinlikler var mı? Varsa siz bu etkinlikler hakkında ne düşünüyorsunuz?
 - Yöneticilerinizle ilişkiniz nasıl? Projede onlarla ne sıklıkta bir araya geliyorsunuz? Mevcut organizasyon yapısı hakkında ne düşünüyorsunuz? (hiyerarşi düzeni)
- Çalışma yaşamına girdiğinizden beri mesleğinize dair düşünceleriniz, fikirlerinizde bir değişiklik oldu mu?
- Benim sorularım bu kadar. Sizin çalışmayla ilgili eklemek istedikleriniz veya herhangi bir önerileriniz var mı?

D. INTERVIEW GUIDE (ENGLISH)

About profession

- How would you describe an industrial designer?
- How would you separate industrial designers from other (creative or not) profession groups?
- Why did you want to be an industrial designer? What were your thoughts about this profession before you started university?
- Have you changed these thoughts since you started university (throughout your education life)? In what direction and how much? Are you pleased to be doing your job right now?

About education

- What do you remember about your undergraduate years? (Positive or negative sides)
- From who and how did you learn to be a designer in this process? How were the people around you define the designer?
- Were there any terms, phrases, or address forms that you often encountered in your undergraduate years?
- What were the most influential stories you heard about your department or profession from students in upper classes or academics?
- In your undergraduate years, were there any general opinion about how the designer should look like?
- What could you say about the design studio during your undergraduate years (written / unwritten rules, spatial perception, usage style, rituals)?
- What could you say about your communication with academics and assistants during your undergraduate years? Was there someone in particular you influenced? Why and how?
- Is there anything you can tell that, unlike students from other departments or from other universities, in the undergraduate years we did this, or we went there?
- Have you worked with people from other departments during the undergraduate years? If so, what characteristics did you see different from yourself?

- What do you think about the professional culture that your university impress on you?
- What do you think about the industrial design departments in other universities? Do you see yourself different?

About work life

- What did you do after graduation? (Where did you look for a job? Did you look for a career?)
- What can you say about the organizational culture of organizations or companies that you have worked in so far?
- Do you work more individually or does group work play a more pivotal role in your working environment?
 - Who's on the team? From which universities/departments are these people?
 - Are there any differences between the perspectives of yours and others? If so how? How do they affect your work experience?
- I have just asked you some questions about the professional culture that you have learned in your undergraduate education. For example, how the designer looks like, how he/she speaks, how he/she socialize, and so on. If you consider these in the context of extensive culture of the organization/company that you are working in;
 - What are the terms or address forms that you often use in your working environment and how do you compare them to the terms or address forms that you used in your undergraduate education?
 - What kind of language do you use in your working environment? Familiar or foreign to you?
 - How do you dress at work, is it different from the undergraduate years? Why and how?
 - What kind of working environment do you have? (Does it resemble the studio environment in the university?)
 - How are your relationships with your colleagues? Is there a social environment? Are there any known social activities that are especially organized for your department or organization/company?
 - How is your relationship with your manager? How often do you come together with them in the projects? What do you think about the current organizational structure? (hierarchical relations)
- Have you changed your thoughts and opinions about your profession since you started the work life?

- That's all my questions. Do you want to add any additional information on the given topic, or do you have any suggestions?

E. TRANSCRIBING THE DATA (INTERVIEWS)

IEW GRAMMARLY

AaBbCcDc AaBbCcE 111-001. AaBbCcDc AaBbCcC AaBbCcE AaBbCcC AaBbCcC AaBbCcC

Normal Style1 Style2 No Spac... Heading 1 Heading 2 Title Subtitle Subtle

Styles

Interview 110 P10

3. Neden endüstri ürünleri tasarımcısı olmak istediniz? Üniversiteye başladan önce bu meslek hakkında düşüneleriniz nelerdi?

I: Peki neden endüstri ürünleri tasarımcısı olmak istediniz? Üniversiteye başladan önce bu meslek hakkında ne düşünüyordunuz?

P: Biraz araştırma yapmıştım ben düşünmeyi severdim, hayal gücünü severdim ama dersen ki hani niye "İç mimari veya mimarlığa yönelmedin?". Zaten iç mimariye benim döneminde farklı bir alandan girdiğimden, TM'den diye hatırlıyorum ama mimarlığa girebilirdim. "Mimarlığı niye istemedin?" dersen endüstriyel tasarımın daha eğlenceli, gündelik objeler açısından daha zevkli şeyler, fikirleri hayatı geçirilebilecekşen şeyler olduğunu düşünüyorum. Ama mimarı de daha genel kitlelere hitap ettiğin için o kadar çeşitlendirmeye de girmen mümkün olmayabiliyor. Hacimler yaratıyorsun ama bizde hacim de yaratıyorsun, fonksiyon da yaratıyorsun... Yani fikirleri direkt eğlenceli halde de hayatı geçirilebiliyorsun. O yüzden endüstriyel tasarımı bu şekilde yorumlamışım.

4. Üniversiteye başladıkten sonra (eğitim hayatı boyunca) bu düşünelerinizi değiştirdi mi? Ne yönde ve ne kadar? Şu an mesleğinizi yapıyor olmaktan memnun musunuz?

I: Peki üniversitede başladıkten sonra, tüm bu eğitim hayatında düşüneler değişti mi meslekle ilgili? Yani meslekten mutlu musunuz yapıyor olmaktan şu anda?

P: Aslında ben mesleği öğrendiğim için genel hayatmda da mutluyum. Niye? Detaylı düşünmeyi öğretiyor, farklı alanlardan bakabiliyorsun, empati yeteneğini artırıyor. Gerçekten günlük hayatı da bir şeyin sonuçlarını içice ideriyorsun. Mükemmeliyetçi olmanın sağlıyor, mükemmeliyetçi olman gerekiyor. Bir işi içine kafa yorman, kolaya beğenmemen, farklı olanı araman gerekiyor. Ama "Mutlu musun?" dersen, mutluyum yalnız Türkiye şartlarında ya da benim karşılaşduğum şartlarında diyelim mühendisler gibi şartlarımız oldukça düşük. Belki bilmiyorum odaşamamamız yüzünden... Yani meslek olarak bilinmiyoruz. Bu yüzden tam yani emek ve performans ve aldığı değer, karşı değer olarak bakarsan o açıdan bir mutsuzluk var. Yoksa yaptığım işten aldığım keyif gayet güzel yanı ne iş yaparsan yap, ne alanda yaparsan yap her zaman ortaya bir farklılık koyabiliyorsun yanı. En kısıt alanda olduğunu düşün yine de sen oraya " Ben acaba bunun nasıl farklı yaparım? Şöyle de bir şey nasıl yapılabilir?" gibi bir soru attığın için yanı taş da yapsan, doğal taş da tasarlasan onda farklı bir noktaya gitdeceksin. Bu da seni özgür bırakıyor, eğlenceli bırakıyor. Senin eserini piyasada görebilme ihtimalin oluyor. En azından prototip olarak üretiliyorsun, insanların tepkilerini görürorsun ki işin ortaya çıkarmak olduğu için ve senin fikirlerin olduğu için bu çok zevkli bir iş, öyle diyebilirim.

Eğitim hayatı hakkındaki sorular

1. Lisans yıllarınıza dair neler hatırlıyorsunuz? (Olumlu ya da olumsuz tarafları)

I: Peki benim şimdi soracağım sorular biraz da eğitim hakkında olacak birkaç soru. Eğitim ile ilgili soracağım ilk şey lisans yıllarına dair neler hatırladığım? Yani lisans yıllarının olumlu, olumsuz tarafları nelerdi? Neler vardı?

P: Ben bunun tabii okulumla ilgili mecburen tabii... Bizim eğitimimin şöyle bir olumlu yanı vardı; bizi çok fazla serbest bırakıkları için yanı sınırlılığı sana öğretiyordu, her şeyin senin elinde olduğunu sorumluluğu sana öğretiyordu. Bir olumsuz yanı da yanı tasarımin birçok şeyinde gördüm bunu işte

3

Figure E.1. Transcribing the Interview Data

F. CODING

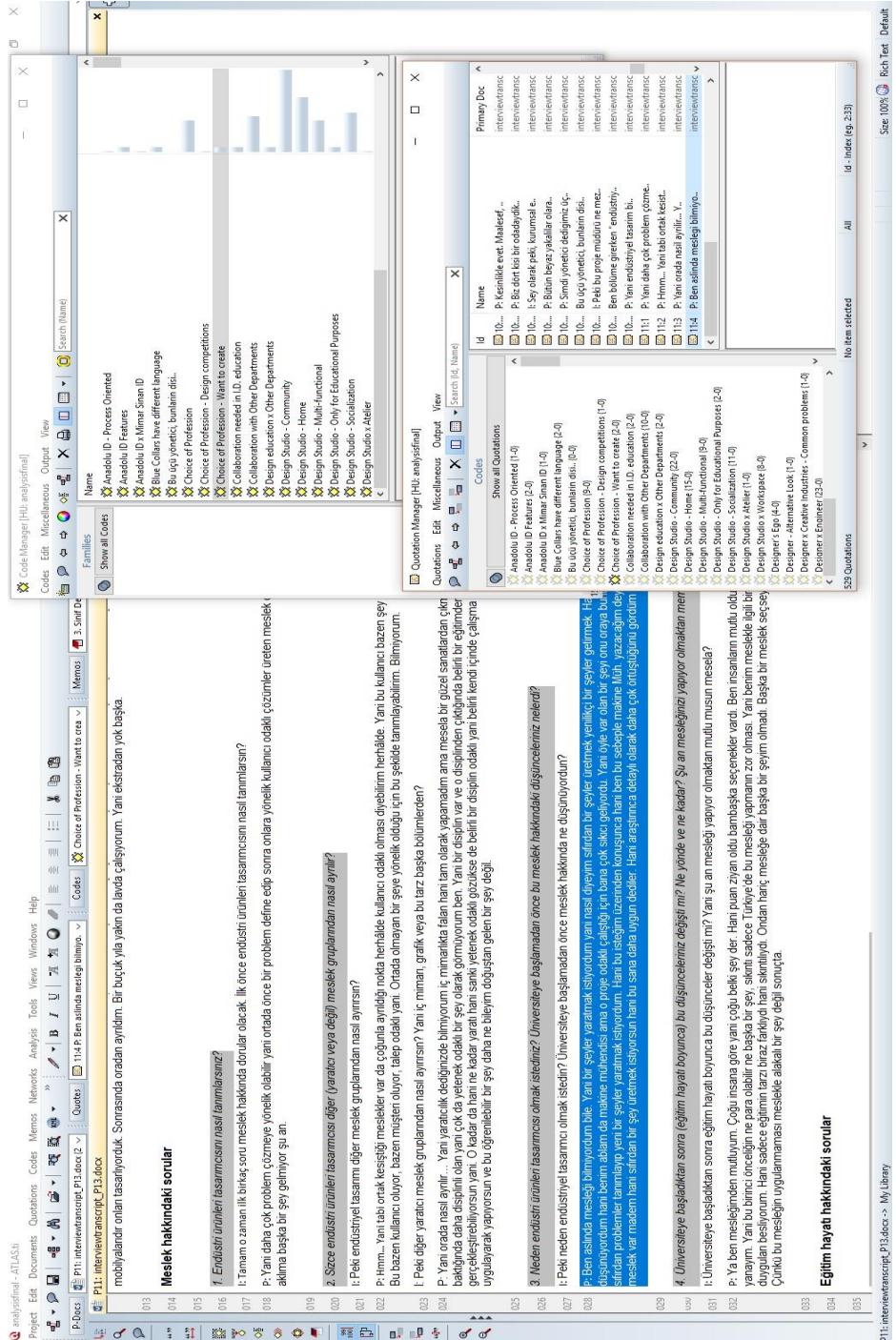


Figure F.2. Coding the Transcripts in ATLAS.ti

G. QUOTATIONS AND CONVERSATIONS (TURKISH)

- [1] Endüstri ürünleri tasarımcısının bence yapması gereken en önemli iş... İşi yani daha doğrusu tanımlarsak eğer belli başlı bir fonksiyon yerine getirecek bir ürün ortadadır. Ve hani bu ürünün bir şekilde hani fonksiyonu, insanla buluşturma gerekiyor bir yerde. Bu işte buluşma noktasında tasarımcı o fonksiyonu yerine getirecek olan kişinin o fonksiyona rahat bir şekilde sağlayabilmesini tasarlıyor, yani öyle söyleyeyim. Yani açıkçası hani bir makine mühendisiyle birlikte çalışırken mesela, bunu şu anda özellikle çok fark ediyorum, hani belli başlı yapılması gereken bir iş var ortada. Onu kullanıcıyla buluşturtmaya çalışıyoruz ancak hani tasarımcı daha çok onu insan nasıl kullanır, nasıl faydalananın bundan, bu fonksiyondan nasıl en iyi şekilde verim alırı düşünerek o şekilde ürünü gerçekleştirmeye çalışıyor. Böyle özetleyebilirim.
- [2] **Araştırmacı:** İlk önce meslek hakkında birkaç soru sormak istiyorum. Endüstri ürünleri tasarımcısını nasıl tanımlarsın?
Katılımcı: Endüstri ürünleri tasarımcısı aslında bir ürün tasarımcısı değil, bir süreç tasarımını ve ya bir sistem tasarımını olabilir. Mevcut olan bir şeyi ya da olmayan bir şeyi ihtiyaçlara göre yeniden düzenleyen, yeni bir şeyler söyleyen ya da yeni bir fikir katan birisidir.
- [3] Nasıl tanımlarım? Herhangi bir sektörün diyelim üretimin girdiği, herhangi bir ürünü ele alırsak... Önce bir fikirle yola çıkarız fikrin bir katma değeri olması gereklidir yani diğer ürünlerden farklı bir ürün olması gereklidir. Bunun aynı zamanda işlevsel olması gereklidir, üretilebilir olması gereklidir, sürdürülebilir olması gereklidir üretimin olduğu yerde. (...) Aynı zamanda fonksiyonel, estetik, işlevsel, albenisi olan malzeme tasarıminın da önemli olduğu ve kullanıcının kullanım kolaylığı, kullanıcı dostluğu özelliklerini taşıması gereken ürünler tasarlamaktır endüstriyel tasarımcının işi. Bazen sıfırdan bir ürün de olabilir ama çoğu zaman bir ürünün gelişimi, farklılaştırılması da olabiliyor. Aynı zamanda üretime ilgili de çözümler bulabiliyoruz. Aslında tasarımda birçok konu da iç içe geçiyor.
- [4] Nasıl tanımlarım? Aslında endüstriyel olarak tabii ki adından da belli olduğu gibi... Üretilebilen her şeyin tasarımını... Ama ben bu noktada tasarımda fark yaratmak için her tasarımcının farklı noktalara değişmeli. Benim için de kişilerin deneyimlerine katkıda bulunabileceği ürünler tasarlamak.
- [5] Seri üretime uygun bir şekilde o ürünün gerektirdiği servis de olur, en optimum çözümü sunmak diyebilirim.

- [6] (...) Mesela bir şey oluyor ve 10.000 adet basılacak. [şirket adı]'de en iyi tecrübe ettiğim şey; oralarda çalışırken kendimi tasarımcı biraz hissediyordum. Ama [şirket adı]'de endüstriyel tasarımcı olarak bahsediyorum, yani hissediyorum. Yaptığın şey hakikaten mass production yani en az 10k basılacak ürettiğim şey. Ve hani onun sorumluluğu var evet bir şeyi yanlış yaparsan 10k'sı yanlış olacak. Yani böyle tasarladığın televizyonu şeye görebilirsin yani ne bileyim Küba'ya gidebilir. Yani Bursa'ya gidebilir. Herhangi bir yere gidebilir, herhangi biri kullanabilir. O anlamda [şirket adı] çok öğretici gerçekten ama bunun kararını sen alacaksın dedikleri şey de oluyor; şey dedikleri hani ama çok yapamıyorum, ben bunu artık yapamıyorum dediğim zamanda "*Tamam söyle yap, böyle yap*" diye yönlendirmeleri de yani şey oluyor. Aslında o anlamda tasarım yani iş yerimin bana tanımladığı görev tanımı [şirket adı]'de istediğim şeye ulaştı...
[7] **Araştırmacı:** Şimdi birkaç soru meslek hakkında olacak. İlk soracağım şey endüstri ürünleri tasarımcısını nasıl tanımladığın?
Katılımcı: Bu tanım, şu anda yaptığım tanım tecrübem yani sektör tecrübesini de üzerine katarak yaptığım bir tanım. Endüstriyel tasarımcı bence satılabilir, ticari kaygıları olan ve pazarda bir yeni bir şeyler söyleyen bir ürün tasarlayan bir yaratıcı bir çalışandır.
[8] **Araştırmacı:** Tasarımcı olmayı bu süreçte kimden, nasıl öğrendiniz? Hani nasıl tanımlıyorlar bu söylediğiniz kişiler endüstriyel tasarımcıyı nasıl tanımlıyordu?
Katılımcı: Ya şu şekildeydi mesela evet 100 tane sandalye var ve biz neden 101.sini yapıyoruz. Bu mesela bunun üzerinden bir örnek, konuştuğumuz bir örnektен hatırlayayım... Burada hani o 101.yi yapmamızda sen o 100 tane sandalyeden farklı kılmlere hitap ediyorsun, ona ne gibi şeyler yaşatmak, deneyimletmek istiyorsun, diğerlerinden... Aslında her seferinde bundan önce yapılan ürünlerden senin yaptığın ürünün farkı ne? Yani bir fark yaratmak ve diğerlerinden farklı bir noktaya aslında farklı bir belki kitleye hitap etmek...
[9] **Araştırmacı:** Peki sizce endüstri ürünleri tasarımcısını diğer meslek gruplarından ne ayırrı?
Katılımcı: Ne ayırrı? Sanırım görünmeyeni görmesi olabilir. Yani herkes görür ama ona farklı bakmak ayırrı.
[10] **Araştırmacı:** Etrafindaki kişiler, akademisyenler mesela nasıl tanımlıyorlardı, nasıl anlatıyorlardı size endüstriyel tasarımcıyı?
Katılımcı: Yaratıcı bir meslek olduğundan bahsediyorlardı sürekli ve hani tek bir doğrunun olmadığı ve sürekli yaptığımız işi çeşitlendirdik zaten... Yaptığımız işe de eleştirel bakardık. Tabii hani bu yaklaşımımız o eğitim sayesinde gelişti.

- [11] Ama olmasi gerek ortak özellikler öğrenmeye açık ve yatkın olması, öğrenme arayışı içinde olması, alternatif ya da eleştirel düşününebiliyor olması, eleştirel düşünmeye yatkın olması, yaratıcı ya da yaratıcılık tekniklerine inanması onları kullanan, işini yaparken yaratıcılıktan faydalanan insanlar olmaları, temel olması gereken özellikler bunlar.
- [12] Kişisel olarak bir endüstri ürünleri tasarımcısı bir yere dokunduysa bir yerde bir farklılık yaratması gerekiyor. Yani bu ürünse ürün, işleyişse işleyiş, mevcut düzense mevcut düzen... Bir şekilde oranın sıkıntısını, sorununu saptayıp gözlemleyebilip onu değiştiren ya da farklı bir hale sokan demek benim için.
- [13] Genel olarak böyle diğer mesleklerin bir konuda çok böyle uzmanlaştığını düşünüyorum, ama endüstriyel tasarımcı her şeyden böyle biraz biraz bilmek zorunda. Hani her şey hakkında küçük de olsa bir bilgi sahibi... Bilgi birikimimiz var ama hani nasıl diyeyim? Bir mühendislik gibi işte acayip uzmanlaştığımız bir şey yok, ama onların konusunda da bir bilgimiz var. O yüzden böyle çok işte yabancı değiliz. O yüzden böyle endüstriyel tasarımcıyı işte biraz böyle ufku geniş olması gereken, hani her konuda söyleyecek böyle bir bilgisi, söyleyecek bir şeyi olan, bir bilgisi olan insan olarak hayal ediyorum.
- [14] (...) her şeyden birazcık birazcık biliyor olman şeyi senin algılarını genişletiyor başka bir ürün yaparken, başka bir şey yaparken ya da hiçbir şey olmasa genel kültürünü arttırmıyor, hayatı baktırıyor. Bu da zaten döngüsel bir şey yani, hayatın değişikçe hani tekrar geri dönüp işine odaklanman, işini daha iyi yapmanı sağlıyor.
- [15] Mesela bu hoca başlarda anlatıyordu bunu. “*İşte bakın bu hani şey meslek olarak yapılacak bir şey değil. Yaşanarak yapılacak bir şey. İnsanlara dikkat etmezsen, çevrene dikkat etmezsen... Bu seni yorar, bu işi yapamazsin.*”
- [16] Yani aslında dediğim gibi yönlendirmesi gereken bir meslek grubu, özellikle hani meslek özelinde konuşursak hani yaptığımız işe alaklı mühendisler hani ‘straightforward’ düşünen insanlar, hani çözüm odaklı gidiyorlar ve hani orada birçok gözden kaçan detay, işte çözüm olabiliyor. Bunu doğru yönlendirebilecek kişi hani dışarıdan asıl işleri üçüncü göz gibi diyebiliriz, üretimdeki üçüncü göz ve hani detayların işte üretimin mantığının hani bu doğru kurgulanmasında önemli bir aktör.
- [17] (...) ben Ar-Ge departmanında çalıştığım için mühendislerden farkımızı söyleyeyim. Tabii ki de kişiden kişiye değişir ama... Biz daha baştan birçok şeyi elimine ediyoruz, düşünüyoruz üzerine bir fikir ortaya attığımızda. Bunun

sonucu bu olur, olumsuzu bu olur, iyi yönü bu olur gibi denemelerden geçiriyoruz ve “*Kullanıcı da bunu almak ister mi, almak istemez mi?*” ama mühendislerde biraz daha “Bunu yapalım sonra bakarız” kafası oluyor. Tabii hepsinde genellemek yanlış olur ama benim gördüğüm kadarıyla söylüyorum. Yani bizim daha detaylı düşünme özelliğimiz var diye düşünüyorum.

- [18] Hani mühendislerle birlikte çalıştığımız zaman bazı ufak tefek farklılıklar çıkıyor. Çünkü hani yani tasarımcı ne olursa olsun sonuçta tamam fonksiyon çok önemliyse de hani formdan tamamen kopamıyor. İşte mühendisle o noktada çalışıldığı noktada, atıyorum bir ürünün statik olarak ayakta durabilmesi için bir destek atılması gerekiyor bir noktadan. Ve mühendis hani o noktada şey yapamıyor mesela, onu yönlendirmezsen sıkıştırmasan, farklı alternatifler sunup işte “*bu da var, bu da var, söyle bir şey olabilir*” gibisinden o fikirleri ortaya atmak yerine, o hesaplıyor, kitabını yapıyor bir şekilde ve diyor ki “*en iyi seçenek bu, o yüzden bunu yapalım. Hani niye diğerlerini yapalım ki? Diğerleri daha kötü seçenekler*” gibi düşünüp, o bir tek bir tane şey sunar sana karşı. O da senin hoşuna gitmezse o noktada bir orta yolu bulmaya çalışıyorsun. Hani tamam bunu atalım da bir yandan da görselden bu kadar feragat etmeyeelim hani birazcık daha onu da kurtarmaya çalışalım diye ufak tefek tartışmaların da oluyor tabi ki.
- [19] Onlar çok şey gibi bakıyor, “*Bu bir ders. Bu derse odaklanmalıyım. Bu dersin bana getirişi...*” Yani bizde şey not önemli değil. Mesela bizimkiler dersi şey diye dinliyordu, ben de dâhil “*Böyle bir şeyler anlatılıyor, anlatılıyor... Bu ilginçmiş.*” Çünkü şey diyebiliyorum ben “*İşte bilmem ne jürisinde bu bana nasıl üretilicek dediklerinde ben cevap vermemiştüm. O bir böyle üretilibilmiş*” gibi. Hani onlar biraz daha ders gözüyle bakıyordu. Biz biraz daha o tasarımcı şımarıklığı gibi bir şey olabilir. Hani biraz daha şey bakıyorduk işte “*Bu benim işime yarar. Bu benim işime yaramaz.*” Şey daha not odaklı değil de daha keyif odaklı.
- [20] (...) Hani beraber şey yapma alışkanlıkları yok [mühendislik öğrencileri], bir de dersi dinliyorlar ama asıl önemli olan onlar için ders notları ve sonradan çalışmaları falan. Aslında onlar daha teorik gidiyorlar ya da sonra işte böyle çalışma lise mantığında devam ediyor yani her şey. Bizde [endüstriyel tasarım öğrencileri] pratik, bizde derste dinlemek zorundasın, çünkü derste daha doğrusu yapmak zorundasın. (...) Daha fazla ‘procrastinate’ etmeye meyilli insanlardık, onların öyle bir zamanı yok, çünkü hani mühendislik eğitimi işte “*şu ödevi, şu soruyu çöz, bunu getir*” olduğu için onda yine bir araştırma yapmak gibi bir şey söz konusu değil, yani “*çalışacaksın, konuyu anlayacaksın, çözeceksin, getireceksin*” böyle...

- [21] **Araştırmacı:** Peki, bu ders aldığıن zaman kimlerle almışın mesela? Başka hangi bölümlerden insanlarla almışın?
- Katılımcı:** Yani çok karışıkta ya şimdî mühendislikler vardı, beşeriden vardı...
- Araştırmacı:** Ne gibi farklılıklar görüyordun endüstriyel tasarımcılar ile onlar arasında?
- Katılımcı:** Yani bizim yanlış olarak baktığımız... Yani biz diğer dersleri pek önemsemiyorduk. Hele de böyle seçmeliyiz. Yani her şey stüdyo odaklı olduğu için; gir çok. 'Ne kadar çabuk bitirirsen o kadar iyi' şeklindeydi. Diğerlerinde böyle bir kaygı olduğunu zannetmiyorum. Yani orada kredi farklılığı bizdeki kadar bariz olmadığı için, ilgi de daha eşit dağılmıştır muhtemelen.
- [22] Bence o kadar da çok bir farkı yok ya yani süreç olarak çok benzer süreçlerden geçiyorlar. Sadece yaptığı işin, ortaya çıkan ürün dolayısıyla, ortaya çıkan sonuç dolayısıyla yaptığı işin etkisi farklı oluyor. Yani diyelim ki görsel iletişim tasarımcının yaptığı şeyin sonucu insanları farklı bir şekilde etkiliyor. Bir mimarın yaptığı farklı şekilde etkiliyor yani sonuçları farklı şekilde etkiliyor. Ama temelde bence özellikle de mimarlıktan falan çok bir farkı yok bence, iç mimarlıktan da öyle diyebiliriz.
- [23] Burada da bir sonuçta tasarladığımız ürün üretiliyor, bu da seri bir şekilde üretiliyor endüstriyel tasarımda. Bu yüzden de o üretim yöntemleri, malzeme bilgisi gibi şeyler ayıriyor bence.
- [24] Şöyledir, yani diğer meslekler böyle 2 boyutlu, 3 boyutlu ayıralım asılnda meslekleri. Grafik işte görsel sanatlar biraz daha grafik ağırlıklı ve 2 boyutlu bir 'medium' üzerinde kalıyor ama hani tasarımda... Ya benim gördüğüm en azından mimar, iç mimar da hani biraz daha hani işin teknik detayında bir yani şu an bakarsak asılnda aynı endüstriyel tasarımla mimarlık ama endüstriyel tasarımin bir farkı asılnda direkt bunu yönetebilmesi ve hani 'mass product' bir ürün olması. Ya 'custom' bir şey değil ama iyi çözülmüş, çok sayıda üretimecek bir ürün. O yüzden diğer mesleklerden ayrışması biraz daha planlı olması yani biraz daha 'mass production' a yönelik ya da hani parça işliyor olsa biraz daha hani ölçüye göre vesairesiyle biraz daha farklı ve hani insan faktörünü daha çok barındıran bir meslek diyebiliriz.
- [25] **Araştırmacı:** Peki mesela mimarlık gibi diğer yaratıcı meslek gruplarını göz önünde bulundurursak grafik, mimarlık, iç mimarlık gibi. Onlardan nasıl ayırsın endüstriyel tasarımını?
- Katılımcı:** 3 boyut ve ürün. Yani 'tangible' ürün olarak. Benim gördüğüm şey yani mimarlık da bir strüktürdür, yapıdır, binadır. İşte grafikte 2 boyutlu objelerle uğraşırsınız. Endüstriyel tasarım 3 boyutlu nesne, elle tutabildiğiniz,

görebildiğiniz şeyler aslında endüstriyel tasarıma girer. Benim kişisel kanaatim bu.

- [26] Grafik tasarımcılarla birebir, şu an çalıştığım yerde grafik tasarımcı var, ama tam olarak kendi işini yaptığı söylediyememi için... Yani birebir böyle bir tasarım ofisinde çalışıp herkesin gerçekten profession'ı ne ise onu yaptığı bir yerde bulunmadığım için söyleyemem ama endüstri ürünleri tasarımcısı olarak mesela grafik tasarımcılar şu noktada ayrılır diyeceğim bir şey olabileceğini düşünmüyorum. Az çok şey olabilir, aynı şeyleri yaşadığımızı düşünüyorum. Mesela işte mesleklarındaki olumsuz düşüncelerimiz ki bunun çögünün bu ülkeden kaynaklanmakta, ülkenin koşullarından ya da ülkenin bakış açısından, hmm, şey diğerlerinden pek ayırt edemiyorum esasında. Mühendislerden de belki bir şekilde ayrılabilir ama bir mimarla az çok hissettiğlerimin mesleki anlamda aynı olduğunu düşünüyorum.
- [27] O birincisi orada hâkim kültür yazılım, yani yazılım mühendisliği yazılım firması olduğu için geneli yazılımcı olduğu için... İşte daha çok erkek çalışanı vardı. Hatta birçok erkek çalışanı vardı. Yani meslegimi bilmiyor bile... Hani ilk kez endüstriyel tasarımcı diye bir şey duyduğunu söyleyen insanlar falan vardı. Üzücü şeylerle karşılaştım. Ya o kültür pek dâhil olamadığım, hiçbir zaman dâhil olamayacağımı biliyordum.
- [28] (...) “*Sizin mesleği*” diyor, “*Aslında birçok kişi yapabilir, buna birçok kişi talip olabilir*” diyor. Ben mesela gelip hani işte; “*Ben de bir telefon tasarlayabilirim*” diyor. “*Bana da kalem kâğıt versen*” diyor. Geçen bir tane adam bunu bize dedi mesela. Aynı şirkette çalıştığım bir insan bu hani. Hiç meslegenin ne olduğundan falan haberi yok ya da sana hala “*Endüstri mühendisi*” falan diyor. Ne iş yaptığından da haberi yok. Ya da işte şey diyor... Bir tane elektrikçi arkadaşım vardı ve biz bununla hep hani benden 2 yaş falan büyük işte işe ilk girdiğim gün şey dedi, işte “*Siz ne yapıyorsunuz ya?*” dedi işte “*Bizde de bir endüstriyel tasarımcı var ama öyle grafik işlerini falan veriyoruz ona*” falan dedi. Hani biz bununla neredeyse aynı kuşak olmamıza rağmen o bile bizim ne yaptığımızı bilmiyor. O yüzden işte sürekli bir mücadele halindesin ve bu bazen yorucu olabiliyor.
- [29] Biz şu an Ar-Ge departmanında beş kişiyiz. Bir müdürümüz var, makine mühendisi, iki tane makine mühendisi arkadaşımız var, bir ben endüstriyel tasarımcıymış bir de teknik ressamlık okumuş bir arkadaş var ama o da endüstriyel tasarımcı diye geçiyor şirkette. Mesela benimle aynı statüde gibi baktığınızda ama teknik resim okumuş.

- [30] **Katılımcı:** İşte hem endüstriyel tasarımcıyı hiç bilmedikleri için fiyat politikasında da maalesef endüstriyel tasarımcının endüstriyel tasarımcıya uygun bir şirkete gitmesi gerekiyor.
- Araştırmacı:** [Şirket adı]’ndan bahsediyoruz değil mi şu anda?
- Katılımcı:** Evet [Şirket adı]’ndan... Bizi mühendislerden ayrı tutuyorlar açıkçası fiyat olarak da, statü olarak da. Daha şey görüyorlar yani daha düşük oluyor. Pek anlamıyorlar, bilmiyorlar yani...
- [31] Ben bölüme girerken “*endüstriyel tasarım geleceğin mesleği*” diyorduk. Onu hala yapıyoruz. Belki gelecek geldi ama Türkiye’ye değil, bakış açım bu. Sektör, Türkiye’de ki sektör iki yıllık endüstriyel tasarımcı arıyor. Yani aranılan, istenilen bu ama biz daha fazlasıyız. Dolayısıyla bizi daha düşük ücretle o işi yapmaya çağırıyorlar biz kabul etmiyoruz. Bence sıkıntı buradan kaynaklanıyor. Birçoğumuz da iç mimari iş yapıyor, hiç bilmeden, yapmak zorunda kalıyor maalesef.
- [32] Aslında çok bilgim yoktu benim. Biraz yani körü körüne girdim. Biraz bilgim olmadan girdim. Şey ile başlar ya işte çizim yapıyorsun bu mesleği yapayım bari ilgi çekiyor dışarıdan gözükünce, hani içine girince biraz farklı da. Biraz daha yeni bir şeyler oluşturmak fikri güzel geldi aslında ondan seçtim ya da yeni bir şeyler yaratma ya da oluşturma, tasarlama.
- [33] Hani benim birazcık çocukluk hayalimi. (...) ben grafik bazlı bir şey yapmak istiyordum. Hani çizime yeteneğim olduğu ve o yönde ilerleyen biriydim. Ama hani birazcık Türkiye’deki hani ekonomik koşullar vesaire ya da hani yönlendirdikleri çünkü diğer meslekler biraz daha soyut kalıyor Türkiye’ye göre, hani onun en somutlaşmış hali endüstriyel tasarımdı. O çizim ilgisiyle başladı ama daha sonra birazcık en son işte üniversitede yaklaşmadan önce daha detaylı gördükçe hani şey diyebildim yani hayalimdeki meslek bu diyerek, o şekilde bir adım attım diyebilirim.
- [34] Ya şöyle, ben çizim yapmayı çok seviyordum. İşte ilkokulda falan da hep çizim yapardım. Yani hep kendimi bildim bileli çizgi yapıyorum. Ama hani işte ne bileyim, “*Güzel sanatlar mı okusam?*” falan diye düşündüğüm de olmuştu. Ama daha sonra işte bu ülke seni o şekilde yönlendirmiyor, böyle güzel sanatlar okumak konusunda çok yönlendirmiyor. Neyse daha sonra işte 10. Sınıfta tesadüfen burada okuyan bir abimden, bu bölümle ilgili, bu bölüm duydum, öğrendim falan o zamandan beri de araştırmaya başladım falan. Hani bir ürünle birlikte bu çizim olayını yapmak hani kendimi bu şekilde geliştirmek falan böyle hoşuma gitti.

- [35] (...) ama dersen ki hani niye “*İç mimari veya mimarlığa yönelmedin?*” Zaten iç mimariye benim dönemimde farklı bir alandan giriliyordu, TM’den diye hatırlıyorum ama mimarlığa girebilirdim. “*Mimarlığı niye istemedin?*” dersen endüstriyel tasarımın daha eğlenceli, gündelik objeler açısından daha zevkli şeyleri, fikirleri hayatı geçirebilecekin şeyler olduğunu düşündüm.
- [36] Aslında benim biraz çizime merakım yüzünden başladığım endüstriyel tasarım merakım. Mimarlık da düşünüyordum fakat endüstriyel tasarım ben üniversitedeyken daha yeni yeni popülerleşmeye başladı. Adı henüz günümüzdeki kadar çok duyulmamış bir meslek grubuydu.
- [37] (...) babam, abim de mühendis olduğu için onların yaptığı işleri de gördüğüm için bu kadar pratik bir şey olmasın, daha doğrusu bu kadar 2+2, 4’tür bir şey olmasın, hani zaten hep sanatsal bir yönüm vardı benim ilgilendiğim çocukluğumdan beri. Dedim ki, “*Okuyacaksam böyle bir bölüm varmış, endüstri ürünlerini tasarımlı. Farklı bir bölüm işte eğlenirim ben burada, bununla da bir şeyler yaparım ki...*” şeklinde yaklaştım, oldum. Hani yaratıcılık ve mühendislik algısını birleştirdiğini anlatıyorlar zaten ilk şeye ilgimi çekti.
- [38] (...) Ama yani birazda hem sanatla ilgilenmek, çünkü sayısal okuyup girdim ben, herhangi bir yetenek sınavıyla girmedim üniversiteye. Çok fazla işte çizim bilgim gibi şeyler yoktu aslında ama hani hem bu kadar sayısal verilere de dayanan aynı zamanda da sanatsal şeyler de içinde barındırdığı için aslında...
- [39] Meslek hakkında... Çok havalı olduğunu düşünüyordum öncelikle. Biraz işte filmlerde gördüğümüz kadarı ya da reklamlarda dediğim gördüğümüz kadarıyla yansıyordu çünkü çok piyasanın olduğunu bilmiyordum. Endüstriyel tasarımın tam olarak ne olduğunu bilmiyordum. O yüzden bana sadece havalı bir meslek olarak, grubu olarak geliyordu. Bir de bunun yanında ben fen lisesi çıkışlı olduğum için çok fazla sayısal hesap kitap olmayan bir şey arayışına girdim daha çok. Yani sayısalдан biraz uzaklaşmak istedim. O da etkili oldu endüstriyel tasarımını seçmemde.
- [40] (...) Biraz sonuna doğru algıladım, ona kadar acı çektim tasarımın ne olduğu şeyinde... Ya bunun da hani tam olarak lise eğitimiyle... Ben TM okuyup gelseydim de aynısı olacaktı, lise eğitimiminin çok yönlülüğü teşvik etmemesiyle alakalı olduğunu düşünüyorum. Yani bize sadece lise eğitimi de değil, sınav mantığı zaten her gün değişiyor, her yıl değişiyor, tek yönlü bakmayı öğretiyor

insanlara. Artı kazandırdığı nokta da, tam olarak bunu söylediğimin tersi tasarım çok yönlü bilmeyi öğretiyor bir insana.

- [41] Esasında şöyle üniversiteye ilk geldiğimde şey dedim “*Aman tanım çok saçma. Buradan gitmeliyim.*” Hiç yapabileceğim bir şeymiş gibi gelmedi. Çünkü şey diyorlardı sürekli “*Bunun öğretilebilir bir şey olduğunu inanıyoruz.*” Ben bir şeyi yaratıcılığın öğretilebilir bir şey olduğunu aklım bir türlü kesmiyordu, çünkü hani benim kafam biraz daha analitik işliyor gibi. Sorun bu, çözüm bu. Buradan buna ulaşırınsın. Sonuçta bunu elde edersin. Biraz öyle işleyen bir kafamvardı. Ama tabii tasarım eğitiminde bize öğretilen şeyin aslında yolda ne yaşadın, ne geçirdin. O yolda yaşadığın sana bir şey öğretiyor.
- [42] (...) contast, denge, işte simetri falan gibi pek çok şey yapıyorduk, ama bunları niye yaptığımızı anlamıyorum. Aslında bunları yapmaktan acayıp keyif alıyorum, işte ne bileyim çok çiziyordum. Çizim dersimiz vardı, çok çiziyorduk işte böyle ne bileyim kâğıtlardan falan böyle 3 boyutlu maketler falan hani en çok maket yaptığımız zamanlardı herhalde. Onlarla uğraşmaktan falan acayıp keyif alıyorum. Ama bunları niye yaptığımızı bilmiyordum. Bu hep böyle bir soru işaretiydi yani işte bir bakıyorsun iyi alıyorsun, bir bakıyorsun kötü alıyorsun falan “*Allah Allah hani*” diyorsun “*Niye böyle oldu ki şimdi*” falan diyorsun. Böyle bir anlamaya çalışıyorsun falan. Öyle 1. Sınıfa dair onu hatırlıyorum. Hani asla ne alacağımı tahmin edemiyorum falan.
- [43] (...) Benim en zorlandığım şey, ders, Basic Design’dı. 1. Sınıf Basic Design’ıydı ama yani ne yapıyorum, karton kesiyoruz işte onu ona boyuyorum vesaire derken ben onu küçümsedim belki, belki algılayamadım ama şu an olsa çok eğlenirim.
- [44] (...) 1. ve 2. Sınıfta bazı şeyleri yapmış olmak için yapıyordum. Hani böyle bir şeyi yaptığın zaman onun hani iyi olacağını düşünüyordun. Niye bilmiyorum yani ama işte o da hep mesleği anlama çabaları, hani deniyorsun yanılarak... Deneyerek, yanılarak öğreniyorsun neticede. Hani niye yaptığını da böyle bir sorgulamıyorsun. Hani [Akademisyen Adı] sürekli “*Bunu niye yapıyorsun? Sunu niye yapıyorsun? Sunu yapmanın sebebi ne?*” falan diye sürekli bana sorgulatmayı öğretti.
- [45] Birinci sınıfın temel tasarım derslerini hatırlıyorum mesela. Hani onlarda birazcık şeydi, hani o zamanlar temel tasarım konusunda brief’ler veriliip bizim bir şey yapmamız bekleniyordu o tasarımla ilgili. Hani çok fazla bir brief açıklaması yapılmıyordu. Herkes kendi anladığını, kendi yorumladığını

yapmaya çalışıyordu. Ve hani projeler veriliyordu. 2 hafta sonra tekrar okula geliyorduk projeleri teslim etmek için. Ve böyle hani o kadar farklı şeyler çıkıyordu ki herkes birbirine bakıp hani diğerinin ne yaptığıni anlamaya çalışıyordu.

- [46] (...) Detaylı düşünmeyi öğretiyor, farklı açılardan bakabiliyorsun, empati yeteneğini arttırmıyor. Gerçekten günlük hayatı da bir şeyin sonuçlarını iyice irdeliyorsun. Mükemmeliyetçi olmayı sağlıyor, mükemmeliyetçi olman gerekiyor. Bir iş üzerine kafa yorman, kolayca beğenmemen, farklı olanı araman gerekiyor.
- [47] (...) Geldiler ve şey dediler "*Elveda, uykuya vedalaşın*". Ben çok kararlıydım "*yok, yok ben kesin uyurum*" konusunda. Onda gözüm bir, gözüm kokmuştu değil de... Yani değişimini asla hayal etmezdim. Ben kesin uyurum falan diyordum. Sonra öyle olmadığını fark ettim. Yani çünkü tatmin olma... Zaten hani bir şeyi okay yapabilecek olsam, bir şey en iyiye ulaşmak diye bir şey olsa zaten bizim mesleğimiz olmaz. O zaman her şeyin en iyisi tasarlanır ve her şey biter.
- [48] Bu camiamızın küçüklüğünden de kaynaklanıyor olabilir. Çünkü şey, ben mesela mühendis olsam mezun olursun ve o hocayı bir daha hayatın boyunca görmeyecek olabilirsin. Bizde öyle bir şey olmaz. Yani sadece okul bazında değil, biri İTÜ'den de mezun olsa ne bileyim Mimar Sinan'dan da mezun olsa biraz küçük bir camia. (...) Biraz daha insan odaklı olduğumuzdan yani biraz daha ilişkileri önemsiyoruz gibi. Zaten sayımızda daha az diğer şeylere kıyaslandığında.
- [49] (...) ürün tasarlıyor insanlar ama neye göre tasarlıyorlar işte, ortada bir kitap yok, bir doğru yok. İşte falan hani, "*Nasıl yapacağım? Yeterince yaratıcı olabilecek miyim?*" falan diye böyle endişeler duyuyordum. Ama buraya geldikten sonra hani o kadar da endişelenenek bir şey olmadığını gördüm, çünkü burada işte dediğim gibi yani 30 kişiydik, 30'umuz da farklı proje yapıyor, hepimizin işte konuşacak farklı bir yönümüz vardı. Hani kimseye de "*Sen yanlış yaptın, sen doğru yaptın*" falan denilmıyor. O yüzden işte hepimizden alacağımız bir şeyler vardı ve hani bir şekilde bunu, mesleği ilerletebiliyorduk.
- [50] (...) Evimin daha rahat olduğunu düşünüyordum. Ama daha sonra şeyi fark ettim; yani kendi başına tasarım yapılamaz. (...) Bir yerde takıldığım anda sorarım; "*Bu nasıl? Böyle olmuş mu? Şu mu daha iyi?*". Ki çok kararsız bir

insanımdır, Dünya'nın en kararsız insanıymdır. Ve beynim şey olduğunda karar veremiyorum. Ama en ufak birinin bana bir yönlendirici bir sözü benim ufkumu açabiliyordu. Onun için stüdyoda çalışmayı daha faydalı bulmaya başladım.

- [51] Yani bir şekilde insanlar belirli yöndeki skill'lerini geliştiriyor ve hani herkes aynı anda bir sürü şey öğrenemediği için mesela biri bir bilgiyi iyi kaptığında ya da bir yönde kendini geliştirdiğinde diğerine aktarıyor. Ve bu daha verimli oluyor. Yani ben öğretmenden ya da okuldaki derslerden öğrendiğimden çok daha fazlasını yanındaki arkadaşımdan öğrendim. Ve de bu bilgi paylaşımı daha faydalıydı.
- [52] (...) Kütüphanede yer kapmanın ne demek olduğunu bilmek istedik. Hep stüdyolarımız vardı artı olarak stüdyo da aslında hani işte stüdyonun kalabalık olmamasını istedik falan. Ve daha esnek şeylerimiz vardı. Bir de bir arada olmamız yani çok stüdyo kültürü sebebiyle daha bir arada olan bir sınıf kültürümüz var bizim. (...) Bizde sınıf ve dönem kültürü vardı dolayısıyla çok yakın geçirdik üniversite yıllarını. Bir proje yaparken de onu hep birlikte yaptık. Ara verdik, canımız sıkıldığı anda işte birlikte ara verdik, birlikte dağıtık, birlikte geldik, birlikte sabahladık. Hani bu farklılığımız vardı.
- [53] Valla, zaten bir stüdyoyu hatırlıyorum, başka da bir şey hatırlamıyorum mekân olarak. Yani diğer bölümlerin hep böyle bir sürü yerleri oluyordu. Hatta bugün bir tane mühendis arkadaş işte sınıfta "*Hani siz hep burada misiniz ya?*" falan dedi. "*Siz gitmiyor musunuz? Bakın yani biz gidiyoruz*" falan dedi böyle. "*Yok*" dedim, "*Ders var*". "*O da mı burada?*" falan dedi, şaşırıcı böyle. Evet, tabii ki de burada, çünkü burası stüdyo. Bizim bütün derslerimiz stüdyoda. İşte hani ne bileyim, bütün derslerimiz burada olmasa da 8 kredilik sonuçta dersimiz hep burada olduk, alındı. Burada yattık, kalktık, bütün yemeğimiz i falan hep burada yiyecektik. O yüzden yani stüdyo evimiz gibi bir şeydi. Onun dışında diğer bölümlerden falan pek ders almazdık zaten.
- [54] (...) Onun dışında farklı bölümlerden aynı dersi aldığım pek kişi hatırlamıyorum. O yüzden de biz mesela böyle çok fazla dışarıdan insanla tanışmadık. Bizim mesela sınıfımızın çok sevdigim bir yönü vardı. Hep birlikte takıldık böyle hani 30 kişiysek 30 kişi birlikteydi. Ama dışarıdan öyle pek arkadaşımız falan yoktu işte.
- [55] Yani çok yoğun ödevlerimiz olduğu için ders dışına çok vakit ayıramazdık ve hani genelde bölüm içinde sosyalleşme olurdu. Zaten tasarım, mesela bizim

bölümde, başka bölümlerde de öyledir çoğu evlilikler bölüm içi olur. Kız arkadaş, erkek arkadaş hep bölüm içinden olur genelde. Bu tarz asosyal bir ortam vardı.

- [56] (...) Güzel bir sosyalleşme ortamı oluyor. Zaten tasarım öğrencisi genel olarak diğer böümlere göre yani otuz kişi varsa bölümde yirmi beşi bir grup halinde herkesin ilişkileri daha iyidir. Ama bu oran diğer meslek dallarında azalır. Çünkü bir emek paylaştığın için, orada bir iş gücü olduğu için beyinsel güç olduğu için, ekip projesi olduğu için tasarım öğrencileri genel olarak daha sosyaldır kendi aralarında, paylaşımçıdır. Güzel ortam vardır yani pek kasıntı değildir. Yaratıcı da bir ortam da olduğu için eğlencelidir.
- [57] (...) stüdyolar 24 saat açıktı, istediğimiz gidip kullanabiliyorduk. Stüdyolarımız yani ortam olarak güzeldi; bir kere yüksek tavanlıydı binadan dolayı. Şeyimiz, taburelerimiz kötüydü ama yine de biz seviyorduk. Çalışması keyifliydi yani proje sınıflarımız yani direkt bize ait olduğu için yani orası okulda en bize ait olan yerlerdi. O yüzden bir bağımız da vardı, istediğimiz zaman girip çıkabiliyorduk, rahat rahat çalışabiliyorduk. (...) Bir de şeydi dönem farkı bizde de çok yoktu yani alt dönemler üst dönemler karışık çalışırdık, çalışabilirdik yani, o problem olmuyordu.
- [58] Yaşam alanı [tasarım stüdyosu], tam olarak yaşam alanı... Çok pis olabiliyor ama yani inanılmaz manevi olarak bağlılık duyduğum bir yer. Yatağımız vardı, onda işte, kapabilen orada yatıyordu. Lavabo zaten her seferinde var, orası senin banyon. Yani evin, hani çok geniş bir alan, senin istediğin masada çalışabildiğin, istediğin kadar özgür olabildiğin, rahat ettiğin bir yer yani, yaşam alanının. Çok büyük bir artı...
- [59] Ya tasarım stüdyosu tabii ki de çok önemli çünkü bir projeye başlıyorsun, onu modelliyorsun, teknik resme döküyorsun. Sonra modelini yapıyorsun, maketini yapıyorsun, prototipini yapıyorsun ve bunlar ev ortamında yapabileceğin şeyler değil. Genellikle ekip projeleri de çok fazla olduğu için geniş alanlara ihtiyaç duyuyorsun. O yüzden stüdyo çok önemli. (...) Hele hele teslim dönemlerinde, final dönemlerinde de çoğu ders sıkışlığı için orada yeri geliyor iki gün de geçirebiliyorsun. O yüzden rahat olması gerekiyor. Masanın büyük, kocaman olması gerekiyor. Hem laptopunu koyacaksın, hem çizimini, sketch’ini yapacaksın...
- [60] (...) sadece bilgisayar başında işimiz yok, maket falan da yapıyoruz ve nitekim yayılabildiğimiz, dağıtabildiğimiz, serbestçe çalışabildiğimiz, masamız

olan... Yani yurtlarda da çalışma salonları var mimarlık fakültesine ait ama o kadar olmuyor yani... Bir de hani müzik açabiliyorsun, uyuyabiliyorsun yani her türlü şeyi yapabiliyorsun birbirini rahatsız etmediğin sürece...

- [61] (...) oraya gelen insanlar zaten aşağı yukarı hani atıyorum sabahlayacaksın ama sabaha kadar yetişmesi gereken iş belli, yapması gereken araştırmayı da, çizmesi gereken sketch belli aşağı yukarı. Hani o şekilde olduğu için insanlar birbirlerini motive ettiğini düşünüyorum o tip bir ortam içerisinde ve hani yazılı bir kural yok belki ama daha disiplinli bir şey çıkıyor ortaya beklenmedik bir şekilde. Herkes yorgun argın bir şekilde sabahlamaya çalışsa bile o disiplin bir şekilde insanların birbirini görerek, daha fazla çalışmaya kendini teşvik etmesiyle birlikte baya disiplinli bir ortam çıkıyor aslında yani. Tabii ki biz de yani açıp da müzik dinlemektir, video izlemektir, o tipte işin eğlence kısmından da arada kafa dağıtmak için yapsak da yani hani evde oturup çalışmaktansa açıkçası gidip de yani stüdyo ortamında bulunmak bana böyle çok daha disiplinli geliyordu mesela.
- [62] (...) Çeşit çeşit giyinen insan vardı. Hiç öyle bir laf duyduğumu hatırlıyorum yani. Çünkü biz jüriye de... Ben eşofmanla çıktığımı hatırlıyorum, üstüm başım son dakikada yetiştirmek zorunda kaldığım projelerde öyle eşofmanla çıkış üstüm başım boyaya ya da daha düzgün bir şekilde giyindiğim de oldu da hiç öyle yorum geldiğini hatırlıyorum.
- [63] Tasarım eğitimi biraz bizim ufkumuzu genişletti. Olumlu tarafı buydu yani farklı şekilde yaklaşıyorduk yaptığımız işe artık. Tek bir doğru olmadığını gördük. Olumsuz yanı da çok çalışmamızdı bunu öğrenirken.
- [64] Ya lisans eğitiminde yani çok şey vardı ya çocuğu denize atalım da ya boğular ya da yüzmeyi öğrenir modunda. (...) Hani o dönem o kadar çok bocalıyorsun.
- [65] (...) işin içinde kendini hissetme durumu var. Bu genelde yaratıcı mesleklerde gözlemediğim bir şey. Onun için, biz işi bırakıp gidemeyiz, ya da işi bırakıp gidemeyiz derken mesaiyi hani memurlukta ne olur, mesai 5'te biter, 5'ten sonra bu insanlar daha fazla hayatlarını yaşayabilirler, ama bizde, şey, sürekli devam ediyor, yani bir şeyi kapatıp gidemiyorum.
- [66] İlk başta aramız limoni olsa da, o biraz daha otoriter ve ödev ya da beklentisi yüksek olduğu için onun yanında ilk derslerde ilk başta çok zorlandım aslında katkısı da daha fazla oldu; işte çizime yöneltti vesaire. Ürün tasarlarken beğenmiyordu, biraz daha iyisini yapmaya çalışıyorduk vesaire.

- [67] Yani böyle tamamen hani tasarımcının isteyebileceği olanaklara, olanakları düşünerek mesela hani gerçekten sabahlayabileceğin, uyuyabileceğin bir şeye hazırlanmış, konseptte hazırlanmış bir yerdı. Yani o anlamda şanslı olduğumu düşünüyorum gerçekten böyle elimizin altında her türlü imkani da bulunduran bir atölye ve stüdyoydu yani.
- [68] (...) biz jürilerde sabahlardık, bu herkesin bildiği bir şey.
- [69] (...) biz çok salaştık, yani böyle diğer bölümler falan... Sadece bence öyle bir imajımız vardı bizim. İşte böyle acayıp yorgun, çok böyle sabahlamış, geceleri burada çalışan, gündüzleri evine gidip, 2 saat uyuyup gelen. Öyle işte eşofmanla, pijamayla ortalıkta dolaşan bir imajımız vardı bence ama öyle genel bir yargı başka yoktu. "*Onlar gece çalışır*" gibi bir şey vardı belki. Öyle...
- [70] [Başka bölümlerde] Hani erkekler, kızlar, herkes hiç fark etmeden bu şekilde okula daha resmi bir şekilde gelirken, hani artık o samimiyeti bir şekilde aşlığın için insanlarla birlikte sabahlayarak ederek okulda daha rahat giyinmeye başlayabiliyorsun en azından öyle söyleyeyim.
- [71] Tasarımcılar kendi aramızda açıkçası çok hani böyle, çok çok farklı bakış açılarına sahip... belki sadece işin hani stilizasyon kısmına gelindiği noktada daha çok hani yaklaşımlar değişimeli biraz daha. (...) Onun dışında hani işin ilerleyışı ya da projelerin ilerleyışı bakımından hani herkes aşağı yukarı bir process'in nasıl yapılması gerektiği konusunda hemfikir olduğu için çok bir sıkıntı çıkmıyor. Hani mühendislerle birlikte çalıştığımız zaman bazı ufak tefek farklılıklar çıkıyor. Çünkü hani yani tasarımcı ne olursa olsun sonuçta tamam fonksiyon çok önemliyse de hani formdan tamamen kopamıyor. İşte mühendisle o noktada çalışıldığı noktada, atıyorum bir ürünün statik olarak ayakta durabilmesi için bir destek atılması gerekiyor bir noktadan. Ve mühendis hani o noktada şey yapamıyor mesela, onu yönlendirmezsen sıkıştırmasan, farklı alternatifler sunup işte "bu da var, bu da var, şöyle bir şey olabilir" gibisinden o fikirleri ortaya atmak yerine, o hesaplıyor, kitabını yapıyor bir şekilde ve diyor ki "*en iyi seçenek bu, o yüzden bunu yapalım. Hani niye diğerlerini yapalım ki? Diğerleri daha kötü seçenekler*" gibi düşünüp, o bir tek bir tane şey sunar sana karşı.

- [72] Mesela makine mühendisi arkadaşımız, tasarımcılar iyileştirmeye yönelik çalışıyoruz. Bazen teknikerlerden bir kişiyle daha çok iletişimim var. Onda da böyle gelmiş böyle gitsin tavırları olabiliyor.
- [73] O [mühendis] gerçekten yine isterse senin tasarımının belki de en güzel yerine bile, ortasına vida atabilir yani, onun için hiç önemli değil, o ‘structure’ taşısının yeter.
- [74] Gerçekten farklı insanlarla çalışmak çok zor ama bir yandan da güzel, sadece tasarımcıyla çalışmak yani iyi değil, farklı ne bileyim bir elektronikçiyle işte makineciyle projecisiyle falan birlikte çalışmak çok güzel. Ondan bir şey öğrendiğin şeyler oluyor. Sen de onlara bir şeyler katıyorsun...
- [75] Yok, onlar yine tasarımcılarla şey olduğu için, yaptığımız için, onda da yine nasıl giyiniyorsak öyle gelebiliyoruz yani.
- [76] (...) özellikle pazarlama ya da ihracat bölümündeki insanların baya bildiğin takım elbiseyle gelmesi isteniyorken, hani isteseler de zaten başka bir şey giymeyorlarken, bizde öyle bir zorunluluk yok yani. Gerekirse yazın kotla t-shirt'le gidiyorsun. Gerekirse sen de ceketini giyiyorsun öyle gidiyorsun. O sana kalmış bir şey. Onu birazcık hani daha şeyler. O konuda alışmışlar birazcık, bu şekilde “*tamam tasarımcı ya bunlar, bunlara çok fazla laf söylemeye elim*” gibi böyle bir algı oturmuş onlarda. O yüzden hani kıyafet konusunda karıştırmıyorlar. Saç sakal konusunda hiçbir şekilde karışılmıyor mesela. O bir rahatlık açıkçası bizim için. Ha dediğim gibi daha çok böyle hani müşterilerle birebir ilişkiye giren pazarlama tarzı bölgümlerde bu tip kurallar yazılı bir şekilde hatta verilmişken, bizde hani biraz daha özgürlük tanımıyor bize açıkçası.
- [77] [Şirket Adı] hakkında söyleyebileceğim; dengeyi bulmanın zor olduğu. Dediğim gibi yani biz işte mavi yaka, beyaz yaka herkes aynı şeyde aynı fabrikada çalışıyor. Yani her kesimden insan var. Ve bunun hepsini birlikte yönetebiliyor olman lazım. Tabi zorlayıcı da bir şey... Onun için katı kuralları da var.
- [78] İşte hem endüstriyel tasarımcıyı hiç bilmedikleri için fiyat politikasında da maalesef endüstriyel tasarımcının endüstriyel tasarımcıya uygun bir şirkete gitmesi gerekiyor.

- [79] Şöyleden bizim birlikte çalıştığımız makine mühendisleriyle çok fazla bir sıkıntımız olmuyor, çünkü bu işte yanında çalıştığım 2 endüstriyel tasarımcı artık 18-20 yıldır oradalar ve artık onlarla birlikte çalışma onlar bir şeyleri öğretmişler. Endüstriyel tasarımın ne demek olduğunu aşağı yukarı biliyorlar ama endüstriyel tasarımcıyla birlikte çalışmayan birimler var. Özellikle elektronikçiler falan mesela. Ya mesela şöyle bir şey oluyor, geçen şöyle bir olay oldu, şeyin yazılımının... Telsiz var, telsizin yazılımını şey yapıyor, elektronikçi yapıyor, yazılımcı yapıyor. Ama bunu endüstriyel tasarımcının yapması gerektiğini düşünüyoruz biz, işte ‘User Interface’ diye bir şey var, işte ‘User Experience’ diye bir şey var. Hani “*Bizim buna söyleyeceklerimiz var*” falan diyoruz, elektronikçi kalkıyor diyor ki işte “*Hayır*” diyor, “*Bu endüstriyel tasarımcının işi değil*” diyor, “*Bu yazılımcının işi*” falan diyor. Hani bir şeyi sırı kodlamayı biliyor diye bu onun işi olduğu anlamına gelmiyor. Ama hani kalkıp bunu müşteri kullandığı zaman ondan sonra, o memnun kalmayacak ya da diyecek ki “*Bilmem şu markanın işte telsizini biz daha rahat kullanıyoruz*” diyor. Yani çünkü hani orada bir tasarım var yani, bir ‘User Experience’ var hani bir şeyler araştırılmış, tartışılmış, bir şeylere karar verilmiş. Hani o yüzden hani burada endüstriyel tasarımcının rolünü anlatmaya çalışıyorsun ama anlatamıyorsun bazen.
- [80] Yani şimdi onlar [direktörler] makineci oldukları için onların makine mühendislerini değerlendirmesi ya da işte “*Bak burada yanlış yapıyorsun*” demesi daha kolay. Ama bir endüstriyel tasarımcıya dediği zaman, ya o hani onun dediği doğru olmayabilir, ama sen kendi dedığının doğru olduğunu ona nasıl anlatabıksın? “*Hayır, yanlış düşünüyorsun. Ben doğru düşünüyorum*” diyemiyorsun, o senin direktörün çünkü hani bunu başka şekilde ifade etmen gerekiyor. Ama öyle ifade edemiyorsun hani bazen ya alinganlık olarak algılayabiliyorlar ya da işte tecrübesizliğine verebiliyorlar falan öyle şeyler yani aramızda bir disiplin farklılığının olmasından dolayı öyle sorunlar olabiliyor.
- [81] Patron hani üniversite mezunu bile değildi, ama böyle sadece piyasadan inanılmaz derecede haberdar olduğu için işte sana gelip hani “*Şöyleden yapalım, böyle yapalım*” falan filan diyebiliyordu.
- [82] O birincisi orada hakim kültür yazılım, yani yazılım mühendisliği yazılım firması olduğu için geneli yazılımcı olduğu için... İşte daha çok erkek çalışanı vardı. Hatta birçok erkek çalışanı vardı. Yani mesleğimi bilmiyor bile... Hani ilk kez endüstriyel tasarımcı diye bir şey duyduğunu söyleyen insanlar falan vardı. Üzücü şeyle karşılaştım. Ya o kültür pek dahil olmadığım, hiçbir zaman dahil olamayacağımı biliyordum. Çünkü ben yazılıma çok uzağım. Onlar şeye çok uzak. Böyle sosyo-kültürel anamları çok farklı insanlar bir aradaydı orada. Ya [şirket adı]’nda de öyle ama [şirket adı]’nınki ya da [okul

adı]’nda de öyle ama o büyülüğünden kaynaklı. Bunlar büyük oldukları için sana şey diyor “*Ya bu kültüre uyum sağlarsın ya da burada yok olursun*” gibi bir şey. Oradaki öyle değil yani. Ben şey diyorum “*Benim, ben buranın içinde yer alamam, bu insanların içinde yer alamam*”. Uzakta da duramadım ama böyle şey böyle misafir gibiydım zaten orada, turist gibi. Hani ben bu kültürün içine girmem gerekmek ben zaten gideceğim falan gibi bir şeydi.

- [83] (...) Biz [ürünleri] kendimiz yapıp tasarımını yapıyoruz. Daha sonra mühendislerle çalışıyoruz. Projeler üretime gidiyor. Atıyorum metal haneye gidecek bunlar. Metalden sonra ahşap bölümüne geçeceği zaman da metal hane yaptığı ürünleri ahşap haneye teslim ediyor. Böyle bir zincir başlayacak şirket içerisinde sürekli dönen. Bu zincirin de aslında birazcık sağlamlaşması için, insanların bir şekilde birbirleriyle iletişime geçmesi için... Burada yani sonuçta empati bu noktada önemli. Çünkü “*Ben tasarımcıym. Ben bunu çizdim. Bir şekilde üretin kardeşim*” diyemiyorsun. Sen de onların getirdiği bir şey var sonuçta, bir kısıtlamalar var sonuçta yani üretimle ilgili bir boyutlarda. Ve bunları anlayabilmen gerekiyor. O şekilde ya sadece gidip de hiçbir şekilde iletişimimin olmayan insanlarla konuşup; “*Bunu nasıl yaparız?*” diye sorup böyle “*Tamam, o zaman öyle yapalım.*” deyip masana döndüğün zaman da çok bir şey katamıyorsun. O şekilde bakarsak olaya; herkesle ufak da olsa bir samimiyet kurulabilirse sosyal etkinlikler aracılığıyla bu iletişim artarsa hem bütün şirket için, hem bizim için, bizim kendimizi geliştirmemiz açısından hem de şirket için bence faydalı olacaktır.
- [84] İnsanları zorlamadan bu tarz etkinlıkların olması gerektiğini düşünüyorum ben, motivasyon arttırması için. Çünkü bizim yaptığımız iş yaratıcı bir iş, mesai kavramıyla yaklaşılmaması gereken bir şey.
- [85] Yok, yok çok resmi oluyor tabii iş ortamı. Herkes kendi işine gömülümiş oluyor yani o kadar muhabbet ortamı olmuyor. Bazısı oda arkadaşların da olsa hani seninle muhabbet eden oluyor, etmeyen oluyor... Yani insanları ben biraz iş hayatında daha sıkıcı buluyorum. Okul gibi olmuyor. Yani [iş ortamı] tasarımcı ağırlıklı olmadığı için aynı kafada olmuyorsun...
- [86] Ama kendi departmanında çok rahat [iş], yani istediğiniz yani karşı bile çıkabiliyorsun. Yani “*Yapmayacağım*” desen bile üstüne gidersen yapmayıbiliyorsun projeyi. Yani inanmadığın bir proje olur, onlar da şey yapmıyor; biraz daha arkadaş ortamı gibi yöneticiler de. Sıkıntı olmuyor aslında hani, ilişkiler biraz da arkadaş gibi diyebilirim. Biraz daha abi-kardeş gibi oluyor. Tabi biraz otorite sağlanması gerekiyor da yani çok sıkı değil yani... O bizim departmanımızda farklı başka departmanlarda farklıdır muhtemelen de.

- [87] Mesela [şirket adı] ile [şirket adı] kalabalıktı ve orada daha hiyerarşik yapı hissedilirdi. Ve yani saygı çerçevesinde hitap edilirdi birbirine insanlar. İlk mesela şu oldu; [şirket adı]'e geçtim [şirket adı]'dan... Mesela ben orada insanlara "Bey" diyordum, mesela "[...] Bey" diyordum, "[...] Bey" diyordum hitap şekli olarak... Orada ilk o tepki ile karşılaştım "Niye Bey diyorsun?" diye. Orada daha samimi bir şey vardı, o hiyerarşik şey olmadığı için, düzen. Yani iyi mi kötü mü bilmiyorum ama orada farklı bir şey vardı o yüzden. Orada hiç o yapı tamamen değişti yani, o hitap şekilleri şeyler, katı kurallar değişti. Orada daha açıktı herkes. Herkes herkesin işi hakkında daha özgür yorum yapabiliyordu.
- [88] (...) Hitap biçimleri meslek grubu içerisinde biraz değişim正在发生. Çünkü mesela insanlar birbirine sonuçta "Bey/Hanım" şeklinde hitap ediyor, şirketin % 90'ında. Ama tasarım merkezinin içerisinde biz müdürümüze "Ağabey" şeklinde seslenebiliyoruz. Müdürümüz kendisine "Bey" dememiz için bir ısrarda bulunmuyor, hatta kendisine "Ağabey" şeklinde sesleniyor olmamız daha çok onun hoşuna gidiyor. Böyle biraz daha hani birlikte iş yapmış olmanın... Sonuçta bazıları [müdürler] "Bu işi verdim, bunu yapın teslim edin" fikrinden çok, herkesin kafa patlatıyor olduğunun farkında. Herkes işin bitirmeye odaklanıyor. "Nasıl yaparız? Nasıl çalışırız?" şeklinde... Hani birbirimizden kritik alarak ilerliyoruz, gerekirse müdürümüze anlatıyoruz gerekirse o bize kritik veriyor şeklinde. Hani daha bir birlikte çalışıyoymuş havası olduğu için hitap biçimleri de değişiyor aslında biraz şirketin diğer geri kalan kısmına göre.
- [89] Şöyle, tabii şimdi işin içine başkaları da girdiği için yani biraz daha mesela [tasarım odaklı şirket adı]'teyken "Ay bunu işte bu terimi mi kullansam anlarlar mı?" diye bir şey yok. Zaten anlıyorlar... Hepimiz aynı dili kullanıyoruz. Ama [mühendis odaklı üretim şirketi adı]'nda dedığım gibi benim işimin temel noktasını bile bilmek zorunda değil o adam, tamamen farklı bir proje. Mesela, o adam İktisat veya Mühendislik okumuş, yani hiçbir seyimiz ortak değil...
- [90] Maket kelimesi prototipe geçti mesela. Maket, mock-up şeyi prototipe geçti. (...) Ondan sonra kritik almak şeye dönüştü, işte proje sunma, taslak, taslak tasarıma dönüştü. Ondan sonra başka grup çalışması işte bir toplantı oluyor bazen işte hani bir brainstorming yapalım şeyine dönüştü. İnsanlar seviyor öyle brainstorming demeyi falan. Biraz daha şey ne denir ona somut odaklı hale geldi sadece. Ama aslında yaptıkları, okulda yaptıklarımızdan çok farklı şeyler değil.

- [91] **Araştırmacı:** Peki bu kullandığın dil çalışma ortamında nasıldı? Yani sana tanındık bir dil miydi? Yoksa yabancı bir dil miydi, çalışmaya başladığında gördüğün?
- Katılımcı:** Yani aslında daha yüzeysel bakılıyordu her şeye. Daha yüzeysel bir yaklaşım vardı. Yabancı olduğum bir dil olduğunu söyleyemem ama mesleği tanımlarken, yaptığım işi tanımlarken yabancı olduğum bir şeydi. Çünkü o yaklaşımla yaptığınız işin profesyonellliğini çok anlatamırdınız. Mecburen şov işi yani biraz da iş, ikna etme işi, kandırma işi... O yüzden de biz de o adaptasyonu sağladık bir şekilde yani, sağlamak zorunda kaldık.
- Araştırmacı:** Örnek verebileceğin özellikli bir şey var mı?
- Katılımcı:** Ya mesela; “*Bu çok güzel bir ürün*” diyemezsin şeide değil mi, akademide, okulda... Mesela bu çok güzel oldu. Güzeli sorarlar, “*Niye?*” Yani yanlış bir tabirdir ama mesela iş hayatında bir patronla konuşuyorsan “*Bu çok güzel*” deyip böyle bir giriş yaparsan mesela etkilenebilir, çünkü jargon o şekilde.
- [92] Yok, tanındık. Ya iş hayatı, mesleki olarak zaten bir bölümle ilgili bir şey zaten şeyim olduğu altyapım olduğu için işte konuşulan, söylenen şeyler bana çok tanındık geliyor. Sadece savunma sanayine ilk geçtiğimde çok yabancı kavramlarla, kısaltmalarla karşılaştım. Ama bunlar tamamen şey, tasarımdan ziyyade, işte yapılan işin niteliğiyle alakalı olan şeylerdi.
- [93] Kendine yani ürünün kendine özgü bir terminolojisi var. O terminoloji çok kullanılıyor doğal olarak. En çok kullanılan şey o oluyor ama bu sadece tasarımlar arasında değil genel olarak bütün Ar-Ge, ürün geliştirme işte tasarım departmanları için geçerli. Yani bu ortak dil ürünün terminolojisinden kaynaklanıyor ya da üretimin terminolojisinden kaynaklanıyor. Tasarım ofisi olmadığımız için, tasarım danışmanlığı veren bir kurum olmadığımız için genelde bizim bütün iş konuşmalarımız ürün üzerinden oluyor. Bu yüzden de bu dili belirleyen şey ürün ve üretim metotları oluyor.
- [94] (...) Üretim kısmında ustaların anladığı bir dil var. Eğer üretime dair bir şey yapılıyorsa yani odada da o şekilde konuşuluyor.
- [95] **Araştırmacı:** Çalışma ortamında sıkılıkla kullandığınız kelimeler, söz öbekleri, hitap biçimleri neler vardı?
- Katılımcı:** Yani ‘Bey/Hanım’ mümkün olduğu kadar tercih ediyorsunuz. İşte “[...] Bey, [...] Hanım” vesaire... Yani Bey/Hanım bence iş hayatında önemli düzenli kullanılması gerekiyor. Yani ben orada girdiğim zaman en küçük insandım yaş olarak. Ağabey, abla demek hiç hoş değil. Mesela beyaz yakalılara hiç hoş değil. Mavi yakalılar ‘Ağabey/Abla’yı çok seviyor. Yani

‘Usta’dan çok ‘Ağabey’i seviyor. İşte “[...] Ağabey nasilsın?” falan... Gidiyorum ahşap atölyesine işte “Ne yaptın [...] Ağabey?” falan, onları çok seviyorlar. Yaş olsun olmasın hani orada şöyle de bir durum var...

Araştırmacı: Saygı gibi...

Katılımcı: Usta vesaire deyince saygı gibi oluyor. Bir de onları konumlandıryorsun bir yerde; “*Sen benim ustamsın. Sen benim ağabeyimsin*”. Yani benim o şekilde bir yaklaşımım vardı. Mavi yakalıysa ‘Ağabey’ değilse ‘Bey/Hanım’... Ama bireysel, birebirde ki iletişimlerde “[*İsim*]” diyebiliyordum rahatlıkla ama işte sana “[*İsim*]” diyorum konuşurken mesela ama başka birine senden bahsederken “[...] Bey ile yaptığımız görüşme” şeklinde ifade ediyordum ama bu benim kesinlikle bireysel yaklaşımım meseleye.

- [96] Ya okulda dediğim gibi belirli bir kullanım şekli yoktu ancak okuldaki yani bu dediğim gibi ‘oturma ünitesi’ bilmem ne gibi daha akademik tabirleri iş hayatında kullanmıyorduk. İş hayatında daha netti her şey. Genelde ustalarla konuşur gibi konuşurduk çünkü yöneticilerimiz de çok eğitimli insanlar değildi genel olarak. Hani bize zaten o şekilde yakışırlardı biz de o şekilde davranışmak zorunda kalındık.
 - [97] Bir önceki yerim açık ofis değildi. Kendimize ait yerimiz vardı. Öyle olunca daha rahattı. O zaman stüdyo ile hemen hemen aynı diyebilirdim. Çünkü kapalıydı. Arka tarafta istediğin müziği açardın. Bazen hatta Cem Yılmaz’ı açar dinlerdik yani. Ama şu anki ona göre biraz kısıtlı çünkü hani yakın yanında Ür-Ge var. Açık ofis sonuça... Diğer tarafta proje planlama var.
 - [98] (...) [şirket adı x]’teki çalışma ortamım daha aslında şeydi, daha rahattı; çünkü çevre tamamen bize [endüstriyel tasarımcılar] aitti. [şirket adı y] de, diğer bu kübik şeklinde... Kübik bence oldukça kötü bir tasarım ve çalışanın performansını oldukça olumsuz etkileyen bir yapı olduğunu düşünüyorum.
 - [99] **Katılımcı:** Yani çok kurumsal olduğu için aslında okulla pek alakası yok. Altı kişilik kübekte standart çalışma ortamı var. Hani çok böyle işte yaratıcılığı tetikleyecek işte ne bileyim işte çok farklı mimariye sahip hani okul gibi bir ortam yok. (...)
- Araştırmacı:** Çalışma ortamı daha rahat hareket edebilme, stüdyoya yakın bir hareket edebilme durumun var mı? Yoksa...
- Katılımcı:** Yok yani çalışma alanında... Sonuçta o tasarım dediğim gibi okulda zaten çalışma çok farklı bir konsept. İşte, hani biraz daha tasarım kültüründen ya da okul kültüründen çok şirket kültürüne kayıyor aslında.
- Araştırmacı:** Şirket bu konuda, endüstriyel tasarımcıya nasıl bakıyor? Nasıl, rahat etmesi açısından bir farklılık sunuyor mu?

Katılımcı: Yok bir farklılık sunmuyor. Hani şirketin de dediğim gibi hani mühendislik bazlı bir şirket olduğu için hani çok da aslında endüstriyel tasarım konseptini ya da hani getirisini götürüsünü çok fark ettiklerini düşünmüyorum ya da fark ediyorlarsa da en azından kulağının üzerine yatma gibi bir durum var genel olarak. Onun dışında bir şey sunmuyor ama hani kurumsal olmasının şöyle bir avantajı var; hani maddi anlamda yani kendini geliştirebilme anlamında bir şey talep ettiğinde çok kolay bir karşılığı oluyor. Böyle bir farklılığı var hani o küçük şirketlerle de kıyaslayınca bir avantaj aslında.

- [100] Şöyle, yani diğer ikisinde [tasarım odaklı şirketler] öyleydi [rahatlardı]; ama [kurumsal üretim firması]'de öyle bir rahat ortamdan bahsedemem. Açık ofiste çalışmayı dert edeceğini düşünmüyorum. Diyorum ya stüdyoda çalışıyordu sonucta oradan bir hafif müzik geliyor. Burada bir insanın sorunu var, bir şeyi tartışıyor olabilir. Koridora sırtımızı dönüyoruz. Koridordan geçen herkes benim bilgisayar ekranımdaki her şeyi görebilir yani o an ne işe meşgul olduğumu da görebilir. Orada bir muhabbet oluyorsa bazen ses yükselebiliyor. Yani hani 70 kişiyiz ya hani bir tane şımarıklık olsa herkes farkında ki şey yapılacak o yani hani kaldırılamaz burası. Zaten genel müdür yardımcımız hem mekanik hem endüstriyel tasarımından sorumlu. Sadece müdürlerimizin odası değil onun odası da orada. Yani mesela stüdyoda sandalyeye oturmak istersen sandalyeye otururum. Masaya oturmak istersem masaya otururum. Mesela burada masaya otururken biraz düşünürsun. Ya da ne bileyim böyle bağıramazsan yani yan arka masamı bile ararım yani. Belki sadece tasarım ofisi olsa daha rahat olabilir daha az kişi olduğu için. 70 kişinin 70'i de endüstriyel tasarımcı olsa yine biraz daha rahat bir ortam olabilir. Biraz daha gergin geçiyor. Biraz daha hareketlerime dikkat etmem gereklidir. *“Böyle davranışacaksan, bu yaptığıн yanlış. Geçen gün söyle yaptın”* gibi hiçbir şeyle karşılaşmadım. Ama o gerilimi hissedebiliyorsun. Bu kadar rahat olmaman gerekiyor. Onu hissettiriyorlar [müdürler].
- [101] Okulda daha rahatsın, okulda nispeten açık ofis gibi bir durum vardı, burada o yok. Burada bir de devamlı birinin gözetimi altındasın. Odada bir tane şef oluyor ister istemez ve onun kontrolü altındasın mütemadiyen. Rahat olmuyor o kadar. Ben mesele uzun süre sandalyede otuructan bir süre sonra böyle kayıp giden bir insanım, böyle yayılıyorum mesela ve de bu bir kadın için hiç hoş karşılanmıyor. Özellikle patron nefret ediyormuş, sırıf bu yüzden oturuşundan dolayı işten çıktıgı adam olmuş yani. Ben bir süre sonra işte render alıyorsam, modelliyorum rahatlıyorum... Sonra birden pozisyonu görüp tekrar toparlanmak zorunda kalıyorum. Senin rahat ettiğin değil de dışardan ne normal karşılanıyorsa o şekilde davranışmak zorunda kalıyorsun.
- [102] Stüdyo ortamına pek benzemiyor. Bir kere stüdyo kadar dağınık değil, ama stüdyo kadar geniş masalarım da yok, o kötü. Masamız hani bana yetmiyor

böyle hani böyle büyük büyük masalarımız olsun, kocaman ben A3'lere çizim yapayım istiyorum ama öyle değil. İşte bu büyütülebilir. (...) Kulaklığımı takıyorum işte kendim çizim yapıyorum, modellememi yapıyorum, işte fikir alışverişinde bulunuyorum. Öyle beni çok geren bir durum yok.

- [103] Okuldakine benzıyor mu? Benziyor ama şu şekilde tabi maket falan yapamıyoruz, biraz daha temiz tutman gereken bir ortam. Hani çok dağınık olmuyor. (...) Biraz daha memur tarzında işte muhasebe bölümümüz gibi bir masamız var. Onun üstünde en fazla çizim yapabiliyoruz. Onun dışında temiz tutmamız gereken bir ortam ya da biraz daha sessiz falan diyeyim, ne diyeyim... Dikkatli oluyoruz yani okulda o kadar dikkatli olmuyorduk hani. Çünkü denetleniyor bu tarz yerler. Temizliğe gelen ya da görevliler tarafından uyarı alabiliyorsun.
- [104] (...) [şirket adı]'un böyle internette şeyivardı izledin mi? Ofis mantıklarını dedi ki kimsenin kişisel masası yok, proje masaları var bizde. Hangi projede çalışacaksan oraya gelirsin ve beraber çalışırsın veya yalnız çalışacaksan işte tamamen kapalı bir odamız var. Oraya girersin ve o odada çalışırsın ve kimse seni rahatsız etmez. Bence en ideal o tabi ki hakikaten çok mantıklı yani çünkü yalnız herkesten kapanıp sessiz bir ortamda çalışmak istediğin şey de oluyor. Ya şimdi ben güzel herkesin olduğu yerde çalışmak güzel dedim ama bazen de o kadar ses seni o kadar rahatsız ediyor ki soyutlanmanda gerekebiliyor. İkisinin de olduğu bir şey, ikisinin de sağlandığı bir çalışma ortamı isterdim.