

MULTIDISCIPLINARY PERSPECTIVES IN EDUCATIONAL AND SOCIAL SCIENCES IV

EDITOR

Prof. Dr. Mustafa KAHYAOĐLU

AUTHORS

Ahmet MAŐLAKĐI

Banu KARAŐAH

Derya SARI

Duygu IŐPINAR AKĐAYOĐLU

Enver ISMAIL

Gökçe DIŐLEN DAĐĐÖL

Hakan ULUM

Haldun VURAL

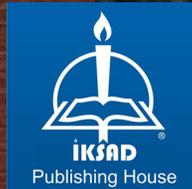
Hasan Emre ÜNAL

İpek Fatma ĐEVİK

Rahmi BAKİ

Sarvenaz SAFAVI

Sinan GÜL



MULTIDISCIPLINARY PERSPECTIVES IN EDUCATIONAL AND SOCIAL SCIENCES IV

EDITOR

Prof. Dr. Mustafa KAHYAOĐLU

AUTHORS

Ahmet MAŐLAKĐI

Banu KARAŐAH

Derya SARI

Duygu İŐPINAR AKĐAYOĐLU

Enver ISMAIL

Gökçe DİŐLEN DAĐĐÖL

Hakan ULUM

Haldun VURAL

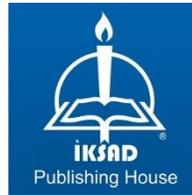
Hasan Emre ÜNAL

İpek Fatma ĐEVİK

Rahmi BAKİ

Sarvenaz SAFAVI

Sinan GÜL



Copyright © 2022 by iksad publishing house
All rights reserved. No part of this publication may be reproduced,
distributed or transmitted in any form or by
any means, including photocopying, recording or other electronic or
mechanical methods, without the prior written permission of the publisher,
except in the case of
brief quotations embodied in critical reviews and certain other
noncommercial uses permitted by copyright law. Institution of Economic
Development and Social
Researches Publications®
(The Licence Number of Publisher: 2014/31220)
TURKEY TR: +90 342 606 06 75
USA: +1 631 685 0 853
E mail: iksadyayinevi@gmail.com
www.iksadyayinevi.com

It is responsibility of the author to abide by the publishing ethics rules.
Iksad Publications – 2022©

ISBN: 978-625-8213-09-6
Cover Design: İbrahim KAYA
September / 2022
Ankara / Turkey
Size = 16x24 cm

CONTENTS

PREFACE

Prof. Dr. Mustafa KAHYAOĞLU.....1

CHAPTER 1

EXAMINING THE VIEWS OF CLASSROOM TEACHERS IN MATHEMATICS

Assist. Prof. Dr. Hakan ULUM.....3

CHAPTER 2

EXPLORATION OF TEACHER IMMUNITY AMONG EFL INSTRUCTORS AT A SCHOOL OF FOREIGN LANGUAGES

Asst. Prof. Duygu İŞPINAR AKÇAYOĞLU

Asst. Prof. Gökçe DIŞLEN DAGGÖL.....19

CHAPTER 3

THE BEGINNING OF THE END: THE IMPACT OF JAMES I OVER HIS SON CHARLES I

Sinan GÜL, PhD35

CHAPTER 4

EVALUATION OF PRE-SCHOOL EDUCATION INSTITUTIONS EFFECTIVENESS WITH DATA ENVELOPMENT ANALYSIS

Asst. Prof. Dr. Rahmi BAKI67

CHAPTER 5

RURAL MIGRATION AND FOREST VILLAGES IN TURKEY

Asst. Prof. Dr. Hasan Emre ÜNAL85

CHAPTER 6

THE FUTURE OF MULTICULTURALISM

Assoc. Prof. Dr. Ahmet MAŞLAKÇI105

CHAPTER 7

**A SEMIOTIC STUDY ON THE SUPERSTITION OF EVIL EYE
IN IRANIAN CULTURE**

Asst. Prof. Dr. Sarvenaz SAFAVI123

CHAPTER 8

**THE PROBABLE REASONS FOR MISTAKES IN SECOND
VERSIONS IN SIMULTANEOUS INTERPRETATION**

Asst. Prof. Dr. Haldun VURAL133

CHAPTER 9

LIVE STREAMING ON A NETWORK

Assoc. Prof. İpek Fatma ÇEVİK.....153

CHAPTER 10

**EVALUATION OF ISFANBUL (VIALAND) THEME PARK
IN TERMS OF SPATIAL LANDSCAPE FEATURES***

Assoc. Prof. Derya SARI , Enver ISMAIL.....175

CHAPTER 11

**ASSESSMENT OF ARTVIN ÇORUH UNIVERSITY
SEYITLER CAMPUS (FRONT OF ENGINEERING FACULTY
AND VOCATIONAL SCHOOL) IN TERMS OF XERISCAPE
DESIGN**

Assoc. Prof. Banu KARAŞAH195

PREFACE

In the 21st century, individuals are expected to be able to interpret the problems they encounter holistically and to solve them by considering them from different aspects with a multidisciplinary perspective. This expectation also shows itself in national and international studies. Recently, there has been an increase in multidisciplinary studies in many fields, especially in education and social sciences. Studies on a multidisciplinary perspective, which is based on examining a concept, subject or problem by considering the knowledge and methods of more than one discipline, or integrating it with different knowledge and skills by centering a certain subject / theme or problem, are very important for the literature. Multidisciplinary perspective has many benefits such as making sense of information, gaining multi-dimensional thinking skills and different perspectives, establishing relationships between different content and topics, and motivating learners and teachers. For this reason, there is a need to increase the number of publications that will develop a multidisciplinary perspective.

In this book, a multidisciplinary view of academics who are experts in their fields, from the opinions of classroom teachers on mathematics, to the evaluation of preschool schools with data envelopment analysis, from the spatial landscape of the Istanbul theme park, from rural migration and forest villages in Turkey, from the future of multiculturalism to the effect of live streaming on the network. You will have the opportunity to read his studies on education and social sciences.

We would like to thank the valuable researchers who contributed to the preparation of the book "Multidisciplinary perspective in Education and Social Sciences" and IKSAD publishing house, which played a great role in the publication of the book.

Prof. Dr. Mustafa KAHYAOĞLU

CHAPTER 1

**EXAMINING THE VIEWS OF CLASSROOM
TEACHERS IN MATHEMATICS**

Assist. Prof. Dr. Hakan ULUM¹

¹ Necmettin Erbakan University, Eregli Faculty of Education, Department of Classroom Teaching, Konya, Turkey, hakanulum@gmail.com, ORCID: 0000-0002-1398-6935

1. INTRODUCTION

Mathematics can be expressed as the science of patterns and order in its most general definition. Mathematics creates some concepts and operations. It is important to know these concepts and processes. However, in today's world, where the change has gained incredible momentum, it is necessary to go beyond these concepts and operations to be mathematically competent. Being competent in mathematics comes from the ability to use mathematical knowledge. Individuals who are competent in mathematics knowledge can compete in every field related to mathematics. For example , it can do more work with less energy in daily life, stand out in local, national and international competitions, develop its society, maintain academic competition, contribute to science, keep up with professional competition and produce meaningful solutions to problems. The importance of learned mathematics and the mathematical competence formed on the basis of this information is critical.

Today, although the importance of mathematics in our lives is no longer discussed, curriculum and pedagogy problems related to mathematics education continue to be discussed in the field of mathematics (Schoenfeld, 2004). Such questions as "What are the goals of mathematics education?, Does everyone have to take math classes?, What kind of mathematics should be taught to primary, secondary, high school and university groups?, Does everyone need to learn algebra?, How should math be taught?" can be only answered by referring to the question "What is math?" (Latterell, 2012). An important part of the solutions of these questions involves teachers. Children begin learning a critical part of mathematics knowledge which will make a difference in their lives in the future with their classroom teachers. They continue to learn throughout their education period. Those who are competent in the mathematical sense with the knowledge they have gained will achieve success in their profession as well as in other fields after their course. Success in mathematics is at the maximum level with a full understanding of what mathematics is.

However, even teachers whose profession is mathematics ask the question "What is mathematics?" and have difficulty answering the question. Yet, this difficulty has a negative effect on the enjoyment and motivation of mathematics (Devlin, 2006; Latterell & Wilson, 2013). This creates deep-rooted problems in mathematics. It is possible that teachers' negative experiences with mathematics will spread to their students. The negativities reflected on the students can put them back in their daily lives and academic

development. Success in teaching mathematics brings open-minded societies. Mathematics, which gives a subjective perspective, is not limited to four operations (Aydm, 2003). Children who are afraid of mathematics form societies that get bad results in national and international mathematics exams cannot develop in the field of science.

In mathematics teaching, teachers' approach to teaching mathematics emerges as a subject that should not be ignored. The starting point of teachers' approaches to mathematics may be "Primary school teachers' thoughts about mathematics" (Handal & Herrington, 2003) and these directly affect students' learning of mathematics (Philipp, 2007). From this perspective, it is important to reveal and present the perceptions of primary school teachers about the concept of mathematics. Classroom teachers can use the results obtained in this study to turn negative situations related to mathematics into positive. Researchers can also use these perceptions in their mathematical studies. Thus, it is thought that teachers will contribute to the transfer of positive experiences towards their students' conceptions of mathematics.

Based on all these explanations, the perceptions of the participants, who are primary school teachers who play an important role in mathematics learning, about the concept of mathematics-aroused curiosity. This research was conducted to reveal these perceptions. Understanding the participants' experiences with mathematics is the main purpose of this research. For this purpose, answers were sought to the following questions:

1. What are the classroom teachers' perceptions of mathematics?
2. What are the perceptions of classroom teachers that emerge when they associate mathematics with themselves?
3. What are the perceptions of the classroom teachers about the mathematics lessons given in schools?
4. What are the perceptions of the classroom teachers about the mathematics lessons given to them?
5. What are the perceptions of classroom teachers on our society's judgments about mathematics?
6. What are the perceptions of classroom teachers about the importance of mathematics?
7. What are the perceptions of the classroom teachers on how to love mathematics more?

2. METHOD

2.1. Study Design

The study is based on a phenomenologic research design. In phenomenologic studies, participants' perceptions based on their experiences are considered and their statements are taken accordingly (Richards & Morse, 2007). Moustakas (1994) explained phenomenology as the act of creating meaning as a process that focuses mainly on the interpretation of participants' experiences, rather than researchers' critique of an existing situation. This view was adopted during this research process. Namely, understanding the participants' experiences with the concept of mathematics is the main purpose of this research.

2.2. Participants

This study was conducted in a primary school located in the center of Seyhan District of Adana province in the 2021–2022 academic year. A universal generalization of the results was not considered when selecting the qualitative study group. The study group of the research consisted of 13 classroom teachers. In phenomenology studies, the number of participants emerges between 5 and 25 (Creswell, 2013; Ersoy & Saban, 2016). In this regard, the number of participants was observed to be sufficient. While determining the participants, the "easily accessible sampling" method was chosen. In line with the purpose of the research, primary school teachers formed a study group from the province where the researcher resides. Six of the participants were male and 7 were female.

2.3. Data Collection Tools

In the study, the data were collected face to face with a semi-structured interview form. This form was developed by the researcher. A semi-structured interview form was created within the scope of the theoretical information formed through the literature review made before the research. The questions used in the semi-structured interview form are the same as the research questions. Research questions can be formed in this direction. The researcher made a probe by using these questions during the interview.

2.4. Data Analysis

According to Moustakas (1994), phenomenology researchers build bridges between the different interpretations rather than simply describing a situation. In this system, the definition of a phenomenon, the description of

the relevant personal experience, and the collection of information from various individuals who have experienced this phenomenon are followed.

Content analysis was applied for the data obtained from the research. According to Yıldırım and Şimşek (2008), we should consider some steps while subjecting the data to content analysis. Accordingly, the data in the present study were respectively coded and the themes were created. Codes and themes were arranged, and the findings were defined and interpreted. The phenomenon experienced based on the analysis process was shaped by content analysis and was explained as a meaning that can be common for different orientation relationships.

Consistency in perceiving similar behavior occurring in different situations and defining these behaviors was considered important in terms of research reliability (Ersoy & Saban, 2016). For this reason, support was received from a faculty member in the field, observations were made during the interviews, notes were taken, and the interview was compared with the observation data. In the analysis process, all documents related to a phenomenon created a raw data set and these data were validated with deeply coded expert opinions.

3. FINDINGS

The findings regarding the perceptions of primary school teachers toward the concept of mathematics are given below.

Table 1: Perceptions of Classroom Teachers toward the Concept of Mathematics

Theme	Code	Frequency
Cognitive Concepts	Reasoning	4
	Problem solving	8
Mathematical Concepts	Process	2
	Number	5
Field-Oriented Concepts	Science (Basic mathematics)	7
	Education (Lesson)	4

Classroom teachers characterized the concept of mathematics with the concepts of daily life, problem solving, science, number, reasoning, education, operation and philosophy, respectively. These concepts are grouped under the themes of cognitive (f:12), mathematical (f:7) and field-

oriented (f:22). As can be understood from the findings, primary school teachers perceive mathematics more as a field theme (Table 1).

Below are some direct quotations from the interviews with the classroom teachers regarding these themes:

K3: It is a comprehensive course that includes lots of operations and problems that are also useful in our daily life and includes numbers.

K7: Mathematics is called science based on reasoning. This science, which is generally taught in schools and increases problem-solving skills, is encountered in all areas of life.

Table 2: Perceptions of Classroom Teachers About Associating Themselves with Mathematics

Theme	Code	Frequency
Personality Related Links	Enjoyable	4
	Organized	5
	Disciplined	4
Cognition Related Links	Problem solver	8
	Engrossing	6
	Hard	9
	Supportive	3

Classroom teachers used the most difficult, problem-solving, thought-provoking, orderly, disciplined, entertaining, and supportive concepts, respectively, when associating themselves with mathematics. These concepts are grouped under themes related to cognition (f:26) and personality (f:13). As it can be understood from the findings, primary school teachers made comparisons about their cognitive characteristics while associating themselves with mathematics (Table 2).

Below are some direct quotations from the interviews with the classroom teachers regarding these themes:

K11: Since I am a person who attaches importance to order and discipline and these features are found in mathematics, I have a good approach.

K1: *Mathematics is fun, like me. My definition of a difficult person also coincides with mathematics.*

Table 3: Perceptions of Primary School Teachers About Mathematics Lessons Given in Schools

Theme	Code	Frequency
Cognitive	Boring	8
	Monotone	5
Affective	Rote	10
	Theoric	5
Curriculum	Hard	8
	Unrelated to daily life	6

Classroom teachers expressed the mathematics lessons given in schools as rote learning, boring, far from difficult daily life, theoretical and monotonous, respectively. These concepts are grouped under the themes of cognitive (f:13), affective (f:15) and curriculum (f:13) concepts. As it can be understood from the findings, primary school teachers expressed the mathematics lessons given in schools mostly under an affective field. However, the cognitive and curricular themes of the mathematics courses taught in schools are similar in intensity (Table 3).

Below are some direct quotations from the interviews with the classroom teachers regarding these themes:

K5: *I think that the mathematics education given at school is extremely boring and consists of theoretical information overload.*

K6: *Mathematics is actually important for us to solve complex problems in daily life and to make certain calculations. I do not think that the mathematics education given in schools can fulfill this completely.*

Table 4: Perceptions of Primary School Teachers About the Mathematics Lessons Given to Them

Theme	Code	Frequency
Affective	Enjoyable	2
	Boring	7
Cognitive	Hard	7
	In-depth	8
	Giving a different perspective	4
Field	Important	4
	Rote	6

Classroom teachers expressed the mathematics lessons given to them as in-depth, boring, difficult, rote-based, important, giving a different perspective, and entertaining, respectively. These concepts are grouped under the themes of cognitive (f:19), affective (f:9) and field-oriented (f:10). As it can be understood from the findings, primary school teachers grouped the mathematics lessons given to them mostly under a cognitive domain theme (Table 4).

Below are some direct quotations from the interviews with the classroom teachers regarding these themes:

K2: I think that formulas are memorized in mathematics lessons and education is given on questions that can only be asked in exams.

K1: I know that I do not like boring math lessons at school and that its teaching is not permanent. I wish we had taught mathematics in a more fun way during my middle school and high school years, then maybe I would have been more successful in mathematics. Also, instead of explaining too many subjects superficially, I think that the subjects that may be really important for a person should be taught a little more deeply and digested.

Table 5.Perceptions of primary school teachers toward society's view of mathematics

Theme	Code	Frequency
Affective	Prejudice	5
	Fear	8
Cognitive	Hard	7
Functional	Useless	6

They associated the classroom teachers' perspectives on mathematics with the concepts of the most feared, difficult, useless, and prejudice, respectively. These concepts are grouped under cognitive (f:7), affective (f:13) and functional (f:6) themes. As can be understood from the findings, primary school teachers classify the society's view of mathematics in terms of affective characteristics (Table 5).

Below are some direct quotes from the interview with the classroom teachers on these themes:

K8: Our society thinks that mathematics is a very difficult subject that cannot be done in any way. Because of this thought, future generations also approach mathematics with prejudice.

K3: There is a negative attitude toward mathematics in our society. The reason for this is that teachers in primary and secondary schools push children away from the lesson with the pressure of teaching mathematics and cause fear toward the lesson.

Table 6: Perceptions of Primary School Teachers About the Importance of Mathematics

Theme	Code	Frequency
Cognition	Gaining perspective	5
Field	in nature	3
	Education	7
	Daily life	9
	Science	6

Classroom teachers characterized the importance of mathematics with the concepts of daily life, education, science, perspective, natural order and concepts, respectively. These concepts are grouped under the themes of Cognitive (f:5) and Field-related (f:25) concepts. As it can be understood from the findings, primary school teachers mostly identified the importance of mathematics with fields (Table 6).

Below are some direct quotations from the interviews with classroom teachers regarding these themes:

K10: Mathematics is critical because it is a science that is effective in all areas of our lives and supports other sciences. It is very common in our daily grocery shopping, construction or school education. It gives a perspective. Exams also affect our lives. Therefore, it is very important.

K2: Mathematics is a concept present in all areas of our lives. It is important in scientific fields such as architecture, physics and astronomy, and it is useful even when shopping, which is a simple process. In other words, mathematics shows itself in every field, regardless of whether it is simple or difficult. Even on earth there was a perfect mathematical harmony.

Table 7: Perceptions of Primary School Teachers Toward Liking Mathematics

Theme	Code	Frequency
Affective Based	By making it fun	8
Curriculum Based	By gamifying	6
	By concretizing	7
	With the method of teaching by doing and experiencing	5
	By changing education policies	4
	Relating to real life	8
	By freeing from memorization	4

The expressions of primary school teachers about liking mathematics are by making them most entertaining, associating with daily life, concretizing, gamifying, teaching by doing, changing education policies and saving them from rote learning. These concepts are grouped under affective-based (f:13) and curriculum-based (f:34) themes. As can be understood from

the findings, primary school teachers attributed their love of mathematics to curriculum-based changes (Table 7).

Below are some direct quotations from the interviews of the classroom teachers regarding these themes:

K7: First all, we should start by not raising children who are prejudiced against mathematics. At school, teachers will help children understand and love mathematics better, as they relate it to real life and give examples from their own lives. Learning by doing and experiencing can also make children love mathematics.

K1: Mathematics can become more fun and enjoyable by organizing games, activities and competitions with students related to the subject to be covered in the lesson.

4. CONCLUSION AND DISCUSSION

According to the results of the research, the respondents attributed different meanings to the concept of "mathematics." Classroom teachers see mathematics more as a field. It is a phenomenon that includes lessons, education, training, science and life. While associating themselves with mathematics, they were more concerned with their cognitive characteristics. These features are generally positive. While negative perceptions predominate in the study, the result in this sub-category is remarkable. Similarly, in the study by Güven et al. (2011) they determined the metaphor perceptions of prospective classroom teachers towards the concept of mathematics. We observed that the perceptions of pre-service classroom teachers as "mathematics as an exciting subject", "mathematics as a difficult and boring subject", and "mathematics consisting of many subjects" came to the fore. In the research conducted by Korkmaz (2021) during the pandemic, 114 metaphors were obtained from 30 primary school mathematics teachers for 4 different metaphor questions. This study partially supported the present study. 72.8% of these involved negative perceptions while 27.2% involved positive perceptions. In the metaphorical sentence for mathematics lessons during the pandemic process, it is seen that 71.5% of the teachers have a negative perception within the categories of inadequate, useless, uncertain and undisciplined. They stated that mathematics course was not sufficient in this process, this course created a feeling of uncertainty, and lost its current discipline, and it was a difficult course.

In the present study, all the perceptions of mathematics lessons given in schools are negative. Opinions on the negativities brought about by the curriculum draw attention. It was also expressed that various opinions under different themes about the mathematics lessons were given by the respondents. Although these opinions are positive or negative, they generally change with respect to mathematics teachers. They perceive the society's view of mathematics mainly in the emotional dimension. A consensus on the fear of mathematics in society also emerges in the present study. Similarly, in the study of Şahin (2013), it is seen that science and technology, pre-school, and classroom teacher candidates who say that they are successful, enthusiastic and hardworking in mathematics class find mathematics enjoyable, successful and establish a relationship with intelligence. It is seen that social studies, art and music teacher candidates prefer negative metaphors about mathematics, mathematics lessons and mathematics teachers more than other branches.

In the study, primary school teachers identified the importance of mathematics in more fields. Its importance in daily life is emphasized. Similar to such results, Güner (2013) found that while primary school teacher candidates think that mathematics makes life more enjoyable, social studies teacher candidates emphasize that mathematics makes their lives more difficult. Unlike both groups, most primary mathematics teacher candidates think that mathematics is life itself. In another study (Yapicioglu & Korkmaz, 2019), it was determined that while describing both science and mathematics concepts, they mostly tried explaining it with the metaphor of life. Additionally, since the metaphor of life is included in more than one theme, it is the concept that pre-service teachers attribute mostly to the meaning.

Classroom teachers attributed their love of mathematics to curriculum-based changes. Mathematics teachers are also perceived to play a major role in mathematics. The curriculum is an important factor in mathematics for all subjects. Further, the book “Curriculum Focal Points for Prekindergarten through Grade 8 Mathematics,” which emphasizes the consideration of the curriculum, was published by the world's largest mathematics education organization “National Council of Teachers of Mathematics (NCTM)” (2006).

The research suggestions are:

- While positive opinions generally predominate when associating themselves with mathematics, negative perceptions stand out in this

study. The reason for this may be the subject of an experimental study.

- Intense criticism of the mathematics curriculum in this study emerges. It should allow the detailed examination of the mathematics curriculum in undergraduate courses with prospective teachers. Additionally, the impact and contribution to the development of the curriculum during the service should be discussed.
- Based on the remarkable frequency of opinions about the importance of mathematics in daily life, projects can be developed to increase the functionality of primary school mathematics lessons in daily life in mathematics undergraduate courses or with in-service training.

REFERENCES

- Aydın, B. (2003). Training individuals in the process of forming knowledge society and teaching of mathematics. *Pamukkale University Journal of Education*, 14 (2), 183–190.
- Creswell, J. W. (2013). *Qualitative inquiry & resaerch design: Choosing among five approaches* (3rd ed.). New York: Sage.
- Devlin, K. (2006). *How do we learn math?* Retrived March 03, 2022, from <https://www.maa.org>.
- Ersoy, A. F., & Saban, A. (2016). *Qualitative research patterns in education*. Ankara, Turkey.
- Güner, N. (2013). Pre-service teachers` metaphors about mathematics. *Education Sciences*, 8 (4), 428-440.
- Güveli, E., İpek, A., Atasoy, E., & Güveli, H. (2011). Prospective primary teachers` metaphorical perceptions towards mathematics. *Turkish Journal of Computer and Mathematics Education (TURCOMAT)*, 2 (2), 159-140.
- Handal, B., & Herrington, A. (2003). Mathematics teachers` beliefs and curriculum reform. *Mathematics Education Research Journal*, 15 (1), 59–69.
- Korkmaz, E. (2021). Metaphoric perceptions of primary school mathematics teachers: different concepts of mathematics in the pandemic era. *Mustafa Kemal University Journal of Faculty of Education*, 5 (7), 1-14.
- Latterell, C. M. (2012). What is Mathematics? *Mathematics in School*, 41 (2), 34–35.
- Latterell, C. M., & Wilson, J. L. (2013). What is Mathematics and Why does it matter. *ETC: A Review of General Semantics*, 70 (4), 387–394.
- Moustakas, C. (1994). *Phenomenological research methods*. London: Sage.
- National Council of Teachers of Mathematics. (2006). *Curriculum focal points for prekindergarten through grade 8 mathematics: A quest for coherence*. National Council of Teachers of Mathematics.
- Philipp, R. A. (2007). Mathematics teachers` beliefs and affect. *Second Handbook of Research on Mathematics Teaching and Learning*, 1, 257–315.
- Richards, L., & Morse, J. M. (2007). *The integrity of qualitative research: Readme first for a user's guide to qualitative methods* (2nd ed.). Thousand Oaks: Sage.

- Schoenfeld, A. H. (2004). The math wars. *Educational Policy*, 18 (1), 253-286.
- Şahin, B. (2013). Teacher candidates' metapforic perceptions related with "mathematics teacher", "mathematics"and "math lesson" concepts. *Mersin University Journal of the Faculty of Education*, 9 (1), 313-321.
- Yapicioglu, A.E. & Korkmaz, N. (2019). Determination of pre-service teachers' perceptions of science and mathematics: A metaphor study. *Mediterranean Journal of Educational Research*, 13 (29), 400-420.
- Yıldırım, A., & Şimşek, H. (2008). *Qualitative research methods*. (7th ed.). Ankara: Seçkin Yayıncılık.

CHAPTER 2

EXPLORATION OF TEACHER IMMUNITY AMONG EFL INSTRUCTORS AT A SCHOOL OF FOREIGN LANGUAGES

Asst. Prof. Duygu İŞPINAR AKÇAYOĞLU¹
Asst. Prof. Gökçe DİŞLEN DAĞGÖL²

¹Adana Alparslan Türkeş Science and Technology University, Department of Translation and Interpreting, Adana, Turkey, diakcayoglu@atu.edu.tr, ORCID ID: 0000-0001-9031-5011

²Adana Alparslan Türkeş Science and Technology University, Department of Translation and Interpreting, Adana, Turkey, gdislen@atu.edu.tr, ORCID ID: 0000-0003-1920-0208

INTRODUCTION

"Running away from a problem only increases the distance from the solution." – Anonymous

As one of the most demanding and stressful jobs, teaching has been reported to be a profession in which individuals experience a lot of tension, burnout, and low professional well-being (Benevene, Stasio, and Fiorilli, 2020 and Mercer and Gregersen, 2020). Palmer (1998) saw teaching as a daily exercise in vulnerability. Both classrooms and wider institutional and socio-cultural contexts could cause teachers to encounter various problems, which affects their motivation and professional identity.

Despite difficulties and challenges, many teachers in various parts of the world can manage periods of burnout. Most do this with the positive emotions they have; however, these positive emotions can be affected by many personal, situational and contextual factors they have. Hiver (2015) stated that the teacher's ability to survive in the profession is affected by the problems s/he faces. Some of these factors include heavy workload, various classroom difficulties like discipline problems, repetitive practices, dealing with demotivated learners, etc. Day and Gu (2007) reported that these characteristics of the profession cause a decrease in teachers' productivity and lead them to maintain a professional life in which they go to work but become physically or mentally unwell, which is referred as "presenteeism".

Hiver and Dörnyei (2017) introduced the concept of teacher immunity to provide a framework for defining the process which enables teachers to create multiple defense mechanisms. These mechanisms enable teachers to maintain their motivation and professional identity. Teacher immunity has been explained parallel to biological immunity, indicating the defense system protecting the organism against negative or harmful impacts coming from the external environment. Immunity is neither an innate feature nor a personality trait. Various factors could have roles in decreasing teachers' immunity. Dörnyei and Ushioda (2011) reported some psychological problems for second language teachers as educational authorities, school managers, and parents. Saydam (2019), on the other hand, reported that problems could additionally arise from reasons such as limitations on teacher autonomy, mandated targets, demands from learners, etc. In a similar vein, Kyriacou (2001) found the main sources of stress for teachers as maintaining discipline, workload, teaching pupils with lack of motivation, time pressures, handling

changes, relationships with colleagues as well as administration and management, role conflicts, and working conditions.

Stressors teachers face may vary according to various contextual factors, yet as reported by Ball (2003) and Parker, Martin, Colmar and Liem (2012), they are associated with several negative outcomes such as burnout, decrease in teaching effectiveness, increase in feelings of incompetence, and reactive teaching behaviors. Given that immunity is developed by language teachers as a result of the problems they face to act as a defense mechanism in their profession, exploration of foreign language teacher immunity is of great importance because many factors are linked to the concept of teacher immunity, which, when productive, can become a tool to pave the way for change and growth as well as high motivation. The concept of language teacher immunity has been investigated in detail (Hiver, 2017 and Hiver and Dörnyei, 2017) investigated. Hence, the concept of teacher immunity is analyzed under six dimensions proposed by Hiver (2016), which include *attitudes toward students/profession, positive affect, resilience, coping, self-efficacy, and hardiness*.

Attitudes towards students/profession: attitudes that language teachers adopt toward their teaching practices (Hiver, 2017).

Positive affect: “an individual’s tendency to experience a positive state of emotion” (Duffy & Lent, 2009, p. 213)

Resilience: the use of available resources productively to succeed in case of adverse and detrimental conditions (Hiver, 2016).

Coping: teachers’ stress-management strategies for classroom-induced nervous tension.

Self-efficacy: teachers’ beliefs about their capacity to make a difference (Mok & Moore, 2019).

Hardiness: a source of resistance mediating the negative consequences of high stress levels (Saydam 2019).

As the concept of teacher immunity is in its nascent stage in the literature, studies focusing on language teacher immunity in other countries have accelerated only within the past few years (Haseli Songhori, Ghonsooly and Afraz, 2018; Rahimpour, Amirian, Adel and Zareian, 2020; Ahmadi, Amiryousefi, and Hesabi 2020; Noughabi, Reza, Amirian, Adel and Zareian, 2020; Pourbahram and Sadeghi, 2020; Dobakhti, Zohrabi and Masoudi, 2022). However, studies conducted in Turkey are still limited in number

(Saydam, 2019; Sariçoban and Kırmızı, 2021). Therefore, this study aims to determine the level of instructors' immunity at a School of Foreign Languages.

Methodology

Research Design and Participants

This descriptive inquiry utilized a quantitative research design. The participants were comprised of 40 EFL instructors working at a School of Foreign Languages in a Turkish state university. The participants were composed of instructors who experienced teaching English during the pandemic in the 2019-2020 (around 3 months under emergency conditions) and 2020-2021 education years (a fully-online education year).

Data Collection Tool

Data were gathered through the Teacher Immunity Questionnaire developed by Saydam (2019). The questionnaire was a 22-item Likert-type tool that aimed to identify the distribution of the teachers across three immunity types as *positively-immunized*, *maladaptively-immunized*, and *halfway-immunized*. It was a six-point scale ranging from strongly disagree to strongly agree, and points 1-2 indicated maladaptive immunity, while points 3-4 indicated halfway immunity, and points 5-6 hinted at productive immunity. The questionnaire had six dimensions as *attitudes towards students/profession* (6 items), *positive affect* (3 items), *resilience* (3 items), *coping* (4 items), *self-efficacy* (3 items) and *hardiness* (3 items). One item in the resilience dimension and one in hardiness were reverse coded.

Data Analysis

The collected data were analyzed via SPSS Program. The percentages and levels of agreement were presented for each item. Mean scores of the six dimensions were also provided to draw a general picture of the instructors' perceived immunity levels for each factor. The study benefitted from the class width formula (class range/number of classes) of Tekin (2002) referred by Özer (2020) and used in other studies (İra & Geçer, 2017; Kaplanoğlu, 2014; Yaman & Tekin, 2010). Class width levels for the evaluation of mean scores in the present study were as follows:

- 1.00-1.83: "Strongly Disagree",
- 1.84-2.66: "Disagree",
- 2.67-3.49: "Slightly Disagree",

3.50-4.33: “Slightly Agree”
 4.34-5.16: “Agree” and
 5.17-6.00: “Strongly Agree”.

Findings

Mean, standard deviation, maximum and minimum scores of six dimensions and the overall questionnaire were gauged and presented in the following tables.

Table 1. Levels for the Dimension of Attitude towards Students/Profession

Items	N	Min.	Max.	X	Sd	Level
I care about my students.	40	5	6	5,80	,405	Strongly Agree
I have a great passion for my job, so no matter what I encounter, I embrace challenges	40	2	6	4,70	1,043	Agree
I love my job.	40	4	6	5,50	,599	Strongly Agree
My love for my students helps me continue.	40	4	6	5,23	,698	Strongly Agree
My passion for my job helps me handle the problems at work.	40	3	6	5,08	,829	Agree
My school is not my workplace; it is a very important part of my life	40	2	6	5,00	,961	Agree
Attitude towards Students/Profession	40	4	6	5,21	,566	Strongly Agree

The findings related to the instructors’ attitudes indicated that they had highly positive views about their students and profession. The level of this dimension was found to be “strongly “agree” (X=5,21). The instructors were found to care about their students (X=5,80) and to continue through their love for the students (X=5,23). Their passion for their job also allowed them to tackle the challenges (X=5,08), and the teaching profession constituted a significant part of their lives (X=5,00).

Table 2. Levels for the Dimension of Positive Affect

Items	N	Min.	Max.	X	Sd	Level
I establish good rapport with my colleagues.	40	4	6	5,45	,552	Strongly Agree
I establish good rapport with my students.	40	5	6	5,60	,496	Strongly Agree
I do my best to solve a problem using my own strategies before reporting it to the school administration.	40	4	6	5,40	,632	Strongly Agree
Positive Affect	40	4,67	6,00	5,48	,399	Strongly Agree

The instructors' mean score for positive affect was found to be 5,48 and it was at the *strongly agree* level. They perceived to establish good rapport with their colleagues (X=5,45) and students (X=5,60). They also stated that they made an effort to solve their problems before reporting it to the school administration (X=5,40).

Table 3. Levels for the Dimension of Resilience

Items	N	Min.	Max.	X	Sd	Level
I lose my motivation in the face of adversities	40	1	6	3,55	1,319	Slightly Agree
Problems are a part of life, so I always welcome them	40	2	6	4,33	1,328	Slightly Agree
I perceive the problems I encounter at work as a way to improvement.	40	2	6	4,55	1,037	Agree
Resilience	40	2,67	6	4,10	,824	Slightly Agree

When it comes to the resilience dimension, the instructors' mean score was at slightly agree level (X=4,10). Although they seemed not to totally agree with always welcoming problems (X=4,33), they agreed with viewing problems as a way to improvement (X=4,55).

Table 4. Levels for the Dimension of Coping

Items	N	Min.	Max.	X	Sd	Level
In the face of adversity, I focus on the situation, not the person.	40	2	6	4,83	1,035	Agree
I calm others down by looking at the problems from a different perspective	40	3	6	4,93	,829	Agree
I can see the underlying reasons behind problems.	40	4	6	5,10	,632	Agree
If anything goes wrong at work, I first question myself	40	2	6	4,50	1,086	Agree
Coping	40	3,75	6	4,83	,584	Agree

As to the coping dimension, the mean score was found to be at the *agree* level ($X=4,83$). They agreed to focus on the situation, not the person in the face of adversity ($X=4,83$), calm others down by looking at the problems from a different perspective ($X=4,93$), see the underlying reasons behind problems ($X=5,10$) and first question themselves if anything goes wrong ($X=4,50$).

Table 5. Levels for The Dimension of Self-efficacy

Items	N	Min.	Max.	X	Sd	Level
I am open to cooperation	40	1	6	5,38	,897	Strongly Agree
I maintain my integrity when I face problems at work.	40	4	6	5,00	,641	Agree
Although I sometimes feel I have lost my enthusiasm, I still try to manage because of my sense of responsibility	40	2	6	5,35	,949	Strongly Agree
Self-efficacy	40	3,67	6	5,24	,506	Strongly Agree

When compared to resilience and coping dimensions, self-efficacy had a higher mean score with the level of *strongly agree* ($X=5,24$). The instructors appeared to be open to cooperation ($X=5,38$), maintain their integrity in the face of problems ($X=5,00$), and have a sense of responsibility to manage the loss of motivation ($X=5,35$).

Table 6. Levels for the Dimension of Hardiness

Items	N	Min.	Max.	X	Sd	Level
I tend to overreact when I encounter stressful situations at work	40	1	5	2,30	1,091	Disagree
I am indifferent to the problems of my students and the school	40	1	6	1,53	,877	Strongly Disagree
I can withstand and recover quickly from difficult situations at work.	40	2	6	4,88	1,017	Agree
Hardiness	40	2,67	5	4,21	,480	Slightly Agree

As in the resilience dimension, the mean score was found to be at *slightly agree* level in the hardiness dimension ($X=4,21$). They reported that they did not have a tendency for showing overreaction in stressful situations at work ($X=2,30$) and keeping indifferent to the problems of students and the school ($X=1,53$). Instead, they believed to withstand and recover quickly from difficult situations at work ($X=4,88$).

Table 7. Overall Teacher Immunity Levels of the EFL Instructors

Items	N	Min.	Max.	X	Sd	Level
Overall teacher immunity	40	4,18	5,64	4,90	,371	Agree

The overall teacher immunity level of the EFL instructors was found to be relatively high ($X=4,90$). The total score the instructors obtained from the questionnaire was identified as 107,8 and they seemed to be immunized in a general sense.

Discussion

This study explored the notion of teacher immunity among EFL instructors working in a Turkish state university. The instructors' perceived level of immunity was examined in six dimensions as *attitudes towards students/profession, positive affect, resilience, coping, self-efficacy* and *hardiness*.

In a general sense, the EFL instructors in this study appeared to be immunized and develop almost productive immunity. Productive immunity could allow them to face the challenges in their profession in a sound and constructive way. In this way, they could make problem-solving a conscious process. In their study that included 230 English teachers, Haseli Songhori et

al. (2018) found that 43.5% of participating teachers in their study had productive immunity while 53.5% had maladaptive immunity. As reported by Saydam (2019), teachers with productive immunity are generally not susceptible to factors such as stress, failure or burnout. These kinds of teachers can ignore disturbances, and dealing with stress helps them experience higher career satisfaction, confidence, and commitment to the profession. Productive immunity can serve as a source of hope, enthusiasm, resilience, and motivation for teachers (Hiver, 2015; Hiver & Dömyei, 2017).

From a broader perspective, the instructors in this study had highly positive attitudes towards their students and profession. They believed that this favorable attitude helped them to continue and handle the difficulties. Moreover, they deemed their school/profession as an essential part of their lives, not just a workplace. As reported by Güneyli and Aslan (2009), teachers' positive attitudes toward their profession are associated with their beliefs that their profession is socially necessary and important and they should improve themselves and their profession. Çeliköz and Çetin (2004) also indicated that teachers with positive attitudes show these attitudes in their gestures and mimics, they can motivate students more easily, and they demonstrate sincere behaviors towards students, so they enjoy their profession and fulfill the requirements of the profession better. However, attitudes can go through changes in unexpected conditions. This study collected data when the education was started face-to-face again. In their study conducted during the distance education process in the pandemic period, Gooran, Soleimani, Alavi, and Jafarigohar (2022) found that teachers' immunity and attitudes went through changes due to factors such as limited student participation, familiarity with online teaching, and skepticism of online learning. The longitudinal data in their study showed that teaching immunity went through positive changes as teachers gained more experience with online teaching as well. Therefore, it is possible to say that an abrupt transition to online teaching in a time of adversity could help the instructors to develop positive immunity, and thus get more equipped to tackle possible problems related to their profession.

When it comes to positive emotions, participating teachers viewed themselves as having good rapport with their students and colleagues. In the face of problems, they also preferred using their own strategies before reporting it to the school administration, which also indicated their willingness to exert an effort to deal with the problems. Studies show that work-related positive emotions are associated with teachers' job satisfaction

(Topchyan & Woehler, 2021) as well as well-being (Seligman, 2011). Teachers could experience periods of burnout due to the difficulties and challenges, yet positive emotions have the potential to help them manage these periods of burnout. Seligman (2011) stated that individuals' optimal performance and satisfaction are facilitated by their positive emotions, engagement, and well-being. Hence, positive emotions could allow the instructors to develop a more comprehensive and constructive outlook toward the problems, which might also help them view the problems not just as a source of complaint.

Although participating teachers viewed the problems encountered in the profession as a way of improvement and tried to keep their motivation high, they reportedly did not always welcome the problems. Their coping skills included focusing on the situation not on the person and questioning firstly themselves in case of a problem. They also claimed to cope with the problems by looking at them from a different perspective and see the underlying reasons behind them. The problems indicated for the context of the present study could include problems experienced both during and after the pandemic period. Problems, oppositions, and disturbances experienced by teachers could be within the classroom and the wider institutional and sociocultural contexts (Saydam, 2019). Teachers in this specific context could have experienced various challenges as well as technical problems during their teaching. Their responses might have been affected by these factors.

The EFL instructors regarded themselves as self-efficacious in managing the problems. One of their characteristics was being open to cooperation. Also, their sense of responsibility helped them to sustain their enthusiasm even in problematic situations. In the study that aimed to determine teachers' perceived strengths and the strengths perceived by other teachers in the same teaching environment, İspınar Akçayoğlu (2022) provided evidence for teachers' high self-efficacy levels through the strengths elicited about themselves as well as other teachers. The study found that being empathetic, having good communication/rapport with students, adjusting teaching according to the level and needs of students were the top-cited perceived strengths of teachers. On the other hand, establishing good communicative relationships and being open to collaboration were among the top-cited strengths of other teachers in the same environment.

Concerning the hardiness, the participating instructors were found not to overreact and to recover quickly in stressful situations. They seemed to keep their sensitivity towards not only their own problems but also students'

problems. Kobasa (1979) introduced the term hardiness based on the notion that people with high levels of stress may remain healthy. Maddi (2004) also viewed hardiness as a personality trait that could ward off the effects of stress on performance. Dörnyei and Ushioda (2011) reported some factors causing teachers to experience demotivation and stress as working environment problems, inadequate career structures, insufficient self-efficacy, or teaching repetitiveness. Teachers in any context could have problems, but knowing how to handle the problems increases their immunity.

All in all, the level of teacher immunity was relatively high in the English language teaching environment where this study was conducted. Instructors appeared to be equipped with the essential attitudes and approaches to deal with the probable problems in their workplace. Such immunity could pave the way for them to turn the stressors in the profession into an opportunity to sustain their professional development.

CONCLUSION

Individuals' beliefs in their coping skills influence the degree of depression, stress, or motivation they will go through in challenging environments. Whereas those have self-doubts about their abilities reduce their struggle and give up easily, the ones who have positive perceptions about their capability in overcoming difficulties do not develop negative thoughts (Bandura, 1994). Therefore, encouraging positive beliefs of instructors could promote their motivation to continue and enhance their resilience levels in the face of adversities. The importance of problem-solving skills could be highlighted among both pre-service and in-service teachers. Elective courses could be added to the curriculum in pre-service teacher education, and workshops could be organized in in-service trainings to raise awareness. As a part of both personal and professional development, instructors could identify weaknesses in their coping skills and find ways to improve them. Furthermore, instructors could share problematic situations and probable coping strategies with each other both to offer solutions and find better solutions through brainstorming. Future studies could be conducted with more participants to draw a general picture of this critical issue.

REFERENCES

- Ahmadi, M., Amiryousefi, M., & Hesabi, A. (2020). Role of individual difference variables in EFL teachers' immunity development. *Two Quarterly Journal of English Language Teaching and Learning University of Tabriz*, 12(26), 361-376.
- Ball, S. (2003). The teacher's soul and the terrors of performativity. *Journal of Education Policy*, 18, 215-228.
- Bandura, A. (1994). Self-efficacy. In V. S. Ramachandran (Ed.), *Encyclopedia of human behavior* (Vol. 4, 71-81). New York: Academic Press. (Reprinted in H. Friedman [Ed.], *Encyclopedia of mental health*. San Diego: Academic Press, 1998)
- Benevene P., De Stasio S., Fiorilli C. (2020). Well-being of school teachers in their work environment. *Front. Psychol.*, 11, 1-4. doi:10.3389/fpsyg.2020.01239
- Çeliköz, N. & Çetin, F. (2004). Anadolu Öğretmen Lisesi öğrencilerinin öğretmenlik mesleğine yönelik tutumlarını etkileyen etmenler. *Milli Eğitim Dergisi*, 162, 136-145
- Day, C., & Gu, Q. (2013). *Resilient teachers, resilient schools: Building and sustaining quality in testing times*. Routledge.
- Dobakhti, L., Zohrabi, M., & Masoudi, S. (2022). Scrutinizing the affective predictors of teacher immunity in foreign language classrooms. *Teaching English Language*, 16(1), 65-88.
- Dornyei Z. & Ushioda E (2011) *Teaching and researching motivation*, 2nd ed. Longman, Harlow
- Duffy, R. D., & Lent, R. W. (2009). Test of a social cognitive model of work satisfaction in teachers. *Journal of Vocational Behavior*, 75, 212-223.
- Gooran, M., Soleimani, H., Alavi, M., & Jafarigozar, M. (2022). EFL teachers' immunity: a case of online language teaching. *Journal of Multilingual and Multicultural Development*, 1-20.
- Güneyli, A., & Aslan, C. (2009). Evaluation of Turkish prospective teachers' attitudes towards teaching profession (Near East University case). *Procedia-Social and Behavioral Sciences*, 1(1), 313-319.
- Haseli Songhori, M., Ghonsooly, B., & Afraz, S. (2018). Language teacher immunity among Iranian EFL teachers: A self-organization perspective. *Iranian Journal of English for Academic Purposes*, 7(1), 128-143.

- Hiver, P. (2015). Attractor states. In Z. Dörnyei, P.D. MacIntyre & A. Henry (Eds.), *Motivational dynamics in language learning* (pp. 20–28). Bristol, England: Multilingual Matters.
- Hiver, P., & Dörnyei, Z. (2017). Language teacher immunity: A double-edged sword. *Applied Linguistics*, 38, 405–423.
- Hiver, P. (2016) Tracing the signature dynamics of language teacher immunity. Unpublished doctoral thesis, University of Nottingham, England.
- Hiver, P. (2017). Tracing the signature dynamics of language teacher immunity: a retrodictive qualitative modeling study. *The Modern Language Journal*, 101(4), 669–690. doi: 10.1111/modl.12433 0026-7902/17/
- İra, N., & Geçer, A. (2017). Üniversite öğrencilerinin web ortamında bilgi arama ve yorumlama stratejileri ile epistemolojik inançları arasındaki ilişki. *E-Uluslararası Eğitim Araştırmaları Dergisi*, 8(2), 58-74.
- İşpınar Akçayoğlu, D. (2022). Teachers' perceived strengths and the strengths perceived by other teachers in the same teaching environment. *Current Researches in Educational Sciences IV*. Akademisyen Yayınevi Bilimsel Araştırmalar Kitabı
- Kaplanoğlu, E. (2014). Mesleki stresin temel nedenleri ve muhtemel sonuçları: Manisa İlindeki SMMM'ler üzerine bir araştırma. *Muhasebe ve Finansman Dergisi*, 64, 131-150.
- Kobasa, S. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology*, 37, 1–11
- Kyriacou, C. (2001). Teacher stress: directions for future research. *Educational Review*, 53(1) 27-35.
- Maddi, S. (2004). Hardiness: An operationalization of existential courage. *Journal of Humanistic Psychology* 44(3), 279–98.
- Mercer, S., & Gregersen, T. (2020). *Teacher wellbeing*. Oxford University Press.
- Mok, M. M. C., & Moore, P. J. (2019). Teachers & self-efficacy. *Educational Psychology*, 39(1), 1-3.
- Noughabi, M.A., Reza, Amirian, S.M.R., Adel, S.M.R. & Zareian, G. (2020). The association of experienced in-service EFL teachers' immunity with engagement, emotions, and autonomy. *Current Psychology*. <https://doi.org/10.1007/s12144-020- 01066-8>.

- Palmer, P. J. (1998). *The courage to teach: Exploring the inner landscape of a teacher's life*. San Francisco: Jossey-Bass.
- Parker, P., Martin, A., Colmar, S., & Liem, G. (2012). Teachers' workplace wellbeing: Exploring a process model of goal orientation, coping behavior, engagement, and burnout. *Teaching and Teacher Education*, 28, 503–513.
- Pourbahram, R., & Sadeghi, K. (2020). English as a foreign language teachers' immunity and motivation: Public schools vs. private institutes. *Teaching English Language*, 14(2), 291-321.
- Özer, S. (2020). Foreign language learning effort levels of students in English for Specific Purposes. *Journal of Language and Linguistic Studies*, 16(3), 1352-1367.
- Rahimpour, H., Amirian, S. M. R., Adel, S. M. R., & Zareian, G. R. (2020). A model of the factors predicting English language teacher immunity: A path analysis. *Indonesian Journal of Applied Linguistics*, 10(1), 73–83.
- Sarıçoban, A., & Kirmizi, Ö. (2021). Language Teacher Immunity: Insights from Turkey. *International Online Journal of Education and Teaching*, 8(2), 1172-1189.
- Saydam, D. (2019). *English language teacher immunity: The METU case*. Dissertation, Middle East Technical University, Ankara, Turkey
- Seligman, M. E. P. (2011). *Flourish: A Visionary new Understanding of Happiness and Well-Being*. New York: Free Press
- Tekin, H. (2002). *Eğitimde ölçme ve değerlendirme*. Ankara: Yargı Yayıncılık.
- Topchyan, R. & C. Woehler.(2021). “Do Teacher Status, Gender, and Years of Teaching Experience Impact job Satisfaction and Work Engagement?” *Education and Urban Society* 53(2), 119–145.
- Yaman, S., & Tekin, S. (2010). Öğretmenler için hizmet-içi eğitime yönelik tutum ölçeği geliştirilmesi. *Bayburt Eğitim Fakültesi Dergisi*, 5(1), 76-88.

CHAPTER 3
THE BEGINNING OF THE END: THE IMPACT OF
JAMES I OVER HIS SON CHARLES I*

Sinan GÜL PhD¹

¹ National Defense University, TMA Foreign Languages Department, Ankara, Türkiye.
sgul@kho.msu.edu.tr ORCID No: 0000-0002-4529-6699

*A preliminary version of this chapter was presented Baku Avrasia Conference on 27/04/2022.

INTRODUCTION

THE CRISIS OF JACOBAN POLITICS

“That he, the said Charles Stuart, as a tyrant, traitor, murderer, and public enemy to the good people of this nation, shall be put to death by the severing of his head from his body” was the final verdict for Charles I who was found guilty of his charges after a hasty trial in almost a week. He, who was a king from the age of twenty-four, was executed on a cold afternoon at the age of forty-eight on 30 January 1649. Thus was the end and beginning of a historical moment in English history, but how did that process start? The English Civil War, which officially started on 22 August 1642 with the flight of the king and his followers from London to Nottingham, was an accumulation of several elements starting from the religious clashes among particularly Protestants, Catholics, and some more groups. Financial problems also forced Charles I to levy new taxes and sell privileges to his favorites in order to accumulate the wealth he needed for a strong army and his lavish lifestyle. The failure to acquire such revenue caused friction between the king and the parliament which wanted to impose a regulation on the king’s expenses. Charles’ Catholic wife, Henrietta Maria, and people’s suspicion over his true religious identity did not ease his work in terms of religious affairs at all. There are several issues that can directly be associated with the flaws of Charles’s character and his failed decisions on certain topics of governance and management. However, this article argues that although Charles I paid the price of the Civil War with his life, the main culprit for his mismanagement of the crisis comes from his father, James IV of Scotland, and James I of England.

Ideological forces are not usually sufficient to comprehend how personal and political motives lead certain statesmen to make decisions. It is almost impossible to draw solid conclusions about the chemistry and characters of specific men and women, and their feelings and thoughts but since all results are tentative to certain degrees, room for a good scope for informed speculation about human motivations is always possible. (Reeve, 1989, s. 16) Besides, personal aspirations, religious conflicts and objectives of the state often co-exist in a shady area in England as well as Europe so everything would be an informed estimation of historical clues. Thus, this article relates the downfall of Charles through his father’s actions which have immensely aided to create Charles as the failed monarch he is remembered. Therefore, it is a study on personal influence rather than a specifically

theological, economic, or military treatment of civil war and Charles I's misrule.

This study is following the footsteps of Hilaire Belloc who asks, "How and why did the English kingship so fail in the person of its last possessor, Charles Stuart?" (Belloc, 2003, p. 16) The monarchy has had major problems since the conversion of Henry VIII to Anglicanism, but Edward, Mary, Elizabeth, and James I somehow managed to keep their subjects together and avoided the worst scenarios. Similar problems took place in different countries with different courses. However, the English monarchy clearly was not apt within the zeitgeist of the changing world and a reformation of the whole system became inevitable. The reign of absolutism in England was over because the country gentlemen whom "the Tudors had reigned so well in local government had acquired an interest in politics" and the same people "had no intention of keeping silent at Westminster on any matters of national import, whether or not they had hitherto been the preserve of the prerogative" (Higham, 1932, p. 50). Some scholars like Belloc believe the catastrophes that the Crown faced were not inevitable and add that just like Louis XVI, Charles I solely failed to rescue and recover the political situation of his kingdom. James did not bequeath a kingdom in great shape economically and ecclesiastically, but his approach to government and leadership affected his son adversely and that became the beginning of the end for the monarchy.

The turmoil that England experienced in the seventeenth century was heavily influenced by sixteenth century. The painful transition from medieval to modern in many senses exacerbated governing for the king as he was not happy with the presence of a parliament which he needed to convince and counsel for his extra expenses. His lords were his obedient feudal assistants, but their help was not enough to build a glorious army. Although the king was in a different mindset, most nobles around him wanted to return to the good old feudal times. For example, the Midland bowers and fletchers asked the King to use bows and arrows on the battlefield in 1642 (Jessup, Frank W. & Howat G. M. D. eds. , 1966, p. X), but the king rejected this idea because he knew that they were weapons that belonged to the medieval age. However, what the king did not probably contemplate was that he also did not belong to seventeenth century England as a capricious monarch just like archaic battle weapons suggested for his army.

In addition to many cultural, social and financial problems, Charles' image became another issue because his predecessors were considered to be success stories. Elizabeth is recalled as the virgin queen who defeated the Spanish armada and, thus, her long forty-year-reign is often described as a time of wealth and success. However, the financial situation that Elizabeth bequeathed to James was on the verge of financial collapse. James I is still known as the peacemaker who ended the era of wars with Spain and his period of peace, of course, decreased the demands to support a big army. Seeing these examples before him, Charles felt the need to prove himself, but he was not fortunate in terms of timing because the whole of Europe was going through a period of change, and it was unavoidable to keep England from turmoil.

1. CHARLES I AND HIS FATHER KING JAMES

Several reasons have been suggested by various scholars to be able to understand why the Civil war started. Traditional historians such as S.R. Gardiner highlight the desire and cry for a constitutional law in opposition to royal absolutism whereas revisionist historians such as Conrad Russell associate the Civil War to the deficiency of the royal army, reluctant troops, and political discontent (Russell, *The Fall of the British Monarchies, 1637-1642*, 1991, pp. 144-145). Some scholars highlight the flaws of Charles' personality and point out his deficiencies in several aspects. In his book *The Image of the King* Richard Ollard argues that "Charles I brought disaster on his realm by asserting too high a view of his rights and duties" (Ollard, 1979, p. 19). He is not the only scholar who believes that Charles' perceptions on certain topics have resulted in his failure to prevent the Civil War. "King Charles was the author of his own troubles" says David Cressy and adds that "there was little benefit to England in the king's prickly defence of his honour or the artistic cultivation of his court" (Cressy, 2015, p. 312). H. M. Gwatkin points at Charles' father and adds that King James had "a genius for getting into difficulties" but he was "not without a certain shrewdness in stopping just short of catastrophe." However, Gwatkin also acknowledges how Charles is culpable for the failure of the state and adds that, "if he [James] steered the ship straight for the rocks, he left his son to wreck it" (Gwatkin, 1917, 2014, p. 283). Maurice Ashley also supports Gwatkin's thesis and adds that "King James had been a statesman, while his son was no statesman and was handicapped from the beginning by serious weakness of character" (Ashley, 1973, p. 56). Despite all his merits praised by friends and foes, Charles was

considered as a weak king because “his lack of insight and humour, his customary curtness and his intellectual shortcomings were poor protection against the coming storms” (Ashley, 1973, p. 56)

In his books on the history of Charles I’s reign, S.R. Gardiner also attributes the failures mainly to flaws in the king’s character. Gardiner points out that Charles did not have the capacity because he “looked upon the whole world through a distorting lens” (Gardiner, 2011, p. 34). It was exceedingly difficult to convince him out of his beliefs and ideas because he “was obstinate in refusing to abandon” them. When faced with criticism, he tended “to relapse into silence, to fall back upon his insulted dignity, and to demand submission” (Gardiner, 2011, p. 36) rather than an attempt to find a conciliatory stance. Although *God’s Secretaries: The Making of the King James Bible*, Adam Nicolson points out that most English historians have underlined the flaws of James’ personality, he was not considered as a source for flaws in his son’s character. When it comes to James, “His extravagance, his vanity, his physical ugliness, his weakness for beautiful boys, his self-inflation, his self-congratulatory argumentativeness” (Nicolson, 2003, s. 16) have been whimsical sides of a successful king.

As in most subjects, there has been a change in historians’ approach toward English history and important figures within it. Around the mid-twentieth century other historians following Gardiner employed a more modern perspective focusing on more socio-economic forces rather than personal traits. Historians such as R. H. Tawney and C. Hill gave detailed lists of expenses, productions of all sorts and most things that were not hitherto considered as components of a historical account of the seventeenth century. Although scientific reasons were put forward to understand the reasons and results of the Civil War, most scholars were in harmony about the problems of the king Charles I. For example, despite the heaviness of objective and statistical elements in Hill’s emphasis, he also could not refrain himself from pointing out the obvious defects of Charles as a person: “The King’s high idea of his own station, his rigid inability to compromise in time, and his transparent dishonesty, made it impossible for him ever to have functioned as a constitutional monarch” (Hill, 2002, p. 72).

In his *Causes of the English Revolution 1529-1642*, Lawrence Stone also offers various sociological explanations and arguments for the causes of the Civil War, but he also admits how he also connects the tragedy for monarchy to “the folly, obstinacy and duplicity of Charles I in causing the catastrophe was if anything understated.” (Stone L. , 1972, p. 72) Stone also

argues that “There is little doubt that Charles I and Laud had dreams of erecting a continental-style baroque absolute monarchy, resting on the three pillars of arbitrary taxation, unquestioned acceptance of the Divine Right of Kings and an intimate union of church and crown.” (Stone L. , 1985, p. 53) Although Stone’s criticism directly focuses on arbitrary actions taken by the whimsical character of Charles, he also states that he and Hill agree that “the English Revolution was not caused by a clear conflict between feudal and bourgeois ideologies and classes; that the alignment of forces among the rural elites did not correlate with attitudes towards ruthless enclosure that the Parliamentary gentry had no conscious intention of destroying feudalism. (ibid, p. 53)

Charles’ mismanagement and personal failures might be the main reason for the fall of monarchy and emergence of a republic, but it is also true that the whole Europe was witnessing a colossal time of radical changes. The seventeenth century was laden with upheavals in various parts of the nation. Ollard describes briefly how the times were loaded with social and economic factors that could enhance the risk of crises:

The signs of God’s anger were clear to those with eyes to see: astronomical marvels, plagues, bad weather, a faltering economy, reversals by land and sea, even the loss of the king’s firstborn. The causes were growing and manifold: ill-managed and unsuccessful wars; failure to recover the Palatinate; abandonment of Europe’s protestants; fiscal devices of dubious legality; erosion of the protections of Magna Carta; the advancement of idolatry and superstition; relaxation or profanation of the Sabbath; and the harbouring of a catholic queen whose entourage facilitated the agenda of popery. (Ollard, 1979, p. 308)

As illustrated, most scholars find fault in Charles’ mischievous character, but there is a clear neglect about his father’s character and treatment of Charles. King James left a legacy of idleness that prevented his son from taking state affairs as seriously as he should have and a narcissist character that did not abide by laws and Parliament. His contribution to the Civil war goes unnoticed as the whole focus is on Charles. For example, Higham describes an insufficient driving force behind Charles’ deeds and explains that “He is wrapped in the cotton wool of his own foregone conclusions and the prejudices he had not the imagination to uproot” (Higham, 1932, p. 48). The point that this study attempts to make is the lack of explanation in this analysis for the deficiencies that Charles is often blamed for and the fact that the impact of James’ as a parent and a former king before Charles remains *incognito*.

2. KING JAMES and DIVINE RIGHTS OF MONARCHY

Although contemporary people might think of a basketball athlete when they hear the name King James, the historical figure was more influential and important than most people on Earth during his lifetime. He was one of the few men who “guided and influenced affairs of state in a few key capitals” (Carter, 1964) James Stuart was born from the union of Mary, Queen of Scots, with her second husband, Henry Stewart, Lord Darnley in Edinburgh on 19 June 1566. When Queen Elizabeth together with other Scottish lords compelled her to abdicate her throne, James was proclaimed James Sixth of Scotland on July 24, 1567, as the new king of Scotland. For the first twelve years of his life, he was not allowed to take part in government affairs, but for his own safety, he was kept at Sterling Castle, safe from the ever-disputing Scottish factions. This time that he spent with nannies and teachers was challenging for James as he could not walk on his own without aid. His weakness led him to focus on his intellectual studies. He could translate Latin and French texts at the age of eight and his knowledge in religious matters exceeded most clergy members. (Tyson, 2011, p. 2)

John Oglander, an English politician who sat in the House of Commons from 1625 to 1629, tells in his memoirs that “King James I of England was the most cowardly man that ever I knew” (Oglander, 1936, p. 195). He is usually portrayed as a coward, but the threats he experienced during his early years could suffice to make any person lose their confidence. In 1582, a faction of Scottish nobles kidnapped him during the Raid of Ruthven and his captivity with them over a year gained him a timid character. Furthermore, he could not openly object to Queen Elizabeth when he was informed that his mother was going to be executed. Overall, James knew that in politics there were things out of his control, and he should accept them the way they were. Additionally, his homosexual tendencies were grossly observed in and outside the court although he married Anne, second daughter of Frederick the Second, king of Denmark in 1589. James had several defects visible to almost everyone around him.

The late sixteenth century was a time of superstitions and it would not be fair to label only James as the source of witch hunts. The church had a fierce propaganda against the presence of evil, anti-Christ, demonic forces and other biblical figures. There were scholars who wrote books and pamphlets and delivered speeches about witches, normal people captured by demonic forces and Satanists. For example, James refers to Jean Bodin’s book *De la Demonomanie des sorciers* (1580), known as *Demonomania* in English and

he was also familiar with the writings of German writers Hyperius (1511-1564) and Hemmingius (1513-1600). James also mentions how Cornelius Agrippa (1446-1535) explained about the particular rites and black arts in his the *Fourth Book*. Thus, James's beliefs were an accumulation of such works written before him and hence he strongly believed in the exodus of evil powers between two worlds. One incident might shed more light upon James' strong proclivity for witches and witchcraft. As the king of Scotland, James was personally involved and interested in the trials of North Berwick witches who were accused of cooperating with the Devil and concoct their plots between the years of 1590 and 1592. James believed that these plotters and their demonic allies took him as their chief opponent. When asked why they hated the king, one of the accused, Agnes Sampson, said that "By reason the king is the greatest enemy hee hath in the world." (Tyson, 2011, p. 4) It should be normal for a person to redeem himself as the protector of Christian faith when he is considered by the captured witches to be the biggest threat to the devil on Earth. These trials must have shaped James' ideas about kings' rightful guardianship against all malice. His book *Demonology* was also a reaction to the trials and all the demonic forces and magical threats to his life and his kingdom. He was keen on persecuting witchcraft everywhere as it took him eight days to reinterpret and harshen the punishment of witchcraft all over England after he ascended to the English throne. In a way, Satan became James' personal foe that he believed that he should fight it strictly and severely everywhere in his country.

His strong rhetoric against demonic forces became a pillar for many to justify their persecution. His hostility against witchcraft went beyond the borders of England. His statute, which was not abolished until 1736 in England, was the main source of accusation for those involved in the Salem witchcraft trials in America. He was very fond of listening to victims' accusations and there are several cases that he attended to judge (Tyson, 2011, pp. 20-21). King James I did not only influence people around him, but he also made an impact in other parts of the world because he exploited writing as a monarch in many different genres, including religion, poetry, and politics.

James Doelman points out the significance of James I in early modern England's written religious climate as a king and sometime poet. (Doelman, 2000) His knowledge of holy texts enabled him to use an appeal of pathos among his audience in almost every subject. In his comment to his Privy Council in 1617, James defended his affection for one of his lifelong favorites, Earl of Buckingham: "I, James, am neither a god nor an angel, but a

man like any other. Therefore, I act like a man and confess to loving those dear to me more than other men. You may be sure that I love the Earl of Buckingham more than anyone else, and more than you who are here assembled.” James compared his partnership with Buckingham to Christ’s bond with John the Baptist and added that “I wish to speak in my own behalf and not to have it thought to be a defect, for Jesus Christ did the same and therefore I cannot be blamed. Christ had John, and I have George” (Matusiak, 2015, p. 282). However, even his strong clerical advocate of his personal matters could not prevent people from talking about his deviant tendencies. Ogländer remarks on the peculiar character of James and adds that “he was much taken with seeing the little boys skirmish, whom he loved to see better and more willingly than men” (Matusiak, 2015, p. 198). It is difficult to estimate to what extent James’ homosexual tendencies influenced Charles, but it is clear that Charles learned from his father that having favorite people without personal merits around him did not need any explanation, but many noble people in the House of Commons, who will have significant roles in the Civil War, had bitter feelings for Buckingham and other favorites who “had achieved on the basis of such little merit” (Reeve, 1989, p. 15) Charles felt no need to win such important men of society. For example, William Laud assigned by Charles to the Bishop of Canterbury was in a way *persona non grata* for the Protestant mass in the House of Commons. James’ favorite Earl of Buckingham, George Villiers, who also *de facto* “ruled England” in the first three years of Charles’ reign, jumped “from private gentleman to dukedom” in such a short time that he was known to “jump better than anyone in England” (Carlton, 1984, p. 23). Although Charles accepted Buckingham as a big brother, Charles was left behind by his father when he quarreled with the favorites. In several instances, James scolded and humiliated his son whenever he had a conflict with Buckingham (Carlton, 1984, p. 25)

Since James was almost an expert on scriptures, his books on monarchy and divine right were also based on scriptural proofs. His arguments were laden with holy words, so he was not to be denied by his subjects. For James, his office was “to minister justice and judgement to the people” and David said in the Bible, his mission as a king is “To advance the good and punish the evil.” The quotes here belong to psalms used in James’ speeches, so James’ main reference point was the scripture whose reliability is not open to any discussion. Considering himself as the absolute messenger and representative of scriptural orders, James advocated his absolute reign over his subjects whose duty was to be compliant and obedient to their

rightful ruler. James comprehended that his Christian audience should be reminded of this basic fact: “That these words, and discourses of Samuel were dited by Gods Spirit, it needs no further probation, but that it is a place of Scripture; since the whole Scripture is dited by that inspiration, as Paul saith: which ground no good Christian will or dare denie” (Rhodes, Richards, & Marshall, 2016, p. 253). James created a rhetorical appeal to invoke a religious calling within his audience. His biblical examples such as Ahab, and Elias, whom he used to exemplify good and bad forces, are to prove that kings can be rebelled against such as the tyrant king of Babel, Nebuchadnezzar. This approach to the right to govern without any monitoring also echoed unsuccessfully in his son Charles I’s defense for treason and murder in 1649 when he said that “no earthly power can justly call me in question as a delinquent” (Higham, 1932, p. 152).

James wrote *The True Lawe of Free Monarchies or The Reciproock and Mutual dutie betwixt a free King and his natural subjects* (1597) and *Basilikon Doron* (Royal Gift, 1598) to argue his theological basis for monarchy. The divine right of kings is scrutinized in *True Law* and James describes a king’s position to be “the highest bench ... to sit upon” (Matusiak, 2015, p. 59). Advocating an absolutist theory of monarchy, the book provides kings with the right to impose new laws upon their people through royal prerogative. As a guide to kingship, *Basilikon Doron* was a gift to four-year-old Prince Henry, who was next in line but died without ascending to the throne. He advises his son to “hold no Parliaments” because kings emerged “before any estates or ranks of men, before any parliaments were holden, or laws made, and by them was the land distributed, which at first was wholly theirs” (Tanner, 1960, p. 187) These two books cemented the idea of divine rights of a king which became a shelter for James and Charles whenever they felt threatened by Parliament.

“Charging you in the presence of God, and by the fatherly authority I have over you, that ye keep it ever with you, as carefully, as Alexander did the Iliads of Homer” (Craigie, 1944, p. 2). Through his divine rights, James claimed a net between his blood and ancient rulers such as Alexander who had lived ages ago. Therefore, he believed that his advice should be accepted as valuable as Homer’s Iliad, which is already a world classic. Comparing his words of wisdom to a time-yielding book can reveal the true nature of James, who thought himself superior to everyone else.

James' argument in most of his points in *Basilikon Doron* is related to God. If a person is a faithful believer, then most things will be easier for him. For him, "marriage is the greatest earthly felicity or misery that can come to a man, according as it pleaseth God to bless or curse the same" (Craigie, 1944, p. 67). His emphasis on the God's presence within everything also reinforces his claim to be the representative of God on Earth. James' main concern was to educate 4-year-old prince Henry in order to "timeously to provide for his training up in all the points of a king's office" (Craigie, 1944, p. 73); however, for this purpose, Henry needed to have a good education of scriptures, prayers, holy book, and other essentials as well as non-essentials for accomplishing the task of being a Godly king. If a king was surrounded with godly justification, his subjects had no choice but to obey him without any hesitation or objections.

Aside from his *Daemonologie*, James published four books: *The Essays of a Prentise in the Divine Art of Poesie* (1584); *Ane Fruitfull Meditatioun on the Seventh, Eighth, Ninth and Tenth Versies of Chapter XX of Revelations* (1588); *Ane Meditatioun upon the First Buke of the Chronicles of Kings* (1589); and *His Majesties Poeticall Exercises* (1591). But he certainly used a more didactic tone in these works, since his aim was to teach his subjects in vague terms the nature of their duty to their king and especially the necessity of obedience and the evil of rebellion. James preferred to use plain language in these works because his previous books were not treated as academic treatises. On the contrary, it was intended to be understood in the clearest, liveliest and most compelling way, and to be read in its entirety, without effort and ambiguity. James's purpose, he said, was "to instruct and not irritate" (Matusiak, 2015, p. 151).

James returned to his rhetoric of divine rights whenever he encountered opposition from Parliament as he did not often need an MP's counselling; on the contrary, he expected acknowledgement and support from his objects. His expectance for complete compliance was not only a silent wish or intention, but he directly expressed it to MPs in parliament:

... *The state of monarchy is the supremest thing upon earth: for kings are not only God's lieutenants upon earth and sit upon God's throne, but even by God himself they are called gods. There be three principal [comparisons] that illustrate the state of monarchy: one taken out of the word of God, and the two other out of the grounds of policy and philosophy. In the Scriptures kings are called gods, and so their power after a certain relation compared to the Divine power. Kings are also compared to fathers of families: for a king is truly parens patriae [parent of the country], the*

politic father of his people. And lastly, kings are compared to the head of this microcosm of the body of man (From James I's speech before the English Parliament in March 1610)

James sincerely believed in the divine rights of a king, and he even used his divine power to heal sick people despite his staunch Protestant beliefs although healing was not unique to James or English kings. Similar treatments were observed all over the Europe particularly France and Italy. Monarchs touched patients from all over society to cure their diseases and conditions. Tuberculosis, which was known as scrofula or King's Evil, was the main target of royal touch. The disease was not life-threatening, so it often lessened on its own and many people thought that the king's touch was responsible for curing the disease. This tradition is usually associated with Saint Edward the Confessor (reigned between 1042 and 1066) whose touch was supposedly healed people. The frequency of healing rituals increased over time and in seventeenth century Charles I touched 100 sick people at Holyrood Palace on 27 December 1633 (Sturdy, 1992, p. 190).

James' belief in his mission's divinity led him to create a Bible which would not have anti-monarchical notes like the Geneva Bible, or one that would not belong to the bishops like the official Bible of the Church of England. When he asked his counsellors to prepare the Bible with a novel translation, he was only performing his duty as God's messenger. Although the proposal originally belonged to John Rainold, James I saw the opportunity to have something bigger than he imagined and had fifty-four translators to work on the text. He engaged the best Greek and Hebrew scholars to write "one uniform translation ... ratified by royal authority" (Matusiak, 2015, p. 232). His Bible would represent his monarchy and his commitment to Christianity. The Bible created by his crew stood the trial of time and is still associated with his name. Here is an excerpt from the James' Bible that highlights the duty of God's representatives on Earth. This part can easily be associated with kings so when James asked for a monarchy friendly Bible, he obtained what he desired:

And I saw heaven opened and behold a white horse; and he that sat upon him was called Faithful and True; and in righteousness he doth judge and make war.

... And he was clothed with a vesture dipped in blood: and his name is called The Word of God.

And the armies which were in heaven followed him upon white horses, clothed in fine linen, white and clean.

And out of his mouth goeth a sharp sword, that with it he should smite the nations: and he shall rule them with a rod of iron: and he treaded the winepress of the fierceness and wrath of Almighty God.

For James, the monarchy came before Parliament. If the concept of Parliament existed, they owed their existence and liberties to monarchy. James reiterated the same subject of kings being representatives of God on Earth in his writings but also, he used poetic ways to educate his children and people about the role a king should play in a country. He recommended his heir in line, Prince Henry to fear God as his lieutenant on Earth and protect his divine rights. Here is the “Sonnet prefixed to His Majesty’s Instructions to His Dearest Son, Henry the Prince by King James I:”

*GOD gives not kings the style of gods in vain,
For on His Throne His sceptre do they sway;
And as their subjects ought them to obey,
So kings should fear and serve their God again.
If then ye would enjoy a happy reign,
Observe the statutes of your Heavenly King,
And from His Law make all your laws to spring,
Since His lieutenant here ye should remain:*

James counselled his son to “Reward the just; be steadfast, true, and plain” and “Repress the proud, maintaining aye the right/ Walk always so as ever in His sight,” because for him this was the only way to have his “princely virtues shine.” At the end of his sonnet, James concludes his royal advice by declaring his real objective that his children should resemble “right your mighty king divine.”

Through his writings and his patronage of the Bible’s translation, James converted the Jacobean era into an age of writing and written word. Additionally, James’ method was to have a uniformed Bible all over his country and provide a “reconciliation of contending parties under the benevolent guidance of a wise, all-knowing and all-governing king” (Matusiak, 2015, p. 234). James aimed, in a way, to pioneer and unite his subjects through his writings. His opponents also chose the same method to reciprocate and soon there were wars of pamphlets, newspapers, and memoirs. James saw himself as *rex pacificus*, the bringer of peace and harmony to each

and any situation, who had not only rescued his realm from war with Spain but also united two separate powers of his country under one banner (Matusiak, 2015, p. 277). During his years as a king in Scotland, James successfully ruled over a kingdom which was divided by religion and reluctance to acknowledge the power of its government. However, James managed to introduce security and peace. For the Scottish historian Gordon Donaldson, James's pacification of the nobles and his accomplishments "in solving problems which had been outstanding for generations, can fairly be described as spectacular" (Houston, 1995, p. 7).

One of the problems that James could not anticipate while championing the idea of spreading literacy in holy texts was the fact that the liberty and capability provided by reading them also enabled people to abandon their commitment to priesthood, church and other institutions particularly monarchy that imposed religious verdicts as well as royal authority upon them. Thus, this resurgence led people to question old superstitions and assumptions about religion. James' attempt to free biblical language and texts also liberated people from the yoke of Catholic Vatican, but at the same time it enabled people to identify themselves as dissenters (nonconformists) which resulted in the establishment of free churches. If James had not unintentionally opened the gates of religious liberty through his actions and writings, the Protestants and other dissident groups in England could not have accumulated enough energy and power to start a Civil War and execute the King. This wave of liberty cannot solely be tied to James because this was a result of Reformation movement all over Europe, but James unwittingly sustained and widened the antagonist forces in his kingdom. His position as a religious figure and icon did not alleviate Charles' position in his relations with sectarian religious groups.

In his memories, the governor of Nottingham Castle and Town and the representative of the county of Nottingham in the Long Parliament Colonel Hutchinson states that James I managed to get throne "by bribes and greater promises" and destroyed the Earl of Essex who "would have had the courage to keep him out" (Hutchinson, 1863) Hutchinson also points out how James I was not committed to the cause of Protestantism as Queen Elizabeth used to be:

Immediately after his entry into the kingdom, himself being moderator at a dispute between both parties, the nonconformists were cast out of doors, the offensive ceremonies, instead of being removed, were more strictly imposed, the penalties against papists relaxed, and many of them taken into favour, those families who

suffered for his mother were graced and restored as far as the times would bear, and those who consented any way to the justice done upon her, disfavoured. (80)

Hutchinson, a fervent Puritan, makes the same complaint about Charles as well. He states that “this king (Charles I) was a worse encroacher upon the civil and spiritual liberties of his people by far than his father” (Hutchinson, 1863, p. 85) Since his marriage to a papist French lady, his court “was replenished with papists” and “all the papists in the kingdom were favoured, and by the king’s example, matched into the best families” (85) According to Hutchinson, Charles I “had nothing of faith or truth, justice or generosity in him,” and adds that “He was the most obstinate person in his self-will that ever was, and so bent upon being an absolute, uncontrollable sovereign, that he was resolved either to be such a king or none” (Hutchinson, 1863, pp. 85-86)

James’ impact on religious matters clearly motivated Charles to have the desire to make contributions to the ecclesiastical components of England as well as Scotland. However, Charles never gained the trust of his people that his father had. Questioned by the Puritans, Charles’ obstinacy to assign people with known Catholic or Papal tendencies became a problematic issue between the parliament and the king. The more James’ authority over Biblical texts was well-known and acknowledged, the less Charles was trusted over clerical issues. His father’s clerical legacy drove Charles to interfere with religious matters. For example, Charles’ insistence to install a new book of prayers was a reminiscence of his father’s version of the Bible. This book was an attempt to impose himself as the King of Scotland according to the rights he inherited from his father. Whenever Charles tried to handle his affairs like the way his father conducted, he encountered resistance from Parliament and other forces around him such as the Scots.

3. PERSONALITIES OF JAMES AND CHARLES

James’ life was full of difficulties and his survival among the Scottish clans and nobles was a combination of miracles. His election as the first king of England from Scotland and his arduous life story convinced James to believe that he was the one as a monarch and his subjects had only one choice: to obey his orders without any question. His blind faith in the holy mission of kings on earth as the representative of God and his eccentric personality disabled James’ perception and, concurrently, his son Charles’ to realize that their choices of ruling harmed the nation which was in an age of transformation and advancement.

Prince Charles was never expected to survive infancy and his physical weakness particularly at his legs put him in a position overshadowed by his elder brother who would tease him until he cried “telling him that he should be a bishop, a gown being fittest to hide his legs” (Matusiak, 2015, s. 315). When Henry suddenly died in 1612 before his nineteenth birthday due to typhoid fever, Charles took an important role at court and in the kingdom at large. Although he remained “very grave”, exhibiting “no other aim than to second his father, to follow him and do his pleasure” according to the Venetian ambassador writing in 1617, he still turned into a young man “of good constitution so far as can be judged from his appearance, who enjoyed theatricals, rode excellently, and delighted in hunting” (Matusiak, 2015, p. 315). The difficult childhood phase put Charles in a tight environment combined with fears “blinded him as completely as any lack of conscientiousness to his obligations toward other people” because those early years cost Charles “a lack of imagination so complete that Charles could see nothing of his opponents’ point of view, frame no other argument than that immediately before him, conceive no other course of action than the one he was about to take, contrary though it might be to earlier assertions” (Higham, Charles I, p. 43). Charles did not seem ready to be the next candidate for the throne, but his brother’s untimely death put him in a position in which he needed to set an example for others so that he can be respected.

To be the next rightful prince, Charles needed a role model. Naturally, he wanted to be like James I because in many ways his father was considered a hero. Despite the general coward image, the brave way his father followed, when his mother was stuck in Denmark due to harsh weather, was admired by everyone in Scotland and England. That might be a primary reason that Charles and Buckingham went on an adventurous journey without proper preparations to Spain on horseback to find Charles’ future bride. Although they returned empty handed, their audacious journey reminded everyone that his son was also as courageous as his father. When James went to bring his bride Anne in 1589, he was only the king of Scotland without a clear promise to the throne of both kingdoms, so he did not have many things at stake, but Charles, as the future king of England, should not have felt the urgency to prove himself. His adventurous journey with Buckingham without any prior provisions to Spain constituted a risk to his life and the crown. However, his father’s legacy has shadowed his presence and this risky journey was a way to show everyone that he was as worthy as his father. Although the dangers that James experienced as a child taught him to be cautious as well as callous

towards his foes, Charles grew as the son of a king. Therefore, he knew that he was the legitimate heir to the throne. He did not go through any of the pain his father suffered at the hands of Elizabeth and her surroundings.

When James acquitted the throne, he knew that he needed people's consent because he was after all an outlander regardless of his blood ties to the royal family. As a Scot, he started with attempts to have dialogue with all members of society. For example, King James selected the Puritan, George Abbot, as Archbishop of Canterbury so people trusted his instincts as a king. Both Elizabeth and James were personally threatened and attacked by the Catholic forces, so most people had utmost faith in them against the mechanism of Popery. The defeat of Spanish armada ascended Elizabeth's position not only for the Protestants in England but also for all opponents of Catholicism in Europe. James was not fervent in his religious beliefs so he wanted to unite rather than separate different sects. This attempt could have been misinterpreted by zealous groups and used for contempt but when the gunpowder plot during the Opening of Parliament in November 1605 was revealed, this failed attempt for assassination became a perfect opportunity to let everyone know that he did not have ties with the Catholics or the Pope. The marriage of his daughter Elizabeth to Frederick V, elector Palatine and the prominent Calvinist prince of Germany, illustrated James' commitment to the Protestant cause and world. However, Charles was friendlier with Roman Catholics and sometimes openly opposed the Puritanism which pervaded the House of Commons (Ashley, 1973, s. 57). Charles' marriage with a fifteen-year-old French Catholic, Henrietta Maria, the sister of King Louis XIII, two months after his accession and his compromises for this marriage alarmed people about their king. Furthermore, when the archbishop of Canterbury, Abbot died in 1633, Charles appointed William Laud, the Bishop of London, who was a sworn enemy of the Puritans, and people could predict that the religious conflicts were about to flare again in the country. David Cressy summarizes how Charles ignored people's wishes and wanted to impose his orders: "From his accession in 1625 to his execution in 1649, Charles Stuart clung to a vision of sacred kingship, in which subjects owed their monarch obedience, service, and love" (Cressy, 2015, p. 7) The more Charles acted obstinately in his ideas to prove his authority, the more monarchy lost power within the country. Charles wanted to be like his father, but he lacked his father's persuasion and authority.

Charles' obstinacy on imposing his will manifested itself in his relations with Scotland. Charles wanted to win a conflict by force against the Scottish nobility although his father never even considered. The Act of Revocation (1625) was designed as restitution to the monarchy of Church's gifts and property acquired by James, as well as donations addressed to Charles before he came of age. The legality of this venture was questionable (it resorted to technical flaws in religious privileges and ignored the fact that Charles was not abdicated before he was an adult) and resulted in a compromise agreement in 1629. When Charles and the archbishop Laud sought to alter the traditional construct of Scottish ecclesiastical life, they left a legacy of distrust for the king among the nobility. "While Charles liked to maintain close ties with his Scottish relatives, particularly the duke of Lennox and the marquis of Hamilton, who played prominent roles in England, his eventual failure in Scotland came at the price of his ignorance and neglect" (Reeve, 1989, p. 19).

Rather than a state of obstinacy, both James and Charles were, to a certain extent, politically blind to the underlying animosities around them. They lacked the vision and empathy to evaluate events through people's eyes as they devoutly believed that they were granted a divine right to rule everyone without limitations and control. Although most of the protests aimed at their favorites and counsellors, the target was most of the time the throne. However, the fact that royal members failed to see was the implication by the House of Commons about the susceptibility of king to such counsel. That meant the royal family was as culpable as the ones who gave ill counsel to them. When Charles lost his counsellors one by one to the accusations of giving evil counsel to the king, little did he know that public attention was focusing upon Charles and he was losing his fight with the Commons. When there was no one else to blame for the causes of the nation's ills, the unthinkable was the only solution for many: trying the king for his wrongs.

4. FINANCE AND ARMY

In the early seventeenth century, the state was short of money and the treasury seemed to shrink day by day. According to the calculations by Patrick O'Brien and Philip Hunt, the level of the revenue in 1550s was not able to be reached until the Interregnum (P & Hunt, 1993, s. 159). That means financial situation never actually improved after the sixteenth century although there was relatively increasing trade and wealth all over the world. Elizabeth I passed on a financial disaster to James I and there were many

economic shortages that he had to solve. These shortages led to turmoil, discontent, and riots and although the amount of those rebellions was not enough to draw royal attention, they were early signs of the upcoming clashes. Elizabeth's income was enough for her during peacetime, but there was inflation due to trade reforms, new trading routes and wealth imported from colonies in America. New patterns of warfare were other issues that required modernization of the army as well as its fiscal books. Elizabeth used royal estates and parliamentary subsidies as her main sources of income, but both sources were almost depleted towards the end of her reign. Russell points out that "She had exhausted her supply of patronage, and her attempts to make up for the lack were eroding her popularity" (Russell, King James VI and his English Parliaments, 2011, s. 8) As trade and military advances became rapid, expenses grew to a degree which was not possible to fulfill without extra taxation.

A steady and high rise in prices worsened economy for everyone including the monarchy. Pound lost so much value that in fifty years' time it became less than half of what it used to be during Elizabeth's reign. Although the prices rose for almost everything, this did not mean a rise of the income of the Crown. Most forms of royal revenue and the feudal dues were according to fixed payments and the fixed price lost value every year. It was not only about the deteriorating economy, but also advances in different fields also required funding more than the Crown could afford.

Due to scientific advance in almost every field, the structure of institutions was changing. The military materials and strategies also needed an immediate review because the key changes in the military revolution were the use of handguns in armies, and the development of the bastion in fortification which eventually led to longer wars. These changes, all over Europe, demanded profound alterations in the financial and political structures of the countries affected by them. They called for levels of taxation of which, as Emmanuel Philibert, duke of Savoy, was very quick to realize, consent was very unlikely to be forthcoming. The new systems of warfare, nonetheless, created an intense pressure for constitutional change (Russell, King James VI and his English Parliaments, 2011, s. 11). The English, for a long time, were shielded from these pressures. This was for three reasons: first, England's only land frontier was with Scotland, and William Cecil's bold intervention in Scotland in 1559-69 had turned Scotland from a natural enemy to a rather uncertain ally; second, Queen Elizabeth's determination to avoid war kept off the pressure for much of her reign; third, just when the costs of war were first

passing out of reach of the king's ordinary revenues, Henry VIII, in Robert Cecil's vivid phrase "raised to himself in effect another crown in point of revenue by the fall of abbeys" (Russell, *King James VI and his English Parliaments*, 2011, s. 13-14).

One of the main problems that monarchs could not realize was the fact that the way armies conducted wars had changed because of several advances in military strategies, weapons, and methods. The new warfare systems demanded a change for constitutional progress and a consensus among the citizens for funding and sustaining the army. It also became obvious that the states needed a permanent and professional army that could get organized once they were called upon. However, the emerging middle class and citizens of the upcoming Enlightenment age were not ready to grant consent just like their ancestors upon monarchy's demand. Thus, a clash between the Parliament and the monarch seemed inevitable. The tax base did not grow with the population growth though, so more people did not actually mean more taxes (Archer, 1991, s. 12-13). England could evade the constitutional change that Europe faced earlier only because of the income from monastic properties that changed hands during the reign of Henry VIII, but by 1590 there was nothing left to turn into capital for the monarchy (Archer, 1991, s. 5). The system for taxation, military investments and the structure of the army were in urgent need of being altered and adapted according to the demands of the century. During the civil war, the Protestant group managed to create a reformed army which was going to be called as the New Model Army. The new army in England brought the end of monarchy and thanks to the new structure, the short Commonwealth period could survive during Cromwell's life.

5. PARLIAMENT

Parliament was not forceful and interfering until Queen Elizabeth's reign because that was the time when the middle-class merchants started to obtain financial power and political might. Queen Elizabeth did not have a great relationship with her House of Commons, but she sold Crown lands to keep her rule in dignity. The Parliament members, nonetheless, claimed a natural right, coming from the Magna Carta and latter agreements between the king and his subjects so that they are involved in foreign policies, legislative actions, ecclesiastical provisions, and tax issues as well as the sale of patents or monopolies. When the monarchy abused their royal privileges and rights over the Parliament, the MPs always found a way to display rancor for the

rulers. For example, in a session of the Parliament in 1601, Elizabeth's grants of trading monopolies were questioned and attacked by MPs who dared to raise the whole issue of the balance between the authority of Parliament and the royal prerogative itself (Matusiak, 2015, s. 242). Monarchs needed to get the consent of the MPs to make laws, to vote taxes and discuss further issues. However, Elizabeth did not consent to listen to Parliament about her foreign policy or the questions of religion. When Elizabeth asked for something from the House of Commons, "it was seldom denied and whenever she had laid claim to something it was 'never inquired' into" (Bacon, 2010, s. 177). Elizabeth also obtained the largest grant of subsidies despite the economic difficulties (Neale, 1957, s. 386-388). Coming from running his own country with an almost fully compliant Privy Council consisting mostly feudal chiefs, James should have at first underestimated the power of this political institution because he was "neither by training nor temperament was well equipped to handle the Commons" (Thrush & Ferris, 2010). He could not hide his anguish and anger against the largest representative institution in Europe when he found "nothing but curiosity from morning to evening to find fault with my propositions. There (In Scotland), all things warranted that came from me. Here, all things suspected!" (Gardiner, 2011, p. 191) The rivalry between the Crown and the Parliament became fierce as both parties tried to subdue the other's power and authority. Thus, the seventeenth century can be considered as a battlefield between the monarchy and parliament in England. For, while Elizabeth had achieved much of her success by cultivating the closest links between her Privy Council and Parliament, and by carefully managing parliamentary debates, the new king found himself personally defending his government's policy in a way that his predecessor would only stoop to do in a matter of crisis (Matusiak, 2015, s. 247).

A clear distinction should also be set between the definitions of Parliament in the seventeenth century and contemporary one because the former was "a court not a legislature" and "there existed independently of king, parliament or any lawmaker a body of immutable fundamental law" (Weston, 1960, p. 411). Parliament evolved into an institution that asked for more attention and privileges to be included within the governmental spheres. The seventeenth century was, however, not a time ripe for democratic participation, so James I had all the right to claim his absolute power over the country as the whole Europe was also ruled by absolute monarchs who did not share their powers with a representative Parliament. Nevertheless, James I was cautious as he could see the rise of wealthy men who could pose threat to

the farewell of the kingdom. Despite their friendly approach in the beginning, the Commons were ready to ask for privileges. For example, two members of Parliament were involved in illegal activities and the King was asked to pardon them since they are MPs. The cases of Sir Thomas Shirley and Sir Francis Goodwin showed the indignant side of the Commons which might be a reason for the king to stop communication with the Parliament. (Ashley, 1973, p. 47)

The gunpowder plot in 1605 eased the tension within the country and the king received his subsidies in 1606. The next four years were spent on discussions of financial expenditure. When James could not get the funding to create an army against Spain, he said that “The plain truth is, we cannot with patience endure our subjects to use such antimonarchical words concerning their liberties, and except they had subjoined that they were granted unto them by the grace and favor of our predecessors.” James was encouraged to dissolve Parliament by his councilors, and Count Gondomar, the Spanish ambassador, stated that Spain could not negotiate while such an institution interrupted the king’s wishes. “Nor was the Spaniard alone, it seems, in his desire for dissolution, for he recorded gladly how ‘the king was being valiantly urged on by the Marquis of Buckingham and other good friends’” (Matusiak, 2015, p. 321). The international pressure upon the English monarchy to act on its own without the counsel of Parliament came from other monarchies in Europe who did not wish England to set a bad example for their nations.

Although James saw the evolution of parliament and approved the significance of representative democracy, he was not ready and willing to share his authority. Yet the king’s history certainly contained statements that would rightly or wrongly redound to his discredit down the centuries. Though there was nothing novel in the claim, for instance, that it was the duty of subjects to obey even tyrannical kings and to accept that, as God’s appointees, anointed rulers were open only to divine judgement, his words, like those of many a well-intentioned pedant, frequently have an unfortunate ring to them. “Kings are called Gods by the prophetic King David,” he reminded his readers “because they sit upon God His throne in the earth and have the [ac]count of their administration to give unto him” (Tanner, 1960, p. 78). In Scotland, he argued, kings existed before any Parliaments were held or laws were made and so

it follows from necessity, that the kings were the authors and makers of the laws, and not the laws of the kings. Likewise, the coronation oath involves no

compact between rulers and ruled. Instead, the good king is a loving father to his people, cherishing their welfare, tempering punishment with pity, and safeguarding order and harmony for the mutual benefit of all concerned by the very inviolability of his authority. As for evil kings, their chastisement will follow in the afterlife. Indeed, they will be punished far above other men, 'for the highest bench is sliddriest to sit upon' (Tanner, 1960, p. 79).

It is true that James also had speeches where he acknowledged the importance of laws and governance by the kings according to laws, but his actions have unfortunately reversed his tedious speeches as he had never hesitated to oppose MPs on the ground that his actions and orders are unquestionable. James saw himself as the husband and the whole island as his dutiful wife and he added that “I am the head and it is my body; I am the shepherd and it is my flock” (Wilson, 1653, s. 17).

When a court decided against a merchant named John Bate’s refusal of paying the “poundage” or import duty levied by the king’s executive orders, this decision emboldened the king and his secretary of State, Sir Robert Cecil to impose new regulations and put new taxes on foreign trade. Objections against new regulations were raised in Parliament and the King dissolved his first Parliament in 1611. Three years passed without Parliament, but as the King needed more money, he summoned a new Parliament in 1614. Hearing similar protests and objections from the Parliament rather than acknowledgement and approval, the King dissolved the “Addled Parliament” in the same year. (Ashley, 1973, p. 51)

Similar to his father, Charles also did not pay attention to the voices from Parliament and dissolved it whenever he saw it fit. He closed parliament three times in his first four years on the throne. He needed to assemble Parliament whenever he needed funding bigger than designated to cover his expensive foreign and domestic wars. The murder of George Villiers, Duke of Buckingham, isolated Charles and this lessened the communication between Charles and the outside world because Buckingham was always in reach of the king. Charles lost his trust and confidence in people after the brutal murder of his favorite friend and counselor. Each time Charles attempted to extend his royal rights such as the revenue of tonnage and poundage which could be collected only for one year. When Charles granted parliament to assemble so that they can approve his extra revenues, parliament forced the king to assent to more rights and less money. For example, in 1628 the Petition of Right asked for the illegitimacy of King’s non-parliamentary taxation and imprisonment without a fair trial. After his first four years, he

closed parliament for another 11 years which he was going to rule on his own without the consent of representatives.

Unlike his predecessors, Charles could not hold the unity of political consensus in his three kingdoms which led to armed conflict and bloodshed within the country. Charles also could not manage his affairs with the members of Parliament and disagreements between them turned into a hostile and dangerous situation which paved the way towards the Civil War. Between the years of 1628 and 1633 English politics experienced a significant transformation “from government in conjunction with Parliament to government without reference to Parliament” and “from the administration of a royal favourite to that of the king and his circle; from government dependent upon parliamentary subsidies and rising debt to government based upon non-parliamentary taxation, customs revenues and war trade; from intervention in continental affairs to isolation; and from war to peace. (Reeve, 1989, p. 1) Conrad Russell points out that religious and political divisions became more prominent during the late 1620s and thus he draws a sharp line between the Jacobean era and Charles’s reign. (Russell, *Parliaments and English Politics 1621-1629*, 1979, pp. 366-420) This contrast was characteristics of a new regime that emerged from the rejection of parliamentary ways. Charles’ policies which constituted a threat to parliamentary framework of English politics and his obstinate character, mostly derived from his father’s eccentric nature, weakened his rule.

6. NOTORIOUS PRODIGALITY OF THE CROWN

Had James and Charles were competent in managing their finances and curbing their extravagances, most of their conflicts with Parliament and other parties could have been avoided. Combined with the weak treasure, James’ spendthrift habits compelled the king to ask for extra taxation as impositions. The fact that James’ annual subsidy of £70,000 did not suffice to provide for his necessities was a result of his “carefree distribution of gifts, grants and favours” (Matusiak, 2015, s. 180). An extravagant amount of £15,593 was spent on the childbed of Princess Mary’s birth on 8 April 1605. There was also a long list gifts and pensions delivered to servants, friends, associates, guards and most people surrounding the royal family. One of the king’s Scottish servants, Jon Gibb, was given £3,000 while Mrs. Jane Drummond, one of Queen Anne’s favorite maids received £2,000. In 1603 £11,741 was spent on “diverse causes and rewards” which became £18,510 the next year and £35,239 in 1605 (Matusiak, 2015, s. 262). He was also

criticized for the bestowal of knighthoods, which was carefully restricted by Queen Elizabeth. Upon his arrival in London, James delivered the title to less than 300 men. Although only 878 men were knighted during the forty-five years of Elizabeth's reign, James promoted 906 men only in the first months of his reign. (ibid, 180) James posed as a king who could be "the beneficent, affable, patriarchal dispenser of largesse and justice, responsible only to God for the welfare of a grateful and pliable realm" (Matusiak, 2015, s. 182).

On the other side, James had a habit of being idle because the plague drove him out of London and he got accustomed to go long hunting trips. He depended on his councilors to run the government and manage the Parliament because he was away most of the time. His son who had to grow up without his father also observed how his father enjoyed his life without being involved in serious talks within the House of Commons.

James' relationship with his favorites clouded his vision and earned him many enemies in and outside the court. People openly criticized their inappropriate behaviors within the public and they were amazed how James acted indifferently to criticism. Such an act of disregard must have left an impact on Charles as he was also criticized to comprehend love as "intellectual surrender" (Higham, 1932, p. 43) Charles broke his word to Parliament during the negotiations with France and the failure was blamed on the queen's influence over the king. Just like his father's domination by his favorites, Charles' dependence on his wife's acknowledgement was seen as a weakness that was passed on to the king from his father.

7. JAMES' SUSPICIOUS DEMISE

At the age of fifty-eight, James I died on March 27, 1625 after spending several months as a sick king. The royal physicians labeled the cause of death as fever (tertian ague), but Alastair Bellany and Cogswell track a commonly believed narrative of murder and intrigue. (Alastarie Bellany, 2015) The Scots physician George Eglisam, who claims to be a consulting physician to the king, is at the center of their theories. Eglisam explains in his book, *The Forerunner of Revenge Upon the Duke of Buckingham*, which he wrote after his flight to Europe, that Buckingham poisoned his master and a half-dozen noblemen upon the fear of losing his favor. Buckingham had many enemies both in Europe and the English parliament because of the monopolies and titles he had acquired, but when James' doctors testified on Buckingham's intervention with the king's treatment, even his friend the new king Charles I could not save him from the meticulous attacks of MPs who

associated this event with a papal attack on England. Bellany and Cogswell's book shows how this claim was backed by many people in society and this has been a turning point for the Parliament and the Crown to fall apart. (Alastarie Bellany, 2015) Hutchinson also explains how King James' death was dubious for many people because of Buckingham's mother's treatment for the king and blames Charles to be involved within the plot:

In the first parliament after he came to the crown, the Duke of Buckingham was impeached concerning the death of King James and other misdemeanors; but the present king, who had received him into the same degree of favour that he was with former, would not endure the question of his favourite, and, to deliver him from it, broke up the parliament which gave too just a suspicion that he favoured the practice; for is true that the duke's mother without the consent of the physicians, had made an application to the wrists of the king his ague, after which he died in his next fit. (Hutchinson, 1863, p. 86)

Although Charles dissolved Parliament, the rumors and allegations caused Buckingham's assassination in 1628. The parliamentary forces used this claim as a significant reason during the Civil War to convince people to fight against the king who was allegedly a king slayer. Regardless of Charles' contribution to his father's death or the fact that Eglisam authored a book of misinformation due to his connection to the Habsburg dynasty, the slightest possibility that caused people to believe that he might have committed the heinous deed is a sign that he was not trusted by people around him.

Whether Charles was involved within the conspiracies of a probable inclusion for his father's death or not, people, as Hutchinson reports, were suspicious of his actions and some believed that he could have harmed anyone to get to the throne. Charles could have justified his ambitions through his father's example because James did not rebel against Elizabeth although she had his mother executed. The compromises that James made for the Crown manifested his desire and, as his son, Charles showed a similar character when it came to the matter of being the king.

CONCLUSION

Perhaps the happiest time for Charles I was during the New Year festivities of 1605-6 at Whitehall when he was made Great Duke of York. He was carried into the old banqueting hall by nine earls and this occasion must have been a golden memory for the prince who did not expect to be the next king or did not have high expectations about his future which was going to be completely different than he anticipated. England's beau ideal, Henry's

untimely death in 1612 at the age of eighteen accelerated the end of his stuttering brother's teenager period. While describing what he inherited from his father, Higham points out that "he imbibed the pernicious doctrines of absolutism, and accepted them as incontrovertible" (Higham, 1932, p. 20). A prince naturally grows up in isolation and usually lacks sympathy, humor, sincerity, friendship and other concepts that a normal person requires to have a self-sufficient and understanding character. Charles did not have most of those in his seclusion, but his father, who prioritized his favorites before his son, could not provide the role model he needed to improve his skills for being a rightful king.

All of the abovementioned characteristics and problems of the era were reminders for both James and Charles that it was time to reform the structural framework of the government and system. The disagreements between the king and parliament seemed to have no end until one of the parties agreed to compromise. Seventeenth century was a time of rapid change although the fore coming years hinted at most of the tensions within the society but like most rulers James and Charles did not want to pay attention to those because they were a threat to their comforts. They were not capable of adapting new methods of government, philosophy, army, parliament and other important sections that required a novel strategy to be implemented into the new society.

Late sixteenth century and early seventeenth century were times that nourished a government presenting a combination of monarchy, aristocracy and democracy. Although it was early to talk about these concepts contemporary usages, English thinkers believed that "the king represented the monarchic element; the House of Lords, the aristocratic; and the House of Commons, the democratic" (Weston, English Constitutional Theory and the House of Lords 1556-1832, 1965, p. 2). In theory, this was the framework, but there were problems among these forces as their expectations and demands from each other differed. James united two kingdoms and he strongly believed in the divine rights of a king upon Earth as the representative of God. Charles wished to maintain his father's position, but he failed to see the reformative vein in Protestantism and his obstinacy to ignore the reformer movement started the Civil War. Despite all the conflicts and armed struggles, he could have ended the turmoil, but the legacy he has inherited from his father has created an antagonistic character that looked down on the Parliamentary forces and believed in a grand mission and superiority of himself as a king. Had James presented a better example for his son through his actions and

writings, Charles could have obtained preliminary skills to manage conflicts between him and his people. However, James' idle habits, spendthrift character, stubborn character, delusional religious beliefs and old-fashioned governmental intentions drove his son Charles to a state of grandeur over everyone else. This delusional situation disabled Charles to see the upcoming storm in his country and led him to start wars with Scotland and parliament.

Although King James was full of ecclesiastical rhetoric which could persuade others in times of crisis, Charles did not have the same chance to convince people with his words. Actions were expected of him and he did not want to behave the way others imposed on him. If he wanted to marry a Catholic woman, he believed that it was solely his decision and no one including parliament did have a say in it. If Charles needed funds to fight the Scots who did not accept his book of prayers, he did not need to convince the Parliament for his rights. As his father mentioned several times, the kings outdated the Parliaments so without a king, none of these institutions could have existed. Thus, everyone should have had respect for the wishes of a king who was God's lieutenant on Earth. There were so many things that could be listed as the sources of the turmoil within the country, but inherited from his father, Charles' obstinacy over his out-of-date ideas paved the way for his execution and monarchy's destruction.

REFERENCES

- Alastarie Bellany, T. C. (2015). *The Murder of King James I*. New Haven, CT: Yale UP.
- Archer, I. (1991). *The Pursuit of Stability: Social Relations in Elizabethan London*. Cambridge: Cambridge UP.
- Ashley, M. (1973). *England in the Seventeenth Century*. London: Penguin.
- Bacon, F. (2010). *Letters and the Life of Francis Bacon*. London: Nabu Press.
- Belloc, H. (2003). *Charles I*. Norfolk: Gates of Vienna Books.
- Carlton, C. (1984). *Charles I: The Personal Monarch*. London: Ark Paperbacks.
- Carter, C. H. (1964). Gondomar: Ambassador to James I. *The Historical Journal*, 7(2), 189-208.
- Cogwell, T. (2018). *James I The Phoenix King*. London: Penguin.
- Craigie, J. (1944). *The Basilicon Doron of King James VI*. Edinburgh: William Blackwood & Sons Ltd.
- Cressy, D. (2015). *Charles I and the Poeples of England*. London: Oxford UP.
- Doelman, J. (2000). *King James I and the Religious Culture of England*. Suffolk: Boydell and Brewer.
- Gardiner, S. R. (2011). *History of England from the Accession of James I to the Outbreak of the Civil War 1603-1642*. Cambridge: Cambridge UP.
- Gwatkin, H. M. (1917, 2014). *Church and State in England to the Death of Quenn Anne*. London: Green and Co.
- Higham, F. (1932). *Charles I A study*. London: Hamish Hamilton.
- Higham, F. (1932). *Charles I*. London: Hamish Hamilton.
- Hill, C. (2002). *The Century of Revolution 1603-1714*. London: Taylor & Francis Group.
- Houston, S. (1995). *James I*. Oxon: Routledge.
- Hutchinson, L. (1863). *Memoirs of the Life of Colonel Hutchinson*. London: Henry G. Bohn.
- Jessup, Frank W. & Howat G. M. D. eds. . (1966). *Background to the English Civil War*. London: Pergamon Press.
- Matusiak, J. (2015). *James I: Scotland's King of England*. Gloucestershire: The History Press.
- Neale, J. (1957). *Elizabeth I and Her Parliaments*. New York: St. Martin's Press.
- Nicolson, A. (2003). *God's Secretaries: The Making of the King James Bible*. New York: HarperCollins Publishers.

- Oglander, S. J. (1936). *A Royalist's Notebook: The Commonplace Book of Sir John Oglander Kt. of Nunwell*. (F. Bamford, Ed.) London: Constable&Co.
- Ollard, R. (1979). *The Image of the King: Charles I and Charles II*. New York: Atheneum.
- P, O., & Hunt, P. (1993). The Rise of a Fiscal State in England, 1485-1815. *Historical Research*(66), 129-76.
- Reeve, L. J. (1989). *Charles I and the Road to Personal Rule*. Cambridge: Cambridge UP.
- Rhodes, N., Richards, J., & Marshall, J. (2016). *King James VI and I: Selected Writings*. Oxon: Routledge.
- Russell, C. (1991). *The Fall of the British Monarchies, 1637-1642*. Oxford: Oxford UP.
- Russell, C. (2011). *King James VI and his English Parliaments*. Oxford: Oxford UP.
- Stone, L. (1972). *The Causes of the English Revolution 1529-1642*. New York: Routledge.
- Stone, L. (1985). The Bourgeois Revolution of Seventeenth Century England Revisited. *Past and Present*, 44-54.
- Sturdy, D. J. (1992). *The Royal Touch in England. European Monarchy: Its Evolution and Practice from Roman Antiquity to Modern Times*. London: Franz Steiner Verlag.
- Tanner, J. (1960). *Constitutional Documents of the Reign of James I 1602-1625*. Cambridge: Cambridge UP.
- Thrush, A., & Ferris, J. P. (Eds.). (2010). *The History of Parliament: The House of Commons 1604-1929*. Cambridge: Cambridge UP.
- Tyson, D. (2011). *The Demonology of King James I*. Woodbury, Minnesota: Llewellyn.
- Weston, C. C. (1960). English Constitutional Doctrines from the Fifteenth Century to the Seventeenth: I. English Constitutional Theories from Sir John Fortescue to Sir John Eliot. *The English Historical Review*, LXXXV(296), 410-425.
- Wilson, A. (1653). *History of Great Britain, Being The Life and Reign of King James The First*. London: Richard Lownds.

CHAPTER 4

**EVALUATION OF PRE-SCHOOL EDUCATION
INSTITUTIONS EFFECTIVENESS WITH DATA
ENVELOPMENT ANALYSIS**

Asst. Prof. Dr. Rahmi BAKI¹

¹ Aksaray University, Faculty of Economics and Administrative Sciences, Department of Management Information Systems, Aksaray, Turkey, rahmibaki@aksaray.edu.tr, Orcid: 0000-0003-0981-5006

INTRODUCTION

The pre-school education process, which is defined as a regular and systematic instruction process that provides basic knowledge and skills suitable for the child's development level from birth to primary education (Dirim, 2004), takes place during the fastest period of child development and greatly affects their future learning abilities. The quality education offered in this period when the foundations of personality are laid and when conscious guidance is of draconian importance has positive effects on a myriad of skills and abilities. Since it is possible for the individual to develop her potential with the opportunities provided in these years, systematic and planned support should be rendered to children during this period. Hence, the number of early-childhood education establishments and students in these institutions is increasing day by day in Turkey (RTMNE, 2016).

Data Envelopment Analysis (DEA), a special approach of linear programming, is a technique used to measure the relative effectiveness of organizations with the same goals (Bayraktutan, Arslan & Bal, 2010). DEA aims to measure the effectiveness of decision units in cases where there are numerous variables with different measurement units in which the ones as active in the DEA are called the reference set. This technique allows one to identify the reasons behind the inefficiency of each unit and form an idea about how these units should influence the amount of inputs or outputs (Charnes, Cooper & Rhodes, 1978) and has been used to compare and evaluate establishments in many areas. In the literature review conducted, even though many studies that measuring the effectiveness of various educational institutions using DEA have been scrutinised (Table 1), no study is found, to this author's knowledge, which analysed the efficiencies of pre-school education institutions.

Taking into account the importance of pre-school education institutions for individuals, families and society and their rapid increase, the comparison of the effectiveness of related institutions via technique such as DEA, a widely-accepted method which has been used over the course of many years, is a research topic that is thought to contribute to the relevant literature. In this present study, the effectiveness of 21 preschool education institutions in Ankara is analysed through a practical application, where four input variables (class area, number of instructors, instructor experience, and number of staff) and one output variable (registration renewal rate).

In the second part, the importance of pre-school education institutions and the studies that measure the effectiveness of various educational

establishments by using DEA are emphasised. Then, the DEA method used in the research is introduced and following this, the steps followed in practice, the efficiency results of the institutions and the target values obtained are presented. Finally, in the conclusion and evaluation section, the findings obtained are discussed, the limitations of the current research are stated and the research topics that can be carried out in the future are put forward.

LITERATURE REVIEW

The pre-school education phase is the period in which child development is the fastest, and it greatly affects future learning abilities (Fidan & Erden, 1993). Many problems that may be encountered in a child's development phase are generally associated with mistakes made in the preschool period (Turaşlı, 2007). In this period, which continues until the beginning of primary school, children can be provided with opportunities suitable for their individual characteristics and developmental levels (Poyraz, 2003). Existing literature yields several definitions of preschool education, one being an educational process enabling children to express themselves and preparing them for primary schooling (Yılmaz, 2003). Another definition, regards the concept as a process that ensures child development in a systematic environment and takes place within the integrity of basic education (Gürkan, 1998). Dirim (2004), on the other hand, defines this notion as a regular and systematic education activity that provides basic knowledge and skills suitable for the child's development from birth to primary education.

Root causes such as the slimming down of playgrounds in urban areas, rising awareness of families about early education, and the increase in the rate of working of both parents have increased the demand for pre-school education institutions (Oktay, 2002). The high-quality and appropriate education offered in these years when one is most open to learning is thought to directly affect the abilities of the child (Babaroğlu, 2018) as developing the potential of the individual is possible with the opportunities that can be provided in the early years. Consequently, systematic, planned, programmed and long-term support should be provided to children in the pre-school period.

Table 1: Studies in which the performances of educational institutions are analysed

Reference	Study Area	Input Set	Output Set
Rassouli-Currier (2007)	Public Schools	Household income, poverty rate, high school graduate parent, student / teacher ratio, teacher salary, teacher experience, teaching expenditures	Exam success scores
Johnes and Li (2008)	Universities	Staff time, staff quality, graduate students, funding, library, number of buildings	Total posts, posts per staff member, reputation
Cheng et al. (2009)	Primary schools	Student-teacher ratio, experience, educational background, educational expenditures, number of books, teacher income, administrator income	Mathematics, Chinese and English excellence rate, student awards, number of articles, teacher awards
Kong and Fu (2012)	Business Departments	Department's performance score	Initial pay, cognitive performance, emotional domain
Barra and Zotti (2016)	State University	Equivalent staff, financial resources	Number of publications, research funding, scientific production, number of graduates, student satisfaction index
Chuany et al. (2016)	Technology Universities	Faculties, education expenses, classroom space, laboratory space	Doctoral degrees, masters, bachelor's degrees, papers, patents
Chen et al. (2017)	State University	Age, gender, SAT math score, SAT verbal score, high school average, merit scholarship	Degree completion
Fatimah and Mahmudah (2017)	Primary schools	Number of teachers, number of postgraduate teachers, number of students, number of classes, number of libraries	Number of graduates, national exam average, number of approvals
Sagarra et al. (2017)	Universities	Faculty, enrolment, first graduates	Publication, number of graduates
Rohayana (2018)	High schools	Student, teacher, library, laboratory, graduate, classroom	Indonesian, English, mathematics, physics, chemistry, biology
González-Garay et al. (2019)	Chemical Engineering Departments	Student entry standards, expenditure per student, staff-student ratio, research intensity	Student satisfaction, research quality, graduate expectation, added value scores
Shamohammadi and Oh (2019)	Private Universities	Academic staff, non-academic staff, research funding, undergraduate enrolments, postgraduate enrolments	Publication, patent, undergraduate degree award, total degree award
Visbal-Cadavid et al. (2019)	Colleges	Academic personnel, administrative personnel expenditures, financial resources, physical resources	Number of undergraduate students, number of graduate students, Saber exam result, indexed journals, research publications
Salas-Velasco (2020)	State Universities	Total number of credits, technical degree weight, equivalent faculty total	Total credits, liquidated research income, degree weight

While the rate of enrolment in pre-school institutions between the ages of 4-5 in Turkey was 4.1% in 1985, this rate increased to 49.27% in 2015 (RTMNE, 2016). However, when these rates are examined in more detail, it is seen that Turkey is below the averages of both OECD and European Union (EU) countries. While the pre-school enrolment rate of 5-year-olds is 71% in Turkey, it is 95% in OECD and EU countries. For 4-year-olds, this rate is 32% in Turkey, 86% in OECD countries and 89% in EU countries; whereas these rates are respectively 8% and 71% for 3-year-olds (OECD, 2016). For Turkey, in the education period in 1923, the number of students in pre-school education institutions was 5880, while the number of instructors was 136. These figures rose respectively to 1209106 and 72228 in the 2015-2016 academic year (RTMNE, 2016). In addition, a study conducted by OECD in 2016 posits that while the number of students per teacher in pre-primary education in Turkey is 17, this rate is 14 and 13 in OECD and EU countries respectively (OECD, 2016). It is observed that investments in pre-school education have increased rapidly in Turkey, especially in recent years. However, priority should be given to reducing the duration of education and the number of students per teacher (Kazu & Yılmaz, 2018). In the existing studies scrutinised, it was observed that the performances of tertiary-level education institutions, high schools or primary schools are generally measured. Recent studies in which the efficiencies of various educational institutions are analysed through DEA are presented in this section.

Rassouli-Currier (2007) evaluates the efficiency of public schools using DEA and Tobit regression while Johnes & Li (2008) measure the research performance of 109 higher education institutions using DEA. Cheng, Mao, Hu, Zhang & Liang (2009) analyse the productivity of a sample of 58 primary schools with DEA and Kong & Fu (2012) create a student-centred performance evaluation model for business departments by integrating the AHP and DEA techniques. Barra & Zotti (2016) apply the bootstrapped DEA approach to evaluate the technical efficiency of a large public university whereas Chen, Chen & Oztekin (2017) propose an approach in which data mining and DEA approaches are used together to assess graduation rates at a four-year public university. Chuanyi, Xiaohong & Shikui (2016) use DEA and stochastic boundary analysis to examine the efficiency of science and technology research universities. Fatimah & Mahmudah (2017) develop a two-stage method using DEA and econometric approach consecutively to measure the efficiency of primary schools. Sagarra, Mar-Molinero & Agasisti (2017) examine the impact of the Education Modernization Program on

teaching and research efficiency in universities with an approach that integrates DEA and Multidimensional Scaling. Rohayana (2018) evaluates the technical efficiency of high school education by applying the aforementioned former method. González-Garay et al. (2019) apply DEA to evaluate the chemical engineering departments of universities while Shamohammadi & Oh (2019) develop a two-stage DEA model to scrutinize the teaching and research performance of private universities. Visbal-Cadavid, Mendoza & Hoyos (2019) evaluate the technical efficiency of colleges using Artificial Neural Networks and DEA whereas Salas-Velasco (2020) compares the technical efficiency performances of public universities via DEA.

In the studies examined and summarised above, it is seen that mostly the performance of higher education institutions have been the focus of the research question. In these academic works, the success of the educational establishments is measured by data such as the number of academic publications, the number of academic publications per staff, the graduation rate, the graduate entry rate and the number of patents, none of which are prevalent when it comes to pre-school instruction. For this reason, in the current study, the success of institutions is measured by the rate of students who renewed their enrolments in the next academic year. It is assumed that a student's attendance at the same educational institution the following year is an indication that his parents are satisfied with the relevant establishment. In the literature, the research in which the performance of educational institutions are analysed with DEA, the application areas of these works and the input / output clusters used are given in Table 1.

METHODOLOGY

DEA is an approach based on linear programming that aims to evaluate the effectiveness of units in cases where there are many variables with different measurement units and which are not easy to compare (Özden, 2008). The method has been used to weigh up numerous public and private institutions in different fields, evaluate their performance and measure their effectiveness. DEA is based on Farrell's (1957) linear equation system using multiple inputs and a single output. In the following years, Charnes, Cooper & Rhodes (1978); Banker, Charnes & Cooper (1984) formulated the precedents of DEA, called the CCR model and BCC model, respectively.

In the environments where multiple inputs and outputs are used in DEA, analyses can be performed without the need for any analytical function (Banker & Thrall, 1992). The decision-making unit that is found to be the

most successful in the technique forms the efficiency limit and the success of the unit is compared with this. Units at the efficiency frontier are adopted with relative success and are referred to as reference sets whereas their units that are not in this border are relatively inactive units (Cooper, Seiford & Zhu, 2004). Through DEA, the causes of inefficiency in each unit can be identified and a strategy for input/output changes is created (Charnes, Cooper & Rhodes, 1978).

APPLICATION

In this assessment, the effectiveness of pre-school education institutions in Ankara is examined through the DEA interval where the input set is represented by four variables and the output set by a single variable. The first input variable is the class area (Input 1) variable, which is calculated by the ratio of the total square meters of all classes in the educational institution to the total number of students. The second input variable is the number of instructors (Input 2) reached by comparing the total number of teachers in the educational institution to the total number of students. The third input variable is the instructor experience (Input 3) calculated by dividing the total experience of all teachers working in the institution on an annual basis by the total number of teachers. The last element of the input set is the number of staff (Input 4), which is the ratio of the total number of personnel in the institution to the total number of students.

The only output variable used in the analysis is the registration renewal rate (Output 1). As stated before, while evaluating the performance of pre-school education institutions, it is not possible to use proxies such as the number of academic publications, the number of patents issued, and the average score of the high school entrance exam or the rate of placement in universities, as is the case for other educational institutions. Thus, in this current study, the output variable, the enrolment renewal rate expressed by dividing the number of students who renew their enrolment in the same educational institution for the next year by the total number of students issued. Students who are due to start primary school next year are not included in the calculation as they are out of the scope to re-register. Data values of these establishments are presented in Table 2.

Input and output data of preschool education institutions are defined and analysed with CCR and BCC models via the DEA Solver software. The results posit, *Institution 1*, *Institution 5*, *Institution 15* and *Institution 19* as effective education institutions according to the CCR model. The remaining

17 data points, on the other hand, are found to be ineffective. The ranking of these organisations according to the CCR model, their efficiency scores, reference clusters and density values are given in Table 3.

The BCC model concludes 10 of the 21 educational institutions to be effective, listed as follows: *Institution 1, Institution 3, Institution 4, Institution 5, Institution 6, Institution 11, Institution 15, Institution 16, Institution 19 and Institution 21*. The rankings vis-a-vis the BCC model, their efficiency values, reference clusters and density values are presented in Table 4.

In order for the remaining institutions to become effective, changes should be made in the input and output values based on the observations in the reference clusters and their respective values. The target values calculated according to the CCR and BCC models for the inactive samples in the study are presented in Table 5 and Table 6 where the improvement values of these institutions are shown. Target values are indicators directing organisations that are not considered efficient on the level they need to bring their inputs and outputs to be considered effective.

Table 2: Data set used in the application

Institution	Input 1	Input 2	Input 3	Input 4	Output 1
Institution 1	2.083	0.174	2.804	0.197	0.481
Institution 2	1.667	0.115	3.414	0.139	0.448
Institution 3	5.028	0.263	9.291	0.330	0.944
Institution 4	1.563	0.131	3.190	0.169	0.469
Institution 5	1.667	0.085	2.634	0.096	0.408
Institution 6	4.375	0.306	8.795	0.375	0.912
Institution 7	4.545	0.273	8.167	0.375	0.841
Institution 8	2.939	0.191	4.400	0.252	0.619
Institution 9	4.530	0.235	8.429	0.302	0.880
Institution 10	2.188	0.133	3.594	0.163	0.517
Institution 11	2.778	0.248	4.421	0.301	0.680
Institution 12	2.510	0.124	4.806	0.155	0.579
Institution 13	2.474	0.196	4.579	0.289	0.684
Institution 14	4.375	0.286	7.906	0.366	0.786
Institution 15	2.703	0.155	5.087	0.209	0.757
Institution 16	2.692	0.164	4.184	0.191	0.641
Institution 17	5.625	0.319	8.696	0.458	0.917
Institution 18	3.077	0.168	5.429	0.207	0.668
Institution 19	1.776	0.132	3.400	0.178	0.539
Institution 20	2.727	0.203	5.207	0.259	0.622
Institution 21	3.333	0.182	4.792	0.212	0.723

Table 3: Efficiency results of pre-school education institutions according to the CCR model

Institution	Input				Output			
	Rank	Efficiency	Reference	Intensity	Rank	Efficiency	Reference	Intensity
Institution 1	1	1	Institution 1	1	1	1	Institution 1	1
Institution 2	9	0.939	Institution 15	0.426	9	0.939	Institution 15	0.453
			Institution 19	0.233			Institution 19	0.248
Institution 3	17	0.740	Institution 5	0.980	17	0.740	Institution 5	1.323
			Institution 15	0.719			Institution 15	0.971
Institution 4	5	0.989	Institution 19	0.870	5	0.989	Institution 19	0.880
Institution 5	1	1	Institution 5	1	1	1	Institution 5	1
Institution 6	18	0.722	Institution 15	0.741	18	0.722	Institution 15	1.025
			Institution 19	0.652			Institution 19	0.903
Institution 7	19	0.672	Institution 5	0.570	19	0.672	Institution 5	0.849
			Institution 15	0.465			Institution 15	0.692
Institution 7	19	0.672	Institution 19	0.476	19	0.672	Institution 19	0.709
			Institution 1	0.499			Institution 1	0.571
Institution 8	13	0.873	Institution 5	0.862	13	0.873	Institution 5	0.987
			Institution 19	0.051			Institution 19	0.058
Institution 9	15	0.771	Institution 5	0.616	15	0.771	Institution 5	0.799
			Institution 15	0.831			Institution 15	1.078
Institution 10	12	0.913	Institution 1	0.107	12	0.913	Institution 1	0.117
			Institution 5	0.748			Institution 5	0.819
Institution 10	12	0.913	Institution 19	0.298	12	0.913	Institution 19	0.326
			Institution 1	0.708			Institution 1	0.758
Institution 11	11	0.933	Institution 19	0.630	11	0.9333	Institution 19	0.675
			Institution 5	0.632			Institution 5	0.655
Institution 12	7	0.964	Institution 15	0.424	7	0.964	Institution 15	0.441
			Institution 1	0.124			Institution 1	0.133
Institution 13	10	0.936	Institution 19	1.158	10	0.936	Institution 19	1.237
			Institution 5	0.512			Institution 5	0.803
Institution 14	21	0.637	Institution 15	0.158	21	0.637	Institution 15	0.248
			Institution 19	0.848			Institution 19	1.331
Institution 15	1	1	Institution 15	1	1	1	Institution 15	1
Institution 16	6	0.965	Institution 1	0.299	6	0.965	Institution 1	0.310
			Institution 5	1.043			Institution 5	1.081
Institution 16	6	0.965	Institution 19	0.133	6	0.965	Institution 19	0.138
			Institution 1	0.300			Institution 1	0.448
Institution 17	20	0.670	Institution 5	1.855	20	0.670	Institution 5	2.768
			Institution 19	0.030			Institution 19	0.044
Institution 18	14	0.828	Institution 5	0.779	14	0.828	Institution 5	0.940
			Institution 15	0.463			Institution 15	0.559
Institution 19	1	1	Institution 19	1	1	1	Institution 19	1
Institution 20	16	0.765	Institution 15	0.177	16	0.765	Institution 15	0.231
			Institution 19	0.906			Institution 19	1.184
Institution 21	8	0.954	Institution 1	0.313	8	0.954	Institution 1	0.328
			Institution 5	1.403			Institution 5	1.471

Table 4: Efficiency results of pre-school education institutions according to the BCC model

Institution	Input				Output			
	Rank	Efficiency	Reference	Intensity	Rank	Efficiency	Reference	Intensity
Institution 1	1	1	Institution 1	1	1	1	Institution 1	1
Institution 2	13	0.980	Institution 4	0.434	15	0.972	Institution 4	0.284
			Institution 5	0.462			Institution 5	0.444
			Institution 19	0.103			Institution 19	0.271
Institution 3	1	1	Institution 3	1	1	1	Institution 3	1
Institution 4	1	1	Institution 4	1	1	1	Institution 4	1
Institution 5	1	1	Institution 5	1	1	1	Institution 5	1
Institution 6	1	1	Institution 6	1	1	1	Institution 6	1
Institution 7	19	0.854	Institution 3	0.449	16	0.941	Institution 3	0.733
			Institution 15	0.551			Institution 15	0.267
Institution 8	17	0.896	Institution 1	0.467	18	0.916	Institution 1	0.175
			Institution 15	0.265			Institution 11	0.199
			Institution 21	0.268			Institution 15	0.102
Institution 9	15	0.962	Institution 3	0.658	13	0.983	Institution 3	0.741
			Institution 15	0.342			Institution 15	0.259
Institution 10	16	0.923	Institution 1	0.174	17	0.929	Institution 1	0.244
			Institution 5	0.459			Institution 5	0.381
			Institution 15	0.221			Institution 15	0.373
			Institution 19	0.146			Institution 16	0.002
Institution 11	1	1	Institution 11	1	1	1	Institution 11	1
Institution 12	14	0.977	Institution 5	0.510	14	0.981	Institution 5	0.478
			Institution 15	0.490			Institution 15	0.522
Institution 13	12	0.985	Institution 1	0.080	12	0.987	Institution 1	0.079
			Institution 15	0.686			Institution 15	0.727
			Institution 19	0.234			Institution 19	0.194
Institution 14	21	0.726	Institution 3	0.155	19	0.891	Institution 3	0.671
			Institution 15	0.845			Institution 15	0.329
Institution 15	1	1	Institution 15	1	1	1	Institution 15	1
Institution 16	1	1	Institution 16	1	1	1	Institution 16	1
Institution 17	11	0.999	Institution 3	0.856	11	0.999	Institution 3	0.858
			Institution 15	0.144			Institution 15	0.142
Institution 18	18	0.870	Institution 5	0.255	20	0.890	Institution 5	0.018
			Institution 15	0.745			Institution 15	0.982
Institution 19	1	1	Institution 19	1	1	1	Institution 19	1
Institution 20	20	0.781	Institution 15	0.381	21	0.819	Institution 6	0.014
			Institution 19	0.619			Institution 15	0.986
Institution 21	1	1	Institution 21	1	1	1	Institution 21	1

Table 5: Target values obtained with the CCR model for ineffective institutions

Institution	Input 1		Input 2		Input 3		Input 4		Output 1		
	Realized	Target	Realized	Target	Realized	Target	Realized	Target	Realized	Target	Improvement (%)
Institution 2	1.667	1.667	0.115	0.103	3.414	3.151	0.139	0.139	0.448	0.477	6.517
Institution 3	5.028	4.831	0.263	0.263	9.291	8.426	0.33	0.33	0.944	1.275	35.066
Institution 4	1.563	1.563	0.131	0.116	3.19	2.992	0.169	0.157	0.469	0.474	1.142
Institution 6	4.375	4.375	0.306	0.278	8.795	8.286	0.375	0.375	0.912	1.263	38.468
Institution 7	4.545	4.545	0.273	0.273	8.167	8.167	0.375	0.352	0.841	1.252	48.914
Institution 8	2.939	2.939	0.191	0.191	4.4	4.4	0.252	0.218	0.619	0.709	14.528
Institution 9	4.53	4.246	0.235	0.235	8.429	7.588	0.302	0.302	0.88	1.142	29.774
Institution 10	2.188	2.188	0.133	0.133	3.594	3.594	0.163	0.160	0.517	0.566	9.512
Institution 11	2.778	2.778	0.248	0.221	4.421	4.421	0.301	0.270	0.68	0.729	7.134
Institution 12	2.51	2.283	0.124	0.124	4.806	3.968	0.155	0.155	0.579	0.600	3.787
Institution 13	2.474	2.474	0.196	0.186	4.579	4.579	0.289	0.246	0.684	0.731	6.835
Institution 14	4.375	4.375	0.286	0.283	7.906	7.906	0.366	0.366	0.786	1.233	56.917
Institution 16	2.692	2.692	0.164	0.164	4.184	4.184	0.191	0.189	0.641	0.664	3.631
Institution 17	5.625	5.625	0.319	0.319	8.696	8.696	0.458	0.361	0.917	1.368	49.229
Institution 18	3.077	3.077	0.168	0.166	5.429	5.318	0.207	0.207	0.668	0.806	20.722
Institution 20	2.727	2.727	0.203	0.192	5.207	5.200	0.259	0.259	0.622	0.813	30.703
Institution 21	3.333	3.134	0.182	0.182	4.792	4.792	0.212	0.206	0.723	0.758	4.780

Table 6: Target values obtained with the BCC model for ineffective institutions

Institution	Input 1		Input 2		Input 3		Input 4		Output 1		
	Realized	Target	Realized	Target	Realized	Target	Realized	Target	Realized	Target	Improvement (%)
Institution 2	1.667	1.667	0.115	0.111	3.414	2.999	0.139	0.139	0.448	0.461	2.876
Institution 7	4.545	4.406	0.273	0.234	8.167	8.167	0.375	0.298	0.841	0.894	6.303
Institution 8	2.939	2.939	0.191	0.191	4.4	4.4	0.252	0.227	0.619	0.676	9.131
Institution 9	4.53	4.425	0.235	0.235	8.429	8.201	0.302	0.299	0.88	0.896	1.764
Institution 10	2.188	2.157	0.133	0.133	3.594	3.594	0.163	0.163	0.517	0.556	7.644
Institution 12	2.51	2.208	0.124	0.122	4.806	3.915	0.155	0.155	0.579	0.590	1.938
Institution 13	2.474	2.474	0.196	0.152	4.579	4.579	0.289	0.202	0.684	0.693	1.295
Institution 14	4.375	4.262	0.286	0.227	7.906	7.906	0.366	0.290	0.786	0.882	12.264
Institution 17	5.625	4.699	0.319	0.248	8.696	8.696	0.458	0.313	0.917	0.918	0.059
Institution 18	3.077	2.685	0.168	0.154	5.429	5.044	0.207	0.207	0.668	0.751	12.399
Institution 20	2.727	2.727	0.203	0.157	5.207	5.140	0.259	0.211	0.622	0.759	22.063

CONCLUSSION

The pre-school education process, which ensures that child development takes place in a systematic environment and within the integrity of basic education, plays an important role in preparing the individual for her future life. The personality structure and value judgments of an adult are largely shaped by the education received during childhood. Today, the number of pre-school education institutions is increasing due to reasons such as parents' rising awareness, the decrease in playgrounds in urban areas and the growing trend of working parents.

In the study, the efficiency of 21 pre-school education institutions operating in Ankara are compared through DEA with the objective to create a guiding resource hoping to contribute to the administrators and educators in the profession by establishing a correct order of the establishments vis-a-vis their effectiveness.

The practical application concludes that 4 and 10 out of 21 pre-school education institutions according to the CCR and BCC models respectively are defined as effective educational establishments In order to make an evaluation among those, the frequency of reference is taken into account. The CCR

model refers to *Institution 19* 13 times, *Institution 5* 12 times, *Institution 15* 10 times and *Institution 1* 8 times. On the other hand, BCC model refers to *Institution 15* 11 times, *Institution 3*, *Institution 5* and *Institution 19* 5 times, *Institution 1* 4 times, *Institution 4* and *Institution 21* 2 times whereas *Institution 6*, *Institution 11* and *Institution 16* only once.

Although the present study offers some useful findings to educational institutions, educators, and researchers, it has some important limitations. In the literature review, it is seen that, rather, the efficiencies of high schools and higher education institutions are generally examined by outputs such as university exam score, university entrance rate, number of academic publications and number of patents received. It is not possible to evaluate the performance of pre-school education establishments with these, therefore the current study uses the registration renewal rate as an equivalent proxy. It is believed that the use of different outputs such as satisfaction surveys to parents in future studies could contribute to the literature.

REFERENCES

- Aktan, O., & Akkutay, Ü. (2014). OECD ülkelerinde ve Türkiye'de okulöncesi eğitim. *Asian Journal of Instruction*, 2(1), 64-79.
- Akyüz, Y. (1996). Anaokullarının Türkiye'de kuruluş ve gelişim tarihçesi. *Milli Eğitim Dergisi*, 132, 11-17.
- Akyüz, Y. (2004). Anaokullarının Osmanlı'da ilk programları ve ders uygulamaları ile yaratıcı dramının ilk izleri. *Aklın ve Bilimin Aydınlığında Eğitim Dergisi*, 51, 19-24.
- Altay, S., İra, N., Bozcan, E.Ü. & Yenal, H. (2011). Cumhuriyetin kuruluşundan günümüze milli eğitim şuralarında okul öncesi eğitimi ve bugünkü durumu. *E-Journal of New World Sciences Academy*, 6 (1), 660-672.
- Babaroğlu, A. (2018). Eğitim ortamları açısından okul öncesi eğitim Institutionları. *Abant İzzet Baysal Üniversitesi Eğitim Fakültesi Dergisi*, 18(3), 1313-1330.
- Banker, R. D., Charnes, A., & Cooper, W. W. (1984). Some models for estimating technical and scale inefficiencies in data envelopment analysis. *Management Science*, 30(9), 1078-1092.
- Banker, R. D., & Thrall, R. M. (1992). Estimation of returns to scale using data envelopment analysis. *European Journal of Operational Research*, 62(1), 74-84.
- Barra, C., & Zotti, R. (2016). Measuring efficiency in higher education: An empirical study using a bootstrapped data envelopment analysis. *International Advances in Economic Research*, 22(1), 11-33.
- Bayraktutan, Y., Arslan, İ., & Bal, V. (2010). Sağlık bilgi sistemlerinin hastane performanslarına etkisinin veri zarflama analizi ile incelenmesi: Türkiye'deki göğüs hastalıkları hastanelerinde bir uygulama. *Gaziantep Tıp Dergisi*, 16(3), 13-18.
- Bilir, Ş., Arı, M., Gönen, M., Üstün, E., & Pekçağlayan, N. (1998). *Okulöncesi Eğitimcisinin Rehber Kitabı*. Ankara: Aşama Ltd. Şti.
- Charnes, A., Cooper, W. W., & Rhodes, E. (1978). Measuring the efficiency of decision making units. *European Journal of Operational Research*, 2(6), 429-444.
- Chen, Y., Chen, Y., & Oztekin, A. (2017). A hybrid data envelopment analysis approach to analyse college graduation rate at higher education institutions. *INFOR: Information Systems and Operational Research*, 55(3), 188-210.

- Cheng, Y. C., Mao, Y. Q., Hu, Y., Zhang, Z., & Liang, W. (2009). Efficiency of primary schools in Beijing, China: an evaluation by data envelopment analysis. *International Journal of Educational Management*.
- Cooper, W. W., Seiford, L. M., & Zhu, J. (2004). *Handbook on Data Envelopment Analysis*. Kluwer Academic Publishers: Massachusetts, A.B.D.
- Chuanyi, W., Xiaohong, L., & Shikui, Z. (2016). The relative efficiencies of research universities of science and technology in China: Based on the data envelopment analysis and stochastic frontier analysis. *Eurasia Journal of Mathematics, Science and Technology Education*, 12(10), 2753-2770.
- Çelik, M., & Gündoğdu, K. (2007). Türkiye'de okulöncesi eğitimin tarihsel gelişimi. *Atatürk Üniversitesi Kazım Karabekir Eğitim Fakültesi Dergisi*, (16), 172-190.
- Derman, M. T., & Başal, H. A. (2010). Cumhuriyetin İlanından Günümüze Türkiye'de Okul Öncesi Eğitim ve İlköğretimde Niceliksel ve Niteliksel Gelişmeler. *Journal of International Social Research*, 3(11), 560-569.
- Dirim, A. (2004). *Okul Öncesi Eğitimi*. İstanbul: Esin Yayınevi
- Farrell, M. J. (1957). The measurement of productive efficiency. *Journal of the Royal Statistical Society: Series A (General)*, 120(3), 253-281.
- Fatihah, S., & Mahmudah, U. (2017). Two-stage data envelopment analysis (DEA) for measuring the efficiency of elementary schools in Indonesia. *International Journal of Environmental and Science Education*, 12(8), 1971-1987.
- Fidan, N. V. & M. Erden.(1993). *Eğitime Giriş*. Ankara: Meteksan Matbaacılık.
- González-Garay, A., Pozo, C., Galán-Martín, Á., Brechtelsbauer, C., Chachuat, B., Chadha, D., ... & McDowell, N. (2019). Assessing the performance of UK universities in the field of chemical engineering using data envelopment analysis. *Education for Chemical Engineers*, 29, 29-41.
- Gürkan, T. (1988). *İlkokul Programı ve Öğretim Yöntemleri*. Eskişehir: Anadolu Üniversitesi Açıköğretim Fakültesi Yayınları.
- Johnes, J., & Li, Y. U. (2008). Measuring the research performance of Chinese higher education institutions using data envelopment analysis. *China Economic Review*, 19(4), 679-696.

- Kandır, A., Özbey, S. & İnal, G. (2010). Okul öncesi eğitimde program kuramsal temeller. İstanbul: Morpa Kültür Yayınları.
- Kazu, İ. Y., & Yılmaz, M. (2018). Ülkemizdeki okul öncesi eğitimin bazı veriler açısından OECD ve AB üyesi ülkeleri ile karşılaştırılması. *Turkish Journal of Educational Studies*, 5(2), 64-75.
- Kong, W. H., & Fu, T. T. (2012). Assessing the performance of business colleges in Taiwan using data envelopment analysis and student based value-added performance indicators. *Omega*, 40(5), 541-549.
- MEB. (2016). Milli Eğitim İstatistikleri Örgün Eğitim 2015/2016. Ankara. Erişim adresi: <http://sgb.meb.gov.tr/www/resmi-istatistikler/icerik/64>. Erişim tarihi: 14.10.2020.
- OECD. (2016). Education at a Glance 2016, Editions OECD Indicators.
- Oğuzkan, Ş. & Oral, G.(1992). Okul öncesi eğitim. İstanbul: Oğul Matbaacılık.
- Oktay, A., (2002). Yaşamın sihirli yılları: Okul öncesi dönem. İstanbul: Epsilon Yayıncılık.
- Özden, Ü. H. (2008). Veri zarflama analizi (VZA) ile Türkiye'deki vakıf üniversitelerinin etkinliğinin ölçülmesi. *Istanbul University Journal of the School of Business Administration*, 37(2).
- Poyraz, H., (2003). Okul öncesi eğitimin ilke ve yöntemleri, Ankara: Anı Yayıncılık.
- Rassouli-Currier, S. (2007). Assessing the efficiency of Oklahoma public schools: A data envelopment analysis. *Southwestern Economic Review*, 34, 131-144.
- Rohayana, A. D. (2018). A robust data envelopment analysis for evaluating technical efficiency of Indonesian high schools. *Indonesian Journal of Science Education*, 7(1), 114-121.
- Sagarra, M., Mar-Molinero, C., & Agasisti, T. (2017). Exploring the efficiency of Mexican universities: Integrating data envelopment analysis and multidimensional scaling. *Omega*, 67, 123-133.
- Salas-Velasco, M. (2020). The technical efficiency performance of the higher education systems based on data envelopment analysis with an illustration for the Spanish case. *Educational Research for Policy and Practice*, 19(2), 159-180.
- Shamohammadi, M., & Oh, D. H. (2019). Measuring the efficiency changes of private universities of Korea: A two-stage network data envelopment analysis. *Technological Forecasting and Social Change*, 148, 119730.

- Turaşlı, N., (2007). Okul öncesi eğitime giriş, Ankara: Anı Yayıncılık.
- Visbal-Cadavid, D., Mendoza, A. M., & Hoyos, I. Q. (2019). Prediction of efficiency in Colombian higher education institutions with data envelopment analysis and neural networks. *Pesquisa Operacional*, 39(2), 261-275.
- Yılmaz, N. (2003). Türkiye’de okulöncesi eğitimi erken çocuklukta gelişim ve eğitimde yeni yaklaşımlar. İstanbul: Morpa Kültür Yayınları.

CHAPTER 5
RURAL MIGRATION AND FOREST VILLAGES IN
TURKEY

Asst. Prof. Dr. Hasan Emre ÜNAL¹

¹ Çankırı Karatekin University Faculty of Forestry, Department of Forest Economics, Çankırı, Turkey. hemre@karatekin.edu.tr; emreunal06@gmail.com. ORCID ID: 0000-0001-6406-3279

INTRODUCTION

Especially underdeveloped countries, which are in the process of rapid change and development, have faced imbalances that can cause important problems between both regions and social class. These imbalances, which are caused by various reasons, undoubtedly draw attention as differences in the socio-economic and cultural structures of urban and rural settlements (Çağlar, 1986a:11).

Low productivity in agriculture, low agricultural income, uneven distribution of income and land ownership, highly fragmented agricultural lands and agricultural mechanization have been prominent features of Turkish agriculture since the 1950s (Keleş, 2006:70). The increasing population in rural areas and the insufficiency of agricultural lands for this population, the inability to adapt to modern techniques and new technologies in agricultural production, the inadequacy of employment opportunities and the limitation of education and health services, the people living in rural areas; it has caused people to migrate to cities to find better opportunities. This population mobility started in Turkey in the 1950s (Günşen and Atmış, 2015: 178). The rapid socio-economic and political changes experienced in Turkey have had an impact on rural areas. This situation has led to the emergence of great changes in rural structures. It is seen that this change started in the 1950s in our country. In addition to many reasons why it started in these years, it can be mentioned that the strong influence of political factors such as liberal policies implemented with the transition to the multi-party system (Özensel, 2015:50).

In terms of poverty and unemployment levels, the agricultural sector and villages have rates above both the Turkey average and the urban average. Likewise, the rate of poor individuals in agriculture is higher than those in industry and service sectors. On the one hand, leaving the people living in rural areas on their own, on the other hand, life in rural areas became more difficult with the withdrawal of the peasants from production with temporary practices (Geray, 2011:84-85).

Although forest villages do not differ from other villages in terms of administrative division, they are economically low, insufficient in terms of transportation and infrastructure facilities, weak in terms of education, health and cultural services and limited in terms of land to be used in agriculture. Due to the lack of job opportunities, there is more intense migration from forest villages to cities (Ekizoğlu et al., 2010:183-184). While the decrease in the population in forest villages has positive effects on the protection of

natural resources, especially forests, it causes the deterioration of the qualitative status of the population, making it difficult to benefit from these resources and negative consequences in terms of rural development (Toksoy and Bayramoğlu, 2017:181).

1.RURAL TURKEY

In the 1930s and 1940s, most of the population lived in the countryside. Therefore, most of the labor was employed in agriculture. In terms of Turkish agriculture, the period between 1928-1948 draws attention as the period when modernization steps were decided to be taken. After 1948, which is thought to have entered a new period in Turkish agriculture, modernization in agriculture accelerated with the Marshall Plan (Tekeli and İlkin, 1988: 37,84). In the 1950s and 1960s, in addition to the rapid population growth, the increase in income, the growth of non-agricultural sectors and urbanization increased the need and demand for foodstuffs (Aruoba, 1988:199). The globalization process, which started in 1980, has led to structural transformations in the country's economy along with the transition to the market economy. The move away from protective policies in agriculture has caused the population that makes a living from agriculture to be in a difficult situation in socio-economic terms (Gülçubuk, 2002: 99-100). In another period that started with the 1990s and continued until the beginning of the 2000s, the agricultural sector was one of the sectors most affected by the economic developments (Günaydın, 2010: 163).

The late 1960s and 1970s were the years when the transition to intensive agriculture was experienced with chemical inputs and mechanization (Yenal, 2001: 34). In the Table 1, the change in the number of tractors between 1924-2021 is given in 10-year periods.

Table 1: Changes in the Number of Tractors Between 1924-2021 in Turkey

Years	Number of tractors ²
1924	500
1930	2.000
1940	1.066
1950	16.585
1960	42.136

² It is seen that there are different data on the number of tractors in different sources. It should be noted that since the establishment of the Republic, precise data on the number of tractors could not be reached and estimated values were given

1970	105.865
1980	436.369
1990	692.454
2000	941.835
2010	1.404.872
2019	1.908.999
2021	1.964.796

Resource: Kadayıfçılar, 1969: 14; Aruoba, 1982: 83; Tezel: 1986: 304; TÜİK, 2008:40-42; TÜİK, 2010a: 63; TÜİK, 2011a: 1; TÜİK, 2022a

One of the most important characteristics of agricultural enterprises in Turkish agriculture was that they were different from each other. In addition to geographical features, factors such as being close to the market, distribution of land ownership, as well as economic and cultural factors have also been effective in the emergence of this differentiation. In this way, it is possible to consider the enterprises in Turkish agriculture in four main groups: traditional-subsistence small enterprises, modern small enterprises, medium and large enterprises producing in traditional ways and large enterprises producing with modern methods (Aruoba ,1973:191-192). After the 1950s, with the effect of the technological changes in the agricultural field and especially the increase in the number of tractors, the villagers became dispossessed and thus the residual population in the villages migrated and started to work in the cities. This situation has led the agricultural enterprises that have expanded in the villages to start to meet the less labor they will use instead of the labor force that has been cut off from the land they need. The fact that agricultural production is carried out in certain periods has revealed that the workforce to be employed in agriculture is defined as seasonal or permanent or seasonal workers in the enterprise during the production year (Sencer, 1971:166). According to Aktan and Vural (2002:10), income generating activities of the rural poor are mainly in the fields of agriculture, animal husbandry, fisheries, forestry work and small-scale industry and service. The rural poor are generally divided into two groups as small landowners who cultivate their own lands, farmers and landowners who rent their lands, and those engaged in non-agricultural activities consisting of workers, village artisans and shepherds. The main factor causing rural poverty is landless and unskilled workers. Table 2 shows the distribution of agricultural employment from 1988 to 2021.

Table 2: Changes in the Agricultural Employment by Years 1988-2021 in Turkey

Years	Noninstitutional population (000)	Turkey (x1000)		Urban (x1000)		Rural (x1000)	
		Total Employment	Employment in Agriculture	Total Employment	Employment in Agriculture	Total Employment	Employment in Agriculture
1988	53.284	18.907	9.328	7.256	455	11.651	8.873
1990	55.580	19.947	9.355	8.295	420	11.653	8.935
1994	58.764	19.404	8.058	9.168	466	10.236	7.592
1998	62.465	21.393	8.777	10.508	454	10.885	8.323
2002	68.800	21.354	7.457	11.111	484	10.243	6.973
2006	68.066	20.423	4.907	13.518	630	6.905	4.277
2010	71.343	22.594	5.683	14.679	701	7.915	4.981
2013 ³	74.793	25.443	6.015	16.772	724	8.671	5.291
2017	59.894	28.189	5.464				
2021	63.704	28.797	4.948				
Change (%)	19.5	52	-47	131	59	-26	-40

Resource: TÜİK, 1988-2009 Household labor force Survey and statistics; TÜİK, 2011b: 4-5; TÜİK, 2013; TÜİK, 2017; TÜİK, 2021.

As it can be seen from the Table 2, there is also a small amount of agricultural employment in cities in Turkey. It is seen that there was an increase of approximately 59% in agricultural employment in the cities in the period of 1988-2021. On the other hand, from 1988 to 2021, it is seen that there was a 40% decrease in agricultural employment in rural areas. In general, in the 1988-2021 period, there is a 47% decrease in agricultural employment, despite an increase of 52% in total employment.

In addition, one of the social institutions changing in rural Turkey is the family. According to Zeybekoğlu (2012: 45-51) and Kongar (1970: 63-65), until the 1950s the dominant family structure in societies characterized as agricultural societies has been the traditional extended family. As the main features of the traditional large family type; It can be listed as consisting of individuals living in rural areas and making their living from agricultural activities, consisting of large family members, strong kinship relations, and decision-making by male individuals. There is a division of labor within the family based on age and gender. However, with industrialization, the

³ TÜİK: “In the Household Labor Force Survey, labor force indicators produced before 2014 could be given in terms of urban and rural. Since 2014, due to the new administrative division structure (due to the new administrative division), no indicator can be given regarding the labor force in the urban and rural division”

traditional family structure has been transformed and there has been a transition to the nuclear family structure.

With the spread of mechanization, the lack of labor force especially in the villages that produce for the market has brought poverty. Classes also emerged in the villages according to their ownership of the means of production and their works (Akşit, 1985: 23). Reasons such as large enterprises using new technology can change prices, population growth, and the implementation of the Forest Law have led to the liquidation of small-scale producers to a large extent. One of the most important reasons for this is that areas that were not cultivated before or that were in the quality of forest and pasture were opened to agriculture during this period. While these areas that are not suitable for agriculture and small businesses have the opportunity to expand their lands, this situation has resulted in an increase in the number of small businesses. On the other hand, this development has also caused the destruction of forest and pasture areas (Ortaylı, 1971: 71; Kurt, 2003: 68).

2. FOREST AND PEOPLE

It has also been revealed as a result of some studies and analyzes that forests are one of the most mismanaged resources, especially in developing countries. This is because forests are undervalued, many of their environmental benefits do not enter markets and illegal activity due to mismanagement is increasing. In addition, the impact of policies and investments in other sectors on forests is not well understood or overlooked. For these reasons, we have been faced with rapid deforestation rates in the last decades (World Bank, 2004: 4).

Forests are a source of food, fuel, and income for millions of people globally. In addition, forest-based industries provide employment and income opportunities for many more people (Vedeld et al., 2007:870; Sreedharan ve Matta, 2010: 3; Angelsen et al., 2014: 12; Newton et al., 2016: 388). Since forests are also a natural resource that produces environmental services on a local, regional, and global scale, it more clearly reveals the relationship of forests with people. Since it is such an important situation, these interactions between forests and people attract great attention of researchers (Newton et al., 2016: 388; Ojea et al, 2016: 246). In this context, forests are an important resource with material or non-material benefits for people living in or adjacent to the forest (Khaine, 2014:197; Langat et al., 2016:1; Teshwar, 2016:11). Because 350 million of the poorest people worldwide are totally dependent on the forest for their livelihoods and survival; 1.6 billion rural people are

dependent on some degree of forest (Abdullah et al. 2016:15; Chao, 2012:3; Hlaing et al., 2017:1; Moe and Liu, 2016:12). While millions of forest villagers, whose socio-economic and cultural lives are closely related to forests, make their living from forests, the dependence of these people on forests varies from region to region. Forest villagers use forests for their livelihood, to raise animals, to collect firewood and as a source of goods to be sold in the market (Akhter et al., 2009: 13).

Forests currently cover 30.8 percent of the global land area (FRA, 2020). The total forest area is 4.06 billion hectares, and more than half of the world’s forests are found in only five countries: The Russian Federation, Brazil, Canada, The United States of America and China. Additionally, two-thirds (66%) of forests are found in ten countries (Table 3) (FAO and UNEP, 2020).

Table 3: Ten Countries with the Largest Forest Area by Year 2020

Country	Forest Area (million ha)	Percentage (%)
Russian Federation	815	20
Brazil	497	12
Canada	347	9
United States of America	310	8
China	220	5
Australia	134	3
Democratic Republic of Congo	126	3
Indonesia	92	2
Peru	72	2
India	72	2

Resource: FAO and UNEP, 2020:10

Turkey with its 78 million hectares of land, has a rich ecological diversity. Forests also have an important place in this richness. As of the date of 2020, forests cover 29,4 percent of total surface and 22.9 million ha in Turkey. Forestlands cover about one fourth of total land area in Turkey. Almost all of Turkey's forests are under the rule and disposal of the state and most of them are managed by the General Directorate of Forestry. Approximately half (48.5%) of forests are classed as having an ecological function including watershed and erosion control, 42% has an economic function including the production of roundwood, fire-wood and non-wood forest products and the remaining 9% is classed as social and cultural (OGM, 2021: 11-12;23).

2.1. Forest Villages

In rural areas, agricultural income is generally less, agricultural lands are fragmented, and the need for labor decreases with the mechanization in agriculture and employment opportunities other than agriculture are insufficient in rural areas. In addition to these features, the fact that there are more opportunities in cities, the phenomenon of migration from rural to urban, which started in the 1950s, continues even though it has lost its momentum. One of the settlements experiencing this migration phenomenon is forest villages (Özden and Birben, 2007: 122).

People living in rural areas of Turkey are divided into two groups as forest villagers and other villages (Alkan and Kılıç, 2014: 240). Forest villages constitute an important part of the settlements in rural areas. These villages are settlement areas that are generally far from the city center, located on the mountain ridge or valley slope, and have inefficient, fragmented, few agricultural areas, insufficient services in education and health and very limited opportunities of livelihood. Economies of forest villages based on income from traditional agricultural activities, animal husbandry, forestry work and other forestry services in forest pastures (Geray, 1974:71; Çağlar, 1986b:18; Gülçubuk, 2005:73; Alkan and Toksoy, 2008:38). In the studies conducted in the past and today, it is seen that forest villages are discussed under a separate heading in the examination of rural societies and the process of rural change (Erdönmez, 1997: 40).

The definition of forest villager was also made with the "Forest Law" numbered 6831 in Turkey, which was enacted in 1956 and is still in effect. According to forest law, the population living in or adjacent to forested areas in the countryside is defined as "forest villager". The population structure has also changed since the establishment of the Republic. 70% of the population lives in urban areas. On the other hand, forest villagers, who have an important place in the rural population, constitute 1/3 of the population living in the countryside (Coşkun, 2021: 160-161).

There are approximately 7.5 million forest villagers residing in more than 23.000 forest villages. However, according to the Forestry Law No. 6831, forest villages in Turkey are also divided into two groups: villages located in forests -article 31- and villages located near forests -article 32- (Alkan and Kılıç, 2014: 240). The number of forest villages and forest villagers by years in Turkey is shown in Table 4.

Table 4: The Number of Forest Villages and Population

Years	Number of Forest Villages	Population (x1000)
1960	13.252	6.658
1970	15.923	7.954
1980	17.568	10.161
1990	17.940	9.117
2002	20.292	7.679
2010	21.278	7.073
2021	23.111	7.451

Resource: Çağlar, 2002: 38; Çevre Şehircilik ve İklim Değişikliği Bakanlığı, 2009: 56, Tarım ve Orman Bakanlığı, 2012: 78-79.

While the number of forest villages given in Table 4 in ten-year periods was 13,252 in 1960, it increased to 23,111 in 2021. Despite this increase in forest villages, the population of forest villagers has started to decrease since 1980.

According to Demirtaş (2000:16) the reasons for increasing on forest village number while forest village population is decreasing as: in some forest villages which harbor more than one neighborhood, some neighborhood has been obtained village footing; registration of forest villagers that has not been registered before; afforestation activities and designating villages as forest villager in boundaries of where forests were established.

The majority of the working and school age populations in forest communities migrate to cities. As a result of this migration, the population staying in forest villages mostly consists of individuals aged 60 and over. Reasons for migrating include better education for their children, more economically rewarding job opportunities, getting married, or benefiting from better health services for a sick member of the family (Kudat et al., 1999: 24-30).

3. MIGRATION FROM RURAL

In the period between 1923 and 1946, there was a population increase that was more than agricultural production. It can be said that the most important reason for the emergence of this situation is the heavy taxation on the villagers and the efforts to select a few cities as an example for progress. In other words, the problem did not arise from the lack of investment or modernization in agriculture. Since the early 1950s, with the significant increase in the number of tractors, around one million farmers had to leave the rural areas by moving away from agriculture. Although the rapid development of mechanization was seen as the primary reason for the migration

experienced in this period, it can be said that other factors were also effective in the spread of migration. Among these factors, the pressure and blood feuds of the landlords and clan leaders on the villagers can be shown (Karpat, 2003:103-105). In addition, in these years, infrastructure (road, water, electricity) services and vehicles started to reach the villages in rural areas. The increase in roads and vehicles also accelerated the migration from the village to the city (Türkdoğan, 2006:68-69).

As a result of the population shift from villages to cities since 1950, there has been a decrease in the ratio of the village population to the total population. The population of the cities, on the other hand, showed a great increase, especially with the migration from the rural areas. The urban population, which constituted approximately 25% of the total population in 1950, started to increase rapidly in the following years and by 1970 the ratio of the urban population to the total population increased to 38%. According to the census years, it is seen that the urban population has reached its present state by increasing regularly. In the 1980-1990 period in Turkey, the rural population started to decrease in absolute terms for the first time. Although the rural population has increased since the 1960s, its share in the total country population continues to decrease (See Table 5).

In Table 5 and Figure 1 the rural and urban population sizes and rates determined in the censuses between 1927-2021 are given.

Table 5: Changes on Rural and Urban Population in Turkey

Census Years	Total	Urban Population	Urban Population Rate (%)	Rural Population	Rural Population Rate (%)
1927	13.648.270	3.305.879	24	10.342.391	76
1935	16.158.018	3.802.642	24	12.355.376	76
1940	17.820.950	4.346.249	24	13.474.701	76
1950	20.947.188	5.244.337	25	15.702.851	75
1960	27.754.820	8.859.731	32	18.895.089	68
1970	35.605.176	13.691.101	38	21.914.075	62
1980	44.736.957	19.645.007	44	25.091.950	56
1990	56.473.035	33.326.351	59	23.146.684	41
2000	67.803.927	44.006.274	65	23.797.653	35
2012	75.627.384	58.448.431	77	17.178.953	23

2013	76.667.864	70.034.413	91	6.663.451⁴	9
2021	84.680.273	78.908.631	93	5.771.642	7

Resource: Tarım ve Orman Bakanlığı, 2010: 15; TÜİK, 2012:2; TÜİK, 2022b

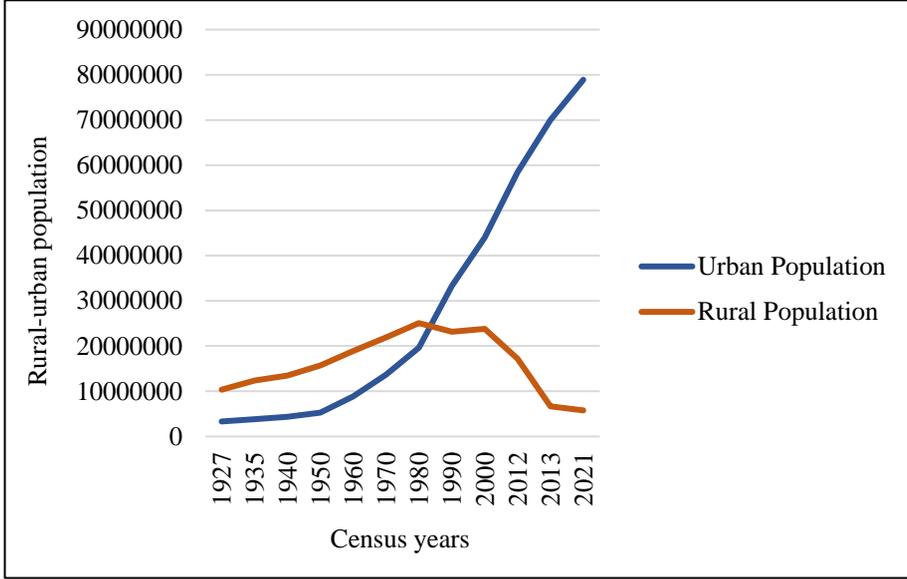


Figure 1: Total Population and Rural Population by Census

According to Akşit (1998:197), three significant increases occurred periodically in migrations from rural to urban areas. These were 4 times increase from 1945-50 to 1950-55; 2 times increase from 1960-65 to 1965-70 and 1.5 times increase from 1975-80 to 1980-85 respectively. These increases were due to the enlargement in villages that were insufficient in terms of land ownership in the 1950-55 period and accordingly the shift of young people from villages to cities, the fact that villages with plenty of land were under the influence of markets and cities in the 1965-70 period, technological development and villages came under the influence of big cities in the 1980-85 period. In Table 6, data on total migration and migration from towns and villages to province and district centers are given.

⁴ In 2012, Law for Metropolitan Municipalities that the law no 6360 has been introduced. Under this law, 14 metropolitan municipalities have been established and in 30 city which has a status of metropolitan, towns and villages has been joint to district municipalities.

Table 6: Migration from Rural to Urban by Periods

Years	Total migration	Migration from towns and villages to province and district centers	Percent (%)
1970-1975	4.038.022	359.120	8,9
1975-1980	6.285.398	610.067	9,7
1980-1985	6.705.783	860.438	12,8
1985-1990	9.467.863	969.871	10,2
1995-2000	11.480.456	1.168.285	10,1
*2007 ⁵ -2012	14.142.826	2.593.796	18,3
*2012-2017	16.297.821	1.429.855	8,7
*2017-2020	10.900.252	897.137	8,2

Resource: TÜİK, 1977:20; TÜİK, 2010b: 56;

*2007-2020 data requested from the official institution

In Table 6, when viewed periodically starting from 1970, the total migration continues to increase, except for the last period of 2007-2020. Likewise, in this period, in which the number of migrations from towns and villages to provincial and district centers increased until 2012-2017, it is seen that there was a decrease of approximately 50% compared to the previous period. On the other hand, in the 2017-2020 period, while the total migration decreased by 1.5 times compared to the previous period, the migration from towns and villages to the province-district centers decreased by 1.6 times compared to the previous period.

CONCLUSION

Rural areas consist of settlements whose economy is mainly based on agricultural production, that is, economically mostly dependent on natural resources, where relatively small-scale production is carried out and accordingly the income level is low. The urban population, which constituted approximately 25% of the total population in 1950, started to increase rapidly in the following years, and by 1970, the ratio of the urban population to the total population increased to 39%. Although the rural population has increased since the 1960s, when industrialization began, it is seen that the share of labor based on agriculture in the total population of the country continues to decrease with the shift towards industry. The factor that was

⁵ Relevant data for the period after 2000 were periodically requested from TÜİK. The starting period of the incoming data is the period of 2007-2008. Therefore, the post-2000 period started on the basis of 2007.

effective in the labor mobility that emerged in this process was the migration from the countryside to the city. The most basic reasons for the migration, which resulted in the arrival from the countryside to the city, can be shown as economic concerns and family reasons.

In the study of rural societies, forest villages are a separate subject of study, with the difference of their social and natural conditions being an important factor. Forest villages have been examined under a separate heading in the studies conducted in the past and today. Both the 1961 and 1982 Constitutions have provisions regarding forest villages and the existence of the Forest Law No. 6831 shows the attention to forest villages. In Turkey, as in many developing countries, there is a relationship between forest villagers who live their lives dependent on these natural resources in forest villages with a population of 7.5 million, and forest resources, resulting in a decrease in resources due to pressure. Economic contribution cannot be provided due to many reasons such as insufficient land ownership in these settlements and inefficient and fragmented lands. In addition, education and marriage, etc., especially for the young population. When the reasons emerged, a migration movement towards the city became inevitable.

REFERENCES

- Abdullah, A.N.M., Stacey, N., Garnett, S.T., Myers, B. (2016). Economic dependence on mangrove forest resources for livelihoods in the Sundarbans, Bangladesh, *Forest Policy and Economics*, 64,15-24. doi:10.1016/j.forpol.2015.12.009
- Alkan, H. and Kılıç, M. (2014). Forests and forestry organizations from the forest villagers' perspective: a case study from Turkey. *iForest*, 7, 240-247.doi: 10.3832/ifor0999-007
- Alkan, S. and Toksoy, D. (2008). Orman köylerinde sosyo-ekonomik yapı: Trabzon ili örneği. *Kastamonu Üniversitesi Orman Fakültesi Dergisi*, 8 (1), 37-46.
- Akşit, B. (1985). *Köy, kasaba ve kentlerde toplumsal değişme*. Ankara: Turhan kitabevi.
- Akşit, B. (1998). Türkiye’de kent-köy, sınıf, din ve etnisite farklılaşmaları ve toplumsal –kültürel bunalımdan demokratik çıkış. *Türkiye’de bunalım ve demokratik çıkış yolları* (s.193-225).Ankara: Türkiye bilimler akademisi.
- Aktan, C.C. and Vural, İ.Y. (2002). *Yoksullukla mücadele stratejileri*. Ankara: Hak-İş Konfederasyonları Yayınları.
- Akther, S., Sohel, S.I., Rana, P.,Alamgir, M. (2009). Impact of forests and non-forests villagers on ukhia and manı forest range under Cox’s Bazar (South) forest division, Bangladesh. *Proc. Pakistan Acad. Sci*,46 (1):13-22.
- Angelsen, A., Jagger, P., Babigumira, R., Belcher, B., Hogarth, N.J., Bauch, S., Börner,J., Smith-Hall, C., Wunder, S. (2014). Environmental income and rurallivelihoods: a global-comparative analysis, *World Development*, 64, 12–28. doi: 10.1016/j.worlddev.2014.03.006
- Aruoba, Ç. (1973). Tarımda geleneksel–geçimlik kesim, büyüklüğü yapısı, işleyişi, *SBF Dergisi*, 28(3),191-210.
- Aruoba, Ç., (1982). Cumhuriyet’in kuruluş yıllarında Türkiye’nin tarımsal yapısı ve tarıma yönelik politikalar, Atatürk dönemi ekonomi politikası ve Türkiye’nin ekonomik gelişmesi semineri, *Ankara Üniversitesi Siyasal Bilgiler Fakültesi Yayınları*, (513), 79-88.
- Aruoba, Ç. (1988). Tarımda teknolojinin değişmesinin gelir dağılımına etkisi. *Türkiye’de tarımsal yapılar 1923-2000* (s.197-208). Ankara: Türk Sosyal Bilimler Derneği Yayınları.

- Chao, S., (2012). *Forest People: numbers across the world, forest peoples program*, Moreton-in-Marsh. United Kingdom.
- Coşkun, U. (2021). Economic analysis in social responsibility projects of forest villages (case of the western Mediterranean region), *Eurasian Journal of Forest Science*, 9(3),160-174. doi:10.3195/ejejfs.980966.
- Çağlar, Y. (1986a). *Köy, köylülük ve Türkiye’de köy kalkınması sorunu*. Türkiye Ziraatçılar Derneği Yayınları.
- Çağlar, Y. (1986b). *Türkiye’de orman köyleri ve kalkındırılmasına yönelik etkinlikler*. Ankara: Milli Prodüktivite Merkezi Yayınları.
- Çağlar, Y. (2002). *Doğa, biyolojik çeşitlilik orman ve orman köylüleri*, Birleşmiş Milletler Kalkınma Programı ve Kırsal Çevre ve Ormancılık Sorunları Araştırma Derneği.
- Çevre Şehircilik ve İklim Değişikliği Bakanlığı, (2009). *2008 yılı faaliyet raporu*.
- Demirtaş, A. (2000). ORKÖY’ün bir değerlendirmesi ve gelecek için öneriler, *Orman ve Av*, 76(76), 14-20.
- Ekizoğlu, A., Kuvan, Y., Özden, S., Erdönmez, C. (2010). *Ormancılıkla ilgili diğer politikalar*. Akesen, A.ve Ekizoğlu, A. (ed.),Ormancılık politikası. Ankara: Türkiye Ormancılar Derneği Yayınları.
- Erdönmez, C. 1997. Bursa-Keles kırsal alanlarındaki toplumsal yapının çevre sorunları üzerine etkisi, İstanbul Üniversitesi Fen Bilimleri Enstitüsü, İstanbul.
- FAO and UNEP (2020). *The state of the world’s forests 2020*. Forests, biodiversity and people. Rome.
- Geray, C. (1974). *Planlı dönemde köye yönelik çalışmalar*. Ankara: Türkiye ve Orta Doğu Amme İdaresi Enstitüsü Yayınları.
- Geray, C. (2011). *Dünden bugüne kırsal gelişme politikaları*. Phoenix Yayınevi Yayınları.
- Global Forest Resources Assessment (FRA) 2020 – main report*. (2020). Rome: FAO.
- Günşen, H.B. and Atmış, E., (2015). İç göçlerin orman köylerinde ve ormancılık çalışmaları üzerindeki etkileri, IV. Ormancılıkta sosyo-ekonomik sorunlar kongresi bildiriler kitabı, (s.177-190). Karadeniz Teknik Üniversitesi.
- Gülçubuk, B. (2002). Küreselleşme ve küreselleşmenin Türkiye’nin tarımına yansımaları, *Mülkiye Dergisi*, 26(236), 97-112.
- Hlaing, Z.C., Kamiyama, C., Saito, O. (2017). Interaction between rural people’s basic needs and forest products: a case study of the Katha

- District of Myanmar, *International Journal of Forestry Research*, 1-18. doi:10.1155/2017/2105012
- Gülçubuk, B. (2005). *Kırsal kalkınma*. Yavuz, (ed.), Ankara: Tarım ve Köy İşleri Bakanlığı.
- Günaydın, G. (2010). *Tarım ve kırsallıkta dönüşüm*. Ankara: Tan Kitabevi Yayınları.
- Kadayıfçılar, S. (1969), *Ziraat Traktörleri (I)*. Ankara Üniversitesi Basımevi.
- Keleş, R. (2006). *Kentleşme politikası*. İmge Kitabevi Yayınları.
- Khaine, I., Woo, S.Y., Kang, H. (2014). A study of the role of forest and forest-dependent community in Myanmar, *Forest Science and Technology*, 10(4),197-200. doi: 10.1080/21580103.2014.913537
- Kongar, E. (1970). Türkiye’de aile: yapısı, evrimi ve bürokratik örgütlerle ilişkileri, *Amme İdaresi Dergisi*, 3(2), 58-83.
- Kudat, A., Özbilgin, B.B., Küleyin, N., Yalçın, İ., Ayhan, Ö. (1999). *Social assessment for the Turkey forest sector review*. Washington, DC: World Bank.
- Kurt, H. (2003). *Türkiye’de kent-köy çelişkisi*. Ankara: Siyasal kitabevi.
- Langat, D.K., Maranga, E.K., Aboud, A.A., Cheboiwo, J.K. (2016). Role of forest resources to local livelihoods: the case of east mau forest ecosystem, Kenya, *International Journal of Forestry Research*, doi:10.1155/2016/4537354
- Moe, K.T. and Liu, J. (2016). Economic contribution of non-timber forest products (NTFPS) to rural livelihoods in the Tharawady District of Myanmar, *International Journal of Science*, 5(1),12-21. doi: 10.18483/ijSci.904.
- Newton, P., Miller, D.C., Byenkya, M.A.A., Agrawal, A. (2016). Who are forest-dependent people? A taxonomy to aid livelihood and land use decision-making in forested regions, *Land Use Policy*, 57, 388-395. doi: 10.1016/j.landusepol.2016.05.032
- Özden, S. and Birben, Ü., (2007). Orman köylerinde yaşanan göç olgusunun nedenleri ve sonuçları. İç/Dış göç ve kültür IV. kültür araştırmaları sempozyumu özetler kitabı, (s.122). Işık Üniversitesi.
- Ojea, E., Loureiro, M.L., Alló, M., Barrio, M. (2016). Ecosystem services and REDD: estimating the benefits of non-carbon services in worldwide forests, *World Development*, 78, 246–261. doi: 0.1016/j.worlddev. 2015.10.002
- Ortaylı, İ. (1971). *Toprak insan ilişkileri açısından Türk köyünün sosyo-ekonomik yapısından biçimlenişi*. Ankara: Teksir.

- Sencer, M. (1971). *Türkiye’de köylülüğün maddi temelleri*. İstanbul: Ant Yayınları.
- Özensel, E. (2015). *Türkiye’de kırsal yapıların dönüşümü*. Çizgi Kitapevi Yayınları.
- Sreedharan, C.K., Matta, J.R. (2010). Poverty alleviation as a pathway to sustainable forest management, *Environment Development and Sustainability*, 12(6):877-888. doi: 10.1007/s10668-010-9229-9.
- Tarım ve Orman Bakanlığı, (2010). *Kırsal kalkınma planı 2010-2013 (Taslak)*
- Tarım ve Orman Bakanlığı, (2012). *Ormanculuk istatistikleri 2010*.
- Tekeli, İ. ve İlkin, S. (1988). Devletçilik dönemi tarım politikaları: (modernleşme çabaları). *Türkiye’de tarımsal yapılar 1923-2000* (s.37-90). Ankara: Türk Sosyal Bilimler Derneği Yayınları.
- Teshwar, A. (2016). Status of dependency of villagers on forest for their livelihood, *International Journal of Forestry and Horticulture*, 2(11), 11-14. doi:10.20431/2455-9487.0201002.
- Tezel, Y. S. (1986). *Cumhuriyet Döneminin İktisadi Tarihi (1923-1950)*, Yurt Yayıncılık.
- The State of the World’s Forests 2020*. Forests, biodiversity and people (2020). Rome: FAO&UNEP.
- The World Bank 2004*. Sustaining forests. Washington, DC: World Bank.
- Toksoy, D. and Bayramoğlu, M.M. (2017). *Kırsal kalkınma ve orman köyleri*. Karadeniz Teknik Üniversitesi Yayınları.
- TÜİK, (2008). *Tarım istatistikleri özeti 1988-2007*.
- TÜİK, (2010a). *Tarım istatistikleri özeti 2000-2009*.
- TÜİK, (2010b). *Türkiye istatistik yıllığı 2009*.
- TÜİK, (2011a). *Motorlu kara taşıtları istatistikleri*.
- TÜİK, (2011b). *Hanehalkı işgücü istatistikleri 2010*.
- TÜİK, (2012). *Hanehalkı işgücü araştırması 2012 Ocak haber bülteni*.
- TÜİK, (2013). *Hanehalkı İşgücü İstatistikleri- Ağustos 2013*.
- TÜİK, (2017). *Yıllık işgücü verileri*. <https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=0CfzpYilYeSGNkIArQR3nhbx3PQ8d/3UdYjjRnebOw70PjlzoACzLKuvsKjL7zew>. Erişim tarihi: (23.05.2022)
- TÜİK, (2021). *Yıllık işgücü verileri*. <https://data.tuik.gov.tr/Bulten/DownloadIstatistikselTablo?p=I8BxFTUjzCwZGXyYztorkFdfcwfaQCOThg2zv f798UicELczSM6lpfWCR58k5rEl>. Erişim tarihi:(23.05.2022).
- TÜİK, (2022a). *Motorlu kara taşıtları*. <https://data.tuik.gov.tr/Bulten/Index?p=Motorlu-Kara-Tasitlari-Ocak-2022-45704>

- Eriřim tarihi:(19.07.2022).
- TÜİK, (2022b). *Adrese dayalı nüfus kayıt sistemi sonuçları 2021*. <https://data.tuik.gov.tr/Bulten/Index?p=Adrese-Dayali-Nufus-Kayit-Sistemi-Sonuclari-2021-45500> Eriřim tarihi: (23.05.2022)
- Türkdoğan, O. (2006). *Türkiye’de köy sosyolojisi*. İstanbul: Kültür sanat yayıncılık.
- Orman Genel Müdürlüğü, (2021).*Türkiye orman varlığı 2020* Ankara: OGM offset.
- Vedeld, P., Angelsen, A., Bojö, J., Sjasstad, E., Berg, K.G. (2007). Forest environmental incomes and the rural poor, *Forest Policy and Economics*, 9(7): 869-879. doi: 10.1016/j.forpol.2006.05.008.
- Yenal, Z. (2001). Türkiye’de tarım ve gıda üretiminin yeniden yapılanması ve uluslararasılaşması, *Toplum ve Bilim*, 88, 32-55.
- Zeybekođlu, D.Ö. (2012). Deđişen ve deđişmeyen yönleriyle aile: yapısı, türleri ve işlevleri. *Deđişen toplumda deđişen aile* (s.39-64). Ankara: Siyasal Kitapevi.

CHAPTER 6

THE FUTURE OF MULTICULTURALISM

Assoc. Prof. Dr. Ahmet MAŞLAKÇI¹

¹ Bahçeşehir Cyprus University, ahmet.maslakci@baucyprus.edu.tr
<https://orcid.org/0000-0001-6820-4673>

INTRODUCTION

In our globalizing and modernizing world, monoculturalism has become almost impossible with the development of technology. Societies are getting richer culturally every day. With the increase in international migration and the ease of transportation and communication opportunities, people, and therefore cultures, are getting closer and intertwined. We call this cultural approach and the coexistence of many cultures “cultural diversity” or “multiculturalism”. However, the coexistence of different cultures, namely multiculturalism, has both positive and negative effects. The concept of culture has been tried to be explained with many definitions both in terms of content and scope. In two basic definitions of culture, culture is considered as aesthetic perfection and life itself (Chin, 2021). The concept of culture can have different meanings in different fields. As the unity of social heritage and traditions, culture is the unity of material and spiritual elements that we learn through a social process. Culture as education is the whole of behavioral patterns that are passed on to generations. As individual psychology, culture is the magnified form of individual psychology and reflected on the scientific screen. As thought, it is a certain system or product of thoughts (Demirçelik, 2020)

Acculturation is defined as mutually occurring changes in the original cultural patterns of both groups because of direct contact between groups of individuals with different cultures. According to the definition, acculturation is clearly distinguished from a one-dimensional cultural change that occurs because of assimilation. It is envisaged that the said cultural exchange will take place mutually both in the dominant culture and in the culture of foreign groups. From this point of view, the adaptation of foreign individuals to that society is not only their own responsibility and adaptation ability, but also a shared cultural responsibility of the host culture in terms of openness. For the acculturation process, which is the basis of the multicultural structure, at least two different cultures and these cultures must be in a continuous relationship at the same time. In this sense, acculturation is the opening of the acculturation process that takes place within the society to the outside world, foreign languages, and cultures.

In globalizing and modernizing world, monoculturalism has become almost impossible with the development of technology. Societies are getting richer culturally every day. With the increase in international migration and the ease of transportation and communication opportunities, people, and therefore cultures, are getting closer and intertwined. We call this cultural

approach and the coexistence of many cultures “cultural diversity” or “multiculturalism”. However, the coexistence of different cultures, namely multiculturalism, has both positive and negative effects. Multiculturalism is defined as different cultures that exist in parallel or together in a society. It is based on an intergroup relational understanding of culture, in which cultures are defined as homogeneous and closed to the outside. Multiculturalism is both a response to the reality of cultural pluralism in modern democracies and a way to compensate for the exclusion, discrimination, and oppression of cultural groups in the past. Most modern democracies are made up of members with diverse cultural perspectives, practices, and contributions. Multiculturalism, while still respecting differences, stops the assimilation pressure of the dominant culture and demands the inclusion of the views and contributions of different members of society. Multiculturalism should be considered as concepts that have historical and contemporary importance, make it easier to read and make sense of social reality, and conditions to take a stand at the level of thought, discourse, and behavior. In addition, these concepts, like many other concepts, are sensitive to have a political and ideological character depending on where, where and how they are viewed.

Although the concept of multiculturalism was first used in Switzerland in 1957, it found its common meaning in Canada in the late 1960s. The concept quickly spread to other Anglo-Saxon (English-speaking) countries and began to be discussed there (Sengstock, 2009). The multicultural perspective encompasses three complementary views: the first consists of the creative interaction of the views that people are intertwined with culture, the second, that cultural diversity and intercultural dialogue are inevitable and desirable, and the third is that all cultures have internal pluralism. In essence, multicultural societies date back to 5000 years ago, when the first centralized states emerged. However, conceptually, multiculturalism has emerged in the developed Western democracies with the criticisms brought to modern society and the nation-state understanding in the 1980s, and it has a structure that increasingly shows its influence.

The multicultural perspective encompasses three complementary views: First, people are intertwined with culture; second, that cultural diversity and intercultural dialogue are inevitable and desirable; the third consists of the creative interaction of views that all cultures have internal pluralism (Şahin, 2020). Today, it seems very difficult to find a country in which a single cultural form is adopted (Iceland and North Korea are

examples in this respect). Most countries have a structure that includes different cultures in terms of culture (Şahin, 2020).

Multiculturalism challenges liberalism. In liberal democracies, the shared identity of the “citizen” should be abstracted from both socio-cultural and economic positions of the society, and citizens must be legally behaved equally (Halse, 2021). This enable to integrate the collectivist behaviors of citizens, that is, to think a mutual politics culture in which everyone participates. However, this view passes off other politically characteristics of the identity such as race, religion, class, and gender. Although the liberal democratic view claims the official equality of citizens, it cannot be said that it emphasizes the points where they are not equal in society. Multiculturalism advocates that many cultures take place together and separately under the same roof, instead of mixing different cultures with each other and appearing under a single national culture roof (Halse, 2021). In other words, while liberalism supports homogeneity, that is, unity; Multiculturalism supports heterogeneity, that is, multiplicity. In a multicultural understanding, individuals can continue to protect their own special identities and continue to live with these identities while living in the society, as well as being one of the complementary and recognizable elements of the society. Multiculturalism, which appeared differently after modernism, re-emerged as cultural diversity and intercultural dialogue with Postmodernism. This situation shows its effect in politics and philosophy, as well as in art. Works produced through identity in art try to find a place for themselves in the dominant culture and try to be visible with their own identity indicators. Sometimes, it is witnessed that those who produce works with the context of identity are among the products of elitist art, popular culture and subculture and dissolve the boundaries.

A collective identity is constructed from a tradition loaded with symbols, memories, works of art, customs, habits, values, beliefs, and knowledge, from the heritage of the past, in short from collective memory. Culture functions as the main carrier and dissemination of this memory.

The generality found in the community is the generality of forms (behavior styles) whose content (meanings) can vary considerably among community members. Although the term multiculturalism is a relatively new concept, The multicultural situation is not new at all. It shows that various cultures coexist side by side at the same time. At no time in history have cultures been completely unrelated to each other, completely closed to themselves (Johansson, 2022).

Human history is a continuous process of interaction and exchange; It is the history of a process in which separate groups encounter each other, collide, borrow from each other, change each other, and change within themselves. In this process, friendship, enmity, or hybrid situations have occurred between societies. The process of socialization is a process that all individuals necessarily experience. The interaction that started in the family, which is the smallest social structure in childhood, is expanding day by day by including the culture, such as friends, school, and other units that form the frame of reference. All social relations and cultural structure that an individual creates during his/her life directly affect behavior patterns. Throughout his life, people have to learn and adopt the cultural structure and patterns in the geography they live on (Tamer Gencer, 2011).

The aim and outcome of multicultural idealism is that the determinant of an individual's social identity is considered important, even the most important, to be a citizen of a nation, a member of an ethnic group rather than being a member of any profession or social group. According to social identity theory, everyone strives to increase their self-esteem and appreciation (Tajfel & Turner, 1986). Studies conducted within the framework of social psychology theories such as social identity theory have revealed the fact that affirming the necessity of ethnic identity emphasis can prevent harmonious coexistence in societies by increasing competition and conflict between ethnic groups (Verkuyten, 2005). Indeed, it does not seem right to expect that the tendency to favor one's own group, which will occur more because of efforts to strengthen ethnic identity, will increase harmonious coexistence in a society and that more tolerance will be shown to those who are not from their own group.

For those who emphasize multiculturalism, the important issue is ensuring equality between ethnic groups, regardless of whether they are a majority or a minority. According to them, if no ethnic group is dominant in a society, there will be no oppression in that society and also the power conflict between different ethnic groups will decrease. But this approach misses an important fact: ethnic groups are more oppressive, less liberal, and greater power imbalances can be observed. The pressures can be very high and intense on the poor, women, children, and individuals with different sexual identities. The main reason for this is that the communities with a high emphasis on ethnic identity are generally more collective, mostly tied to old traditions, the distribution of power is largely unbalanced, equal rights are not recognized and especially male-dominated communities (Verkuyten, 2005).

Religion can be seen as another criterion to ensure the coexistence of multicultural societies. Religion promotes unity and solidarity between different groups; however, it cannot be considered as a mandatory and the only factor. Language, religion, and cultural factors alone are not a reason or an obstacle for unity. However, historical experiences can create feelings of sameness or difference in individuals (Çankaya Kurnaz, 2021). Language, religion, and cultural elements, which are not sufficient on their own, can transform themselves over time with historical relations and experiences. Thus, a sense of sameness can be created between different groups, as in the case of Switzerland, and between peoples with close ties to each other, as in the case of Bosnians, Serbs, and Croats.

Multiculturalism and Migration

The biggest problems in terms of social life are experienced after the migration phenomenon. The phenomenon of migration is a tool that requires socio-cultural change. The fact that the problems brought about by this change have not been resolved is an indication that the migration process has not yet been completed. The adaptation process should not be perceived only as an economic relief (Keskinel & Doğan, 2020). The key to the solution is social cohesion. Because the immigrants did not only go to the target society they went to, but they also took their culture with them. It is important for the integration process that immigrants can experience an environment where they can experience their differences in the destination country (Keskinel & Doğan, 2020).

The phenomenon of migration does not deeply affect not only the people who carry out the migration act, but also the social life in the target country. Leaving their current place and establishing a new life in a foreign place brings difficulties in every aspect. These are many emotional difficulties such as loneliness, social isolation, alienation, longing, feeling worthless. The obligation of societies with different cultural structures to live together will only be possible by accepting each other's differences (Keskinel & Doğan, 2020). In this context, the harmonization policies of the institutions of the target country should come into play. Otherwise, immigrants who cannot find a place for themselves in a different cultural environment will experience "culture shock". Immigrant individuals who must live in the same environment with different languages, religions, traditions, and different cultural symbols will experience great difficulties in social cohesion. In this context, to achieve social cohesion, relevant cohesion policies should be

implemented in the fastest and most accurate way. Social support practices to be offered to immigrants for adaptation will contribute to their adaptation to the new social order and their acceptance.

The integration of societies with differences around common values without losing their own identities is the most positive step to be taken in terms of harmony. Integration in the integration process should not be perceived as a duty of immigrants alone. Individuals living in the country of immigration need to try to achieve a healthy mutual harmony. Their approach to immigrants with the fear of losing their national identity or independence will undermine the integration process. Instead of; If necessary, they should receive support from relevant institutions to approach differences within the framework of tolerance.

The basic element of the coexistence of societies with different cultures is their acceptance of each other. For this, a legal structure is necessary. This is possible with a multicultural management approach. Especially in the last century, technological developments have made it necessary for different cultures to meet more easily and even live together. In the background of this, there are attractive opportunities offered to individuals by globalization, international mass migrations and the media. As a result of this, everyone with different cultures has the chance to express himself freely in the common life area and continue his existence. In other words, it is "Multiculturalism" that serves as a political umbrella for differences. The concept of multiculturalism means giving different cultures a chance to live in their own originality by creating awareness without marginalizing them. In this sense, "Multiculturalism" is a social richness for living in harmony. Multiculturalism offers many cultural privileges to societies that must come together for various reasons. The issue of cultural rights within the framework of multiculturalism; exemption measures include religious practices, language, and special education.

Societies are in change in the process. However, they preserve and develop their inherited life experiences and cultural elements. No society in the world is in a homogeneous structure. Based on this thought; an inter-communal interactive communication and relationship environment is formed. Multiculturalism, which means the coexistence of cultural diversity, requires living together in equality and harmony. In this sense, the coexistence and harmony of different cultures forms the basis of multiculturalism. Multiculturalism, which is seen as a social order in which cultural diversity and richness is reflected, is also seen as a political order in many countries

today to keep societies together. In a multicultural order where all communities that have to live together tolerate their life values, cultural freedoms are experienced equally. While cultural richness is experienced around common values in multicultural societies, the process of adaptation plays an important role in keeping societies together.

From the point of view of nationalism, the status of national identity has been replaced by more local and divided nationalisms in the process of globalization. These nationalisms: It has emerged in a position that can be divided into sub-headings as religious, ethnic, or regional. Increasing varieties of nationalism also nurture local cultures and identities. These types of nationalism, which have become radical in these years, have led to various wars. It is a situation that we encounter in almost all countries, especially in the Middle East, Africa, and Europe. With the increasing tension, an environment of conflict has emerged, and new ways have been opened for other nationalisms. In addition to known nationalisms such as skin nationalism, race nationalism, religious nationalism, there have been "fan nationalisms" that have appeared on social media in recent years. These groups define themselves with a name and exhibit all the behaviors that we can encounter in nationalism in daily life on social media.

Multicultural environments are a concept that has started to be talked about more after the 2000s (Karaköse, 2020). Communication is one of the important problems between groups that must live together due to changing world conditions, globalization, forced migration and economic reasons. Considering that each of them has a different background, identity and culture, a chaos environment can be expected. Because the lines that become clear with the globalization process are expected to push the groups to the exclusion. However, there are multicultural societies that still survive despite negative expectations (Van den Berg, 2021). There are many reasons for this persistence. One of them may be political preferences and state policies. Another reason is the decrease in integration and assimilation with communication technologies brought by globalization. Since ethnic identities do not lose their essence and their ever-increasing and accumulating structure, they are a minority in the societies (Karaköse, 2020). These unions have turned into individuals who are not ashamed of carrying their own identities and can express it freely. This transformation raises some question marks for nation states. The strongest of these questions is, "Can ethnic identities, which come to the fore with globalization, become nation states?" is the question.

This question is starting to turn into a problem in states that have adopted multiculturalism.

Another is that the structure of globalization that destroys localities is effective in multicultural environments, and people get rid of ethnic, religious, or other identity affiliations and adopt global culture. In this case, it will be easier to live in multicultural environments as all individuals act in line with a common culture. At this point, the homogenizing structure of globalization will also have a functional value (Karaköse, 2020). However, this is not a common situation in long-term partnerships. People living together through short-time exchange programs seasonal workers, education or travel are more likely to conform to the cultural generality brought by globalization. In short-term relationships, the importance of sharpening identities with globalization decreases and the individual is more willing to live in a more open and multicultural environment.

The global nature of international migration results in the mixing and coexistence of people from increasingly diverse physical and cultural environments. The dimensions of integration problems are quite diverse (Koca, 2021). When policies to integrate into society come late, migrant children may find themselves in a lower class with less language and other skills needed to succeed. They may also become more culturally distant from the experiences of their host societies living in western societies. A growing sense of alienation, especially among young people in immigrant communities, may be a belief that they are not welcome, treated equally by the police and other authorities, and are discriminated against in employment and employment (Koca, 2021).

Multiculturalism and Education

Multicultural education approach started to gain importance in the United States of America in the 1960s, with the increasing awareness of citizenship rights (Ramsey, 2008). The United States had a population of very different ethnic origins at that time, as it is today. A portion of this population consists of European and Asian immigrants and black American citizens whose ancestors were brought to the continent as slaves; another part consisted of Native Americans and Mexicans whose homelands were occupied (Ramsey, 2008). Multiculturalism in principle corresponds to the heterogeneity, diversity and multiplicity of forms and structures, plurality of ways and means. It not only ensures the existence of diversity and various forms of culture, but also liberates minority groups in the homogenizing logic

of identity. Multiculturalism thus guarantees the social and cultural rights of different groups and recognizes minority groups.

After the middle of the twentieth century, migration from one country to another gained momentum all over the world. Multiculturalism is increasingly becoming a global phenomenon. Significant immigration to the North American continent has created a kind of identity crisis in the United States. After these migrations, Americans began to struggle to establish a link between the past and the future. The development of the literature with studies on diversity in the 1970s strengthened the sub-fields that nourish multicultural education such as "polyethnic education", "education for cultural pluralism", and "education for equality". Anthropologist Margaret Gibson (1976) defines multicultural education as a method in which an individual develops his/her abilities to understand, comprehend, evaluate, act and perform within the framework of multifaceted systems. Some examples of how multiculturalism has linked with social and political atmosphere are found in the expansion of western literature and other canons of the last quarter of the 20th century, particularly in the revisions of the curricula of Europe and North America. The basic to university level curriculum was revised and expanded to include contributions from minorities and neglected cultural groups. It was designed as a correction to a misconceived notion of "Eurocentrism", in which the contribution of "white European colonial" powers was overemphasized, but the importance of contributions by indigenous and black people was not emphasized. In addition to this correction, contributions made by cultural groups in various fields have been added to the curriculum for special recognition of previously overlooked contributions. The establishment of "African American History Month" and "National Hispanic Heritage Month" in the USA is an example of this movement.

Multicultural education tries to create equal educational opportunities for all students from different races, ethnicities, and social groups, and to this end, it tries to change and restructure the entire school environment (Ferguson, 2008). Multicultural education advocates state that all students should be provided with an equal opportunity school and education environment, regardless of their race, ethnicity, language, religion, gender, cultural background, social economic status, or even sexual preferences. Therefore, the basic principles and dimensions of multicultural education can be listed as follows (Açıklalın, 2010).

- Social justice
- Equality of opportunity in education
- Understanding the importance and impact of culture in the educational setting
- Recognizing and understanding other cultures
- Reducing prejudices against other cultures
- Creating the school and educational environment according to multicultural principles
- Teaching by considering equal opportunities and cultural elements

Multicultural education is the process by which students learn to understand and respect differences. Today, the effects of the globalization trend are felt more on education systems. In modern societies, individuals raised are expected to interact with different cultural groups and develop positive attitudes in their interactions. For this reason, while the developed countries produce solutions to their education-related problems, they also include multicultural education studies.

Multiculturalism and Politics

Multiculturalism is closely related to political and social movements that take identity politics as the vital factor of focus of their political movements. These factors enhance interests of members of the groups. Contrary to multiculturalism, politics movements are based on the mutual identity of the participants. However, both identity politics and multiculturalism share a common demand for recognition and redress for past inequalities. Multiculturalism raises important questions for citizens, public administrators, and political leaders (Kymlicka, 2021). It also provides a possible answer to the question of how to increase the participation of formerly oppressed groups by asking for cultural differences to be recognized and respected.

It is not a coincidence that the themes of cultural diversity and multiculturalism often meet in the field of social policies; In contrast, they are rarely mentioned in the field of cultural policy (Taylor, 2005). Despite the apparent weakness of the multiculturalist approach in the analysis of public cultural policies, it is true that it is key to finally confronting the theme of cultural practices within a multiple, complex, and global society.

Politically, social, and political changes are also important in bringing identities and cultures to the fore. With the collapse of great utopias such as

communism, this exit has accelerated. This perspective is a criticism against the existence of identities (Arthur, 2021). According to the affirmative view, Cultures that fall behind the rhetoric of great ideologies and are ignored are an obstacle to people's coexistence and equality in terms of rights and freedoms. Looking at the formation of multiculturalism historically; Multiculturalism was born in the early 1970s when the governments of the two receiving countries, Australia, and Canada, adopted what they called multiculturalism policies aimed at promoting the cultural differences of indigenous peoples and immigrants. In the next decade, it spread to English-speaking countries (United States, Great Britain, New Zealand), and then to Europe and Latin America (Doytcheva, 2016).

Stable migration dynamics – as is known – traverse this context, and these dynamics tend to be contagious in the form of identity, shared culture, and sensitivity. These dynamics define the meaning of collective identity; it tends to transform the meaning attributed to language, places, the meaning of consumption styles between public and private spaces, and the meaning of belonging (Curti-Pozzolo, 2015).

The past two centuries have witnessed the collapse of great empires, accompanied by a global explosion of nation-states. Since the Second World War, more than 110 new nation-states have emerged. Paradoxically, the number of nation-states has tripled since the mid-20th century, despite predictions that state formation is a thing of the past. To put it bluntly, some empires often tolerated minority nations or cultural groups living in their vast territories, unless there were strong opposition movements or open rebellion (Arthur, 2021). Consideration of cultural diversity at the scale of states is logically dependent on the framework in which the national question arises in each country (Kymlicka, Liberalism, dialogue and multiculturalism, 2001). The initial enthusiasm for cultural development was based on the self-legitimizing principle of cultural policy as a complement to the goal of democratization.

Cultural policies have been shaped and developed in most Western countries based on four important principles. The first is the strategic value of culture as the diffuser of symbolic and communicative standards. Second, it is the basis of cultural collective identities, and hence of nations and states. Third, cultures have effects that foster economic and social creativity, self-esteem, and a positive image of people and regions. The fourth principle is based on the obligation to protect a collective cultural property of cultural, historical, or natural character. Therefore, it is not surprising that public

powers have difficulty in being culturally neutral. In a state with a multicultural structure, this approach leads to some important imbalances, as some communities see their identity differences under direct threat, because of attitudes towards the elimination of discrimination and equality. According to the liberal-democratic tradition, existing rules and rights make us truly see ourselves as citizens. Internal tensions arising from the existence of many forms of multiculturalism and cultural difference are one of the challenges of local and national politics, the solution of which depends on deepening the concept of cultural rights in the debate on cultural diversity. Clarifying the "definitions, qualities, and violations of rights and freedoms as a disrespect for diversity" of these rights is the best way to prevent uncontrolled cultural rights from being used in favor of a cultural relativism that opposes the universality of human rights, and from becoming a justification for opposing communities or even peoples as wholes.

As we examine what culture is, the phenomenon that we encounter is that culture is related to the human being himself and the society and world he lives in. In that case, it is necessary to understand the values created by man and his change/development, that is, man. It is possible to consider human in the context of civilization/universal culture, national culture, multiculturalism, local culture. Universal culture or civilization is the universal values created by man. These are science, art, and philosophy (Taylor, 2020). The whole of values, in which the knowledge, skills and behaviors that are formed because of the processing, development and enlightenment of the human soul, constitute the universal culture. Consequently, the coexistence of all these cultures is called multiculturalism (İyi, 2003). Multiculturalism also causes cultural relativism. Cultural relativism is based on the understanding that the way of life of every group is a culture and that each is equal in being a culture. Multiculturalism also causes cultural conflict and change. For example, the tension and conflict experienced by people migrating from rural areas to cities between the urban culture and the culture they came from is called cultural conflict (Cohen-Almagor, 2021). Thus, groups of people living in cultural relativism need to develop equal respect for cultures and create tolerance for different cultures. Individuals with different cultural identities can create a universal culture and live in peace only in education and social order, which provides the opportunity to develop the possibilities of being human and increase the value of being human (İyi, 2003)

In parallel with all the developments in today's world, different language, religion, ethnicity, culture, and identity concepts are mentioned in

societies. Even if the countries determine their political borders, they can have information about the countries that we will never see -the social structures of those countries, all their understanding of life and cultures- through easily accessible networks such as the internet. Recognizing and interacting with the identities of different cultures creates multiculturalism (Kymlicka, 2021). If the members living in a state are either from different nationalities or come from different nationalities, if this phenomenon constitutes an important aspect of individual identity and political life, we can call that country a multicultural country (Kymlicka, 2020).

REFERENCES

- Arthur, J. (2021). *Campus wars: Multiculturalism and the politics of difference*. Routledge.
- Çankaya Kurnaz, S. (2021). KİMLİK ve ÇOKKÜLTÜRLÜLÜK ÜZERİNE BİR DEĞERLENDİRME. *Süleyman Demirel Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 32-54.
- Chin, C. (2021). Multiculturalism and nationalism: Models of belonging to diverse political community. *Nations and nationalism*, 27(1), 112-129.
- Cohen-Almagor, R. (2021). *Just, reasonable multiculturalism: Liberalism, culture and coercion*. Cambridge University Press.
- Demirçelik, E. (2020). EĞİTİMDE ÇOKKÜLTÜRLÜLÜK. İksad.
- Doytcheva, M. (2016). *Çokkültürlülük*. Çev. Tuba Akıncılar Onmuş. İstanbul: İletişim Yayınları.
- Ferguson, L. (2008). *Çok Kültürlülüğe Giriş*, Future Worlds Center. Nicosia, Cyprus. .
- Halse, C. (2021). *Theories and theorising of multiculturalism*. Routledge.
- İyi, S. (2003). Çağdaş Açılımlarıyla Kültür Kavramı ve İoanna Kuçuradi. *Maltepe Üniversitesi Fen-Edebiyat Fakültesi Dergisi*.
- Johansson, T. R. (2022). In defence of multiculturalism—theoretical challenges. *International Review of Sociology*, 1-15.
- Karaköse, G. (2020). Identity, Nationalism and Multiculturalism Appearances in the Globalization Times. *İnsan ve Sosyal Bilimler Dergisi*, 506-519.
- Keskinel, B., & Doğan, C. (2020). Göç, Çokkültürlülük ve Toplumsal Uyum . *Balkan and Near Eastern Journal of Social Sciences*.
- Koca, M. (2021). International Migration and After: Multiculturality from Theory to Practice. *Kent Akademisi*, 14(3), 867-878.
- Kymlicka, W. (2001). Liberalism, dialogue and multiculturalism. *Ethnicities*.
- Kymlicka, W. (2020). *Çok kültürlü Yurttaşlık Azınlık Haklarının Liberal Teorisi*. İstanbul: Ayrıntı Yayınları.
- Kymlicka, W. (2021). “Çokkültürlülüğün Düşüşü Mü Yükselişi mi?”, (Çev. E. K. Kaya). İstanbul: Işık Yayınları.
- Şahin, H. (2020). Tarihsel Bir Olgu Olarak Kültür, Çokkültürlülük ve Hoşgörü. *Academic Journal of History and Idea*.
- Tajfel, H., & Turner, J. C. (1986). *The social identity theory of inter-group behavior*.

- Tamer Gencer, Z. (2011). ÇOK KÜLTÜRLÜ TOPLUMLARDA İLETİŞİM: DİVRİĞİ ÖRNEĞİ. *Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi*.
- Taylor, C. (2005). *Kimlik/Farklılık Sorununa Sahici Demokratik Çözüm Arayışı*, Haz: Gutman, A., İstanbul: YKY.
- Taylor, C. (2020). *Modernliğin Sıkıntıları*. (Çev. U. Canbilen). İstanbul: Ayrıntı Yayınları.
- Van den Berg, R. (2021). *Nyoongar people of Australia: Perspectives on racism and multiculturalism*. Brill.
- Verkuyten, M. (2005). Ethnic Group Identification and Group Evaluation Among Minority and Majority Groups: Testing the Multiculturalism Hypothesis. *Journal of Personality and Social Psychology*, 88(1), 121-138.

CHAPTER 7

**A SEMIOTIC STUDY ON THE SUPERSTITION OF
EVIL EYE IN IRANIAN CULTURE**

Asst. Prof. Dr. Sarvenaz SAFAVI¹

¹ Faculty of Communication, Near East University Nicosia, KKTC.

INTRODUCTION

The word 'superstition' as a technical term does not exist in any science, because it belongs to a possible world that is in contrast with the physical world. That is the reason definitions of this word in general dictionaries and in specialized resources have a lot of similarities. For instance, in the Oxford English Dictionary, the definition of superstition is "Unreasonable or irrational or groundless awe, fear, notion or belief about something unknown, mysterious, or imaginary, especially in regard of religion." This definition can be compared with Martin's (2009: 1020) explanations. "Superstitions may represent long standing popular beliefs and practices which presuppose an erroneous understanding about cause and effect, which have been rejected by modern science."

All of these definitions have a common ground which shows that superstitions must be considered a non-scientific belief or proposition. However, from a semiotics approach, this belief may be defined more accurately.

Throughout their presence in this world, humans have faced so many events that needed explanations. These explanations created narratives which were acceptable in each society. Based on these narratives, thunder, tides, earthquakes, birth and death were explained. As science developed, these narratives were disproved. No one in modern society believes in Zeus' power or Thor's hammer because those narratives have been substituted with scientific explanations. Based on these explanations, it is possible to give an accurate definition of superstition and claim superstition is a belief that remains despite the scientific explanation of these narratives. But some of these narratives and superstitions are still present in natural languages, such as sun rise and sun set. Although we know that the earth does revolve around the sun, we still use structures that are based on pre-scientific narratives.

1. Evil Eye

One of the most ancient superstitions is the belief that hurting the evil eye will bring bad luck or wound (Ross, 2010: 47-57). The belief in the Evil Eye have roots on Greek earliest times. According to Walcot (1978), there are more than a hundred ancient works mentioning this phenomenon, including writings by Hesiod, Plato, Plutarch and Aulus Gellius. The origin of this belief goes back to a mythological monster in Greek literature, which most commonly refers to three sisters with horrifying visages that turned those who beheld them to stone.

The background of this narrative must be older than that; existing evidence of amulets formed to protect from evil eye shows an older history. The older repetitions symbols was usually build with ceramic, earlier the creation of glass is originated in the Mediterranean ca. 1500 BC.

The idea expressed by the term causes many different cultures to pursue protective measures against it. According to Galf (1982: 664), “about half of today world population still believe in the evil eye.”

Based on a semiotics approach, it is possible to look at this superstition and claim as such—in a possible world, we face people who have evil eye, and in the same possible world, we have tools that protect against the evil eye. This article is limited to the signs in Iranian culture that are used to protect against evil eye.

2. Iranian Protections against Evil Eyes

The protection from the Evil Eye in Iranian culture is divided into two main groups. The first group is the linguistic structures, which either come from the Arabic language based on Islamic traditions to protect from evil eye, or from the Persian language for the same purposes. Signs A to E are the most common signs from this group:

- A. Using “Masha’ Allah” [=God has will]
- B. Using “Tabarak ‘Allah” [=Blessing of God]
- C. Using “Cheshmam kafe pat” [=my eye under his/her feet]
- D. Using “Dur bashe az cheshme bad” [=far from bad eye]
- E. Using “La howle va la ghovvate ella bellah” [=power belongs only to God/ there is no power but from God]

These structures have differences based on the types and the rates of applications. A is unmarked based on the social classes and has the most use. B has less use compared to A. C is not used between high class people. D is only used between people who believe in evil eye. E is used by people who have strong religious backgrounds. A, B and C came from the Arabic language. The usage of A and B have two possibilities: first, when the speaker believes in evil eye, and second, when the speaker doesn’t believe in evil eye but uses it based on cultural tradition or because a companion might be a believer.

The second group of protection from evil eye is the objects that are used in Iranian culture against this power.

F. Knocking on wood

Furthermore known as ‘touching wood,’ it is one of the most frequent protections from the evil eye in Iranian culture. The foundation of this tradition may be from Celtic or German folklore, where mystic beings are supposed to be alive in trees and can be appealed for defense. In Iranian culture, this action has another interpretation. Knocking on wood is the act of sending the evil eye to wood, which is the material neutralizing the action of evil eye.

G. Evil eye amulet

It is made to protect in contradiction of the evil eye and is named ‘nazar ghorbani’ [=Sacrifice of the malevolent gaze]. These amulets are made of ceramic or glass, containing of shade of blue and white rings. In Iranian culture there is a belief that light-colored eyes, especially women with light color eyes, are bestowing the curse, intentionally or unintentionally. This is why in Iran the ‘nazar ghorbani’ is usually hang inside the homes, vehicles, clothes, or combined stuffs to be within the view of those having malevolent glare.

H. Harmal

Peganum harmala belongs to the *zygophyllaceae* family of plants and is often referred to as Harmal, or ‘Esfand’ in Persian. In Iran, Esfand is used to be against the evil eye in two different ways. First, by hanging a string of Esfand or burning Esfand seeds. The smoke that arises from the burning seeds must be move around one’s head or the home. The smoke are supposed to take away the effect of evil eye. This is a way that has been moved on through generations from the days before Islam in Iran.

I. Breaking an egg

This is a way to determine the owner of an evil eye and to neutralize his/her power. The technique of breaking an egg has several steps. The so-called affected person must sit close to a guardian. The guardian takes a raw egg and calls the name of all persons who could be the source of the evil eye. Calling each name, the guardian draws a small circle with a piece of coal on the egg. After doing this, the guardian takes a coin, places it on the top of the egg and presses the coin while calling the aforementioned names. The guardian presses the coin on the egg and while calling a name, the egg breaks. This is the technique to find the source of the evil eye and protect from his/her power. The broken egg must be thrown away in flowing water.

J. Scratching the bottom

This is one of the simplest acts against the evil eye. One who is the addressee of compliments can scratch his/her bottom and defend himself/herself against a potential evil eye.

3. Data Collection

The main source of this research is Hedayat's *Neyrandestan* (1933). *Neyrangestan* is the first book-length attempt at recording Iranian folklore. It was one of the most influential works of its time and has a part about the superstition of evil eye. The writer of this paper collected her data about evil eye in Persian folklore and its defense possibilities from this so-called encyclopedia.

As a hobby for more than a year, the researcher asked 100 Iranians from different parts of Iran, aged 40 to 80, both male and female, with different levels of educational background and different social classes, about the situation of using protections against the evil eye.

The writer of this paper used Osgood's theory (1964) of the semantic differential to measure the rank of power, frequency and knowing the protection object. The writer asked the respondents to choose where his or her position lies, on a scale between two polar features: 'valuable _not-valuable,' frequent _not-frequent,' 'knowing the protector _not-knowing the protector' and 'adequate _inadequate.'

4. Data Analysis

Based on these explanations, in a possible world other than the real world, there is a sign called evil eye, and in the same possible world the Iranian culture has A to J protections. These 9 shields have distinguished differences based on validity, frequency and knowing. Figure (1) is based on signs A to E.

A	Validity	___, +, ___, ___, ___, ___, ___, ___
	Frequency	__+, ___, ___, ___, ___, ___, ___, ___
	Knowing	__+, ___, ___, ___, ___, ___, ___, ___
B	Validity	___, ___, __+, ___, ___, ___, ___, ___
	Frequency	___, ___, __+, ___, ___, ___, ___, ___
	Knowing	___, __+, ___, ___, ___, ___, ___, ___
C	Validity	___, ___, ___, ___, ___, __+, ___, ___
	Frequency	___, ___, ___, ___, ___, ___, __+, ___, ___
	Knowing	___, ___, __+, ___, ___, ___, ___, ___
D	Validity	___, ___, ___, ___, ___, __+, ___, ___
	Frequency	___, ___, ___, ___, ___, __+, ___, ___
	Knowing	___, ___, __+, ___, ___, ___, ___, ___
E	Validity	___, ___, __+, ___, ___, ___, ___, ___
	Frequency	___, ___, ___, __+, ___, ___, ___, ___
	Knowing	___, __+, ___, ___, ___, ___, ___, ___

Figure 1. Signs A to E

Figure 2. explains signs F to J.

F	Validity	___, +, ___, ___, ___, ___, ___, ___
	Frequency	__+, ___, ___, ___, ___, ___, ___, ___
	Knowing	__+, ___, ___, ___, ___, ___, ___, ___
G	Validity	__+, ___, ___, ___, ___, ___, ___, ___
	Frequency	___, ___, __+, ___, ___, ___, ___, ___
	Knowing	__+, ___, ___, ___, ___, ___, ___, ___
H	Validity	___, __+, ___, ___, ___, ___, ___, ___
	Frequency	___, ___, __+, ___, ___, ___, ___, ___
	Knowing	__+, ___, ___, ___, ___, ___, ___, ___
I	Validity	___, ___, ___, ___, ___, __+, ___, ___
	Frequency	___, ___, ___, ___, ___, ___, __+, ___, ___
	Knowing	___, ___, ___, ___, ___, ___, ___, __+
J	Validity	___, ___, ___, ___, ___, ___, __+, ___
	Frequency	___, ___, ___, ___, ___, ___, ___, __+
	Knowing	___, ___, ___, ___, ___, ___, __+, ___

Figure 2: Signs F to J

Figure (2) and Figure (1) show the level of validity or adequacy, frequency of use, and knowing the object of protection. For instance, based on Figure (2), F has a higher rank than other objects.

In the case of selection and combination of these signs, there are interesting points that we face. A to J protections can be used separately but can result in different situations when used in combination. Figure (3) shows these combinations.

F+A
F+B
I+E

Figure 3. Combinations of signs

Figure (3) shows that, for instance, knocking on wood [=F] can combine with Mashallah [=A] or Tabarakallah [=B], but the combination of F with C or D is not common. Use of two protections together can be considered an emphaziser and can increase adequacy. Figures (4) and (6) show the occurrence relations of the protection objects.

	A	B	C	D	E
Validity	6	5	3	3	5
Frequency	7	5	2	3	4
Knowing	7	7	5	5	6

Figure 4. Occurrence of the signs

Figure (4) shows that the validity, frequency and the knowing of A is more than all other signs in Iranian culture. In another words, the occurrence relation of this sign in Iranian culture can be shown in Figure (5):

$$A > B > E > D > C$$

Figure (5) shows that, for instance, sign B is used when the speaker knows the validity, frequency and the knowledge of A, and when the speaker use sign E, he/she knows the validity, frequency and the knowledge of sign B.

The same situation is also applied for signs K to J:

	F	G	H	I	J
Validity	6	7	6	3	2
Frequency	7	5	5	2	1
Knowledge	7	7	7	1	2

Figure 6. Occurrence of the signs

Figure (6) shows that knocking on wood is the most efficient and well-known among Iranians, while ‘nazar ghorbani’ is not commonly used even though everyone has knowledge of it. However, between F and G, the

validity of G is higher. Therefore, the occurrence relation of F to J signs can be drawn as:

$$F > G > H > I > J$$

All signs from A to D are used for protecting against the evil eye in the same situations as F, G, H and J, but I is considered an exemption because it is used after the evil eye happens.

CONCLUSION

It is obvious that Iranians are very superstitious people and firmly believe in, or act as believers of, the evil eye. Iranians at times peek their success to themselves just because they are afraid that someone will hurt them with the evil eye.

The researcher shows that knocking on wood, wearing or hanging anti-evil eye accessories, saying something in Persian or Arabic and burning Harmal seeds are some objects that act as protections against evil eye, even when the users don't believe in evil eye and act only to respect the believers.

Each protective object, as a sign selected from language sign system or other sign systems, has its own form using with the same content.

REFERENCES

- Ross, Colin, A. 2010. "Hypothesis: The Electrophysiological Basis of the Evil Eye Belief". *Anthropology of Consciousness*. 21.
- Martin, Dale, B. 2009. *Inventing Superstition*. Cambridge, M. A.: Harvard University Press.
- Galt, Antony, H. 1982. The evil eye as synthetic image and its meanings on the Island of Pantelleria, Italy. *American Ethnologist*, 9(4), 664–681.
- Hedayat, Sadegh. (1933). "Neyrangestan" [=Persian Folklore]. Tehran: Danesh.
- Osgood, Charles, E. 1964. "Semantic Differential Technique in the Comparative Study of Cultures". *American Anthropologist*. 66. 171_200

CHAPTER 8

**THE PROBABLE REASONS FOR MISTAKES IN
SECOND VERSIONS IN SIMULTANEOUS
INTERPRETATION**

Assist. Prof. Dr. Haldun VURAL¹

¹ Cappadocia University, Faculty of Humanities, Department of English Translation and Interpreting, Nevşehir- Türkiye, haldun.vural@kapadokya.edu.tr, ORCID: 0000-0002-4638-4084

INTRODUCTION

The complexity of simultaneous interpretation (SI) occurs from understanding and producing in two languages concurrently. Simultaneous interpretation (SI) and interpreting studies in general are closely related to memory and especially working memory (WM). WM research can offer essential clues for SI and different cognitive arguments about SI since WM affects SI quality and working memory capacity and SI are related to each other significantly. WM is important to explain the cognitive aspects of SI.

While interpreting, various strategies are applied to ensure the accuracy and quality of the interpretation. However, mistakes may still exist, and they can be in many forms originated from source language or target language usage. When the same speech is interpreted two times, mistakes are expected in the first version in general. However, in this recurrent process, new mistakes can be found in second interpretations where they are correctly interpreted in the first interpretation. This phenomenon can be related to the difficulty of the speech, but in this situation this difficulty seems unreasonably, because the misinterpretations occur in second versions. Therefore, these mistakes can be related to memory and cognitive capacities related to memory somehow. Accordingly, before explaining the possible reasons for these mistakes, the memory is defined, the types of memory and interferences are explained, and their relations with SI are given below.

1. LITERATURE REVIEW

1.1. Memory

Some memory classifications depend on their contents, their being procedural or implicit and their being declarative or explicit (Squire, 1992), and some depend on their duration as short-term memory (STM) and long-term memory (LTM) (Izquierdo, & Medina, 1997). And some memories are categorized based on their nature; here, STM and LTM are accepted as archival and working memory (WM) is accepted as moment-to-moment and ephemeral (Goldman-Rakic, 1991). Memory encodes (comprehends), stores, and retrieves the information (input). These tasks are not easy to define, and they are accepted as complex cognitive activities. Two types of memories execute these tasks; these are short-term memory (STM) and long-term memory (LTM).

Contrary to what is believed, STM is not a corridor to LTM, and WM does not establish a kind of STM. Some same or various subsystems of brain are relevant to LTM, STM and WM, and they control LTM, STM and WM as

well. This relevance involves many receptor and post-receptor level molecular mechanisms (Izquierdo et al., 1999). This is in accordance with current memory organization concepts (Fuster, 1998) against lesion studies consisting former phrenological concepts. Therefore, it can be suggested that different brain sections should work in harmony and some receptor/post-receptor mechanisms are engaged in these processes (Izquierdo & Medina, 1998).

According to Atkinson et al. (2017) STM stores the information for a moment like 1.5-2 seconds, and the LTM stores the information for a long time like minutes or years. The difference between STM and LTM is that STM not only keeps the information but handles it when this information is utilized in any cognitive activities. Therefore, STM not only stores the information, but reasons, deduce or calculates at the same time. This is where the STM plays the role of working memory.

However, according to Baddeley (2017), the working memory (WM) is the place where the processed information is temporarily stored. Investigations have shown that complex cognitive functions about linguistics, and functions of design and arrangement tasks are closely related to WM (Miller 1956; Craik & Lockhart 1972; Baddeley 2017). Although WM has a lot of tasks to perform, it has its own limits as well. Its memory span, i.e., the number of items WM can keep has a limited capacity. In his work Miller (1956) suggests the 7 ± 2 formula. According to him average STM can hold 7 ± 2 different pieces of information which can be called as chunk. Miller proposes this idea for WM but here the same can be suggested for STM because cognitive activities are performed by STM in simultaneous translation. This chunking can be valid for digits. But unless it forms a meaningful word, chunking cannot be any help with letters. WM can retain more chunks if the elements are linked together (Bower & Springston, 1970).

Texts, sentences, words, and letters may be at different levels of complexity and this complexity affects WM and its capacity directly. It may be helpful to reduce the storage demand through skipping the words and syntactic forms and only to hold the sentence's general meaning. Carpenter (1994, p. 1080) suggests that long texts can be handled easier in this way. Sometimes the sound and its single meaning is in concordance with each other as in numbers, and then, dissociation of meaning and sound structures in memory does not occur.

1.2. Short-Term Memory (STM)

Working memory has a limited capacity and it is responsible for short-term memory (STM), that is to say the temporary storage, and it manipulates the information (Diamond, 2013). Since STM has a system with limited sources, it oversees whether new information is relevant to the task and renew the previous appropriate information (Pelphrey & Reznick, 2002). Baddeley's (2017) model suggests four fundamental parts of working memory. The first is the phonological loop which is responsible for storing and handling verbal information. The second is visuospatial sketch pad which is about the visuospatial information. The third one is the episodic (memory of events) buffer which briefly keeps the information and connects working memory with long-term memory. And the fourth one is the central executive whose duty is to coordinate the episodic buffer with two sensory system.

In addition to this information, it is necessary to mention about the articulatory rehearsal mechanism and phonological store (VSTM) which compose the phonological loop. Actually, the phonological store and articulatory rehearsal mechanism are two subsystems of the phonological loop. This phonological store (VSTM) is responsible for verbal information to be held for very a short time, approximately 2 seconds after when it fades away (Baddeley, 2004, p. 356). However, if the holder articulates covertly or overtly the information in her/his storage through vocal or subvocal rehearsals also known as the articulatory process, this procedure may prolong the length of her/his storage time of information as the information is reiterated in an auditory loop (Baddeley, Gathercole, & Papagno, 2017). During this articulatory rehearsal mechanism, a visual information is recoded into a phonological form and thus it can enter the phonological store (Henry, 2012, p. 45).

According to working memory model of Baddeley's (2004) a person hears a pronounced word. After hearing the word, for example 'dog', this sound sequence is put into the phonological store temporarily together with the word's semantic representation such as four legs, tail etc. This semantic representation may be achieved with the help of the episodic buffer in long-term memory (LTM). And central executive is responsible from this episodic buffer (Baddeley, 2000). Here it is believed that articulatory rehearsal activates the long-term semantic representation and thus, the memory trace is kept active in the phonological store, and as a result of this process, the memory trace does not decay and the probability of word's being correctly recalled is increased (Campoy & Baddeley, 2008; Thorn, Gathercole, &

Frankish, 2005). Then relevant phonemes should be gathered together, and necessary motor commands should be planned and executed to articulate the word by the person. Instead of hearing the word, if a person sees a picture and then asked to recall the word, then this visual image is kept in the visuospatial sketchpad rather than the phonological store (Baddeley, 2017).

Also, there is a close relation between learning and memory. Baddeley suggests that learning, comprehending, and reasoning are cognitive efforts which are assisted by memory; besides, the working memory may keep and operate the information over these cognitive efforts (Baddeley, 2002, p. 250). Since memory is accepted as a component of intelligence or cognitive operations, it can be an important component in consecutive and simultaneous interpretations as well. And since not recalling and forgetting are the challenging part of consecutive and simultaneous interpretations, it can be better to mention about the interference reason of these phenomena.

1.3. Retroactive-Proactive Interference

People forget or cannot recall because memories interfere with each other or may disrupt one another (Baddeley, 2013). This interference may occur in two ways; retroactive interference and proactive interference. The similarity of materials practiced is important, but this similarity does not guarantee the facilitation of recalling and it may cause interference as well (Osgood, 1946). In proactive interference acquired materials of past inhibits the learning of new materials (Warren, 1974). This means a new task is not learned because of a learned old task, namely new memories are obstructed by old memories. Conversely, in retroactive interference recalling of acquired materials interfere with the learning of new materials (Postman, 1976). In other words, old memories are obstructed by new memories and new tasks make someone forget her/his previously acquired tasks.

1.4. Simultaneous Interpretation (SI)

Simultaneous interpretation (SI) requires a complex cognitive ability because listening to the incoming message and translating it at once in accordance with its objectives and intentions are complicated enough and requires memory and language practicing. In SI everything occurs simultaneously. An interpreter understands and stores the input. At the same time, earlier inputs are prepared for the target language. It is generally assumed that simultaneous interpreting is very challenging. In education constant mistake-findings and demanding better work of instructors may

ignite this perception. However, this is also valid with many interpreters after their graduation and with a lot of working experience that they may fail to render all of the information in source language with required quality and satisfaction. Mistakes may happen with professional interpreters as well. Even when a speech is interpreted two times, interpreters may make mistakes in their second versions where they interpret correctly at the first time (Gile, 2009, p. 183; Gile et al., 2015). Setton (1999, p. 25) asserts that before an interpreter translates (output) the source text generally a definite gap (*décalage* in French) occurs. This is an essential gap for her/him to get the meaning of the chunk, to operate on it and construct it in another language.

In SI necessary grammatical and linguistic information comes from LTM during input and output process. Here WM is responsible for input's activation, procession and translation and monitoring this process. In SI process WM limitations are more prominent. Luria (1976) suggests that normal listening conditions consist of very brief mnemonic traces. However, in simultaneous interpretation they are checked constantly and so, they can be stored longer (Kalina, 1992). This is due to constant repetition and Baddeley et. al. (1998) calls this subvocal repetition (Baddeley, Gathercole, & Papagno, 2017). But simultaneous tasks in interpreting may interfere with this process since subvocal repetition is interfered by articulatory suppression, i.e. constant recurrence of information (Baddeley, 1990).

2. METHOD

A video recording is taken from EC Speech Repository given by Helen Campbell, DJ interpretation of the European Commission on Facebook and it can be reached through open access. The speech is totally 483 words and lasts 3.29 minutes. It gives the idea behind the emergence of Facebook and touches some controversial points. The subject is very general, however the terminology is given previously; these are 'Facebook, rise in fame and fortune, CEO, Mark Zuckerberg, Ivy League associates, marital arguments, gossip, to mark a cultural shift, hard to come by, default settings, lo and behold, privacy issue'. Out of these 'Ivy League associates, cultural shift, hard to come by and lo and behold' are thought as rare terminology and they are given for preparation. The participants are sophomores and juniors of English Translation and Interpreting Department at Cappadocia University in Turkey. Three sophomores and three juniors are volunteered for the study. Their native language (A language) is Turkish, and English is their source language

(B language). Although they are still students, their skills and capacities in English are prominent.

The terminology with their meanings is given to them. The participants listen to the source speech from internet through headphones and they record their translations on a recorder. The first translation recording is done in the first-class period, and they are asked to translate and record the same speech again in second class period, approximately fifty minutes later.

Transcription of both speeches are the second step in the current study. Then comparison is made to determine the differences between two translations and to see whether second translations are same or different from the first ones and whether the participants make any mistakes in their second trials. Therefore, the following questions are investigated:

1. Do the participants translate the speeches in the same quality both times?
2. What can be the reasons for these mistakes?

3. RESULTS

Here are the transcriptions and mistakes of students' second interpretations that they have interpreted correctly in their first versions. There are some omissions, correct interpretations in both versions, and corrections of mistakes in the second versions. Also, there are some general practical advances in second interpretations. However, according to the scope of the current study, correct first versions and their misinterpretations in second versions are taken into consideration. Besides other mistakes, the number of the participants and their frequency of mistakes are not considered. Therefore, there is no good performer in this study, since the focus is only on the mistakes in second versions, and no language or no specialty difficulty is involved.

List of mistakes in 2nd translations:

1. ‘...some aspects of its rising fame and fortune’:

(...yükselen şöhretinin ve servetinin bazı yönleri)

1st participant: “bazı görüşler” exists in second translation and ‘of its rising fame and fortune’ is omitted as well.

2nd participant: It is translated as “yükselen ünün ve şansın bazı boyutları” in the 2nd translation. Here ‘şans’ is used for ‘fortune’, but it is ‘chance’ in English. This shows that in 2nd version the participant makes a mistake, and the meaning is not conveyed.

5th participant: In the 2nd translation the participant says ‘artmış’ which has a past meaning instead of ‘artan or yükselen’ which has a progressive meaning.

2. ‘He set up the site...’... it has become absolutely enormous.’:
(O siteyi kurdu...; kesinlikle devasa hale geldi.)

3rd participant: In the 2nd translation the participant says ‘bu site kuruldu’ which is passive voice and ‘çok büyüyor’ which is progressive, and s/he omits ‘absolutely’ in 2nd version completely.

3. ‘People don't talk anymore...’
(İnsanlar artık konuşmuyor...)

6th participant: In 2nd translation the participant translates as ‘halk konuşmaz...’ which is wrong because here ‘people’ means ‘insanlar’ and s/he omits ‘anymore’ completely.

2nd participant: In 2nd translation the participant translates as ‘İnsanlar konuşmaz...’ omitting ‘anymore’ completely.

4. ‘...what they're going to do on holiday...’
(...tatilde ne yapacaklar...)

4th participant: In the 2nd version instead of ‘tatilde’ (on holiday) s/he uses ‘’ileride’ (in the future).

1st participant: In the 2nd version s/he translates as ‘tatilde yaptıklarını’ (what they have done on holiday). This is a wrong translation of time clause, and the meaning shifts from present to past form.

5. ‘...now what everybody wants.’
(...şimdi herkesin istediği şey.)

2nd participant: In the 2nd version s/he translates as ‘herkes ne isterse istesin’ (whatever anybody wants) and the meaning completely changes and besides, ‘now’ is omitted.

6th participant: In the 2nd translation s/he translates as ‘...şimdi herkes istemiş’ (...now everyone wanted). Here the meaning is in the past form, not present.

6. ‘...the category of below 30 years in age, 75% of these subscribers...’

(...30 yaş altı kategorisi, bu abonelerin %75'i...)

1st participant: In the 2nd translation s/he translates as ‘13 yaşında’ (at 13 years in age). Here the meaning is completely different because of the mistake in translating the number.

2nd participant: In the 2nd translation s/he translates as ‘abonelerin %17'si’ (17% of the subscribers). Here the meaning is completely different because of the mistake in translating the number.

4th participant: In the 2nd translation instead of ‘30 yaş altı’ (below 30 years in age) s/he uses ‘13 yaş altı’ (below 13 years in age).

5th participant: In the 2nd translation the participant says ‘...13 yaş kategorisi’ (the category of 13 years old) which means a completely different thing.

6th participant: In the 2nd translation s/he translates as ‘%25 aboneler’ (25% of the subscribers). Here the meaning is completely different because of the mistake in translating the number.

7. ‘...half a million subscribers.’

(...yarım milyon abone.)

5th participant: In the 2nd translation the participant says ‘yarım milyar abone’ (half a billion subscribers) which means a completely different thing.

6th participant: In the 2nd translation the participant says ‘...yarım milyar aboneler’ (half a billion subscribers) which means a completely different thing. Besides, s/he makes ‘abone’ plural as ‘aboneler’ which is not proper in Turkish grammar.

8. ‘...there's no doubt.’

(...şüphesiz.)

3rd participant: In the 2nd translation the participant says ‘şüphe götürür’ (open to question) which is a mistranslation and meaningless in this context.

9. ‘I read recently about a couple...’

(Geçenlerde bir çift hakkında bir şeyler okudum...)

1st participant: In the 2nd translation s/he translates as ‘bir çift okudum’ (I read a couple). Here the meaning is completely pointless because of the mistranslation.

4th participant: In the 2nd translation s/he translates as ‘bir şeyler okudum bir çift hakkında’ (I read something, about a couple). S/he omits ‘recently’ and changes the word order in Turkish.

10. ‘...finally bring it to a happy close.’

(...sonunda mutlu bir sona getirerek.)

2nd participant: In the 2nd translation s/he translates as ‘sonunda mutlu bir yakınlık’ (a close intimacy at last). Here the meaning is completely different because of the mistake in translating the clause.

5th participant: In the 2nd translation the participant says ‘mutlu bir kapanışa getirip’ (bring a happy closure) which means a completely different thing. Besides, ‘finally’ is omitted.

11. ‘...but that's what's happening.’

(...ama olan bu.)

3rd participant: In the 2nd translation the participant says ‘ama neler oluyor’ aboneler’ (but what is going on) which is a mistranslation and meaningless in this context.

4th participant: In the 2nd translation s/he translates as ‘ama oluyor’ (that is happening). S/he omits ‘but’ and mistranslates resulting in a wrong meaning.

6th participant: In the 2nd translation the participant says ‘ama ne olursa olsun’ (but whatever) which is a mistranslation and has a completely different meaning.

12. ‘...broadcast to everybody your likes and your dislikes...’

(...beğendiklerinizi ve beğenmediklerinizi herkese yayınlamak...)

1st participant: In the 2nd translation s/he translates as 'sevdiğin sevmediğin herkese haber ver' (Tell everyone you like and dislike). Here the meaning is completely senseless because of the mistranslation.

3rd participant: In the 2nd translation the participant says 'beğendiğin beğenmediğin ne varsa' (whatever you like and dislike) which is a mistranslation and meaningless in this context.

4th participant: In the 2nd translation s/he translates as 'herkese yaymak' (spread to all) which is a mistranslation, and it results in a wrong meaning.

13. '...it isn't just your closed circle of friends...'

(...bu sadece senin kapalı arkadaş çevren değil...)

2nd participant: In the 2nd translation s/he translates as 'yakın arkadaşlar değil' (not intimate friends). Here the meaning is completely different because of the mistake in translating the clause. Besides, s/he omits 'just' and 'circle' in the 2nd version.

6th participant: In the 2nd translation the participant says 'senin yakın çevrendir' (your intimate circle) which is a mistranslation and has a completely different meaning since negative meaning is positive in this version.

14. '...the default settings on Facebook ...'

(...Facebook'ta varsayılan ayarlar...)

1st participant: In the 2nd translation s/he translates as 'Facebook üzerindeki ayarlar' (settings on Facebook). Here back translation to English sounds correct but in Turkish 'üzerinde' is abundant.

5th participant: In the 2nd translation the participant says 'Facebook ayarları' (Facebook settings). 'The default' of 'settings' is omitted.

15. '...be circulated quite far and wide.'

(...oldukça uzağa ve geniş bir alana yayılmış olmak.)

3rd participant: In the 2nd translation the participant says 'uzağa yayılmış olmak' (be spread out) which is a mistranslation. Besides, the words 'quite' and 'wide' are omitted.

16. ‘...and then lo and behold the next day...’

(...ve sonra bak şu işe ertesi gün...)

2nd participant: In the 2nd translation s/he translates as ‘ve ertesi gün’ (and the next day). S/he omits ‘then’ and ‘lo and behold’ completely.

6th participant: In the 2nd translation the participant omits ‘lo and behold’.

17. ‘...further than your group of friends.’

(...arkadaş grubunuzdan daha ileri.)

4th participant: In the 2nd translation s/he translates as ‘arkadaşımızın grubu’ (your friend’s group) which is a mistranslation, and the meaning is wrong.

5th participant: In the 2nd translation the participant says ‘arkadaştan da öte’ (more intimate than a friend). Here the meaning is completely pointless because of the mistranslation.

18. ‘I don’t know if things will change.’

(Bir şeyler değişir mi bilmiyorum.)

1st participant: In the 2nd translation s/he translates as ‘ne değişir bilinmez’ (it is not known what will change). This is a mistranslation, and the meaning is wrong.

3rd participant: In the 2nd translation the participant says ‘bir şeylerin değişeceğini sanmıyorum’ (I don’t think something will change) which is a mistranslation. Besides, the meaning is completely different and wrong.

19. ‘...apparently very few people are bothered by it.’

(...görünüşe göre çok az insan bundan rahatsız oluyor.)

4th participant: In the 2nd translation s/he translates as ‘bazı kişiler bundan rahatsız oldu’ (some people were offended by it). S/he mistranslates ‘very few people’ and changes the time clause. Also, s/he omits ‘apparently’.

6th participant: In the 2nd translation the participant says ‘açıkçası bundan rahatsız olan yok’ (obviously no one is bothered by it) which is a mistranslation and has a completely different meaning since positive meaning is negative in this version. Besides, there is no ‘apparently’ in 2nd version.

20. ‘...people won't speak anymore they'll just talk ...’

(...insanlar artık konuşmayacak, sadece sohbet edecekler...)

1st participant: In the 2nd translation s/he translates as ‘insanlar konuşmadan sohbet edecek’ (people will talk without speaking). This is a mistranslation, and the meaning is completely wrong.

5th participant: In the 2nd translation the participant says ‘kişiler konuşur ve sohbet eder’ (people speak and talk). This is a mistranslation, and the meaning is completely wrong. S/he changes the time clause from future to present. Also, s/he omits ‘anymore’.

4. DISCUSSION

This section presents the discussion of the current study’s research questions one by one. First, the analysis of the interpretations from quality point of view is indicated and discussed. And then, possible reasons for these mistakes are presented. Here it should be emphasized again that omissions, corrections of mistakes in the second versions and any other mistakes are not considered. The scope of the current study requires the misinterpretations of the correct first version interpretations. Therefore, this section presents the probable reasons for the misinterpretations in accordance with relevant literature. Two major issues are investigated in this study, and they are given below.

The first issue is about quality of participants’ speeches in both versions of interpretation. The answer for this research question is positive. However, it is observed that while they translate correctly in their first trials, the interpreters misinterpret some of their correct versions in their second trial. These mistakes may range from minor ones to the ones with different or wrong meanings. And therefore, the quality in the second ones is not as high as the first ones. This result is in accordance with another investigation on performance of professional simultaneous interpreters where the participants make some mistakes in second versions where they interpret correctly in the first versions (Gile, 2009, p. 183; 2015).

The second issue is about the possible reasons for the mistakes of misinterpretations in the second versions. It is quite interesting that the participants interpret correctly and then misinterpret the same text in their second interpretations. There may be a lot of reasons for this phenomenon. As explained above, SI involves listening to the message and translating it with necessary objectives and intentions, and therefore a high cognitive ability is

essential in the process (Baddeley, 2002). These misinterpretations in the second versions are explained by fatigue as a possible reason (Gile, 1999). However, even the researcher Gile (2009, p. 183) opposes this idea and asserts that the speech is not so long, and the participants are allowed to have rest before reinterpretation, and thus, fatigue cannot explain for the process. Therefore, it can be asserted that STM, WM together with LTM are involved in interpretation process. WM monitors the process as well as activates the input, processes and translates it. Very brief mnemonic traces may be stored longer in SI. One reason for these mistakes in second interpretations may be caused by the constant repetition of these mnemonic traces which are called subvocal repetition. And constant recurrence of information which is called articulatory suppression interferes with these subvocal repetitions.

Another reason for these mistakes may be proactive interference. The past knowledge and acquired information may interfere with the new material and prevents the understanding of new one and as a result of this, there may be a mistranslation. Here working memory (WM) is an important agent. WM keeps the information for a limited time only and it is responsible for the STM which checks the relevance of new information with a limited system. One of the fundamental parts of WM is the phonological loop which stores and handles the verbal information. This phonological loop may be the most important WM part, which is essential for SI, because phonological loop consists of two subsystems that are phonological store and articulatory rehearsal mechanism. Here the phonological loop may be still busy with the information of the first interpretation through articulatory rehearsal mechanism of the info in phonological store. As a result, this acquired past information interferes with the information in second interpretation and because of this proactive interference the second interpretation may result in misinterpretations despite the sameness of the texts.

Retroactive interference may be another reason for these mistakes. Newly acquired information interferes with previously learned knowledge and old memories are disrupted by new memories and because of this, new learned tasks cause the forgetting of the old tasks. Here the phonological loop has an important role again and it may be busy with storing and handling the verbal information in second interpretation. This second interpretation can be perceived as a new task and despite the sameness of the texts, later learning interferes with the previous one and disrupts it. Therefore, the second interpretation may be regarded as a new task by the phonological loop and misinterpretations happen as a result of this.

CONCLUSION

Interpretation of the same speech by the same interpreter does not guarantee the quality of the translation since mistakes may occur in the second versions, even though the speech is the same. The results of the current study are in accordance with some other research where the same findings are observed by Gile (1999, 2009). The findings of the current study prove limitations of interpreters during the SI process which are based primarily on mental pressure. It can be suggested that proactive or retroactive interferences play roles in SI mistakes but to what extent and which is more prominent needs for further investigation.

These are the findings with limited number of participants. However, besides the number of the participants, the mental process during the SI should be explored closely and instruments to observe this process should be developed in order to find out precise reason for these kinds of misinterpretations. It is obvious that this phenomenon cannot be explained by fatigue or saturation. It is essential to analyze the memory processes in detail and look for proactive or retroactive interferences to explain these failing patterns and necessary capacities for correct interpretation. It can also be necessary to develop new models to test and validate the quality of interpretation with less mistakes.

REFERENCES

- Atkinson, R. L., Hilgard, E. R., Chiara Mirandola, Nolen-Hoeksema, S., & Al, E. (2017). *Atkinson & Hilgard's Introduzione alla psicologia*. Padova: Piccin.
- Baddeley A. (1990): *Human memory: Theory and Practice*, Hove, Lawrence Erlbaum Associates.
- Baddeley, A. (2000). The episodic buffer: a new component of working memory? *Trends in cognitive sciences*, 4(11), 417-423. doi: [https://doi.org/10.1016/S1364-6613\(00\)01538-2](https://doi.org/10.1016/S1364-6613(00)01538-2)
- Baddeley, A. D. (2002). Fractionating the central executive. In D. Stuss & R. Knight (Eds.), *Principles of frontal lobe function* (pp. 246–260). New York, NY: Oxford University Press.
- Baddeley, A. D. (2004). Working memory. In D. A. Balota & E. J. Marsh (Eds.), *Cognitive psychology: Key readings* (pp. 355–361). New York, NY: Psychology Press.
- Baddeley, A. (2013). *Essentials of human memory (classic edition)*. Psychology Press.
- Baddeley, A. D. (2017). Working memory: theories, models, and controversies. *Exploring Working Memory*, 332-369. doi: 10.1146/annurev-psych-120710-100422
- Baddeley, A. D., Gathercole, S. E., & Papagno, C. (2017). The phonological loop as a language learning device. *Exploring Working Memory*, 164-198. doi: 10.1037/0033-295x.105.1.158
- Bower, G. H., & Springston, F. (1970). Pauses as recoding points in letter series. *Journal of Experimental Psychology*, 83(3p1), 421. doi:10.1037/h0028863
- Campoy, G., & Baddeley, A. (2008). Phonological and semantic strategies in immediate serial recall. *Memory*, 16, 329–340. doi: 10.1080/09658210701867302
- Carpenter, P. A. (1994). Working memory constraints in comprehension: Evidence from individual differences, aphasia, and aging. *Handbook of psycholinguistics*, 1075-1122.
- Craik, F. I., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of verbal learning and verbal behavior*, 11(6), 671-684. doi: 10.1016/S0022-5371(72)80001-X
- Diamond, A. (2013). Executive functions. *Annual review of psychology*, 64, 135–168. doi:10.1016/B978-0-444-64150-2.00020-4

- Fuster, J. M. (1998). Distributed memory for both short and long term. *Neurobiology of learning and memory*, 70(1-2), 268-274. doi: 10.1006/nlme.1998.3852
- Gile, D. (1999). Testing the Effort Models' tightrope hypothesis in simultaneous interpreting-A contribution. *HERMES-Journal of Language and Communication in Business*, (23), 153-172. Doi: doi:10.7146/hjlc.v12i23.25553
- Gile, D. (2009). Basic concepts and models for interpreter and translator training. *Basic Concepts and Models for Interpreter and Translator Training*, 1-299.
- Gile, A., Weininger, T. D., Johannes, M., Bleyer Ferreira dos Santos, G., & Barbosa, D. M. (2015). Testing the effort models' tightrope hypothesis in simultaneous interpreting—a contribution. *Journal of Linguistics*, 35(2), 590-647. doi:10.7146/hjlc.v12i23.25553
- Goldman-Rakic, P. S. (1991). Prefrontal cortical dysfunction in schizophrenia: the relevance of working memory. *Psychopathology and the Brain*, 1-23. doi: 10.1176/jnp.6.4.348
- Henry, L. (2012). *The development of working memory in children*. London, United Kingdom: SAGE Publications, Ltd. doi: 10.4135/9781446251348
- Izquierdo, I., & Medina, J. H. (1997). Memory formation: the sequence of biochemical events in the hippocampus and its connection to activity in other brain structures. *Neurobiology of learning and memory*, 68(3), 285-316. doi: 10.1006/nlme.1997.3799
- Izquierdo, I., & Medina, J. H. (1998). On brain lesions, the milkman and Sigmunda. *Trends in neurosciences*, 21(10), 423-426. doi: 10.1016/s0166-2236(98)01279-x
- Izquierdo, I., Medina, J. H., Vianna, M. R., Izquierdo, L. A., & Barros, D. M. (1999). Separate mechanisms for short-and long-term memory. *Behavioural brain research*, 103(1), 1-11. doi: 10.1016/s0166-4328(99)00036-4
- Luria, A. R. (1976). *The neuropsychology of memory*. Washington DC: Winston.
- Kalina, S. (1992). Discourse processing and interpreting strategies-an approach to the teaching of interpreting. In *Teaching translation and interpreting* (p. 251). John Benjamins. doi: 10.1075/z.56.38kal

- Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological review*, 63(2), 81. doi: 10.1037/h0043158
- Osgood, C. E. (1946). Meaningful similarity and interference in learning. *Journal of Experimental Psychology*, 36(4), 277. doi: 10.1037/h0063154
- Pelphrey, K. A., & Reznick, J. S. (2003). Working memory in infancy. *Advances in Child Development and Behavior*, 31, 173–227. doi:10.1016/S0065-2407(03)31005-5
- Postman, L. (1976). Interference theory revisited.
- Setton R. (1999): *Simultaneous interpretation. A cognitive-pragmatic analysis*. Amsterdam-Philadelphia, John Benjamins. doi: 10.1075/btl.28
- Squire, L. R. (1992). Memory and the hippocampus: a synthesis from findings with rats, monkeys, and humans. *Psychological review*, 99(2), 195-221. doi: 10.1037/0033-295X.99.2.195
- Thorn, A. S. C., Gathercole, S. E., & Frankish, C. R. (2005). Red-integration and the benefits of long-term knowledge in verbal short-term memory: An evaluation of Schweickert's (1993) multi-nomial processing tree model. *Cognitive Psychology*, 50, 133–158. doi: 10.1016/j.cogpsych.2004.07.001
- Warren, L. (1974). An analysis of proactive inhibition in a cued recall task. *Journal of Experimental Psychology*, 103(1), 131. doi: 10.1037/h0036849

CHAPTER 9

LIVE STREAMING ON A NETWORK

Assoc. Prof. İpek Fatma ÇEVİK¹

¹ Üsküdar University Faculty of Communication, Department of Cartoon and Animation, ipekfatma.cevik@uskudar.edu.tr, ORCID: 0000-0003-4917-6675

INTRODUCTION

Increasing network speed with the development of communication technologies has made video sharing quite effortless. The fact that social media channels are also open to video content has been met with intense interest from users. Nowadays, when everyone with a suitable mobile device has turned into an amateur broadcaster, one-way communication in traditional media tools has started to take the form of broadcasting that allows two-way interaction on the network. At this point, it is witnessed that live video sharing, which has become possible over the network, has turned into a professional media broadcasting in some cases and the network has begun to be used as a traditional television platform. It would not be wrong to say that traditional television broadcasting via cable television platforms or satellite has evolved into broadcasting over the internet, which has low technical costs and appeals to a wider audience, with today's technological possibilities. In this research, which will focus on the development of professional use of live streaming provided over the Internet, rather than amateur users, developments in live video content sharing will be discussed.

The saying of the US artist Andy Warhol, "*Everyone will be famous for 15 minutes*" makes its realism even more felt today (Willett, 2010). Today, Internet users can create their own videos and publish them on social media, and these productions can reach a wide audience. This situation, unlike the one-way communication of traditional media, social media positions publishers as both users and producers. An important difference from the traditional media is that instant feedback can be obtained about the published productions. Considering the huge costs of establishing the technical infrastructure for mass media television companies to come to life, it is seen that broadcasting over the internet is quite cheap. It is observed that broadcasting over the network has also become an opportunity for individuals, institutions and organizations that cannot find a place in television broadcasting, which acts according to rating concerns or political and economic conditions.

Today, the internet has started to be seen as a new broadcasting medium where they can make their voices heard for ideas or tendencies that cannot find a place on television. Significant signs are being witnessed that internet broadcasting, which provides user convenience with the rapid development of technology, has begun to replace traditional television broadcasting, which is established with great costs and needs a large amount of financial input to continue broadcasting, or in other words, it has begun to

transform traditional television broadcasting. Considering that traditional media broadcasting organizations are now trying to deliver their live streams to the audience over the internet, apart from cable television, satellite and other channels they prefer to use (Karadağ, 2018), it can be said that the internet is also accepted as a new medium by mass communication organizations.

1. TECHNICAL CHANGE OF VIDEO PROCESSING

Analogue video processing techniques, which are dominant in television broadcasting, started to leave their place to digital systems in the early 1990s (İspir, et al., 2013). Since 1994, video broadcasting companies have created an image format called DV (Digital Video) (Ormanlı, 2012). With the emergence of this format, video recorders began to be produced in smaller sizes. The revolutionary feature of this new format is that it enables videos to be digitized and used by computers (Baldini, 2000). The video digitized via Capture Cards can now be processed in the computer environment. Powered computer systems started to replace the video mixer, video editor, video player and recorder devices, sound mixer and character generator for writing, which constitute an analog editing set. Especially as a result of the interest of big broadcasters in digital video editing, CBS, the pioneer of computer-based editing systems, followed by Avid, which launched professional editing systems that were cheaper.

In the early 1990s, the fact that personal computers became powerful enough to display video increased the efforts to digitize the images previously recorded in analogue media (the image is recorded on magnetic tape with the sound) (Baştan, 2004). The great increase in the capacity of personal computers paved the way for the emergence and spread of video editing programs such as Adobe Premiere, After Effects and Avid, FinalCut, which were released by the Adobe brand.

In early forms of computing, video was usually played back from non-streaming channels (CD-ROM) or by downloading a digital file from a remote web server and saving it to a computer's local hard drive. In the next process, it was difficult to watch a video recorded on the network without waiting for it to be completely downloaded, in direct proportion to the difference between the data size and the bandwidth of the network. Since 2000, the development of large-scale information transfer over the internet, algorithms that make image compression easier, and more powerful digital systems have made it easier to transfer moving images over the internet

(Fechey-Lippens, 2010). It is seen that the transfer of digital recordings to the computer environment can be done directly from recording devices, and the effective use of video watching sites such as Youtube, which was established in 2005, has increased significantly.

2. DATA TRANSFER STREAMING PROCESS IN ONGOING BROADCAST

Moving image transfer over the Internet is done in two different ways. The first one is on-demand streaming video streaming; the other is live streaming, which is performed depending on the discretion of the broadcaster (Dağdeviren, 2004: 40). Unlike traditional video broadcasting, the live stream over the network is recorded on the network for later viewing. This live stream is broadcast; it is captured by the user's receiver, temporarily recorded in the buffer and viewed (Fechey-Lippens, 2010).

The development in internet band speed is important for the streaming process. Streaming is the transfer of data in an ongoing stream and allows a file to be accessed as soon as it is published. Internet broadcasting televisions use video streaming, which gives the opportunity to watch longer and live video recordings as if they were uploaded to the computer (Shelly, et al., 2010, 95-96). Today, thanks to IP TV and web TVs, which have created their own infrastructure, as well as sites providing Livestreaming services, anyone who acquires the necessary devices has the freedom to broadcast. While live streaming previously required a significant amount of computer resources and hardware, it has become quite common with the development of mobile devices.

Despite its leading position among video sharing sites on the internet, Youtube allowed live video streaming a little later than other platforms. It seems that the pioneering in providing live streaming over the network is made by platforms such as Justin TV, Livestream, Veetle and BlogStar. Livestream, which has become an important platform especially in terms of professional broadcasting, continues to hold an important place in this field with its live broadcast systems and software. It can be said that the emergence of social networks that offer mobile options apart from these platforms, which generally serve for more professional broadcasters with a certain stream, has created an explosion in the production of individual live streams. Therefore, with Meerkat and then Periscop applications and other social media platforms giving the opportunity to broadcast live one after the other, everyone with a mobile phone has become a live broadcast source.

3. TRANSFORMATION FROM PROFESSIONAL LIVE BROADCAST TO AMATEUR BROADCAST

In the development process of the Internet, it is seen that initially literary data, then photographs and graphics, then motion pictures are transmitted. With the increase in the use of social media, channels such as Facebook and Twitter, which provided text transmission at first, and Instagram and Snapchat, which also allow visual sharing, emerged (Şahin & Şahin, 2006: 54). Today, with the increase in internet bandwidth, live video transmission over social media networks such as Youtube, Twitch, Facebook, Twitter, Instagram has become easily possible. While it is necessary to have a camera, video switcher, audio switcher and satellite connection to make a professional live broadcast, it is now much easier to broadcast live with mobile phones that partially accomplish the same task even if not with the same image quality. It is seen that Youtube, which keeps a distance from such broadcasts for a while and does not allow it, except for its subscribers, whom it finds reliable, now joins this trend. While Youtube (Duran & Yeniceler, 2019), which allowed the live broadcast feature a long time ago, only made this feature available on the web service until recently, it is seen that dozens of platforms that provide live broadcasting from mobile are taking advantage of this opportunity. Although it is thought that Youtube eases the necessary conditions for subscribers who want to broadcast mobile in order to regain the throne that it is about to lose, it is still not possible for every user who wants to live broadcast via mobile devices, such as Periscop or Facebook Live. While Youtube provides mobile live connection service, it takes care to choose reliable ones from its users in order to benefit from it. The fact that mobile live broadcasts are very difficult to control is seen as one of the reasons for this cautious approach of Youtube, which is the favorite of video sharing sites. Because, in a mobile broadcast, it is possible that a situation that causes copyright infringement and legal liability may occur at any time (Öztürk, 2015). In addition, it is not possible for every publication to be of aesthetic quality.

Although Van Dijk (2016: 296) describes Keen's claim that the content on the internet will lead to the collapse of the traditional media that produces higher quality productions as a result of the productions made by users, he agrees that the shares are of poor quality. According to Dijk, user-generated information or cultural sharing does not destroy traditional media, but rather makes the gap between professionals and amateurs more evident. It can be thought that Youtube is trying to overcome this viewability problem by

allowing subscribers who did not cause problems in its previous broadcasts and which it considers to be reliable.

Although Youtube is very cautious about mobile live broadcasts, it actually allows live broadcasts on the normal platform for a long time, and camera footage digitized using various software can be broadcast using the Youtube Live feature. The difference of this type of live broadcast from mobile live broadcasts can be defined as being a planning and preparation phase and staying connected to the place. It can be said that this application of the platform has an effect on the fact that live broadcasts on Youtube are of higher quality than mobile connections like Periscop in terms of technical and content.

Youtube live broadcast feature is used as a channel where organizations, sports events, conferences and special meetings that have not found a place on normal television platforms for a long time are broadcast. It is seen that especially television organizations, which cannot find a place in the broadcast stream, broadcast the competitions by creating youtube channels in order to reach their enthusiasts. After the end of the live broadcast, the recorded image can be watched as many times as desired and the costs that are far below the broadcasting expenses of a match to be broadcast on television provide a significant advantage. The channels created by many sports federations in Turkey and in the world on YouTube have become almost like a private broadcasting area.

4. LIVE STREAMING GENERATED WITH MOBILE VEHICLES

Media technologies such as satellite, internet and other forms of digital communication are compressing time and space. Roughly speaking, the world is getting smaller. All the important events in the world can be experienced as if they were there. With new communication technologies, the world is becoming a smaller place than ever before (Williams, 2003: 213). Social media, whose use is rapidly spreading, stands before us as a new medium that shares the reign of traditional media. Now ordinary people have acquired the technology that allows video production and new platforms to broadcast them. Video production, which could once be done with very expensive systems, can now be done via mobile phones. The development in broadband technology and the ever-expanding digital network enable the shares to reach a very large audience. Technological opportunities that enable the person to produce video content alone; With the video recorders produced

in smaller sizes and the monitors added to it, the user has attained self-broadcast wireless broadband technologies (Hulur & Yasin, 2016: 16).

In the most popular social media networks with live broadcasting via mobile devices, it is striking that the leadership is in Facebook, Twitter and Instagram. It is seen that live broadcasts on social media are mostly made for the purpose of making money, promotion, education, self-satisfaction and exposure or citizen journalism. The most important feature of social media, which provides the opportunity to establish dialogue and share files with visual and audio content between individuals without the limitation of time and space, is that the user is both a content producer and a viewer. We are in a two-way communication process that is open to interaction with the instant feedbacks coming to the published stream.

Mobile live broadcasts have an important advantage in providing instant news. In places where traditional televisions cannot be found with advanced broadcasting tools, the easy portability of mobile devices enables them to become an effective news source (Böyük, 2017). The superiority of mobile devices is an undoubted fact, especially in publicizing social events. Today, mobile live broadcasts over social media undertake the task of informing the public in environments where traditional televisions cannot be found or in cases where the traditional media ignores the news for various reasons. As a current example, President Erdoğan connected to the CNN live broadcast on a mobile device during the July 15 coup attempt (Spring, 2018) to inform the public and social media users shared the situation on the street live via Periscop and Facebook Live. A broadcast made on mobile devices can sometimes reach a significant number of viewers and can leave traditional televisions behind in terms of journalism. In social media, where ordinary and instant events are shared, users sign broadcasts that are watched all over the world.

American independent journalist Tim Pool, who broadcast social events such as Occupy Wall Street in 2011, Gezi Events in 2013, and Ferguson in 2014 on his mobile phone, informed the public about the Baltimore events in 2015 via Live Stream, SnapChat and Periscope (Çelik & Namal, 2016: 703-714). Pool's broadcasts with Google Glass during the Gezi events made a lot of noise (Kalsın, 2016).

Besides the important effect of mobile live broadcasts in informing the public, there are also many discussed features (Karaduman, 2018: 115). The vast majority of mobile phones used today are suitable for data exchange over the internet and they are with them wherever people go in and out.

Therefore, it is possible for the participants to take images from many organizations whose broadcast rights have been purchased and broadcast them over the network. This situation causes significant loss of rights. In particular, there are significant problems in the prevention of mobile live broadcasts from sports competitions and concert organizations. It is even witnessed that some users shoot sports events broadcast on encrypted channels from the television screen and broadcast live on mobile devices.

Among the reasons why Youtube has been more selective in allowing mobile broadcasts for a long time compared to platforms such as Periscope and Facebook Live, it seems likely that it wants to be cautious about pirated broadcasts that will cause copyright problems. However, it is seen that Youtube, which previously offered conditions such as having 10,000 subscribers and not receiving any warning for 90 days to its users who wanted to broadcast mobile live, could not resist any longer, and immediately after allowing mobile live streaming on its Instagram, it bent these conditions and tried to become a partner in the competition again. Another danger regarding live broadcasts made over the social network is immoral and exposing content and violent sharing. The sharings made during sexual intercourse and the increase in suicide cases in live broadcasts (İnce, 2020) reveal that there is a significant deficiency in the control of live streaming over social networks.

5. NETWORK PROFESSIONAL PUBLISHING

Traditional televisions include many live broadcasts in their streams. The live broadcasts, which are planned in line with the demands of the audience and included in the broadcast stream, mostly include news links, sports competitions, concerts and organizations, and programs made outside the central studios for various reasons. While it is observed that live connections with news and sports content are predominant in the broadcast planning of thematic channels, it is observed that the programs that usually need to be shot in a place outside the studio in television organizations with entertainment content are transferred to the center with the live broadcast technique and added to the main stream.

Traditional televisions, which have a general audience, are very selective about the content of live broadcasts because they create their broadcast streams by taking into account the viewing rates or in line with some commercial and political relations. The use of vehicles with very expensive systems during the making of these broadcasts, the need for satellites to carry the signal, and the fact that they can only be carried out by

technically trained personnel create a significant cost. These high costs cause such live connections in the broadcast stream to be very limited.

Although it has been observed that mobile lines, which have developed in recent years, have started to be used in live connections by traditional televisions, it is seen that these devices are very limited in obtaining a quality image and are used in relatively simple live broadcasts with news quality. The reason for this is that all the visuals used by the television organizations in their streams must be of a certain standard in quality and they are very sensitive to image losses that may occur during the live connection. Despite the great technological developments in the web and mobile lines, the probability of errors in the live connection to be established is higher than the broadcasts made via satellite.

Despite the technological diversity at the point of connection to the network and the ever-growing bandwidth, there are problems with the continuity and quality of live broadcasts over the internet at professional standards. Many factors threaten an efficient and uninterrupted live stream in a network environment, from the devices used by the broadcaster and the bandwidth of the internet service it has, to the number of people watching, from the possibilities of the platform on which the broadcast is made, to the networking conditions of the viewers.

In traditional television broadcasting, the risk of interruption of the flow and falling standards cannot be afforded. In this context, it is out of the question for the organizations that exist on the internet to give up the platforms they use and broadcast only over the network, even if they share their broadcasts on the internet. It is observed that the priority of the organizations trying to broadcast professionally over the network is the cost and the desire to broadcast more independently.

5.1. Live Streams with News and Commentary

It is witnessed that these broadcasts, which are mostly made by people, groups or segments that cannot find a place in the traditional media, are made in venues resembling a small television studio and the shares are technically made with more advanced devices than the general social media users. Considering that these real-time broadcasts, which are shared simultaneously on many social media sites through the software used, are recorded on these platforms and can be watched later, it is seen that a significant audience can be addressed. Television journalists and programmers, who are generally known for their oppositional aspects, are at

the forefront of these broadcasts in Turkey. Medyascop, which was founded under the leadership of Ruşen Çakır and where Mirgün Cabas also took part, 32. Gün TV with live interviews by Hilmi Hacıoğlu, #Özgürüz, WebizTV, Gazete Wall, Current News, which was founded by Can Dündar and broadcast from Germany. It is noticeable that they work to make live broadcasts close to professional television standards.

Considering Turkey in particular, it is seen that many newspapers such as Hürriyet, Fanatik and Birgün make video news sharing and real-time broadcasts over the internet using their own websites and social media channels. In addition, they broadcast live from Anadolu Agency and Doğan News Agency sites. These news agencies announce their live streams on Twitter and share videos through their channels created in Youtube.

5.2. Live Streams of Sports

It would not be wrong to say that those who use live streaming over the network most efficiently and professionally are those who broadcast sports content. It is seen that sports branches, which cannot find enough space in the broadcast stream of traditional television organizations, choose the internet as an alternative channel for themselves. Platforms such as Youtube, Ustream and Livestream stand out as the channels where sharing of sports content is intense, and there are channels on these platforms where many sports federations and supporting organizations share their content. It is seen that the organizations that invest in sports formations and sports organizations in the sense of supporting, broadcast the competitions and races live on the internet with very professional shots.

While the Internet has become a live broadcasting platform for sports organizations, it also turns into an income source for popular sports organizations that do not have trouble finding a place in the traditional media. These organizations have started to price the real-time streaming or sharing to be made over the network separately during the sale of the broadcasting rights of the competition. As an example, it is seen that internet and mobile broadcasting rights are offered for sale as a separate package in the recently held Turkish Super League and 1st League Football Competitions broadcasting rights tender. Internet and mobile broadcasting rights, which are one of the broadcasting rights offered for sale in four separate packages, were paid a price of 15 million dollars (Budak, 2019). Although Turkcell made a bid on the rights of internet and mobile broadcasts, at the end of the tender, it bought this package along with the others of Bein Media Group.

It is a fact that sports organizations broadcast on television are followed by a very large audience, but the rapid development of the internet and the ease of accessibility by users make it compete with televisions. On October 15, 2012, Austrian Felix Baumgartner's space jump (<https://t24.com.tr/haber/felixin-uzay-atlayisi-youtube-view-record-kirdi>) was supported by Red Bull Stratos and broadcast on Youtube, 215275), watched by approximately 8 million people, it will be seen how supportive and justified the sports community is in using the internet as a new broadcasting medium.

5.2. Live Streams of Art

It is frequently encountered that the shootings of the performing arts made with professional broadcasting techniques are published on the internet. It is becoming very popular to share the images of performing arts and music concerts, shot with techniques familiar from television broadcasting, via the network live stream. At this point, especially in this live stream of performing arts, a new method has started to attract attention. New shooting techniques are put into practice over the network to follow the atmosphere of the concert venue or the theater stage as if it were there. This technique, which is active only in broadcasts over the network, provides a new viewing experience for the audience.

Video recorders with 360-degree viewing capability have started to be used in actions such as virtual tours and online meetings, as they make the audience feel like they are there. The biggest reason for the spread of such broadcasts is the ease of access to technology and the acceleration of video transmission (Baştanlar, 2005). During the live streams made with this method, in which cameras with 360-degree vision are used, the viewers have the chance to see any point of the scene as if they were there.

It is witnessed that platforms such as Youtube, Periscope or Twitter allow broadcasting or watching the stream that is shot in 360 degrees one after the other. Broadcasting with 360-degree streams means that the audience does not have to watch from the director's point of view during artistic performances that are broadcasted from the television screen with classical methods. The diversity and increase in the production of technological devices that allow 360-degree broadcasting over the network suggests that such broadcasts over the network will develop further. With the help of 360-degree cameras, which have started to be used especially in live concert or show broadcasts, the audience feels like the place where the event is held. The

viewer, who is free to change the camera's point of view, can see the areas outside the scene or other viewers who are there at that moment. At this point, it is possible to see such 360-degree live broadcasts, which we can define as the reproduction of the show, as a stage in transferring the aura of the exhibited to the audience.

In Walter Benjamin's (2002) work titled "Reproduction of the artwork in the age of mechanical production", he argued that the copies of the artwork do not reflect the atmosphere of the place where it is located, and that the emotions that will occur when viewed on site cannot be achieved. Despite the creation of applications that show the work in place as a result of technological developments, this phenomenon, which is defined as the uniqueness or aura of the work of art, has not been fully felt from afar (Çevik, 2018). Berger, who says that reproductions do not carry the value of the original when shared, they become incomplete copies and their meanings change, states that he shares the same thoughts with Benjamin (Berger, 1995: 19-21).

Until recently, live broadcasts could not convey the atmosphere to the audience, as W. Benjamin stated in his article (Benjamin, 2002: 50-63). The reproductions of a staged show, created with image and sound carrier systems, could not fully preserve the uniqueness of the work of art, and cameras, video mixers or sound transmission systems, which are controlled by others, enter between these productions and the audience. The live messages brought to the screens professionally reach the audience under the control of the director and only through his filter. However, the constantly renewed and developed remote communication technology seems to give the viewer the freedom to be in the place where the artwork or stage work is made instantly. The development of virtual reality applications, which have become much talked about these days, is increasingly expected that the people who experience it will be able to act as their spatial senses and be able to make the whole aura of the space feel as if they are there.

Kevin Robins (2013: 92-93) summarizes the future of developing virtual reality technology as follows; 'In the future, human and technology interaction will be able to go beyond the keyboard and mouse in computers that we know. It seems likely that the user will encounter a new world that can be felt with the senses as in real life. Notifications that can be sent to certain parts of our body can make us feel positions, gestures, contact, movements and balance. It is a fact that Robins has a not so utopian approach in this period when virtual worlds such as Metaverse are being built. As Robins

mentioned, the dream of transforming the communication devices used by humans as sensory organs into sensory organs will perhaps come true in the not too distant future. In line with the steps taken in developing technology and virtual reality, it may be possible in the future to feel the aura of the work of art with all the senses. Current technical possibilities cannot fully answer this.

5.4. Live Streams of Computer Games

It is seen that the broadcasts where computer-based game enthusiasts share their experiences with each other in live streams over the network have a significant audience (Li, & Guo, 2021). Although it is seen that the shares about video games are made on all social networks, the platform named Twitch, which is one of the websites with the highest traffic in the USA, has become the main address for game content streams. Twitch offers a large selection of gamecasts for channels featuring popular games to choose from (Jia, Shen, Epema, & Iosup, 2016). Similar to the incredible rise of video games in the last 20 years, the popularity of online gaming competitions called esports is constantly increasing. When these broadcasts are compared with the sports competitions broadcast from traditional media organs, it is seen that they reach a significant audience. For example, the League of Legends season three championships garnered more viewers than the BCS national championship, the NBA finals, and the World Series. It is witnessed that broadcasts on Twitch blur the boundary between real and virtual by allowing virtual playground, social network and face-to-face communication (Burroughs & Rama, 2015). It is seen that this interest also attracts the attention of traditional television broadcasters and they broadcast E-Sports matches.

Apart from being just a video sharing site of Twitch, it has also become a sandbox where gamers and their idols meet. What should not be overlooked is that Twitch's main theme is computer-based games and a passionate audience for them. In addition to the correct use of the content created by amateur broadcasters, this social community image has an important place in the rise of Twitch.

Online game environments designed according to Castronova (2008: 3) are like synthetic worlds containing large numbers of people. If the game is online, any person in the world starts watching an alternative world from the screen they use as soon as they log in. This new earth could be another planet or an alternative universe that existed on another plane, which could contain

mountains, stars, fires. It may or may not have gravity. Trees and grass can also be chickens and dragons or chicken-headed dragons or dragon-headed chickens. It can be houses, taverns and castles or spaceships or tiki bars. This alternate universe may have people of its own. Other than these people produced by software, the rest are controlled by real people. As those characters begin to be controlled, the person begins to feel that they exist in this synthetic world. The screen of the computer is actually the eye of the person, and the element it controls is now his own body. Meeting someone else in this alternate universe means two people looking at each other from their computer screens. Even if one is in Hong Kong and the other is in New York, these two people, who are actually in the same cyber zone, have made eye contact, they can establish a mutual relationship even if their appearance is different from their own. Although these places are not 'real', it seems that users feel real enough to spend hours, weeks or even months in these alternative worlds. Although games are played in this area, emotions such as conflict, management, trade, friendship and love are also realized (Castronova, 2008: 6-7). The spread of real-time gaming environments, especially called online, causes users living in this virtual world to communicate with each other and create social communities. It is seen that Twitch can respond to this need better than other social networks. It has been seen that the success of this platform, where even the meal breaks given by the players can be watched live, has activated Youtube and Amazon, which are the giants of the digital content market. In 2014, Amazon won the struggle between these two by giving \$ 970 million and became the owner of Twitch.

5.5. Educational Live Broadcasts

The fact that there are so many live streams with various content shared over the web at any time makes it difficult to classify or group them. Although the content that is tried to be examined in detail above is intense, there is a lot of content on the network that we can describe as live streams. Among these, educational publications also have an important place. It is possible to watch training videos with innumerable different content on video sharing sites such as Youtube. The mutual communication that can be established between the viewer and the broadcaster during instant streaming over the network, which has become an important channel for distance education institutions, provides an important advantage in terms of approaching the quality of face-to-face education in distance education. In addition, live broadcasts are made non-stop on the web from many sources,

from training and dealer meetings of companies to conferences and events, from marriage ceremonies to festival organizations, from streams containing pornography or suicide to traffic and security cameras.

6. SOFTWARE AND DEVICES THAT PROVIDE PROFESSIONAL LIVE STREAMING ON THE NETWORK

Although live streaming over the network can be done easily on mobile devices, it is very difficult to catch up with the application and technical quality of traditional television broadcasting. It is observed that new devices and software are constantly being released for a webcast that is head-to-head with traditional television streams. It is actually possible to make the final images taken with the devices used in classical live broadcasts and combined in the video mixer, suitable for web broadcasting by passing them through a video converter. However, this method, which is quite costly, is not attractive for those who want to broadcast over the network with limited budgets. Because a unit to be created with classical methods needs very expensive devices and a professional team to use them.

The increase in web TV or amateur broadcasters providing continuous streaming over the network accelerates the development of new and cheaper technologies. It is seen that portable devices have replaced many cameras, meters of cables, video readers and recorders, video and audio mixers, and other technical means used in delivering these broadcasts to satellites. These new formations, which are very easy to use, basically consist of portable devices or computer software that can collect video and audio signals sent by IP cameras. It is seen that these new units use software used with devices similar to conventional video mixers to ensure professional shooting quality.



Picture 1. <https://livestream.com/blog/wp-content/uploads/2014/08/studio4.jpg>



Picture 2. <https://233b1d13b450eb6b33b4-ac2a33202ef9b63045cbb3afca178df8.ssl.cf1.rackcdn.com/images/product-tc8000-setup.jpg>

It is seen that the programs that are more suitable for amateur broadcasts and that transform the computer screen into a virtual television director are used more widely. These devices and software translate the obtained image into computer language and make it ready for digital broadcasting over the network. It is seen that software such as vMix, OBS Studio, Wirecast, Xsplit, as well as the relatively more professional products of companies such as Livestream, NewTek, which are compatible with classical broadcast devices, have a very common use in providing live streaming over the network.

7. WEB TV

According to Castell, Web TV is the situation where two independent technologies can be used together with the help of a device that can both benefit from internet service and receive television signals (Castell, 2008: 488). Although broadcasting television signals over the internet at the end of the 1990s became technologically possible, the low video quality due to the inadequacy of the band speed did not make it possible for the user to meet Web TV at that time (Akaydin, 2014).

While the growing bandwidth since the 2000s has made it easier to access rich video content on the internet, it has been witnessed that mobile communication tools and televisions have become compatible with the web. The fact that users can access video content on the Internet without space and time limitations has created an alternative viewing format to the ongoing flow of classical television broadcasts. This important change has led to a vicious debate that has reached the present day that the end of television broadcasting is approaching (Dikmen, 2017).

Although it is seen that the internet has not yet put an end to television broadcasting, it is possible to say that classical television broadcasting has undergone significant changes in the face of this technological development. It is possible to say that what is experienced is actually a very intense convergence and the chief architect of this interaction is digital technology. With the digitalization of image and sound, even if the network (cable, satellite, terrestrial broadcast) is different, it has become suitable for carrying the same content. This common use of content has further increased convergence. While digital technology paved the way for computer and television systems to work together, it also enabled formations such as IPTV, Web TV or mobile TV (Mavi, Yüksek, & Dursun, 2017:1,2).

While television broadcasts are made from operators using terrestrial, satellite or cable broadcasting systems (Digiturk, Dsmart), IPTVs using a closed or protected internet system (Tivibu, Turkcell TV), a broadcasting model using an open internet network has emerged as an alternative to these. The difference of this broadcasting model, which is defined as the OTT (Over The Top) model, from IPTV is that it is affected by changes and interruptions in internet speed (Dikmen, 2017).

In addition to watching direct television (Linear TV) broadcasts with IPTV, the audience is also given the authority to interfere with the entire stream in a certain time period. Users who have access to rewind, stop, save or special content offered during streaming also have pay-to-watch options (Pay TV). Telephone and internet services can be provided simultaneously via IPTV (BTK, 2013: 6). Considering its general characteristics, it would not be wrong to define IPTV as a new mutation of classical television broadcasting with the contribution of digital technology and computer infrastructure. With the ease of access to broadband access, the tendency of accessing the content on the network wherever and whenever desired pushed television broadcasters to broadcast over the internet, resulting in large organizations starting to offer OTT TV services. Unlike IPTV, in OTT TV, it is seen that the user is reached over the internet service provided by a third service provider, not its own infrastructure. The rapid expansion in broadband access constantly increases the number of OTT TV service providers. He recently joined this caravan on Youtube TV.

In addition to all these professional broadcasting formations, countless web TVs continue to broadcast because they can be established with small costs. While these televisions, which broadcast for commercial, religious, ideological or many other purposes and have continuous flow, take

traditional televisions as an example in terms of content, classical televisions are trying to adapt to the internet, which has become a new broadcasting medium.

CONCLUSION

Since the invention of traditional television by John Logie Baird in England in 1926 (Maeda, 2021), it has undergone significant changes in terms of technique and content. Television spends the last phase of this change by trying to adapt to a new network that surrounds the whole world. Considering that broadcasts transmitted via terrestrial networks, satellites and cables can now be viewed from mobile devices, it is seen that this last circle of change will be decisive for the future of television. It is quite normal for television broadcasting to undergo a change as humanity, living in a period in which communication technologies come to the fore, transforms into a more fluid and dynamic network society defined by Castells (2008). Traditional television broadcasting, which has made a significant progress in incorporating this new technology with digital broadcasting, diversifies and appears as IPTV or Web TV.

With the effect of technological development that facilitates interpersonal communication and mass communication, it is seen that the traditional media is going through a period in which every individual holding a mobile device connected to the network is a partner in the role of video broadcasting. Everyone is aware that they are a broadcaster and they can experience journalism with their live streams at the slightest opportunity. The traditional media's unique quality of public reporting suffers more than ever before, eroding the media power they allegedly hold. This change, which was proved to the whole world by the people who participated in the Arab revolts in 2011, continues exponentially. Although it is not clear what the long-term consequences of the broken media perception will be or how the big media giants will continue their lives, it is witnessed that traditional televisions, which started by sharing their broadcasts in all emerging channels, are trying new business models to keep up with this new communication age. It would not be wrong to say that today, information is no longer the monopoly of traditional media channels and that every mobile device, which is a blessing of technology, is a live broadcast camera that is ready to broadcast at any time, and that there is an awareness of awareness on this issue in all segments of the society.

REFERENCES

- Akaydın, A. (2014). Değişen televizyon platformlarının izleyiciye sunduğu seçenekler. *Erciyes İletişim Dergisi*, 3(4), 18-24.
- Akdeniz, E. (2017). Walter Benjamin’de dönüştürücü bir güç olarak tarihsel eleştiri. *Düşünme Dergisi. Journal of Thinking*.
- Bahar, A. (2018). Bilişim suçları. *İletişim ve Sosyal Medya. İstanbul Aydın Üniversitesi Dergisi*, 10(3), 1-36.
- Baldini, M. (2000). *İletişim Tarihi*, çev. Gül Batuş, İstanbul: Avcıol Basım Dağıtım
- Baştan, S. (2004). Dijital Video Yayıncılığındaki Gelişmeler: Bilgisayar İle Televizyon Teknolojilerinin Birleşmesi. *Manas Üniversitesi Sosyal Bilimler Dergisi*, 6(12), 181-201.
- Baştanlar, Y. (2005). Parameter extraction and image enhancement for catadioptric omnidirectional cameras (Master's thesis, Middle East Technical University).
- Benjamin, W. (2002). *Pasajlar*, Çev. Ahmet Cemal.
- Berger, J. (1995). *Görme Biçimleri*. Çev. Yurdanur Salman. Metis Yayınları.
- Böyük, M. (2017). Mobile Journalism (MoJo): Mobile Journalism on Social Events. *Innovation and Global Issues in Social Sciences*, 34.
- Budak, E. (2019). Türk medyasında dijital spor yayıncılığı üzerine bir araştırma. *TRT Akademi*, 4(8), 226-245.
- Burroughs, B., & Rama, P. (2015). The eSports Trojan horse: Twitch and streaming futures. *Journal For Virtual Worlds Research*, 8(2).
- BTK (2013). IPTV hizmetlerine ilişkin uluslararası uygulamalar ve Türkiye için öneriler.
- Castell, M. (2008: 488). *Ağ Toplumunun Yükselişi-Enformasyon Çağı: Ekonomi, Toplum ve Kültür*
- Castronova, E. (2008). *Synthetic worlds: The business and culture of online games*. University of Chicago press.
- Çelik, K. H. & Namal, E.(2016), TRT Akademi - Cilt 01, Sayı 02, *Dijital Medya Sayısı*.
- Çevik, İ. F. (2018). Mekanik yeniden üretim sonucu kaybolan sanat yapıtının aurasını teknolojik yenilikler yolu ile yeniden bulmak. *İstanbul Gelişim Üniversitesi Sosyal Bilimler Dergisi*, 5(1), 114-126.
- Dağdeviren, B. (2004). MPEG ve İnternet Yayıncılığı. *Video Graph. Sayı:2, Nisan-Mayıs-Haziran s. 38-40*

- Demirkıran, C. (2010). Geleneksel televizyonun sanal modeli olarak Web TV ve Livestream portalında TV yönetimi. Akdeniz Üniversitesi İletişim Fakültesi Dergisi, (14), 73-85.
- Dikmen, E. Ş. (2017). Türkiye’de televizyon yayıncılığının dönüşümü: sosyal TV yayıncılığı. Gümüşhane Üniversitesi İletişim Fakültesi Elektronik Dergisi, 5(1), 425-448.
- Dijk, J.V. (2016). Ağ toplumu. Çev: Sakin,Ö. Kafka, Epsilon.
- Duran, K. N., & Yeniceler, İ. (2019). Gelenekselden yeni medyaya geçiş sürecinde içerik üretimi sürecinin dönüşümü: Cüneyt Özdemir Youtube kanalı. Yeni Medya Elektronik Dergisi, 3(3), 200-212.
- Fecheyr-Lippens, A. (2010). A review of http live streaming. Internet Citation, 1-37.
- Hülür, H., & Yaşın, C. (2016). İzleyiciden kullanıcıya yapı-özne sarkacı. Himmet Hülür ve Cem Yaşın (Der.), içinde, Yeni Medya: Kullanıcıların Yükselişi, 7-38.
- İlhan, E., & Bayram, S. (2021). Online Mediation: A Study On Experience Of Mediator’s Use Of Social Media. İletişim Fakültesi Akademik Dergisi Yıl 4 Sayı 8, 65.
- İnce, M. (2020). Sahibini Vuran (Dijital) Silah: Sosyal Medyanın Bumerang Etkisi Üzerine Bir Değerlendirme. Journal of Humanities and Tourism Research, 10(1), 84-94.
- İspir, B., Birsen, H., Binark, F. M., Özata, F. Z., Bayraktutan, G., Öztürk, M. C., ... & Ayman, M. (2013). Dijital iletişim ve yeni medya. Web-Ofset. Eskişehir.
- Jia, A. L., Shen, S., Epema, D. H., & Iosup, A. (2016). When game becomes life: The creators and spectators of online game replays and live streaming. ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM), 12(4), 1-24.
- Kalsın, B. (2016). Geçmişten geleceğe internet gazeteciliği: Türkiye örneği. The Journal of Academic Social Science Studies, (42), 75-94.
- Karadağ, G. H. (2018). Kullanımlar ve doyumlar yaklaşımı bağlamında genel televizyon / Tematik Televizyon İzleme Alışkanlıkları. The Turkish Online Journal of Design Art and Communication, 8(4), 708-724.
- Karaduman, S. (2018). Television Broadcasting In New Media Platform And Interaction Yenimedya Ortamında Televizyon Yayıncılığı ve Etkileşim. Public Relations Cultural & Media Studies.

- Li, Y., & Guo, Y. (2021). Virtual gifting and danmaku: What motivates people to interact in game live streaming?. *Telematics and Informatics*, 62, 101624.
- Maeda, K. (2021). Screens and Displays. *Encyclopedia of Glass Science, Technology, History, and Culture*, 1, 787-797.
- Mavi, B. A., Yüksek, C., & Dursun, S. (2017). Dijitalleşme ve Yakınsama Bağlamında Televizyon Yayıncılığı Sektör İncelemesi Raporu.
- Ormanlı, O. (2012). Dijitalleşme ve Türk Sineması. *The Turkish Online Journal of Design Art and Communication*, 2(2), 32-38.
- Öztürk, Ş. (2015). Sosyal medyada etik sorunlar. *Selçuk Üniversitesi İletişim Fakültesi Akademik Dergisi*, 9(1), 287-311.
- Robins, K. (2013: 92-93), Into the image - culture and politics in the field of vision, *İmaj - Görmenin kültür ve politikası*, Çev: Nurçay Türkoğlu.
- Shelly, G. B., Cashman, T. J., & Vermaat, M. (2008). *Discovering Computers. Course Technology.*
- Smith, A., & Johansson Lindgren, A. (2017). Simulation and data analysis of peer-to-peer traffic for live video streaming.
- Şahin, M., & Şahin, G. (2016). Geleneksel Medyanın Yeni Rakibi: Yeni Medya ve Canlı Yayınlar. *Yeni Medya*, (1), 50-63.
- Williams, K. (2003). *Understanding Media Theory*. Oxford University Press.
- Willett, E. (2010). *Andy Warhol: Everyone Will Be Famous for 15 Minutes*. Enslow Publishing, LLC.

CHAPTER 10

**EVALUATION OF ISFANBUL (VIALAND) THEME
PARK IN TERMS OF SPATIAL LANDSCAPE
FEATURES***

Assoc. Prof. Derya SARI¹, Enver ISMAIL²

¹ Artvin Coruh University, Faculty of Arts and Design, Department of Landscape Architecture, Arhavi, Artvin, Turkey. <https://orcid.org/0000-0001-9440-7343>

² Artvin Coruh University, Graduate Education Institute, Artvin, Turkey
Orcid id: <https://orcid.org/0000-0003-2130-4305>

*This study was produced from the master thesis at Artvin Coruh University Graduate Education Institute, Department of Landscape Architecture.

INTRODUCTION

People started to establish cities with the transition to collective life, and after the settlement of city life, they lost the adventures and excitement they had previously experienced in nature. But people still continue to use their imaginations. For this reason, they began to seek their lost sense of adventure and excitement in new areas. Today, these places appear as recreation and entertainment areas. Characterized areas that are established far from the city or in isolation, and whose nature and environment are integrated in terms of landscape are called theme parks (Asensio, 2000; Deniz, 2002, Topaloğlu, 2007; Yücesoy, 2017).

There are different definitions in different sources about the concepts of theme parks and gardens. An alternative definition is the areas where theme parks and gardens are designed and turned into business in a serious and planned manner, where fantasy and entertainment are combined, based on the reflections of imagination, while incorporating historical elements, it never overlooks modernity, and where various control methods are used to strengthen its own social identity (Zukin, 2007). 1991; Dalkılıç, 2007).

Theme parks are urban-scale green spaces that enable people to spend their free time, help them learn and develop their culture, have educational advantages, and contribute to the economic development of countries (Nacak, 2000; Dalkılıç, 2007; Dağ Çınaroğlu, 2019).

Theme parks have many functions defined in the literature, these functions can be summarized as follows (Yücesoy, 2017):

- It provides the formation of urban identity.
- Contributes to the promotion of the country.
- Provides people with an unusual recreational opportunity.
- It provides people with the opportunity to engage in activities that are impossible to experience.
- It brings together people from different cultural and socio-economic backgrounds and strengthens social relations.
- It contributes to tourism and, accordingly, to economic development.
- Supports the preservation and sustainability of authentic natural and cultural areas.
- Contributes to education and social consciousness formation in line with the theme.
- On the urban open green space and its organization It contributes to the planned city formation with its positive effects.

- It contributes to urban ecology by creating open space corridors.

There are many opinions in the literature on the classification of theme parks. Topaloğlu (2007) made a general classification of theme parks by considering previous classifications (Figure 1).

Wylson and Wylson (1994) reported that theme parks are established according to scientific, cultural and historical objects just like in museums (Düzenli et al., 2017), and each of them is animated with their real identities by focusing on a subject within themselves.

Theme parks; they are places that are based on scientific, cultural and historical objects and have recreational and educational features on a specific subject. These places can be for every age group in proportion to their social identities, or they can only appeal to a certain age group. In addition, considering the contribution of green areas in cities to people's health, they are almost medical investments for the future (Müminoğlu et al., 2018). For this reason, botanical gardens and arboretums within the theme parks offer many opportunities to visitors as the most important examples of these green spaces (Karaşah and Var, 2016; Erbaş, 2019).

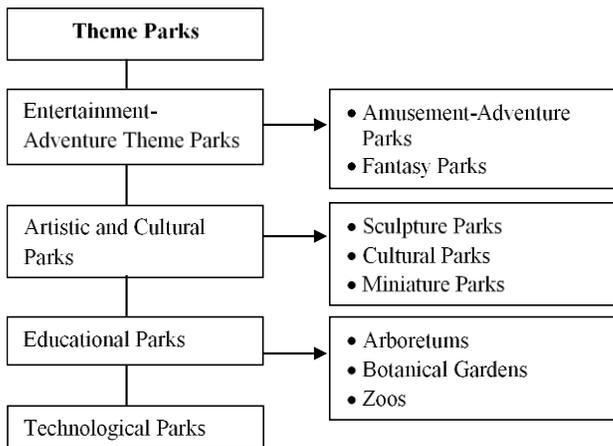


Figure 1. Classification of Theme Parks (Topaloğlu, 2007)

In recent years, people have started to want to get away from the monotonous system of city life and to get to know societies with different cultural values. Therefore, the demand for visits to regions rich in natural and touristic elements has increased. National and international theme parks, which are constantly increasing, need to be in constant development in order to ensure their preferability and sustainability. The city of Istanbul, which is

among the developed metropolitan cities, has also developed in terms of theme parks and added new theme parks to its structure by making new investments over time. The city of Istanbul, which is a national trade gate, has been the most populous city in Turkey by constantly receiving immigration due to its location.

There are 4 entertainment-adventure-themed, 5 nature-themed, 1 history-culture-themed theme parks in Istanbul, which hosts many different theme parks due to its mild climatic conditions.5 of these parks are located in the Anatolian region and 5 of them are in the European region (Table 1).

Table 1. Theme Parks in Istanbul

No	Theme park name	Theme park class	Location
1	Marina Aquapark Waterland	Entertainment– adventure theme parks	Anatolian side
2	Forestanbul		Anatolian side
3	İsfanbul (Vialand)		European side
4	Grand Aqua Marine		European side
5	Miniatürk	History - culture theme parks	European side
6	Zeytinburnu Medicinal Plants Garden	Nature themed parks	European side
7	Atatürk Arboretum		European side
8	Nezahat Gökyiğit Botanical Garden		Anatolian side
9	Çekmeköy Zoo		Anatolian side
10	Polonezköy Zoo		Anatolian side

The purpose of this study is to examine the studies carried out in these areas and to make evaluations in terms of spatial landscape characteristics, since the theme parks, which are increasingly diversified and attracting attention, are one of the landscape design subjects. There are many studies such as determining the planning and design criteria for parks, user evaluations for parks (e.g.: Tarakci Eren et al., 2018; Yılmaz et al., 2015; Surat, 2017; Karaşah and Aşık, 2021; Kahveci et al., 2021). In this study, a scale was developed for the evaluation of theme parks according to spatial landscape characteristics. Accordingly, by revealing the qualifications, positive and negative aspects of theme parks, some suggestions were made to ensure the sustainability of the theme parks and to increase the landscape quality in future planning and designs.

MATERIAL AND METHOD

In this research, the spatial landscape features of İsfanbul (Vialand) Theme Park, located within the borders of İstanbul, were examined. Within the scope of the study, field survey and literature research were carried out. In order to evaluate the spatial landscape characteristics of İsfanbul (Vialand) Theme Park, a field analysis form was prepared, field studies were carried out, and the form was filled with on-site detection method. At the same time, information was obtained by interviewing the officials working in the theme parks. Field trips were carried out in the spring-summer period of 2021.

In the first part of the analysis form, the address of the theme park, the size of the area, the list of activities in the area, the use of weekdays and weekends, the theme of the park and the user profile features are included. In the second part of the form, 15 characteristics are effective in the preferences of the users in public outdoor spaces such as parks and that affect the spatial quality of the park. In determining the qualifications discussed in the evaluation form, Nasar (1998); Onsekiz and Emür (2008); İnceođlu and Aytuđ (2009); Cořaner et al. (2014); Basalma et al. (2019); Ozturk and Temel (2019); yellow (2019); Kartal et al. (2021); Uskan Demir et al. (2021) have benefited from the work done. Accordingly, the spatial landscape features of the theme park areas were evaluated according to the following 15 features:

Transportation facilities, defined/controlled entrance, Security, Parking areas, Circulation design, Suitability for the use of disabled people, Hard floor- covering elements, Urban furniture and its adequacy, Social facilities and services, Design and spatial organization that support activities, In Activity and Entertainment units Security measures taken, Balance of green areas and hard ground, Presence and quality of vegetation, Presence of visual-aesthetic elements, Maintenance, and cleanliness of spaces.

Google Earth, Adobe Photoshop and AutoCad 2021 software were used in the creation of the plans and maps of the İsfanbul theme park.

The city of İstanbul has a transitional climate between the Mediterranean and Black Sea climates in terms of climate characteristics. A temperate climate prevails in the area. The city receives plenty of precipitation due to its geographical location. According to the data recorded between 2007 and 2020, the annual average temperature in the city is 16.2 °C. The lowest temperature during the year was recorded in February (-5.1 °C), and the highest temperature was recorded in September (39.6 °C). Annual precipitation falls mostly in December and then in January (MGM, 2022).

The city of Istanbul, where the research was conducted, is geographically located in the Northwest of Turkey at 41.00527 north latitude, 28.97696 east longitude, with a surface area of 5,712 km², built on the points where the Asia- European continents are closest to each other, and a bridge between these two continents.

In the world population density ranking, the city of Istanbul ranks 13th with a population of 15,462,452 million, and ranks 1st in Turkey.

Istanbul (Vialand) Theme Park: Istanbul, also known as the domestic Disneyland, is Turkey's first amusement theme park concept, and is a large living and entertainment complex with restaurants, a shopping center, bowling alley, cinema, and show center. Vialand was opened on May 26, 2013. Established on an area of 60 hectares, Istanbul site has an amusement theme park on 20 hectares, a shopping center on 35 hectares, a show center of 11 hectares, accommodation and a parking lot with a capacity of 8000 vehicles (Efendioğlu, 2017; Erbaş, 2019).



Figure 2. Location of Istanbul (Google earth, 2022)

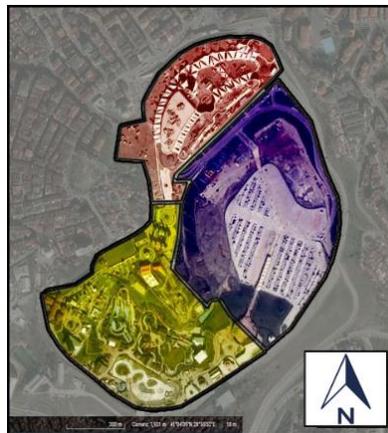


Figure 3. Istanbul Site Plan (Google earth, 2021) (red: shopping area, blue: entertainment and living area, yellow: performance center)

RESULTS

According to the Isfanbul Theme Park layout, the main activity areas can be evaluated in three parts. Accordingly, there are shopping areas, entertainment - living areas and performance center areas in the area. 'History of Istanbul', which is the only section in the park designed according to a specific theme, can be considered as the main theme of Vialand Isfanbul.

There is a hotel that offers accommodation throughout the year in the Isfanbul AVM and theme park complex. All facilities in the complex are easily accessible from the shopping center and the hotel. In this part of the park, there is a parking lot with a capacity of 8000 vehicles and green areas (Figure 4).



Figure 4. Isfanbul Hotel (Original, 2021)

Shopping Area: Located in the area between Isfanbul Theme Park and the hotel, the shopping center has 250 different storefronts in terms of design. With these different façades created, the area has gained dynamism. The sizes of these stores vary between 0.01 hectares and 0.65 hectares. Vialand AVM consists of two floors, one floor is open and one floor is closed. On the open floor, which is designed as a street, visitors are offered the opportunity to travel by tram. The shopping mall, fast food area with large terrace and cinema are located on the other floor (URL-1). A suspended tension structure was placed on the open floor as a shadow element, and the area was designed in a passage structure (Figure 5).



Figure 5. A View from Isfanbul Shopping Center (URL-2)

Performance Center: Adventure Land, which was established around Istanbul Lake, is an activity park designed in an informal structure on a wide grass area to appeal to all age groups, allowing for various outdoor activities intertwined with nature. It is located inside Isfanbul land and next to Vialand Theme Park. The two parks have separate entrances. Isfanbul Theme Park consists of 3 main parts. These; from the main entrance, they are Adventure World, Game World, Legends World (URL-3).

The game entertainment activities in the theme park can be listed as follows: Tower of Justice, Breathtaking, Viking, Adventurer, Once Upon a Time in Istanbul, 5D Little Dolphin, King Kong, Carousel, Cloud Express, Conqueror's Dream, Hero Firefighters, Brave Drivers, 4D Journey To The West, Crazy River, Little Miners, Bumper Cars, Jet Ski, Mini Tower, Magic Room, Joyful Farm, Little Explorers, Flying Children, Palace Swing Waterfall, Little Pedals, Fairytale Tree, Bounce Kangaroo, Isfanbul Open Air Stage, Breathtaking Stage, Castle (Figure 6).

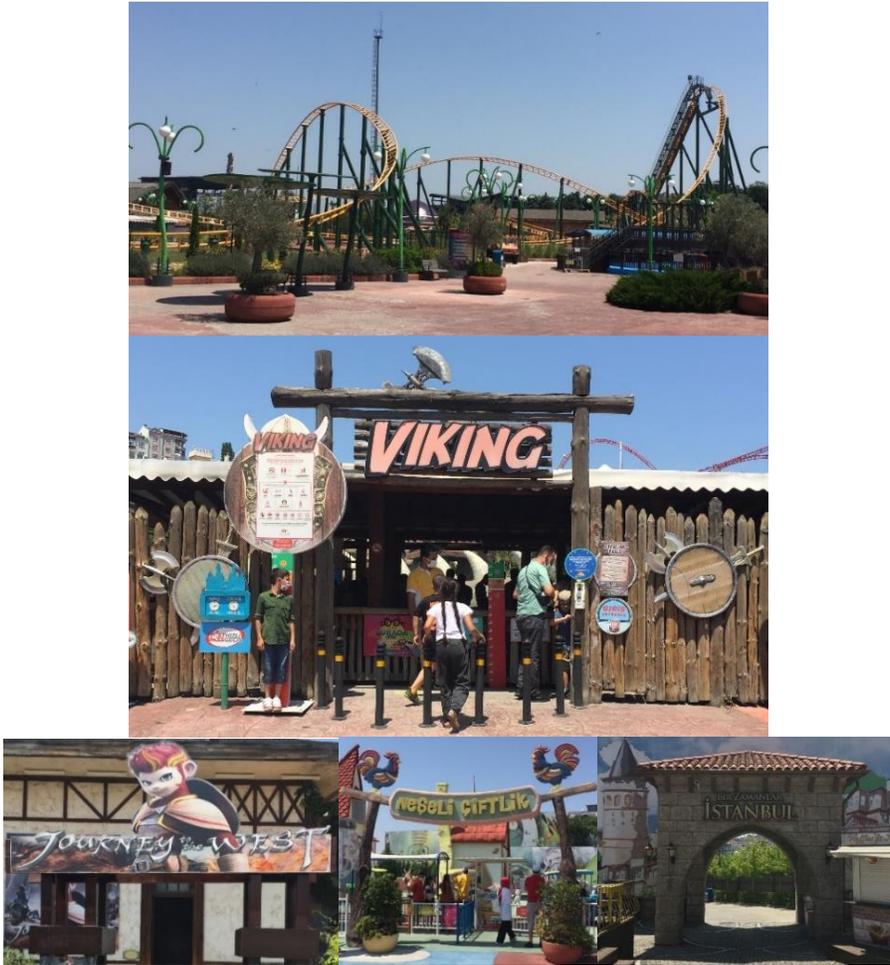


Figure 6. Views from Some Game Entertainment Activities in the Theme Park (Original, 2021)

Spatial Features in Isfanbul (Vialand) Theme Park Area

The area characteristics of Isfanbul Theme Park are shown in Table 2. Accordingly, the general evaluation of the spatial landscape features identified in the park area is summarized below.

Table 2. Site Analysis Table

Weekday and weekend usage status (hours and days the park operates): Theme park weekdays summer period 11:30 - 20:00, winter period 10:00-18:00 It serves between 11:30 - 20:00 in the summer period on the weekend, and between 10:00-18:00 in the winter period.			
The theme of the park and its user profile: Has the concept of Turkey's first amusement park theme User profile: domestic and foreign tourists, visitors of all age groups			
Spatial Features in Theme Park	General evaluation		
	Good	Moderate	Poor
Transportation facilities	✓		
Defined/controlled entry	✓		
Security		✓	
Parking areas	✓		
Circulation design	✓		
Suitability for use by persons with disabilities	✓		
Hard floor-covering elements	✓		
Urban furniture and its adequacy	✓		
Social equipment and service		✓	
Presence of design and spatial organization supporting events	✓		
Security measures taken in activity and entertainment units	✓		
Green areas and hard ground balance	✓		
Vegetation presence and quality	✓		
Presence of visual-aesthetic elements	✓		
Maintenance and cleanliness	✓		

Transportation Facilities: Isfanbul is 3 km from the city center. There are public transportation options (metro, metrobus, bus) or private vehicle transportation options that can be used to reach Isfanbul from within and outside the city.

Defined/controlled entrance: The main entrance of Isfanbul Park can be characterized by a modern design style that is in harmony with the theme of the park, attracting people's attention. In addition, thanks to the automatic machines at the main entrance, it is ensured that the entrance and exit of the users are easy to move (Figure 7).



Figure 7. Main Entrance View of Isfanbul Theme Park (Original, 2021)

Security: There are security guards and security cameras assigned to various places in Isfanbul Theme Park for monitoring and tracking purposes. Thanks to the security services provided in the area, visitors feel comfortable and safe. There are high-quality lighting elements that provide vision and exploration in the park, so visitors do not have to worry when visiting the theme park in the evening (Figure 8).



Figure 8. Camera and Security Guard View in Isfanbul Theme Park (Original, 2021)

Parking areas: Isfanbul Theme Park hosted 450 thousand visitors in 2021. Therefore, the free parking lot in the theme park with a capacity of 8000 vehicles can be considered sufficient, but it can be predicted that the number of visitors will increase, especially with the increase in tourism after the COVID-19 pandemic, so new arrangements can be made to meet the need.

Circulation design: The circulation design that spreads over the whole area is at a good level and is compatible with the space. Some are narrow,

some are wide tracks and are stylistically different (straight, circular, sloping, etc.). It has easy and detectable circulation connections. Structurally, there are different tracks, some of them natural, some of them synthetic, suitable for the place where the games are located.

Suitability for the use of disabled people: The park in general has a suitable structure that does not restrict the movement of the disabled. There are no ramps near the stairs in areas where the height difference is high, but ramps are designed for the disabled to pass smoothly on the roads and pavement heights where the level difference is low.

Hard floor-covering elements: The materials used in the floors are suitable and high quality according to the field of activity and vary according to the type of activity. The visual identity of the floors is good. Hard floor covering materials are generally suitable for the function of the place where they are applied. There are different materials such as cube stone, brick, wood, concrete and rubber in children's playgrounds in the area.

Urban furniture and its adequacy: In addition to promotional and informative posters at the entrance of each section of the theme park, there are tables of various shapes, plastic, wooden and concrete seating units, lighting elements, shading elements, garbage cans (Figure 9). In general, urban reinforcement elements are diverse and compatible with spaces. The maintenance of urban furniture is carried out periodically and continuously, depending on the financial infrastructure of the park.



Figure 9. Some Urban Furniture in Isfanbul Theme Park (Original, 2021)

Social facilities and services: Toilets, fountains, commercial places (restaurants, shopping places), religious facilities, etc. needed in Isfanbul park. There are social facilities and service structures such as (Figure 10). However, since these structures are mostly located at the entrance of the park, it was observed that they were not sufficient considering the size of the park and the

number of visitors, therefore it was observed that they should be distributed to serve all parts of the park.



Figure 10. Some Social Facilities in Isfanbul Theme Park (Original, 2021)

The existence of design and spatial organization that supports the events: Each event in the park has its own design that expresses its difference from other events, its content and history. The spatial organization, which plays an active role in supporting the events, facilitates the users to reach the events in the shortest time and with a good visual character.

Safety measures taken in activity and entertainment units: Security measures taken in activity and entertainment units are quite good because there are controls and conditions (weight, height, age, health status, etc.) that check users whether activities are suitable for them. Events are designed to provide confidence to users with their various elements and equipment.

Green areas and impermeable surfaces balance: In the observations made during the park visit, it was determined that the green areas were scattered and fragmented, and the places where the activities were held were made of impermeable surfaces. Impermeable surfaces cover approximately 60%, and permeable surfaces approximately 40% throughout the park. According to the nature of the activity areas, the ratio of hard floors is higher (Figure 11).



Figure 11. Distribution of Green Areas and Hard Floors in Isfanbul Theme Park (Google earth, 2022)

The presence and quality of planting design: In the landscape design of the park, attention has paid to the use of plants with color aesthetics. Contrast, hierarchy, emphasis etc. in plant compositions designed throughout the area. Planting design principles were used (Erbaş, 2019). There is a wide and regular vegetation in the park area. It has been observed that the quality of the plants is good, and they are suitable for the spaces visually as well as in harmony with the environment (Figure 12).



Figure 12. Images of Planting Design in Isfanbul Theme Park (Original, 2021)

Presence of visual-aesthetic elements: There are many aesthetic elements (water elements, artistic elements, etc.) in the park that attract the attention of the users and at the same time give a sense of fun. All this is the result of a well-integrated and harmonious design within the park (Figure 13).

Maintenance and cleanliness of the places: It has been observed that the spaces in the park area are quite regular. It is regularly cleaned, maintained and its condition is monitored by the cleaners and attendants in the park.



Figure 13. Visuals of Some Visual-Aesthetic Elements (Original, 2021)

CONCLUSION

If the findings are to be summarized; Isfanbul Park is located close to the city center. It has a large area, but due to the dense construction surrounding it, it can be difficult to expand the area to keep up with future development. Isfanbul Park can be easily accessed in many ways. The car parks provided in the area are sufficient for the intensity of seasonal visits.

Isfanbul Park has a dynamic circulation for the visitors to move in the park. It is connected by main and secondary roads distributed to the playgrounds and entertainment areas according to design standards. Although the floors in Isfanbul Park consist of various types of materials, some flooring elements that have worn out as a result of intensive use need to be renewed.

In Isfanbul Park, landscape furniture is designed according to sustainability and landscape planning standards, sufficient to serve visitors and distributed throughout the park. Social services and facilities, on the other hand, are few compared to the visitor potential, so efforts should be made to increase the number of the venue in order to be suitable for its capacity, and to

improve it in terms of quality and efficiency. It can be said that the reason for this weakness is the presence of shopping malls and stores near the park. In addition, it is considered necessary to establish some units for emergencies as there are no health units in the area.

It has been observed that various plant species can be used in the area thanks to the climatic characteristics of the location where İsfanbul Park is located. Broad-leaved, evergreen, coniferous, etc. to avoid noise. The use of species promotes comfort and environmental sustainability. The park area does not contain enough aesthetic elements according to the size of the garden. For this reason, it is necessary to make designs that will increase the visual quality by strengthening the planting design.

Theme parks are recreational areas that have a very important place in our lives, where people go to have fun and communicate with others in their spare time, and in some cases to learn about their own culture and increase their sociocultural development. It has important contributions to the health, environmental quality and economy of the city.

For the theme parks to be sustainable in terms of quality and quantity, questioning and considering the expectations, opinions and suggestions of the users (Topaloğlu, 2007), open to innovations (Küçük and İnce, 2018), creating new trends, having a flexible design approach and continuing to develop. Theme parks should be designed with aesthetic, environmental and functionally appropriate designs by making preliminary studies with participatory methods.

As a result, it can be predicted that theme parks, which are located in both urban and rural areas, contribute to the economy of the city and the country they are located in, and provide people with different recreational activity opportunities and the opportunity to experience exciting experiences to their visitors, will continue their existence by developing and changing. For this reason, it is an important requirement to consider the spatial landscape features that will contribute to the sustainability of theme parks in terms of quality and quantity in planning and designs.

REFERENCES

- Asensio, P. (2000). *The world of contemporary*. Rutgers University Press, Italy. 456p.
- Başalma, D. E., Uslu, A., Şahin Körmeçli, P. (2019). Kent parkı kalite göstergelerinin değerlendirilmesi kapsamında bir deneme: Ankara/100. Yıl Birlik Parkı örneği, *Uluslararası Peyzaj Mimarlığı Araştırmaları Dergisi*, 1(1), 08–13.
- Coşaner, M., Kiper, T., Korkut, A. (2014). Mahalle parklarının peyzaj tasarım ve kullanım kriterleri açısından irdelenmesi: İstanbul, Şişli Örneği, *Tekirdağ Ziraat Fakültesi Dergisi*, 11(2), 1-18.
- Dağ Çınaroğlu, M. (2019). *Kalehan-Ecdat bahçesi ve Japon parkı (Konya) tema parklarının kullanıcı memnuniyeti açısından irdelenmesi*. Yüksek Lisans Tezi, Selçuk Üniversitesi Fen Bilimleri Enstitüsü, Konya.
- Dalkılıç, E. (2007). *Eğlence parklarının tarihsel gelişimi ve planlama kriterleri*. Yüksek Lisans Tezi, AÜ Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Anabilim Dalı, Ankara.
- Deniz, G. (2002). *Temalı park ve bahçelerin planlama-tasarım ilkeleri*, Ankara Üniversitesi Fen Bilimleri Enstitüsü Peyzaj Mimarlığı Ana Bilim Dalı, Ankara.
- Düzenli T., Tarakci Eren E., Alpak E.M. (2017). Müze bahçelerinin peyzaj özellikleriyle kullanıcı memnuniyeti ilişkisi, *Turkish Studies*, 12(13), 201-214.
- Efendioğlu, E., G. (2017). *Landscape design principles of theme parks: a comparable study*, Özyeğin University, Faculty of Architecture and Design, Graduate School of Sciences and Engineering in Partial Fulfillment of the Requirements for the Master Degree of Architecture, İstanbul.
- Erbaş, I. (2019). *İstanbul kenti tema parklarının peyzaj planlama ve tasarım kriterleri kapsamında değerlendirilmesi*, Ankara Üniversitesi, Fen Bilimleri Enstitüsü Peyzaj Mimarlığı Ana Bilim Dalı, Ankara.
- İnceoğlu, M., Aytuğ, A. (2009). Kentsel mekanda kalite kavramı. *Megaron*, 4(3), 131-146.
- Kahveci, H., Hergül, Ö. C., Göker, P., Altınok Çalışkan, S. E. (2021). Bilecik Pelitözü Göleti yakın çevresinin rekreasyonel kullanımına yönelik peyzaj tasarım önerisi. *Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi*, 22 (2), 192-201.

- Karaşah, B., Aşık, S. (2021). Sosyal etkileşim ortamı olan kent parklarında kullanıcı tercihlerinin belirlenmesi: Artvin-Hopa örneği. *Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi*, 22 (2), 183-191.
- Karaşah, B., Var, M. (2016). Botanik bahçelerinde ziyaretçi tercihlerinin belirlenmesi 'Nezahat Gökyiğit Botanik Bahçesi örneği', *Kastamonu Üniversitesi Orman Fakültesi Dergisi*, 16(1), 120-130.
- Kartal, S., Temiz, B.İ., Sipahi, S. (2021). Kentsel rekreasyon alanlarında mekânsal kalite: Çankırı örneği, *Akademik Sosyal Araştırmalar Dergisi*, 9(119), 286-302.
- Küçük, V., İnce, S. (2018). Tematik park kavramının Kayseri Anadolu Harikalar Diyarı örneğinde irdelenmesi, *Süleyman Demirel Üniversitesi Mimarlık Bilimleri ve Uygulamaları Dergisi*, 3(1), 18-33.
- MGM, 2022. Meteoroloji Genel Müdürlüğü, Retrieved from <https://www.mgm.gov.tr/veridegerlendirme/il-ve-ilceler-istatistik.aspx?m=ISTANBUL> (10 January 2022).
- Müminoğlu, Y., Tahta, B. T., Aslan, B. G. (2018). Kentsel yaşama bilimsel, görsel, rekreasyonel katkılar; Botanik bahçeleri. *Muş Alparslan Üniversitesi Fen Bilimleri Dergisi*, 6(1), 519-528.
- Nacak, H. (2000). *Su parkların yer seçim ihtiyaçları ve tasarım kriterlerinin incelenmesi*, Yüksek Lisans Tezi, İzmir İleri Teknoloji Enstitüsü, İzmir.
- Nasar, J. L. (1998). *The evaluative image of the city*. SAGE Publications, London,
- Onsekiz, D., Emür, S. H. (2008). Kent parklarında kullanıcı tercihleri ve değerlendirme ölçütlerinin belirlenmesi, *Sosyal Bilimler Enstitüsü Dergisi*, 24(1), 69-104.
- Öztürk, S. M., Temel, S. C. (2019). Evaluation of quality criteria in urban parks: the case of Karabük Kordon Park, *Kent Akademisi*, 12 (4), 752-764.
- Sarı, D. (2019). İhtiyaç-etkinlik-mekan ilişkisinin kent parkları örneğinde irdelenmesi, *AÇÜ Orman Fakültesi Dergisi*, 20(2), 181-192.
- Surat, H. (2017). Kent Parklarının Görsel Peyzaj Algısının Peyzaj Mimarlığı Öğrencileri Tarafından Değerlendirilmesi, *Bartın Orman Fakültesi Dergisi*, 19(1), 70-80.
- Tarakci Eren, E., Düzenli, T., Alpak, E. M. (2018). Correlation between landscape properties of museum gardens and visitor satisfaction. *Fresenius Environmental Bulletin*, 27, 9868–9879.

- Topalođlu, S. (2007). *Ankara Harikalar Diyarı kent parkı'nın tema park kavramı kapsamında irdelenmesi*. Yüksek Lisans Tezi, Zonguldak Karaelmas Üniversitesi Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Anabilim Dalı, Zonguldak.
- URL-1. Isfanbul Theme Park. <https://tr.foursquare.com/v/isfanbul-tema-park/52ea726c11d23af65b3c9a53?openPhotoId=55741ff2498e08f07c9cadc>, (27 November 2021).
- URL-2. Isfanbul Shopping Center <https://www.aa.com.tr/tr/sirkethaberleri/hizmet/isfanbul-avm-cadde-tv-yayinda/658471> (22 July 2020).
- URL-3. Isfanbul Theme Park. <https://www.isfanbul.com>, (28 October 2021).
- Uskan Demir, M., Akkurt, E., Erdönmez, M. E. (2021). Evaluation of public spaces in Beşiktaş in terms of spatial quality, *Journal of Environmental and Natural Studies*, 2(3), 153-173.
- Wylson, A., Wylson, P. (1994). *Theme parks, leisure centers, zoos and aquaria*. Longman Building Studies, New York.
- Yılmaz, H, Surat, H., Özhancı, E., Yeşil, Yeşil, M. (2015). Urban living area satisfaction and public preference, *Kastamonu Univ., Journal of Forestry Faculty*, 15 (2), 319-329.
- Yücesoy, N. (2017). *Tema parkları ve Bursa için uygun temaların belirlenmesine yönelik araştırma*. Uludağ Üniversitesi Fen Bilimleri Enstitüsü, Peyzaj Mimarlığı Anabilim Dalı, Yüksek Lisans Tezi, Bursa.
- Zukin, S. (1991). *Landscapes of power from Detroit to Disney World*. University of California Press, California, 326p.

CHAPTER 11

ASSESSMENT OF ARTVIN ÇORUH UNIVERSITY SEYITLER CAMPUS (FRONT OF ENGINEERING FACULTY AND VOCATIONAL SCHOOL) IN TERMS OF XERISCAPE DESIGN

Assoc. Prof. Banu KARAŞAH¹

¹ Artvin Coruh University, Faculty of Arts and Design, Department of Landscape Architecture, Arhavi, Artvin, Turkey, ORCID: <https://orcid.org/0000-0001-5079-5313>

INTRODUCTION

As a result of urbanization and wrong land uses, green infrastructures are replaced by impermeable structures called gray infrastructures. In addition to these wrong land uses, the wrong use of natural resources as if they will never end will bring great problems in the process. These problems pose a threat to all living creatures and ecosystems. One of the natural resources is water, which is the source of life for all living things.

Çorbacı et. al., (2017) stated that the problem of thirst has arisen with the increase in temperature and irregular precipitation due to the recently changing climatic conditions, this problem direct planners, designers, and local governments to new approaches such as xeriscape and rain gardens for more rational use of water (Bayramoğlu and Oğuztürk, 2020). Çorbacı et. al., (2011) indicated that there are special design applications such as water meadows, water harvesting, rain gardens, water retention gardens, which are components of the green area system, as an alternative solution in urban landscape designs. Landscape arrangement studies have been developed in different alternatives from classical landscaping approaches such as "Water-Wise, Water-Smart", "Low-Water" and "Natural Landscaping" under the title of "Water-Efficient Landscaping" worldwide (Çorbacı et al., 2011). Nowadays, xeriscape applications are popular as a water-efficient landscape approach in the discipline of landscape architecture.

The term Xeriscape, which is among the ecological approaches in urban landscape design, is derived from the Greek words "Xeros" meaning arid and English "Landscape" meaning landscape (Wilson and Feucht, 2007). This concept was first developed in 1978 by the Denver Water Department and Colorado State University in the city of Denver, Colorado, USA, for the purpose of saving and conserving water in landscape arrangements. Within the scope of this approach, the first garden was established in Colorado in the 1980s. The "Xeriscape Demonstration Garden", which includes all the features of the xeriscape, continues its existence as a continuation of the first garden (Şahin, 2013; Selim, 2021). Xeriscape can be described as creative landscape actions that use water and energy effectively. In a more detailed description, Xeriscape is defined as a quality landscape creation technique that protects the environment and minimizes water consumption (Çorbacı et al., 2011).

The basic principles of xeriscape practices are, appropriate planning and design, soil preparation, design of easy-to-maintain and practical lawn areas, effective irrigation, mulch use, appropriate maintenance, and selection

of plant species with low water needs and high drought tolerance (Yazıcı et al., 2014; Kısakürek et al., 2020).

Xeriscape planning offers many economic and environmental benefits such as water saving, time saving, money saving, energy saving, provide more habitat for plants and animals, lower labor and maintenance costs, reduced water use, release more water for fish and wildlife, offering an expanded area for water resources infrastructure and reducing tax costs (Çorbacı et. al., 2011).

Xeriscape was first used as an alternative solution for lawns in arid or semi-arid regions of the United States in the mid-1980s. Afterwards, the real effectiveness of Xeriscape was realized when a savings of between 20% and 53% was achieved from the water used in the gardens of the detached house owners located in the Southern Nevada region of the United States in the 1990s (Testa and Newton, 1993; Nelson, 1994; Stinnett, 2003; Medina and Gumper, 2004; Sovocool et. al., 2006; Abacıoğlu Gitmiş, 2020). Sovocool and Morgan (2005) stated that an average of 2271 liters of water was saved on an area of 1 m² in the planted spaces in the regions designed with xeriscape. In another study conducted in the State of California, it was determined that annual water consumption decreased by 54% and maintenance costs decreased to 50% (Taner 2010; Bayramoğlu, 2016).

Natural areas are partially moved to the city by plants. However, urban open green spaces are areas with intense human management or use (Tarakci Eren and Özbilen, 2017). The transport of natural plant taxa grown in rural areas to urban areas and the inclusion of them in planting designs provide the emergence of natural vegetation patterns (Tarakci Eren, 2019). These patterns are one of the alternatives that can be evaluated in xeriscape designs.

It has been determined that drought tolerance, minimum-maximum temperatures and precipitation variables are effective on the future adaptations of plant species (Sarı and Karaşah, 2020). Therefore, these variables will have a great impact on landscape plantings as well as their effects on agriculture (Sarı, 2021). It has been reported that the frequency and intensity of drought periods have increased significantly in the last ten years in the Mediterranean Basin, which includes Turkey (Lopez-Nicolas et al. 2018; Ortega-Gómez et al. 2018). According to the climate change action plan, it is predicted that Turkey will have a hotter, drier, and more uncertain climate regime in terms of precipitation soon, while at the same time there will be a significant

decrease in water resources (İDEP, 2012; Abacıoğlu Gitmiş, 2020). At this point, the importance of xeriscape designs will increase even more.

Species that can be evaluated in rural and urban landscape designs due to their water tolerance have been revealed in many studies (Yılmaz and Yılmaz, 2009a; Yılmaz and Yılmaz, 2009b; Bayramoğlu, 2016, Kısakürek et al., 2020; Abacıoğlu Gitmiş, 2020; Selim et al., 2021). For example, Yılmaz and Yılmaz (2009b) stated that species such as *Acer divergens* Pax var. *divergens*, *Cotinus coggygria* Scop., *Ostrya carpinifolia* Scop., *Populus tremula* L., *Rosa canina* L., *Ailanthus altissima* (Mill.) Swingle, *Carpinus betulus* L., *Cotoneaster nummularia* Fisch & Mey., *Hypericum perforatum* L. were preferred in landscape arrangements in urban and rural areas due to their various morphological features such as low-maintenance and water tolerance.

In this study, it is aimed to evaluate the plants used in the study area in terms of xeriscape design in the example of Artvin Çoruh University Seyitler Campus (Engineering Faculty and Vocational School Front Garden).

MATERIAL AND METHODS

The material of the study is the front garden of the Faculty of Engineering and Vocational School located in the Seyitler Campus of Artvin Çoruh University (Figure 1). The study area is in the Seyitler village of the central district of the city of Artvin, located in the Eastern Black Sea Region of Turkey.

Walking paths, car parks, a ceremony area and sitting-resting areas were designed in the area was completed in 2012. The planting design is designed to support and strengthen the structural design (Karaşah et al., 2016).

Artvin province has a moist/semi-moist climate with cool winters, warm summers with moderate water deficit and near-sea impact. It has the most variable climate in the Eastern Black Sea region. In the region that includes the coastal areas and the Cankurtaran mountain range, the typical Black Sea climate that includes precipitation in every season is observed. In the area between the Cankurtaran mountains and Borçka and Artvin centre, the Black Sea climate with colder winters and less precipitation is prevalent. (ESR, 2018; Sarı and Karaşah, 2020). According to the drought map of the General Directorate of Meteorology (GDM) (2022), it can be said that the study area is located is moderately dry according to the data between April 2020 and March 2022 (Figure 2).

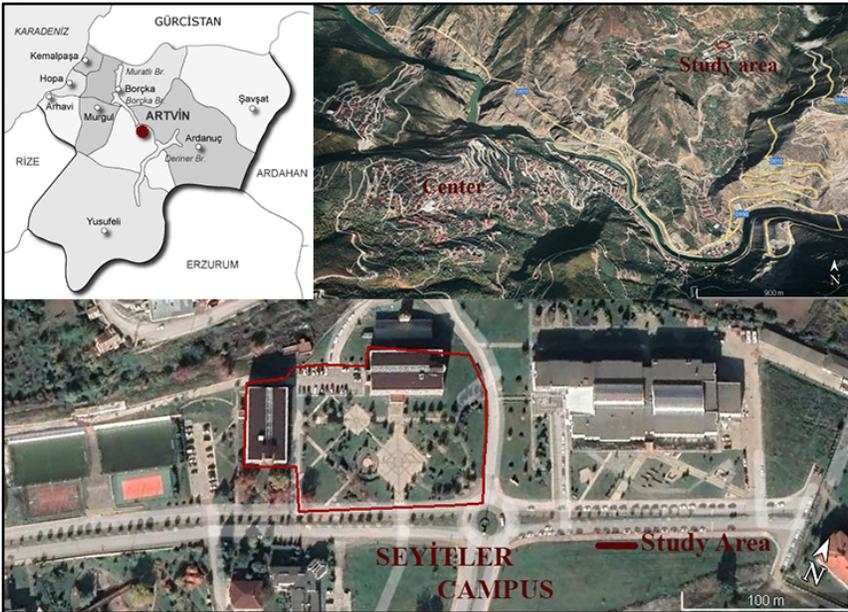


Figure 1. Location of the study area

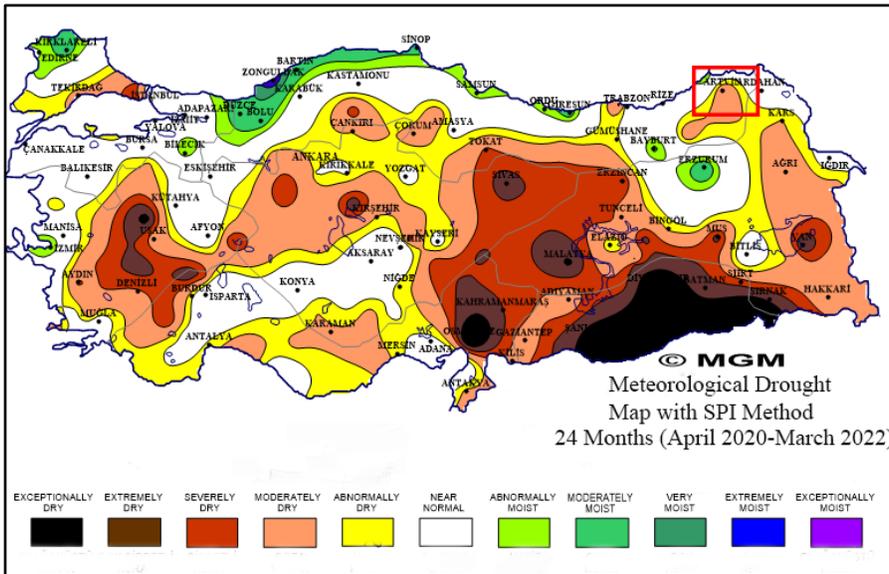


Figure 2. Meteorological Drought Map (MGM 2022)

In the study, the plants used in the area were identified, photographed (Figure 3), the water demands of the species were revealed and their suitability for xeriscape designs was determined. While determining the

degree of suitability, those with very low-low-moderate water demand were classified as suitable, and those with moderate-high water demand were classified as unsuitable. Alternative species have also been proposed for unsuitable species.



Figure 3. Some plant species from study area

RESULTS

Results showed that 51 taxa from 25 families were determined in study area. The most of the taxa were seen in Cupressaceae (9 taxa) , folowed by Rosaceae (8 taxa), Magnoliaceae (4 taxa), Leguminosae (3 taxa), Adoxaceae (2 taxa), Berberidaceae (2 taxa), Betulaceae (2 taxa), Oleaceae (2

taxa), Pinaceae (2 taxa), Sapindaceae (2 taxa) and others (Altingiaceae, Anacardiaceae, Asparagaceae, Buxaceae, Bignoniaceae, Caprifoliaceae, Ericaceae, Fagaceae, Malvaceae, Moraceae, Myrtaceae, Pittosporaceae, Salicaceae, Taxaceae and Theaceae (one taxa for each of them)) (Table 1). 26 of these taxa are evergreen and 25 of them are deciduous. It can be said there is a balance for mass void effect in planting design.

In the study area, it was determined that the water demand of 2 plant species is very little, 9 plant species is little, 8 plant species is little-medium, 30 plant species is medium and 2 plant species is medium-high (Figure 4).

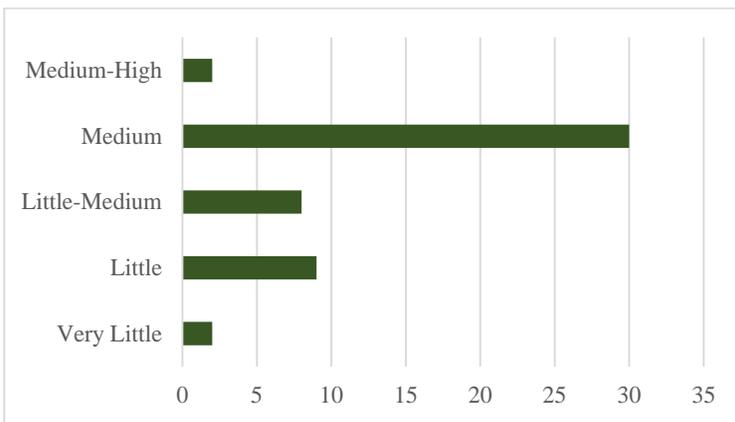


Figure 4. Water demand level of plant species in study area

It was determined that *Juniperus communis* L. 'Hybernica' and *Yucca gloriosa* L. species have very little water demands, while *Fagus sylvatica* 'Pendula' Lodd. and *Betula pendula* Roth 'Youngii' species' have medium-high (Table 1).

Among the species found in the study area, *Albizia julibrissin* Durazz, *Berberis thunbergii* DC. 'Atropurpurea', *Betula pendula* Roth, *Cotinus coggygria* Scop. 'Royal Purple', *Juniperus sabina* L., *Lonicera nitida* E.H. Wilson, *Pyracantha coccinea* M. Roem, *Tilia tomentosa* Moench., *Viburnum tinus* L. are species with little water demand. *Acacia dealbata* Link., *Cupressocyparis x leylandii* (A.B. Jacks. & Dallim.) Dallim., *Cupressus arizonica* Greene, *Cupressus macrocarpa* Hartw. 'Goldcrest', *Ligustrum japonicum* Thunb., *Magnolia soulangeana*, *Mahonia aquifolium* (Pursh) Nutt., *Morus alba* L. 'Pendula' are species with little-medium water demand (Table 1).

It was observed that the number of species with medium water demand (30 species) is the highest in the study area. Some species are *Acer palmatum* Thunb., *Cotoneaster horizontalis* Decne. 'Microphylla', *Liriodendron tulipifera* L., *Magnolia grandiflora* L., *Photinia x fraseri* Dress. 'Red Robin', *Rosa* spp., *Salix caprea* L. 'Pendula', *Taxus baccata* L. 'Fastigiata' and *Viburnum opulus* L. (Table 1).

When the species used in the study area are examined in terms of their suitability for xeriscape designs; it has been determined that only 2 of the 51 plant species used in the area are not suitable for xeriscape applications because their water demands are medium-high.

Table 1. Plant species in study area, their families, growth form, water demands and suitability to xeriscape designs

Scientific Name	Family	Growth Form	Water demand	Suitability to Xeriscape Design
<i>Acacia dealbata</i> Link.	Leguminosae	Evergreen	Little-Medium	Suitable
<i>Acer palmatum</i> Thunb.	Sapindaceae	Deciduous	Medium	Suitable
<i>Acer platanoides</i> L.	Sapindaceae	Deciduous	Medium	Suitable
<i>Azalea japonica</i> A.Gray	Ericaceae	Evergreen	Medium	Suitable
<i>Albizia julibrissin</i> Durazz.	Leguminosae	Deciduous	Little	Suitable
<i>Berberis thunbergii</i> DC. 'Atropurpurea'	Berberidaceae	Deciduous	Little	Suitable
<i>Betula pendula</i> Roth	Betulaceae	Deciduous	Little	Suitable
<i>Betula pendula</i> Roth 'Youngii'	Betulaceae	Deciduous	Medium-High	Not suitable
<i>Buxus microphylla</i> Siebold & Zucc.	Buxaceae	Evergreen	Medium	Not suitable
<i>Callistemon citrinus</i> (Curtis) Skeels	Myrtaceae	Evergreen	Medium	Suitable
<i>Camellia japonica</i> L.	Theaceae	Evergreen	Medium	Suitable
<i>Catalpa bignonioides</i> Walter	Bignoniaceae	Deciduous	Medium	Not suitable

Table 1 continued

Scientific Name	Family	Growth Form	Water demand	Suitability to Xeriscape Design
<i>Cedrus atlantica</i> (Endl.) Manetti ex Carrière ‘Glauca’	Pinaceae	Evergreen	Medium	Suitable
<i>Chaenomeles japonica</i> (Thunb.) Lindl. ex Spach	Rosaceae	Deciduous	Medium	Suitable
<i>Chamaecyparis lawsoniana</i> (A.Murray bis) Parl. ‘Columnaris Glauca’	Cupressaceae	Evergreen	Medium	Suitable
<i>Chamaecyparis nootkatensis</i> ‘Pendula’ G.Nicholson	Cupressaceae	Evergreen	Medium	Suitable
<i>Cotinus coggygria</i> Scop. ‘Royal Purple’	Anacardiaceae	Deciduous	Little	Suitable
<i>Cotoneaster horizontalis</i> Decne. ‘Microphylla’	Rosaceae	Deciduous	Medium	Suitable
<i>Crataegus oxycantha</i> ‘Coccinea Plena’ Bean	Rosaceae	Deciduous	Medium	Suitable
<i>Cupressocyparis x leylandii</i> (A.B. Jacks. & Dallim.) Dallim.	Cupressaceae	Evergreen	Little-Medium	Suitable
<i>Cupressus arizonica</i> Greene	Cupressaceae	Evergreen	Little-Medium	Suitable
<i>Cupressus macrocarpa</i> Hartw. ‘Goldcrest’	Cupressaceae	Evergreen	Little-Medium	Suitable
<i>Fagus sylvatica</i> ‘Pendula’ Lodd.	Fagaceae	Deciduous	Medium-High	Not suitable
<i>Juniperus communis</i> L. ‘Hybernica’	Cupressaceae	Evergreen	Very little	Suitable
<i>Juniperus sabina</i> L.	Cupressaceae	Evergreen	Little	Suitable
<i>Ligustrum japonicum</i> Thunb.	Oleaceae	Evergreen	Little-Medium	Suitable
<i>Liriodendron tulipifera</i> L.	Magnoliaceae	Deciduous	Medium	Suitable
<i>Liquidambar orientalis</i> Mill.	Altingiaceae	Deciduous	Medium	Suitable
<i>Lonicera nitida</i> E.H. Wilson	Caprifoliaceae	Evergreen	Little	Suitable

Table 1 continued

Scientific Name	Family	Growth Form	Water demand	Suitability to Xeriscape Design
<i>Magnolia grandiflora</i> L.	Magnoliaceae	Evergreen	Medium	Suitable
<i>Magnolia grandiflora</i> ‘Gallisoniensis’ K.Koch	Magnoliaceae	Evergreen	Medium	Suitable
<i>Magnolia soulangeana</i>	Magnoliaceae	Deciduous	Little-Medium	Suitable
<i>Mahonia aquifolium</i> (Pursh) Nutt.	Berberidaceae	Evergreen	Little-Medium	Suitable
<i>Malus floribunda</i> Siebold. ex Van Houtte. ‘Atropurpurea’	Rosaceae	Deciduous	Medium	Suitable
<i>Morus alba</i> L. ‘Pendula’	Moraceae	Deciduous	Little-Medium	Suitable
<i>Photinia x fraseri</i> Dress. ‘Red Robin’	Rosaceae	Evergreen	Medium	Suitable
<i>Picea pungens</i> Engelm. ‘Glauca’	Pinaceae	Evergreen	Medium	Suitable
<i>Pittosporum tobira</i> (Thunb.) ‘Nana’	Pittosporaceae	Evergreen	Medium	Suitable
<i>Prunus cerasifera</i> Ehrh.	Rosaceae	Deciduous	Medium	Suitable
<i>Pyracantha coccinea</i> M. Roem	Rosaceae	Evergreen	Little	Suitable
<i>Rosa</i> spp.	Rosaceae	Deciduous	Medium	Suitable
<i>Salix caprea</i> L. ‘Pendula’	Salicaceae	Deciduous	Medium	Suitable
<i>Sophora japonica</i> L. ‘Pendula’	Leguminosae	Deciduous	Medium	Suitable
<i>Syringa vulgaris</i> L.	Oleaceae	Deciduous	Medium	Suitable
<i>Taxus baccata</i> L. ‘Fastigiata’	Taxaceae	Evergreen	Medium	Suitable
<i>Thuja occidentalis</i> L. ‘Danica’	Cupressaceae	Evergreen	Medium	Suitable
<i>Thuja occidentalis</i> L. ‘Reingold’	Cupressaceae	Evergreen	Medium	Suitable
<i>Tilia tomentosa</i> Moench.	Malvaceae	Deciduous	Little	Suitable
<i>Viburnum opulus</i> L.	Adoxaceae	Deciduous	Medium	Suitable
<i>Viburnum tinus</i> L.	Adoxaceae	Evergreen	Little	Suitable
<i>Yucca gloriosa</i> L.	Asparagaceae	Evergreen	Very little	Suitable

CONCLUSION

Plants are important living things that make the cities more liveable, providing lots of ecosystem services to cities like provisioning, regulating, supporting and cultural ecosystem services. Water is vital for the survival of the plants. In a process where the problems related to water resources on a global scale are important, xeriscape designs, is one of the water efficient landscape approaches, should be evaluated and disseminated.

Within the scope of the study, it was aimed to determine the suitability of the plants in the sample area in terms of xeriscape designs and the water demands of the plants were revealed. In this context, 49 of 51 taxa in the study area were found to be suitable for xeriscape designs. As seen in GDM 2022 data, Artvin city is in the moderately dry class and considering the drought problem of the whole world soon, it is pleasing that the plants used in the study area are tolerant species at this point.

Within the scope of the study, only woody taxa in the study area were evaluated. At this point, it should be evaluated in herbaceous taxa. In addition, plant species with little and/or medium water demand should be selected for new designs to be made within the campus. Xeriscape design principles should also be considered in designs.

Betula pendula Roth 'Youngii' and *Fagus sylvatica* 'Pendula' Lodd have medium-high water demand and, because of their effective autumn colors and weeping forms have used in planting design. Instead of these species, *Acer palmatum* or *Fraxinus americana* which have effective autumn colors and little water demand can be used. It is possible to raise awareness about the sustainability and use of natural species and water saving by including the natural species of the city of Artvin in the designs.

REFERENCES

- Abacıoğlu Gitmiş, E. (2020). Kurakçıl peyzaj düzenlemelerine bir tasarım önerisi: Aliya İzzetbegoviç Parkı örneği. *Turkish Journal of Forest Science*, 5(1), 214-232.
- Bayramoğlu, E. (2016). Sürdürülebilir peyzaj düzenleme yaklaşımı: KTÜ Kanuni Kampüsü'nün xeriscape açısından değerlendirilmesi. *Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi*, 17(2), 119-127.
- Çorbacı, Ö.L., Özyavuz, M., Yazgan, M.E. (2011). Peyzaj mimarlığında suyun akıllı kullanımı: Xeriscape. *Tarım Bilimleri Araştırma Dergisi*, 4(1), 25-31.
- Çorbacı, Ö.L., Özyavuz, M., Yazgan, M.E. (2017). *Kurakçıl peyzaj (xeriscape) ve uygulamaları*. Karakayalar Matbaa, Edirne.
- ESR (Environmental Status Report), 2018. Artvin province 2016 yearly environmental status report. Retrieved from: http://webdosya.csb.gov.tr/db/ced/editedordosya/Artvin_icdr2016.pdf.
- General Directorate of Meteorology (GDM), (2022). Kuraklık analizi. Retrieved from: <https://mgm.gov.tr/veridegerlendirme/kuraklik-analizi.aspx>.
- İDEP, (2012). İklim Değişikliği Ulusal Eylem Planı 2011-2023, Çevre ve Şehircilik Bakanlığı, Ankara. Retrieved from: <https://webdosya.csb.gov.tr/db/iklim/banner/banner591.pdf>.
- Karaşah, B., Arslan Muhacir, S., Sarı, D., Yaman, Y.K. (2016) Artvin Çoruh Üniversitesi seyitler yerleşkesi peyzaj tasarımı. *İnönü Üniversitesi Sanat ve Tasarım Dergisi*, 6(13), 109-119.
- Kısakurek, Ş., Oguz, H., Yılmaz, M.B. (2020) Evaluation of xeriscape in avsar campus affiliated to Kahramanmaraş Sutcu Imam University. *ArtGRID-Journal of Architecture, Engineering & Fine Arts*, 2(2), 110-121.
- Lopez-Nicolas, A., Pulido-Velazquez, M., Rougé, C., Harou, J.J., Escrivá-Bou, A. (2018). Design and assessment of an efficient and equitable dynamicurban water tariff. Application to the city of Valencia, Spain. *Environmental Modelling & Software*, 101, 137-145.
- Medina, J., Gumper, J. (2004). YARDX: Yield and reliability demonstrated in xeriscape: Final Report. Metro Water Conservation, Littleton, Colo. Retrieved from: <http://www.coloradowaterwise.org/yardx.htm>.
- Nelson, J. (1994). *Water saved by single family xeriscapes*. Proc. 1994 AWWA Ann. Conf., New York.

- Oğuztürk, G., Bayramoğlu, E. (2020). Kurakçıl peyzaj açısından Rize sahil parkının incelenmesi. *İnönü Üniversitesi Sanat ve Tasarım Dergisi*, 10(21), 13-24.
- Ortega-Gómez, T., Pérez-Martín, M.A., Estrela, T. (2018). Improvement of the drought indicators system in the Júcar River Basin, Spain. *Science of the Total Environment*, 610-611, 276-290.
- Sarı D. (2021). *Türkiye florasında yayılış gösteren Crassulaceae familyasından bazı türlerin peyzaj ve süs bitkisi nitelikleri bakımından incelenmesi*. In: Cengizler İ., Selçuk D. (eds.) Ziraat, Orman ve Su Ürünlerinde Araştırma ve Değerlendirmeler- I. Gece Publishing, 291-314.
- Sarı, D., Karaşah, B. (2020). Future adaptability of urban trees due to the effects of climate change: The case of Artvin, Turkey. *Journal of Environmental Science and Management*, 23(1), 60-70.
- Selim, C., Bayrak, G., Doksöz, S. (2021). Kent parkına yönelik kurakçıl peyzaj tasarım önerisi: Antalya serdengeçti parkı. *Mehmet Akif Ersoy Üniversitesi Fen Bilimleri Enstitüsü Dergisi*, 12(1), 76-91.
- Sovocool, K. A., Morgan, M., Bennett, D., (2006). An in-depth investigation of xeriscape: As a water conservation measure. *Journal - American Water Works Association*. 98(2), 82-93.
- Şahin, N. (2013). *Kurakçıl peyzaj düzenlemesinde suyun etkin ve akılcı kullanımı-Xeriscape*. Yüksek Lisans Tezi, Muğla Sıtkı Koçman Üniversitesi, Fen Bilimleri Enstitüsü, Muğla.
- Stinnett, R. (2003). *Landscape trends and water use in the phoenix metropolitan area*. US Bureau of Reclamation, Washington.
- Taner, T. (2010) *Peyzaj düzenlemesinde suyun etkin kullanımı: Kurakçıl peyzaj*. Yüksek Lisans Tezi, Ege Üniversitesi Fen Bilimleri Enstitüsü, İzmir.
- Tarakci Eren, E. (2019). Analysis of plant species used in urban open spaces: The Trabzon case. *Applied Ecology and Environmental Research*, 17(4), 9795-9811.
- Tarakci Eren, E., Özbilen, A. (2017). Kentsel açık ve yeşil alanların kentsel tasarım teorilerine göre incelenmesi: Trabzon kent merkezi örneği. *The Journal of Academic Social Science*, 5(43), 438-460.
- Testa, A., Newton, A. (1993). *An evaluation of a landscape rebate program*. Proc. AWWA Conserv'93, Las Vegas, Nev.
- Wilson, C., Feucht, J.R. (2007). *Xeriscaping: creative landscaping*. Colorado State University (no:7.228), USA.

- Yazıcı, N., Dönmez, Ş., Şahin, C.K. (2014). Isparta kenti peyzaj düzenlemelerinde kullanılan bazı bitkilerin kurakçıl peyzaj tasarımı açısından değerlendirilmesi. *Kastamonu Üniversitesi Orman Fakültesi Dergisi*, 14(2), 199-208.
- Yılmaz, H., Yılmaz, H. (2009a). Use of native plants in landscape planning of roadside banks under extreme climatic conditions in eastern Anatolia, Turkey. *International Journal of Biodiversity Science & Management*, 5(2), 102–113.
- Yılmaz, H., Yılmaz, H. (2009b). Karayolu şevlerinde doğal olarak yetişen odunsu bitkilerin kullanım alanlarının irdelenmesi; Erzurum-Uzundere örneği. *Süleyman Demirel Üniversitesi Orman Fakültesi Dergisi*, A (1), 101-111.



IKSAD
Publishing House



ISBN: 978-625-8213-09-6