

EXPLORING FUTURES WITH WORLD BUILDING IN DESIGN EDUCATION:
BUILDING AND APPLYING A THEORETICAL MODEL THROUGH ACTION
RESEARCH

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EMRE ÇAĞLAR

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Approval of the thesis:

**EXPLORING FUTURES WITH WORLD BUILDING IN DESIGN
EDUCATION: BUILDING AND APPLYING A THEORETICAL MODEL
THROUGH ACTION RESEARCH**

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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.

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ABSTRACT

EXPLORING FUTURES WITH WORLD BUILDING IN DESIGN EDUCATION: BUILDING AND APPLYING A THEORETICAL MODEL THROUGH ACTION RESEARCH

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Supervisor: Prof. Dr. Gülay Hasdoğan

February 2021, 14 pages

Design students are often engaged with future contexts, as design education encourages them to explore different contexts and understand the implications of their activities. These explorations are done in what is called a fuzzy front-end in design, which stands for the chaotic but fruitful early phase of a design process. There are different approaches used by design students to conduct research and increase immersion into the context in this phase. Approaches such as design scenarios, make use of fictional information in addition to factual, in order to increase immersion into context and help design students generate inferential insights. This creates both epistemological and practical challenges in terms of how to define and utilize fiction within the early phases of design. This study draws from the existing literature to utilize world building in this phase. Through action research, three workshops were conducted with design students to generate a theoretical model for presenting how world building is utilized in design education, contributing to the design literature. Furthermore, the toolset devised for use in these workshops is iterated throughout the study based on the insights from the theoretical model, and is presented as a practical contribution to the design education literature. Based on the results, this study presents a case for

how world building in design education is carried out in waves of speculation for creating textual reference worlds, and assessment for comparing these speculations with actuality through pragmatic concerns.

Keywords: design fiction, design education, world building, design for future, action research

ÖZ

TASARIM EĞİTİMİNDE DÜNYA KURGULAMA İLE GELECEĞİ KEŞFETMEK: EYLEM ARAŞTIRMASI İLE KURAMSAL MODEL OLUŞTURULMASI VE KULLANIMI

Çağlar, Emre

Doktora, Endüstriyel Tasarım Bölümü

Tez Yöneticisi: Prof. Dr. Gülay Hasdoğan

Şubat 2021 , 14 sayfa

Tasarım eğitimi, öğrencilerin farklı bağlamları keşfetmesi ve üretimlerinin bu bağlamları nasıl etkileyebileceğini düşünebilmeleri için onları sıklıkla gelecek bağlamları ile ilgili çalışmaya itmektedir. Bu keşifler tasarımın belirsiz önyüzü de denilen, kaotik fakat üretken bir erken tasarım sürecinde gerçekleşmektedirler. Bu süreçte tasarım öğrencileri pek çok farklı yöntemden faydalanarak araştırma yapar ve önceden tanımadıkları bağlamların içine girmeyi hedeflerler. Bu yöntemlerden biri olan tasarım senaryoları, gerçek bilgilerden olduğu kadar kurgusal bilgilerden de faydalanır. Bu sayede öğrenciler bağlamların daha çok içine girerek dolaylı çıkarımlar yapabilirler. Bu durum, kurgunun tasarımdaki tanımı ve yeri ile ilgili epistemolojik ve pratik sorunları beraberinde getirir. Bu tez, mevcut literatürden faydalanarak söz konusu erken aşamayı bir dünya kurgulama yöntemi olarak tanımlıyor. Tez kapsamında eylem araştırması ile üç çalıştay gerçekleştirilmiş ve sonuç olarak ortaya tasarım eğitiminde dünya kurgulamanın nasıl kullanıldığına dair bir teorik model çıkartılarak tasarım literatürüne katkı sağlanmıştır. Bununla birlikte, çalıştaylarda kullanılan araç seti, ça-

lıřma boyunca geliřtirilmiř ve son hali ile tasarım eęitimi literatürüne katkı olarak sunulmuřtur. Tezin sonucunda tasarım eęitiminde dünya kurgulamanın, önce metinsel referans dünyalarını yaratan spekülasyonlar, sonra da bunları asli dünyadaki pragmatik endiřelerle karřılayan deęerlendirmeler arasındaki dalgalanmalar olarak tasviri öne sürölmüřtür.

Anahtar Kelimeler: kurgusal tasarım, tasarım eęitimi, dünya kurgulama, gelecek için tasarım, eylem arařtırması

Dedication

ACKNOWLEDGMENTS

Acknowledgements

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LIST OF ABBREVIATIONS

FFED	Fuzzy Front-End of Design
SCD	Speculative and Critical Design
HCI	Human-Computer Interaction

CHAPTER 1

INTRODUCTION

There is an increasing interest in the early stages of design, the so called fuzzy front-end in design (FFED), which focuses on defining better questions before designers attempt to answer them Aaltonen and Barth, 2005.



Figure 1.1: Screenscaps from a movie Scott, 1982.

1.1 Research Aim

1.2 Research Questions and Approach

My aim is to explore world building in design education, by understanding and supporting it in the early phases of design. My main research questions are as follows:

1. How can a theoretical model describe and represent the world building process of design students when working with future contexts?
2. What are the properties of a toolset for openly enabling world building to be used by design students when working with future contexts?

1.3 Contributions to Literature

There will be two main contributions to the existing body of knowledge in design education. First, the answer to my first research question will provide a theoretical model of world building in design education. This model will be generated by layering four research outputs: (1) an interpretive literature review for transporting concepts of world building from media studies to design, (2) elements and their properties of world building, (3) processes of world building and (4) pragmatic concerns of world building. These layers will be weaved together to present a wholistic model of world building in design education, contributing to existing body of knowledge within design education literature.

1.4 Structure of the Thesis

The overall structure of this dissertation is built on four components: literature review, methodological framework, workshops and conclusions. The literature review consists of Chapter 2 (p. 3), and Chapter 3 (p. 5). These chapters will present my theoretical background.

CHAPTER 2

LITERATURE REVIEW

In this chapter, I will explore the existing approaches used by designers to make sense of unfamiliar contexts Aaltonen and Barth, 2005.



Figure 2.1: FFED in the design process.

2.1 Heading 1

Design research is often theorized under three phases: exploratory, generative, and evaluative research.

2.1.1 Subheading

2.1.1.1 Subsubheading

Below is a quote I translated from the original Turkish. The original Turkish text is automatically inserted in the Appendix.

"English translation from the original quote."¹

Design research is often theorized under three phases: exploratory, generative, and evaluative research Aaltonen and Barth, 2005.

CHAPTER 3

METHODOLOGY

In this chapter, I will explore the existing approaches used by designers to make sense of unfamiliar contexts Aaltonen and Barth, 2005.



Figure 3.1: FFED in the design process.

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Design research is often theorized under three phases: exploratory, generative, and evaluative research.

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Design research is often theorized under three phases: exploratory, generative, and evaluative research Aaltonen and Barth, 2005.

REFERENCES

- Aaltonen, M., & Barth, T. (2005). How Do We Make Sense of the Future? *Journal of Futures Studies*, 9(4), 45–60.
- Scott, R. (Director). (1982). *Blade runner* [Film]. Warner Bros.

Appendix A

ORIGINAL QUOTES

Quotes from Chapter 2

[1] Orjinal Türkçe metin.

Quotes from Chapter 3

[2] Orjinal Türkçe metin.

Appendix B

INTERVIEW QUESTIONS FOR PARTICIPANTS

B.1 Original Turkish Text

Merhabalar,

Öncelikle ses kaydı alacağım, senden de ricam eğer mümkünse kendi tarafından da telefonuna ses kaydı alman. İzninle başlıyorum.

B.2 English Translation

Hi,

I will be recording the session, and if you can, please record your own end with your phone. With your consent, I begin.

CURRICULUM VITAE

PERSONAL INFORMATION

Surname, Name: Surname, Name

Nationality: Turkish (TC)

Date and Place of Birth: Birthday, Birthplace

Marital Status: Marital Status

Phone: Phone Number

Fax: Fax Number

EDUCATION

Degree	Institution	Year of Graduation
M.S.	M.S. Institute	M.S. Year
B.S.	B.S. Institute	B.S. Year
High School	High School Name	High School Graduating Year

PROFESSIONAL EXPERIENCE

Year	Place	Enrollment
Duration 1	Institute/Company 1	Role/Position/Experience 1
Duration 2	Institute/Company 2	Role/Position/Experience 2

PUBLICATIONS

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